Risk Reduction Strategies Manual
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The goal of the Options intervention is to frame the healthcare provider and patient as a team. The Options Risk Reduction Strategies Manual and accompanying patient handouts are tools to support both the provider and the patient.
Appendices

A. Incorporating HIV Prevention into the Medical Care of Persons Living with HIV (Centers for Disease Control and Prevention)

B. HIV and its Transmission (Centers for Disease Control and Prevention)

C. What you Should Know About Oral Sex (Centers for Disease Control and Prevention)

D. Female Condom FAQ (Female Health Company)

E. What is FC Female Condom? (Female Health Company)

F. What is FC2 Female Condom? (Female Health Company)

G. FAQ about Microbicides (Global Campaign for Microbicides)

H. Drug Fact Sheets (Office of National Drug Control Policy and New York State Department of Health AIDS Institute)

I. Drug-Associated HIV Transmission Continues in the U.S. (Centers for Disease Control and Prevention)

J. Viral Hepatitis and Injection Drug Users (Centers for Disease Control and Prevention)

K. Coinfection with HIV and Hepatitis C Virus (Centers for Disease Control and Prevention)

L. Syringe Disinfection for Injection Drug Users (Centers for Disease Control and Prevention)

M. Physician Prescription of Sterile Syringes to Injection Drug Users (Centers for Disease Control and Prevention)

N. Syringe Exchange Programs (Centers for Disease Control and Prevention)
How to Use the Risk Reduction Strategies Manual

The Options Risk Reduction Strategies Manual is a reference tool and is divided into chapters based on the type of risk reduction information presented, such as safer sex and drug use strategies, HIV transmission information, and communication skills.

Providers can take several steps to use the Options Risk Reduction Strategies Manual as a tool when working with their HIV-positive patients:

1. Become familiar with the manual before implementing the Options intervention with patients.

Healthcare providers who plan to use the Options intervention with their HIV-positive patients should review this manual before implementing the intervention to become familiar with the information, motivation, and skills development material that may be relevant for their patients.

2. Refer to the manual as needed when working with patients to reduce their risk behaviors.

The Options intervention can help the providers uncover barriers to safer sex and drug use behavior when working with a patient. Once specific barriers have been identified, providers can then refer to the appropriate section(s) of this manual as a reference tool to help them most effectively work with the patient to address those barriers.

   For example, if during an Options intervention session a provider discovers that the patient often has unprotected sex because he doesn't like to wear condoms, the provider can refer to Chapter 10, Strategies for Dealing with Negative Attitudes about Condoms, for suggestions on how to help the patient be more open to using condoms.

3. Use relevant patient handouts to reinforce information provided during meetings with patients.
Target Risk Behaviors for Interventions—Sexual Risk

The majority of research conducted to date on prevalence of sexual risk behaviors among individuals living with HIV has been with men who have sex with men (MSM).

Research suggests that although many HIV-positive MSM attempt to make some behavioral changes to reduce the risk of transmitting HIV, a significant number continue to engage in at least some forms of risky sexual behavior after a diagnosis of HIV.

- In a study of recently diagnosed HIV+ MSM, although men appeared to make efforts to reduce transmission risks after diagnosis, many continued to engage in some risky behaviors. For example, unprotected anal intercourse with unknown status or one-time partners was less frequent after diagnosis, but rates of unprotected anal intercourse with last sex partner did not change.  

- In a study of more than 1,000 HIV+ MSM in New York City and San Francisco, 47.3% reported engaging in unprotected anal sex during the past 3 months with an HIV-negative or status unknown non-main partner, while 21.3% reported unprotected anal sex with HIV-negative and status unknown main partners (see Table 1).  

Overview

The Options Risk Reduction Strategies Manual is a supplement to the Options Intervention Protocol Manual and is intended for physicians and other healthcare providers who work with HIV-positive patients.

This manual is a resource for information and risk reduction strategies that providers can use to help patients reduce their HIV transmission risk behaviors. It presents information on HIV risk reduction in a practical and nonjudgmental way to help providers effectively incorporate prevention counseling into clinical care with their HIV-positive patients.

Rationale for Prevention in the HIV Clinical Setting

Although HIV prevention efforts have historically focused on “at-risk” populations (i.e., uninfected individuals at-risk for acquiring HIV due to risky sex or drug use behaviors), recently the focus of prevention has broadened to include individuals already infected with the virus.

While many HIV-positive individuals attempt to practice safer behaviors to protect themselves and their partners, they may find it difficult to maintain the behavioral changes. In addition, efforts at reducing HIV transmission risks may be inconsistent.

Helping HIV-positive patients reduce sexual and drug use risk behaviors and maintain behavior changes has significant implications for three main reasons:

1. Reducing the Risk of HIV Transmission to Uninfected Partners

   HIV-infected individuals represent a source from which future infections may be generated. If HIV-positive individuals continue to practice unprotected sex, they put their uninfected partners at risk for acquiring HIV. In addition, even if they engage in unprotected sex with other known HIV-positive individuals, they and their partners are at risk for acquisition of other STIs and HIV dual infection (see next page).
2. **Reducing the Risk of STI Acquisition**
HIV-infected individuals who engage in unprotected sex put themselves at risk of acquiring other sexually transmitted infections (STIs) that may accelerate their HIV disease progression.

3. **Reducing the Risk of HIV Dual Infection**
Dual infection occurs when an HIV-positive individual is infected with two different strains of HIV from different sources; it can be due to **coinfection** or **superinfection**.

The frequency of HIV dual infection has not been well-documented: most of the available information is from a handful of case reports, though coinfection appears to be more common than superinfection.¹

The clinical consequences of HIV dual infection have not been well documented in longitudinal studies, but clinical observations suggest dual infection is associated with **faster disease progression** (including decreased CD4 count and increased viral load) as well as drug resistance and **complications in antiretroviral therapy**.¹ Individuals also put themselves at risk for acquiring a drug-resistant strain of HIV.

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**Coinfection** occurs when an individual is infected “with two heterologous strains either simultaneously or within a brief period of time before infection with the first strain has been established and an immune response has developed.”¹

**Superinfection** occurs when an individual is infected “with a second strain after the initial infection and the immune response to it has been established.”¹

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**Support for Prevention in the Clinical Care Setting**
Prevention interventions for people living with HIV/AIDS have been shown to be effective at decreasing HIV transmission risk behaviors and sexually transmitted infection rates.²

Specific characteristics of interventions that have been found to reduce rates of unprotected sexual behaviors² include many of the elements of the Options intervention:
Guided by behavioral theory.
Specifically focused on HIV transmission behaviors.
Provides skills building.
Delivered one-on-one, by healthcare providers, and in the clinical care setting.

Recent recommendations from the CDC and other agencies (Appendix A) reinforce the need for prevention interventions for people living with HIV/AIDS and support the routine incorporation of prevention interventions into existing clinical practice as an emerging standard of care.

**Recommendations for Prevention in the Clinical Care Setting**

According to recent recommendations from the CDC and others, clinicians providing care to people with HIV/AIDS are uniquely positioned to play a “key role in helping their patients reduce risk behaviors and maintain safer practices, and can do so with a feasible level of effort, even in constrained practice settings.”

**Key Components of Recommended Prevention Interventions**

Recommended clinician-delivered prevention interventions that can be incorporated into routine office visits include:

- Performing a brief screening for HIV transmission risk behaviors.
- Communicating prevention messages.
- Discussing sexual and drug use behavior.
- Positively reinforcing changes to safer behavior.
- Referring patients for services such as substance abuse treatment.
- Facilitating partner notification, counseling, and testing.
- Identifying and treating other STDs.

Furthermore, other clinic staff (e.g., nurses, social workers, health educators) can reinforce the prevention messages and interventions delivered by physicians.

**The Importance of Referrals**

HIV providers are uniquely positioned to assist patients with sexual and drug-use risk reduction. However, it is critical that providers be aware of and use the resources within their care organization and community to support both themselves and their patients.
Providers should have a referral guide of available local resources, including:

- Substance abuse treatment
- Mental health services
- Syringe exchange programs & locations to purchase clean needles
- Domestic violence services
- Case management services (if not offered through the medical care clinic)
- Nutrition counseling
- Reproductive medicine specialists
- Individual or group HIV prevention interventions (e.g., Healthy Relationships)
Topics that can be successfully addressed by clinicians and clinic support staff:

- Lack of knowledge about HIV transmission risks
- Misconceptions about risk of specific types of sexual and drug-use practices
- Misconceptions about viral load and transmission of HIV
- How to disclose HIV-seropositive status to a sex partner, family member, or friend
- Importance of using condoms or not exchanging fluids with partners
- Ways to reduce number of sex or drug partners
- Ways to keep condoms accessible
- Ways to remember to use condoms
- How to persuade a sex partner to use a condom
- Ways to obtain support (e.g., emotional, financial) from family, friends, and lovers
- Ways to clean/disinfect injection equipment
- Ways to obtain clean needles
- Ways to avoid sharing injection equipment
- Ways to deal with mild psychological distress stemming from situational circumstances

Issues that might need referral to outside agencies

- Need for intensive HIV prevention intervention
- Excessive use of alcohol or recreational drug use
- Drug addiction, including injection drug use
- Depression, anger, guilt, fear, or other mental health needs
- Need for social support
- Sexual compulsivity
- Sexual or physical abuse (victim or perpetrator)
- Desire to have children, contraceptive counseling
- Housing or transportation needs
- Nutritional needs
- Financial emergencies
- Child custody, parole, or other legal matters
- Insurance coverage

Table reproduced from the Centers for Disease Control and Prevention
New York State Resources

A regional directory of New York State HIV/AIDS Service Programs is available at: [http://www.health.state.ny.us/diseases/aids/resources/index.htm](http://www.health.state.ny.us/diseases/aids/resources/index.htm)

For information on licensed domestic violence service providers in NYS, contact the NYS Coalition against Domestic Violence 24-hour hotlines:

- **800–942–6906 (English)**
- **800–942–6908 (Spanish)**

For a directory of syringe exchange (ESAP) providers in New York State: [http://www.health.state.ny.us/diseases/aids/harm_reduction/needles_syringes/esap/provdirect.htm](http://www.health.state.ny.us/diseases/aids/harm_reduction/needles_syringes/esap/provdirect.htm)

For a referral to a drug abuse treatment program, contact the New York State Office of Alcohol and Substance Abuse Services (800–522–5353).

HIV Clinical Guidelines and other provider materials from the New York State Department of Health AIDS Institute is available at: [http://www.hivguidelines.org](http://www.hivguidelines.org)

For more information, visit the New York State Department of Health HIV/AIDS website: [http://www.health.state.ny.us/diseases/aids/](http://www.health.state.ny.us/diseases/aids/)

Target Risk Behaviors for Interventions—Sexual Risk

The majority of research conducted to date on prevalence of sexual risk behaviors among individuals living with HIV has been with men who have sex with men (MSM).

Research suggests that although many HIV-positive MSM attempt to make some behavioral changes to reduce the risk of transmitting HIV, a significant number continue to engage in at least some forms of risky sexual behavior after a diagnosis of HIV.

- In a study of recently diagnosed HIV+ MSM, although men appeared to make efforts to reduce transmission risks after diagnosis, many continued to engage in some risky behaviors.
  
  For example, unprotected anal intercourse with unknown status or one-time partners was less frequent after diagnosis, but overall rates of unprotected anal intercourse (with last sex partner) did not change.4

- In a study of over 1,000 HIV+ MSM in New York City and San Francisco, 47% reported engaging in unprotected anal sex during the past 3 months with an HIV-negative or status unknown non-main partner, while 21% reported unprotected anal sex with HIV-negative and status unknown main partners (see Table 1).5
Table 1
Summary of MSM Sexual Behaviors from Parsons et al. (2005)\(^5\)

<table>
<thead>
<tr>
<th>Sexual Behavior</th>
<th>Unknown Status Partners</th>
<th>HIV-Positive Partners</th>
<th>HIV-Negative Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any insertive oral sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Partners (n=435)</td>
<td>47% – 55%</td>
<td>45% – 47%</td>
<td>59% – 72%</td>
</tr>
<tr>
<td>Non-Main Partners (n=840)</td>
<td>57% – 63%</td>
<td>53% – 62%</td>
<td>33% – 35%</td>
</tr>
<tr>
<td>Unprotected insertive oral sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Partners</td>
<td>45% – 47%</td>
<td>65% – 76%</td>
<td>49% – 68%</td>
</tr>
<tr>
<td>Non-Main Partners</td>
<td>53% – 62%</td>
<td>40% – 51%</td>
<td>29% – 33%</td>
</tr>
<tr>
<td>Any receptive oral sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Partners</td>
<td>84%</td>
<td>69% – 75%</td>
<td>83% – 87%</td>
</tr>
<tr>
<td>Non-Main Partners</td>
<td>64% – 68%</td>
<td>41% – 50%</td>
<td>36% – 42%</td>
</tr>
<tr>
<td>Unprotected receptive oral sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Partners</td>
<td>73% – 79%</td>
<td>64% – 71%</td>
<td>73% – 83%</td>
</tr>
<tr>
<td>Non-Main Partners</td>
<td>60% – 66%</td>
<td>38% – 49%</td>
<td>33% – 41%</td>
</tr>
<tr>
<td>Any insertive anal sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Partners</td>
<td>21% – 39%</td>
<td>55% – 61%</td>
<td>31% – 51%</td>
</tr>
<tr>
<td>Non-Main Partners</td>
<td>33% – 38%</td>
<td>32% – 33%</td>
<td>19% – 20%</td>
</tr>
<tr>
<td>Unprotected insertive anal sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Partners</td>
<td>5% – 20%</td>
<td>47%</td>
<td>11% – 12%</td>
</tr>
<tr>
<td>Non-Main Partners</td>
<td>19% – 22%</td>
<td>21% – 27%</td>
<td>7% – 10%</td>
</tr>
<tr>
<td>Any receptive anal sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Partners</td>
<td>58% – 69%</td>
<td>52% – 54%</td>
<td>59% – 62%</td>
</tr>
<tr>
<td>Non-Main Partners</td>
<td>39% – 42%</td>
<td>30% – 35%</td>
<td>22% – 26%</td>
</tr>
<tr>
<td>Unprotected receptive anal sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Partners</td>
<td>26% – 47%</td>
<td>38% – 45%</td>
<td>24% – 45%</td>
</tr>
<tr>
<td>Non-Main Partners</td>
<td>21% – 27%</td>
<td>21% – 28%</td>
<td>11% – 17%</td>
</tr>
</tbody>
</table>

In previous work implementing the Options intervention in a clinical care setting with a predominantly heterosexual population (79% of the total sample), approximately one quarter of the sample reported sexual risk behavior (unprotected vaginal, anal, or insertive oral sex) in the preceding three months.\(^6\)

- The aggregate number of such unprotected sexual events was substantial: HIV-infected study participants reported a total of 2,408 unprotected vaginal, anal, or insertive oral sexual events during the past 3 months, with 1,785 of these being unprotected vaginal or anal sexual events.\(^5\)

- The aggregate number of partners involved in unprotected vaginal, anal, or insertive oral sexual events over the past 3 months was also substantial: HIV-infected study participants reported engaging in such unprotected sexual acts with a total of 351 partners during this interval.\(^6\)
Target Risk Behaviors for Interventions—IDU risk

Most providers and patients are familiar with the risks of needle/syringe sharing. However, syringe sharing is not the only concern among injection drug users (IDUs).

Although syringe sharing continues to be a problem among IDUs, sharing of drug solution and other drug equipment appears to be a more common behavior and also carries a significant risk of HIV transmission.7–11

- In a study of IDUs in the Baltimore area from 1988 to 1998, reported rates of sharing cottons or cookers among IDUs declined significantly over time (from over 70% to less than 50%) but remained significantly higher than rates of needle-sharing (from approximately 20–30% in 1998 to approximately 10% in 1998).7

A follow-up study of the same cohort found similar trends from 1998 to 2004.8

- A 2004 study of IDUs in the Philadelphia area found high rates of HIV transmission risk behaviors.9
  - 34% had shared needles in the past month.
  - 67% had shared works in the past month.
  - 60% had attended a shooting gallery at least once in the past month.
  - 35% had traded sex for drugs or money in the past month.

- Similarly, a 2006 study also observed high rates of transmission risk behaviors among IDUs in Needle Exchange Programs (NEP) and those not in a NEP.10 Specifically, in a 6-month period:
  - 31% of NEP users & 53% of non-NEP users engaged in receptive needle sharing.
  - 40% of NEP users & 55% of non-NEP users reported sharing their used needle.
  - 21% of NEP users & 40% of non-NEP users reported back-loading.
  - 61% of NEP users & 75% of non-NEP users reported sharing a cooker.
  - 52% of NEP users & 65% of non-NEP users reported sharing a cotton.
  - 42% of NEP users & 56% of non-NEP users reported sharing rinse water.
Injection drug users who report transmission risk behaviors may also harbor drug resistant strains of HIV.

- A study of 180 HIV-infected injection drug users found that 31% reported using injection drugs in the past month and 40% of those active users reported sharing needles/works 148 times with 296 partners.\(^\text{12}\)

- Furthermore, 31% (55) of the injection drug users harbored resistant HIV, including 3% (5 individuals) who also shared needles/works 27 times with 44 partners, thus exposing a substantial number of people to drug resistant HIV.\(^\text{12}\)

Research shows that while many HIV-positive individuals attempt to practice safer sex and drug use behaviors, a significant number of individuals continue to engage in high-risk behavior—putting themselves, and their sex and drug use partners, at risk.

HIV prevention for people living with HIV/AIDS is emerging as a standard of care that can be effectively integrated into ongoing medical services to help reduce these risk behaviors.
References


Recommended Reading


DeCarlo P, Coates T. Does HIV prevention work on different levels? CAPS Fact Sheet # 1ER. Available at http://www.caps.ucsf.edu/pubs/FS/levels.php.


Understanding the Sexual Transmission of HIV and the Continuum of Sexual Risk Behaviors

A number of factors may influence the likelihood of HIV transmission among partners during sexual activity: viral load, antiretroviral treatment status, stage of HIV infection, presence of other STIs, circumcision, and others.

However, all patients with HIV are at risk for transmitting HIV to others, or becoming reinfected with a different strain of HIV.

The type of sexual behavior an individual engages in also affects the risk of HIV transmission. For example, unprotected vaginal intercourse and receptive anal intercourse are considered very high-risk behaviors.

The transmission risk of insertive anal intercourse is somewhat less than receptive anal intercourse, but this behavior still poses a significant transmission risk.

The risk of oral sex is less clear, and although it is considered to be relatively low risk as compared to vaginal or anal sex, documented cases of HIV transmission through oral sex do exist. Other sexual behaviors also carry some risk for HIV transmission that patients need to be aware of.

- Providers should be knowledgeable about the relative risks of different behaviors and the factors that promote and inhibit HIV transmission.
- Providers should assist patients in making informed decisions about engaging in different sexual behaviors and the relative risks of each.

Relevant Chapters:
Chapter 5—Sexual Transmission of HIV
Chapter 6—Sexual Behaviors, Relative Risk, and Safer Alternatives
HIV Risk Reduction Strategies for Sexual Behaviors

Eliminating HIV Sexual Transmission Risk

- Abstaining from vaginal, anal, and oral sex.
- Engaging in sexual behaviors that do not involve penetration or exposure to genitals or genital secretions (e.g., massage, fantasy, phone/Internet sex).

Reducing HIV Sexual Transmission Risk (Harm Reduction)

- Engaging in vaginal or anal sex with a latex or polyurethane condom (following procedures to correctly use the condom and minimize likelihood of breakage or slippage).
- Using a water-based lubricant inside and outside of a condom to minimize the likelihood of condom breakage and trauma to the mucosal wall of the receptive partner. (Avoiding oil-based lubricants which can break down latex.)
- Engaging in vaginal sex using a female condom (with correct usage procedures).
- Avoiding use of the spermicide nonoxynol-9 (N-9), which may actually increase the risk of HIV transmission. However, using a condom with N-9 is preferable to not using a condom at all during intercourse.
- Engaging in oral sex with a cut-up nonlubricated condom or a dental/Glyde dam. If neither a condom nor a dam is available, using a piece of plastic wrap may be the next best option.
- Engaging in relatively lower-risk sexual behaviors (e.g., mutual masturbation).
- Encouraging regular screening and treatment for STIs, which may increase the risk of HIV transmission.
- Avoiding use of drugs or alcohol when sex may occur, as these substances often impair the user’s judgment and may increase the likelihood of risky sexual behaviors.

Relevant Chapters:
Chapter 9—Condoms and Lubricants
Chapter 10—Strategies for Dealing with Negative Attitudes about Condoms
Chapter 11—Other Barrier Methods: Oral Barriers, Cots, and Gloves
Chapter 12—Microbicides
HIV Risk Reduction Strategies for Injection Drug Use (IDU) Behaviors

Eliminating HIV IDU Transmission Risk

- Abstaining from injection drug use.
- Using new, sterile syringes purchased from participating ESAP (Expanded Syringe Access Demonstration Program) pharmacies or NYS-approved Syringe Exchange Programs.
- Never sharing syringes or injection drug “works” (e.g., cottons, filters, water, spoons, or other drug use paraphernalia).

Reducing HIV IDU Transmission Risk (Harm Reduction)

- Cleaning syringes (if a new syringe is not available) with bleach or boiling water.
- Reducing injection drug use (thereby reducing transmission risk by decreasing the number of times the person is injecting).
- Consuming drugs in alternative form (e.g., snorting or smoking) instead of injecting.
- Practicing safer injection behaviors.

Relevant Chapters:
Chapter 13—Commonly Abused Drugs and Effective Risk Reduction Strategies
Chapter 14—HIV and Injection Drug Use

Helping Patients Identify Challenges for Consistent Safer Sex and Drug Use

Once a person is motivated to reduce their HIV transmission risk behavior and begins to make a change, it can be a significant challenge to maintain that behavior change over time.

Behavior change is a process, not an all-or-nothing event. By recognizing that lapses are common, and encouraging patients to use their lapses as learning experiences, providers will be better able to facilitate long-term behavior change.
The Relapse Prevention model can be applied to the reduction of HIV transmission risk behaviors to give providers and patients strategies for understanding the challenges that patients face in long-term behavior change and tools to deal with those challenges.

These strategies include:

- Identifying high-risk situations for relapse.
- Developing adaptive behavioral responses and problem-solving skills to cope with high-risk situations.
- Changing maladaptive thought patterns to better deal with high-risk situations, urges, and lapses.
- Learning from safer sex and drug use lapses.
- Reinforcing safer behaviors.

**Relevant Chapters:**
Chapter 7—Identifying Triggers for Safer Sex and Drug Use Lapses

**Helping Patients Acquire Adaptive Communication Skills**

Although motivation to consistently practice safer sex and drug use behaviors is critical for patients to engage in these risk reduction behaviors, certain skills—such as the ability to communicate assertively—are also essential.

Because practicing safer sex and drug use typically involves other people, the development of assertiveness skills can be a very effective tool for people living with HIV/AIDS.

Assertive communication—which must be differentiated from passive, aggressive, and passive-aggressive communication styles—involves a person expressing their feelings, thoughts, and desires in a clear manner that is respectful and does not violate the rights of the other person.

In assertive communication a person . . .

- Clearly states their thoughts, feelings, and/or request.
- Uses “I” statements.
- Listens to what their partner is saying.
- Is respectful, and acknowledges their partner’s feelings/opinions.
Explains the reason for their position or request.

- Refuses to be coerced into something they don’t want.
- Matches their verbal and nonverbal communication.

**Relevant Chapters:**
Chapter 8—Safer Sex Communication Skills.

### Facilitating HIV Status Disclosure to Partners

For many men and women with HIV, deciding when and how to disclose their HIV status can be an extremely stressful process.

Disclosure to all sex partners is important to encourage, as it allows both partners to make informed decisions about HIV risk reduction.

In New York State, partner notification is mandated, and providers are required to talk with HIV-infected patients about their options for informing sexual and needle-sharing partners of possible HIV exposure.

The three options for partner notification in New York include:

1. The counselor from the Health Department’s PartNer Assistance Program (PNAP) or Contact Notification Assistance Program (CNAP in New York City) tells the partner(s) without ever revealing the patient’s identity.

2. The patient tells their partner(s) with the help of their doctor or PNAP/CNAP.

3. The patient tells their partner(s) themselves.

When making decisions about HIV status disclosure, patients will want to consider:

- Who do they want to tell, and why?
- How much are they ready to share?
- How much is the person being told ready to hear?
- How will the disclosure affect your client?
- How will the disclosure affect the person being told?
- What are the risks and benefits of disclosure?
- When and where do they want to disclose their status?
- Do they have the skills to effectively disclose and cope with the other person’s reaction?
The New York State brochure *There's Something I Need to Tell You* is a valuable resource for helping patients address HIV disclosure with their partners. It is included in the Options patient handouts and is available at: [http://www.health.state.ny.us/disease/aids/publications](http://www.health.state.ny.us/disease/aids/publications).

**Relevant Chapters:**
Chapter 4—Assisting Patients with HIV Disclosure

**Tip**

*Providers should use appropriate patient handouts* provided with the Risk Reduction Strategies Manual to reinforce risk reduction information and strategies discussed during the clinic visit.

*Providers should also rely on available support and referral services* within their care organization and community to support the patient in their efforts to reduce their sexual and drug-use risk behaviors.
Although many men and women living with HIV/AIDS attempt to reduce their HIV transmission risk behaviors, a substantial number of individuals continue to engage in some forms of sexual or drug use risk behaviors.

Estimates of the proportion of infected individuals who continue to engage in unsafe sex vary across populations and studies, but overall approximately 33% of HIV-positive individuals continue to practice unprotected sex despite their HIV status (including men who have sex with men [MSM], injection drug users [IDUs], and clinical/community samples). Similarly, rates of injection drug use risk behaviors—especially sharing “works”—are relatively high among both HIV-positive and HIV-negative IDUs (see Chapter 1, Introduction).

There is no way to predict with complete accuracy who will practice unsafe sexual or drug use behavior after an HIV diagnosis, and no assumptions should be made. Each patient’s risk behaviors should be assessed individually. However, research has shown that some factors may place some HIV-positive individuals particularly at risk.

Risk Factors for Unsafe Sexual Behaviors

Factors associated with engaging in sexual risk behavior(s)\(^1-3\) include:

- Lack of sufficient information about HIV/AIDS, its transmission, and health risks.
- Belief that safer sex decreases sexual pleasure.
- Lack of confidence in one’s ability to engage in safer sex practices.
- Perception that one has little behavioral control over condom use, especially among women.
- Lack of assertiveness, especially among women.
- Problems communicating to partners about safer sex.
Lack of (or low) commitment to self or others to practice safer sex.
- Low socioeconomic status.
- Alcohol and drug abuse (especially hard drug use).
- Low self-esteem.

Other factors that may have implications for a person’s likelihood of engaging in unsafe sexual behaviors include:

**Partner HIV Status**

HIV-positive men and women are generally more likely to have unprotected sex with partners they believe are also HIV-positive than those thought to be HIV-negative.

This suggests many HIV-positive individuals are concerned about transmitting the virus to uninfected individuals. However, they may not realize the potential risks of getting or giving a different strain of HIV or other secondary infections that may accelerate their or their partner’s HIV disease progression.

MSM “POZ Parties” have been reported in several urban areas, providing venues for HIV-positive MSM to feel relieved of HIV status disclosure pressures and engage in high rates of unprotected sex with multiple partners. It is also important to explore the manner in which patients determine a partner’s HIV status. False assumptions or quick but inaccurate decision-making rules may lead to the belief that a potential partner is HIV-positive when in fact they are not.

**Type of Partner (Primary vs. Casual)**

Results from studies looking at rates of unprotected sex with primary versus casual partners (often in MSM populations) have been mixed. Unprotected sex may depend more on presumed serostatus than primary vs. casual partner. For example, several studies suggest that unprotected sex is more common with seroconcordant partners, regardless of whether they are primary or casual partners.

However, the type of partner (primary vs. casual) may interact with HIV status to influence sexual behaviors.

- Among primary partner sexual relationships, evidence suggests that HIV-positive men with HIV-negative or unknown status primary partners are less likely to practice some forms of risky sexual behavior (e.g., insertive oral and anal sex) than those with HIV-positive main partners.
Among casual partner sexual relationships, evidence suggests that HIV-positive men are most likely to have unknown status partners, followed by HIV-positive and then HIV-negative partners. Men appear most likely to practice risky sexual behaviors with HIV status unknown casual partners, followed by HIV-positive casual partners.\(^5\)

In addition, having a partner who is willing to engage in unprotected sex has been shown to increase the likelihood of it occurring.

### HIV Serostatus Disclosure

Although there is inconsistent support for a relation between nondisclosure of HIV serostatus and sexual risk, some research does suggest that patterns of disclosure and nondisclosure may be important risk factors. 

**Consistency of HIV status disclosure** may be a particularly important factor. In a study of HIV-positive MSM, individuals who inconsistently disclosed their HIV status to partners were most likely to engage in risky sexual behaviors, followed by nondisclosers. MSM who consistently disclosed their HIV status were the least likely to engage in risky behavior.\(^6\)

These inconsistent disclosers and nondisclosers may represent important targets for HIV risk reduction counseling.

### Negative and Positive Emotions

There is conflicting evidence about whether negative emotional states such as depression, anxiety, and anger are associated with unprotected sex. Importantly, positive emotions may sometimes play a role as well: some HIV-positive individuals report positive mood states (e.g., affection and excitement) associated with incidents of unprotected sex.

### Misperceptions of HIV/AIDS Infectivity Because of Low Viral Load

Some HIV-positive individuals may continue to practice unsafe sex because of misperceptions that an undetectable plasma viral load may lead to decreased infectivity.\(^7\) This is problematic because of the instability of plasma viral load measures and uncertainty of exactly how plasma viral load translates to infectivity (i.e., viral load in semen and genital tract/anal mucosa).

### Impact of ART on Perceptions of HIV as a Treatable Disease and Infectivity

Some MSM have reported being less concerned about becoming HIV-positive because the availability of new treatments has changed their perception from HIV as a terminal disease to a treatable disease, and also because they believe newer HIV treatments will reduce the likelihood of HIV transmission.
A recent meta-analysis\(^7\) suggests that it is not being on antiretroviral therapy (ART) or having an undetectable viral load *per se* that puts an individual more at risk for practicing unsafe sex, but rather an individual’s **beliefs about ART and viral load**.

Specifically, individuals on ART or with an undetectable viral load are not necessarily more likely to engage in unprotected sex, but individuals who *believe* that receiving ART or having an undetectable viral load protects against transmitting HIV, or who had reduced concerns about engaging in unsafe sex given the availability of ART are at increased risk for practicing unsafe sex.

**Risk Factors for Injection Drug Use Risk Behaviors**

Less is known about risk factors for continued injection drug use risk behaviors, but longitudinal research suggests that *the best predictor of IDU risk behavior is past IDU risk behavior*.

For example, in a 6-year prospective study of IDUs, the users least likely to stop sharing needles were those who had a previous history of either needle-sharing or use of shooting galleries.\(^8\)

Other factors associated with sharing injection drug paraphernalia\(^8\)–\(^17\) include:

- Homelessness.
- Having an IDU sex partner (especially if that partner shares equipment with others, or if one partner relies on the other to inject them).
- Nonparticipation in a Syringe Exchange Program (SEP participation also reduces likelihood of sharing drug paraphernalia other than syringes).
- Engaging in drug-splitting and/or joint purchasing of drugs.
- Attendance at shooting galleries.
- Unemployment.
- Being female.
- Young age.
- Incarceration.
- Regular use of injection drugs (3 or more times per week).
- Depression.
- Family history of injection drug use.
- Use of amphetamines and/or cocaine.
Risk Factors for Initiation of Injection Drug Use

In addition to understanding which IDUs may be at particular risk for engaging in risky drug use behaviors, it is also useful for HIV care providers to be familiar with factors that may be associated with non-injection drug users eventually transitioning to injection drug use (and possibly risky injection behaviors).

Research suggests the following may be associated with initiating injection drug use:

- Previous drug use (especially non-injection use of heroin and cocaine).
- Homelessness.
- Young age (<18 years).
- Parental divorce or separation.
- Dropping out of high school.
- Unemployment.
- Have traded sex for drugs or money.
- Parental substance abuse.
- Use of injection drugs by family members.
- Comfort with needles (which may be correlated with a greater likelihood of a history of needle use, such as having one or more tattoos).
- Social network acceptance of injection drug use (e.g., friends, sex partners, and community members).

- For example, IDUs with early onset (ages 12–16) often first inject with friends, relying on others to administer the drug and provide the needle.
- Crack cocaine smokers who transition to injecting drugs are more likely to have a sex partner who injects drugs.
Implications for HIV Care Providers

Many factors may potentially increase the likelihood that someone will engage in risky sexual or drug use behavior.

By being familiar with factors that may be associated with engaging in HIV transmission risk behaviors, providers may be better prepared to identify those individuals who may be at greatest risk, and potentially help patients avoid establishing those behaviors early on.

At the same time, although research can provide group-level observations and trends that suggest who may be at highest risk, all individuals should be considered as potentially at risk and thus appropriate targets for HIV prevention interventions.

Therefore, because there are many types of factors associated with risk behavior, and all patients are unique, the prevention net must be cast widely. With prevention, one size does not fit all. Each patient should be assessed for their unique needs and barriers to safer sex and IDU behavior, and the appropriate targeted intervention must then be implemented.
References


Recommended Reading


For many men and women with HIV, deciding when and how to disclose their HIV status can be extremely stressful.

There is no best way for a person to tell someone else that he or she is HIV-positive, and there is no way to be sure how another person will react to hearing the news.

However, there are some things that you can do to help your patients be better prepared to decide who to disclose their HIV status to and how to best tell them.

*The healthcare provider is often the first person the patient talks to about disclosure* and, as such, it is important that providers who care for HIV-positive patients be familiar with common concerns surrounding disclosure. New York State has specific resources that HIV-positive patients can use to help them with disclosure.

**Ethical and Legal Issues in Partner Disclosure**

Disclosure to current, past, and potential sexual partners can be a particularly challenging situation, and it involves additional ethical, legal, and safety considerations for both healthcare providers and their patients.

Many people living with HIV do not disclose their HIV status to their current sexual partners (an estimated 10%–50% of HIV-infected individuals), and even fewer disclose their HIV status to past partners.¹

It is important to encourage disclosure to all partners, as this facilitates informed decisions about HIV risk reduction.

- In one study of HIV-infected gay men,² 48% of the total sample withheld disclosure from their sex partner, and 13% withheld disclosure and engaged in unsafe sex.
- Inconsistent disclosers and nondisclosers may be more likely to engage in risky sexual behaviors than individuals who consistently disclose their HIV status.
For example, a study of HIV-positive MSM found that individuals who consistently disclosed their HIV status to their casual sexual partners (29%) were more likely than inconsistent disclosers (38%) and nondisclosers (33%) to practice safer sex.  

- HIV-infected men and women are more likely to disclose their status to steady sexual partners than to casual partners.

Some people may assume that if their sex partner (or potential partner) doesn’t ask if they are infected, the partner is infected or doesn’t care, and thus is unlikely to disclose.

**New York State Partner Notification Laws**

In New York State, partner notification is mandated, and providers are required to talk with HIV-infected patients about their options for letting sexual and needle-sharing partners know they may have been exposed to HIV.

**Partner notification in New York State can occur in three ways:**

1. The counselor from the Health Department’s PartNer Assistance Program (PNAP) or Contact Notification Assistance Program (CNAP in New York City) tells the patient’s partner(s) without ever revealing the patient’s identity.

2. The patient tells the partner(s) with the help of his/her doctor or a PNAP or CNAP counselor.

3. The patient tells the partner(s) without support. A PNAP/CNAP counselor will work with the doctor to confirm that the partner(s) was told. If PNAP/CNAP cannot confirm this, the counselor may follow up with the patient or the partner(s) directly.

**Healthcare providers who are aware of the name of the patient’s partner(s) must report the name to the Department of Health. Partner notification will proceed unless deferred because of the potential for domestic violence.**

In New York, patients are not required to disclose their partners, and no civil or criminal liability arises for nondisclosure of partners by the patient.

For more information about New York regulations and resources, see the NYS Department of Health website:

http://www.health.state.ny.us/diseases/aids/regulations/notification/summary.htm
Addressing Disclosure with Patients

HIV status disclosure issues may come up with your patients in different ways.

- **Patients may spontaneously say that they have concerns** about HIV disclosure (either in general or to someone specifically). If this occurs, you can normalize their concerns and help them make appropriate decisions about disclosure by talking about the considerations.

  **Example:** A lot of my patients have told me that deciding who to tell about their HIV status and how to tell them can be a hard thing to figure out. In working with lots of people living with HIV over the years, I’ve found that there are some important things that can be helpful to think through when you’re trying to sort it all out. Would it be helpful to talk about some of these things together?

If patients say they are not ready to talk about a specific plan for disclosure, let them know that is fine and that you will be happy to talk about it when they are ready. **Note:** This may not apply to partner nondisclosure (see the first section in this chapter, *Ethical and Legal Issues in Partner Disclosure*).

- **Patients may not say anything specifically about disclosure, but you may get a sense from talking with them that disclosure is something they may be concerned about.** In this case, you may decide to bring up the subject of disclosure in a nonthreatening, supportive manner.

  **Example:** Some of my patients have told me how hard it is to decide who to tell about their HIV status, and what the best way is to tell someone. I was wondering if you are concerned about this?

If a patient acknowledges that this is a struggle for him/her, you can follow up by normalizing their concerns and offering to discuss helpful strategies (see example above).

If a patient does not seem ready to address this, let them know that is fine and if they decide later on they want to talk about it, you’ll be happy to help them. **Note:** This may not apply to partner nondisclosure (see the first section in this chapter, *Ethical and Legal Issues in Partner Disclosure*).

- **You may be concerned (ethically and/or legally) that a patient has not disclosed their HIV status** to their sexual partner(s), even if the patient has not expressed this concern. In this case, it is important to bring up the issue of partner notification in a nonjudgmental, nonthreatening manner.

  **Example:** You’ve mentioned your partner several times in our discussions. I was wondering if your partner is aware of your HIV status?
If a patient indicates that he or she has not disclosed their HIV status to their partner(s), you will need to explore this issue further according to state laws and the requirements of your institution (be sure you are clear on both). Most importantly, you want to give your patient the clear but nonjudgmental message that it is very important that their sexual partners are aware of their HIV status.

**Example:** It is important that your partners know your HIV status so that they can get tested to see if they have HIV. If they do, then they can get the health care they need and learn how to prevent spreading the virus to other people. If they do not have HIV, you and your partner can learn how to try to keep it that way.

**Exploring Concerns About Partner Disclosure**

Depending on your relationship with the patient (i.e., whether this is a new patient to you or someone who you have a strong trusting relationship with) and how much time you have available to talk with them, you will need to decide how much you can practically explore about disclosure with them.

**If you have very limited time available with the patient,** you can use that time to express the importance of disclosure to sexual partners and to discuss the options for disclosure (i.e., disclosure by the patient, disclosure through a partner notification system, or physician disclosure). If you sense the patient is having a difficult time with disclosure and you do not have time to extensively explore their perceived barriers to disclosure, **consider a referral to a counselor** to help the patient address their disclosure concerns more in depth.

**If you have more time available with the patient** and have the opportunity to explore your patient’s disclosure concerns more extensively, it can be helpful to determine if your patient has not disclosed because they do not want to tell their partner (a motivation deficiency), or because they not feel they have the skills to disclose to tell their partner (a behavioral skills deficiency).

**Example:** Have you not told your partner because you don’t want him to know, or because you don’t know how to tell him?

**Addressing a Motivation Barrier**

**If a patient does not want his/her partner to know their HIV status,** it can be helpful to explore the reasons. For example, are they concerned about being rejected? Are they worried that other people will find out too? Do they think it’s the partner’s responsibility to ask?

Once the patient’s concerns become clearer, you will be better prepared to address them. Remember, simply giving advice and/or adopting a confrontational style usually do not work.
To move the patient closer to the decision to disclose, it can help to:

- use open-ended questions to explore the patient’s concerns.
- listen to and encourage the patient with verbal and nonverbal prompts.
- seek to understand the patient’s frame of reference.
- express acceptance and understanding.
- clarify and summarize what the patient has told you.
- elicit and selectively reinforce the patient’s own self-motivational statements about disclosure.
- remain nonjudgmental and supportive.

Regardless of the laws of your state regarding partner notification, patients should always first be encouraged to disclose their HIV status to their partner(s) themselves unless there is a risk of potential violence.

However, if the patient remains unwilling to disclose to his/her partner(s), and partner notification is required by law in your state, you must discuss your obligation with the patient and jointly consider the options.

See the section in this chapter on Ethical and Legal Issues in Disclosure for more information.

**Addressing a Behavioral Skills Barrier**

Behavioral skills barriers can sometimes be more straightforward to address than motivational barriers.

If your patient *wants* to tell their partner(s) about their HIV status, but *lacks confidence* in their ability to do so, you can use the steps outlined in the sections that follow to help your patient feel better prepared and confident in their ability to disclose.

**Assisting Patients With Disclosure**

When making decisions about HIV status disclosure, it may be helpful for patients to consider:

- Who do they want to tell, and why?
- How much are they ready to share?
- How much is the person being told ready to hear?
- How will the disclosure affect your patient?
- How will the disclosure affect the person being told?
- What are the risks and benefits of disclosure?
When and where do they want to disclose their status?

Do they have the skills to effectively disclose and cope with the other person's reaction?

Deciding Who Needs to Know

When deciding whether or not to disclose, your patient may want to think about who needs to know, who does not necessarily need to know, and who they may want to know.

Your patient may also want to consider whom to disclose to first: it may be easier to first disclose to close friends and relatives before disclosing to a sexual partner.

Helping your patient clarify why they want a specific person to know can also help them decide what they want to say and to make sure their expectations are realistic.

Who Should Be Informed?

- People who may have been exposed to HIV so that they can be tested and seek medical attention if required (e.g., sexual contacts, needle-sharing partners).
- Doctors and other healthcare providers to ensure that your patient receives appropriate care.

Who Does the Patient Not Have an Obligation to Inform?

- Patient’s employer (though they are protected from job discrimination under ADA).
- Anyone not at risk of acquiring HIV from your patient.

Who May Your Patient Want to Tell?

- Close family and friends
- Children

How Much Is Your Patient Ready to Share?

Patients need to think about how much they are ready to share before disclosing. Remember, even though they are disclosing their status, they still have a right to privacy and are not obligated to share anything they don't want to share.

The patient should anticipate possible questions and responses to those questions.

For example, people may ask how they became infected. If they don’t want to share this information, they should have a reply ready such as . . .

- “Does it really matter?”
- “I'm not ready to talk about that.”
How Much Is the Person Being Told Ready to Hear?

Some people are open to hearing anything, while other people actively avoid discussing issues they perceive as negative or stress-inducing. It can be helpful for your patient to anticipate how ready the person is to hear this information.

For example, if an HIV-infected gay man would like to disclose his HIV status to another male friend who is part of an active gay community, he may not have to worry much about his friend being unprepared and overwhelmed. He may feel that his friend will be emotionally able to receive this news.

The same may not be true for other people who are not used to dealing with such news or who do not generally deal well with stressful situations; your patient may want to prepare how much they want to share accordingly.

How Will Disclosure Affect Your Patient and the Person Receiving the Information?

People react differently to hearing that someone is HIV-positive: some may immediately embrace the patient while others may react negatively or need time to process the news and overcome preconceived notions about HIV.

For example, the patient may think that the person they want to disclose to may react by rejecting the patient or getting angry. The patient can then prepare for each of these possible reactions so that they will feel confident in their ability to handle the other person’s reaction, whatever it is.

Tip

Although it is impossible to accurately predict how another person will react to disclosure, it can be helpful for the patient to think about how the person has reacted in other situations, how they may react to this situation, and what the patient can do to deal with the reaction.

It may be helpful to provide resources and support to the person being told. The patient may want to provide informational brochures or books on HIV, telephone numbers of support groups in the area, and/or names of others who are aware of the patient’s status and can be available for support. Possible sources of support include family, friends, a doctor, a social worker, a counselor, community AIDS organizations, etc.
Concerns About Violence

If your patient has concerns that the person they are planning to tell may become violent, you can discuss their options, such as having someone with them when they disclose, disclosing with a counselor or physician present, or using a partner notification program.

If the patient is in a violent relationship, a referral to a social worker or counselor for assistance in getting out of the abusive situation is very important. Also, advise the patient to disclose through a partner notification program. The patient should not disclose to the partner alone.

What Are The Risks and Benefits of Disclosure?

Research suggests that there are a number of concerns that people with HIV commonly have about disclosing their HIV status to others. These common concerns include fears about:

- Abandonment, closely tied to fear of loss of economic support from partners.
- Rejection/discrimination.
- Violence.
- Upsetting family members.
- Accusations of infidelity.

It is important for your patients to consider the realistic potential for each of these risks (and any others), and to weigh the risks and benefits of disclosure when deciding whether or not to tell someone about their HIV status.

Helping your patients anticipate how they could best handle these potential concerns may help them feel better prepared to deal with them.

Considering the possible benefits of disclosure is also important when trying to motivate patients to disclose, or when helping them weigh the risks against the benefits.
Possible benefits of disclosure include:

- Increased social support, acceptance.
- Decreased anxiety, depression, and stress of having to keep a secret.
- Strengthening of relationships.
- Ability to make informed decisions with partner (which facilitates HIV-preventive behavior).
- Increased feeling of control and self-responsibility when informing sexual and needle-sharing partners.
- Avoiding legal consequences.

Creating a continuum of disclosure risks/benefits can help patients establish a personal plan for disclosure. Ask the patient to rank order people they would find least difficult to most difficult to tell about their HIV status. This activity helps patients think about whom they may want to disclose their status to first and how to plan ahead and reduce their stress.

**When and Where Should the Patient Disclose?**

**Where to Disclose?**

When preparing for disclosure, it is important to consider where the disclosure will occur.

- For example, would it be better to have the conversation at the patient’s home, a friend’s home, a healthcare setting (especially important if there is a risk of the person becoming violent), or somewhere else?

**Tip**

*When possible, it is best for the patient to plan for the disclosure to occur in a place that is comfortable and safe, where they will not be disturbed while they talk, and while they are both sober.*

**When to Disclose?**

*When* to disclose can also be a challenging issue for patients, particularly for disclosure to sexual, or potential sexual, partners. Generally speaking, there is no *ideal* time to disclose. Unless legally required, the patient should disclose when they feel ready to do so, but they should consider the potential ramifications of their decision about when to disclose.
Options for when to disclose to (potential) sexual partners include:

- **Disclosure upon meeting a potential sexual partner**
  
  **Advantage:** Less emotional attachment before possible rejection
  
  **Disadvantage:** Possibility of more people in community knowing about HIV status

- **Disclosure after several “dates” but before sexual contact**
  
  **Advantage:** More privacy, don’t have to disclose to every date
  
  **Disadvantage:** Possible angry/hurt reaction about not being told previously

- **Disclosure after a sexual encounter**
  
  **Rationale:** Patient *hopes* that partner will be emotionally involved and won’t reject patient.

  **Disadvantages:** Most people lose their trust in partners who conceal important information.
  
  - If patient had unprotected sex, will expose partner to HIV
  
  - Studies indicate that telling after sex can lead to increased risk of violence.
  
  - There may be legal repercussions.

**Skills Needed for Disclosure**

There is no best way to disclose one’s HIV status to another person, but becoming an effective communicator can help a person reduce their stress and make better decisions about disclosure.

If done skillfully, disclosure can empower your patient, the other person, and their relationship.

**To effectively communicate about their HIV status, your patient needs:**

- **Confidence in their ability to manage disclosure situations** *(self-efficacy)*

  Confidence can be increased by preparing for disclosure, getting feedback from other people who have gone through disclosure themselves or with a physician/ counselor, and through role-plays and practice.

  Role-playing and/or rehearsing different ways to disclose can be a very helpful preparation tool. Practicing and saying the words out loud will certainly help the patient be more confident.
When practicing, the patient should consider:

— How will the topic be introduced?
— How will they respond to the person’s questions?
— What will the patient say and do if the person responds negatively?

● **Availability of support from others for disclosing**

The patient should have support available before the disclosure (to help prepare) and after the disclosure (to help cope with the other person’s reaction, if needed).

● **Ability to determine the potential consequences for disclosing one’s HIV status**

See previous section in this chapter, *What are the Risks and Benefits of Disclosing?*

● **Skills for managing disclosure situations, such as the . . .**

— **ability to communicate assertively**

(expressing personal thoughts, feelings and needs using “I” statements)

**Example:** *I am telling you this because I care about and respect you, and I want be honest in our relationship. I understand you may need some time to process this information, but I hope that we can continue our relationship.*

— **ability to use active listening**

(listening for both the thoughts and feelings of the other person, then summarizing back to them what they said)

**Example:** *From what you are saying, it sounds like you are concerned about the risks of getting HIV if we have sex, and you are feeling a little hurt and angry that I didn't tell you sooner. Is that right?*

— **ability to identify aspects of situations that facilitate or impede disclosure**

(i.e., availability of a private place and time to talk, both sober)
— ability to manage one's own emotional reactions

The patient should plan for the possibilities of how the person they are disclosing to may react, and then plan for how they will deal with those possible reactions.

For example, if the person your patient tells becomes angry, how will the patient de-escalate the situation and manage their own emotional reactions? If the person rejects or pulls away from the patient, how will they handle that? Support and preparation are critical here.

Summary

The most effective way to help your patients with disclosure is to teach them the skills to:

- evaluate the risks and benefits of disclosing.
- communicate effectively to others about their HIV.
- cope with the positive and negative consequences of disclosing their HIV status.

Seven Steps to Notifying Partners

Patients can use the strategies discussed in the previous sections, and may also refer to the brochure, *There’s Something I Need to Tell You*, a step-by-step guide to disclosing to partners that is published by the New York Department of Health. It is included in the Options patient handouts and is available at: [http://www.health.state.ny.us/disease/aids/publications](http://www.health.state.ny.us/disease/aids/publications).

This guide follows 7 steps to notifying partners that they may have HIV:

1. Weigh the pros and cons of telling your partner yourself.
2. Get ready to share the facts about HIV.
3. Decide if you want help telling your partner and who will help you.
4. Find the right time and place.
5. Plan what you will say.
6. Prepare for how your partner will react.
7. Get extra support after telling your partner.
Planning What to Say

In planning what to say to their partner, the patient should make sure that they get 3 basic messages across:

1. The patient has HIV.
2. Their partner may also have HIV.
3. Their partner should get an HIV test.

What else the patient may want to say:

- Why the patient is telling their partner
  
  **Example:** “I care about you and want you to stay healthy, so you need to know about this.”

- Why it is important the partner gets tested
  
  **Example:** “There are medicines that help people with HIV stay healthier. You should get tested right away so that if you have HIV, you can get treatment and support.”

- How the patient will support the partner
  
  **Example:** “Getting an HIV test can be stressful. I am here for you if you need help.”

- That they will share information about their medical condition
  
  **Example:** “My doctor says I will probably need to start taking HIV medicine soon. That will help keep me healthier. I plan to be around for a long time.”

**Tip**

**Helpful Hint for the Patient:** Think about how you felt when you first tested positive for HIV. What did people say that helped you? Remembering these things will help you plan what to say to your partner(s).

Things for the patient to think about when preparing for their partner’s reaction:

- Remember how you felt when you were told that you have HIV. How did you react? Your partner may feel the same way.

- Bring phone numbers with you to share with your partner. Helpful numbers might be an HIV/AIDS hotline, the number of your counselor or clergy, or the number for PNAP/CNAP.
• Telling a partner may change your relationship. Sometimes people stay together and work through this. Sometimes they don’t. Your partner may want some time and space to see how they feel. Be understanding and let your partner know that you care and are there to help. Get the support you need to help you through changes in the relationship.

• No matter how your partner reacts, remember that you are sharing important information to protect their health. Telling is an act of caring and concern.

• Let the person know why you are telling them: you respect them, you want to protect them, you want to be honest with them, etc.
References


The largest proportion of HIV/AIDS diagnoses in the United States continues to be attributable to sexual contact. For men, male-to-male sexual contact is by far the biggest transmission category, and for women, heterosexual contact accounts for the majority of HIV/AIDS cases (see Figure 1).

**Figure 1**

Transmission Categories of Adults/Adolescents with HIV/AIDS Diagnosed in 2004

(Based on data from 35 areas with long-term, confidential name-based reporting.)

Given that many HIV-positive individuals continue to be sexually active after their diagnosis, it is critical for health care providers to understand and convey to their patients the relative risks of different types of sexual behaviors and the factors that may increase the likelihood of HIV transmission through sexual contact.

**Infectivity Estimates of Various Sexual Practices**

HIV-positive individuals, like uninfected individuals, may engage in a variety of sexual behaviors that fall along the continuum of transmission risk. Some HIV-positive individuals engage in unprotected sexual behaviors under the mistaken impression that certain behaviors (e.g., receptive anal sex or oral sex) carry little
or no risk of HIV transmission. While patients need to understand the relative risk of different sexual behaviors, they also need to know that all unprotected sexual behaviors carry some degree of transmission risk.

Table 2 shows estimates from the CDC about the per-act risk for acquisition of HIV for different unprotected sexual behaviors.2 Risk estimates of exposure by transfusion and injection drug use are provided as a reference.

### Table 2
**Estimated Per-Act Risk for Acquisition of HIV, by Exposure Route**

<table>
<thead>
<tr>
<th>Exposure Route*</th>
<th>Risk per 10,000 exposures to an infected source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood transfusion</td>
<td>9,000</td>
</tr>
<tr>
<td>Needle-sharing injection-drug use</td>
<td>67</td>
</tr>
<tr>
<td>Receptive anal intercourse</td>
<td>50</td>
</tr>
<tr>
<td>Percutaneous needle stick</td>
<td>30</td>
</tr>
<tr>
<td>Receptive penile-vaginal intercourse</td>
<td>10</td>
</tr>
<tr>
<td>Insertive anal intercourse</td>
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</tr>
<tr>
<td>Insertive penile-vaginal intercourse</td>
<td>5</td>
</tr>
<tr>
<td>Receptive oral intercourse**</td>
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</tr>
<tr>
<td>Insertive oral intercourse**</td>
<td>0.5</td>
</tr>
</tbody>
</table>

* Estimates of risk for transmission from sexual exposures assume no condom use.
** Refers to oral intercourse performed on a man.

### Heterosexual Intercourse (penile vaginal sex) 3
- Heterosexual intercourse is the most common route of HIV acquisition for females in the United States, and the most common mode of HIV infection for males and females worldwide.
- Heterosexual intercourse during menstruation may increase the risk of transmission from an infected female to an uninfected male.
- In the U.S., infectivity estimates are higher for male-to-female transmission than female-to-male transmission (in some areas of the developing world estimates of female-to-male transmission are higher than in developed countries, though the reasons for this are unclear).

### Anal Intercourse (penile anal sex) 3
- The risk of HIV infectivity is higher for the receptive partner in penile anal sex than for the insertive partner, but it is critical for patients to be aware that both behaviors carry a risk of HIV transmission.
HIV transmission to the receptive partner most likely occurs as a result of HIV-infected semen coming into contact with traumatized rectal mucosa.

“Pulling out” prior to ejaculation is also unsafe—exposure to pre-ejaculate may also carry a significant risk of transmission.

**Rectal Douching and Rectal Fisting**

Rectal douching and rectal fisting have been shown to increase risk of HIV infection in studies of MSM—this is likely due to rectal mucosa trauma which then facilitates entry of HIV into the bloodstream during subsequent anal sex post-douching or fisting.

**Oral Sex**

See Appendix C for in-depth information from the Centers for Disease Control and Prevention on the HIV transmission risks associated with oral sex.

**Oral Penile Sex**

Exact estimates of the risk of oral penile sex are difficult to obtain given that so few people practice oral sex to the exclusion of other, higher risk sexual activities.

Generally, the risk of oral-penile sex is believed to be very low, but not necessarily risk-free (there have been reports of suspected transmission due to oral sex).

Importantly, regardless of its relatively lower risk for HIV transmission, oral sex is clearly a risk factor for other STIs such as herpes and gonorrhea that may play a role in the acceleration of HIV disease-progression in co-infected patients.

**Oral Vaginal Sex**

The transmission risk associated with oral vaginal sex has received very little attention.

There are case reports of female-to-male and female-to-female HIV transmission via oral-vaginal sex, but studies generally conclude that the risk is extremely low.

However, like oral penile sex, oral vaginal sex is a risk factor for other STIs that may play a role in HIV disease-progression acceleration in co-infected patients.

**Oral Anal Sex**

Oral anal sex has not been shown to be an independent risk factor for HIV infection based on studies with MSM.

However, oral anal sex is an effective route of transmission for other harmful pathogens, such as Hepatitis A and B and parasitic infections (e.g., giardiasis and amebiasis).
An Important Note about Oral Sex . . .

- Some patients believe that using mouthwash after oral sex will help minimize the risk of acquiring HIV or another STI. There is no scientific evidence that this practice has any effect on likelihood of HIV/STI transmission.

Other Factors Affecting Sexual Transmission of HIV

Viral Load\textsuperscript{4,5,6}

- Generally, research suggests that individuals with low blood plasma viral loads are less infectious than individuals with high levels of blood plasma viral load.

- However, low levels of plasma HIV viral load are generally relevant for transmission only to the degree to which they mirror low levels of HIV present within the rectal tissues, the female genital tract, and the semen of HIV-infected men.

- One study\textsuperscript{5} of HIV-positive women found that although more women with detectable plasma viral load had concurrent HIV-1 genital tract shedding (80%), a significant minority of women (33%) with less than 500 copies/mL plasma RNA also had genital tract shedding. A similar study found genital shedding in 25\% of women with undetectable plasma viral loads.\textsuperscript{6}

- Therefore, while risk of transmissibility may be highest among patients with higher levels of plasma viral load, a significant number of patients with low or undetectable plasma viral load remain potentially infectious.

Antiretroviral Therapy\textsuperscript{4,7,8}

- Antiretroviral therapy (ART) has been shown to be effective in reducing the mortality and morbidity associated with HIV. The impact of ART on HIV transmissibility is less defined. While ART has been shown to reduce plasma viral load, the extent to which it decreases the likelihood of HIV transmission depends in part on the impact of ART on the amount of HIV present in semen, the genital tract, and rectal mucosa.

- Studies have demonstrated that even among individuals on ART with fully suppressed plasma viral load, seminal shedding may still occur. For example, one study of 7 men on ART with no detectable plasma viral RNA (<50 copies/mL) demonstrated proviral DNA in seminal cells of 4 of the men, suggesting “that the genital tract can be a reservoir for HIV-1 replication in men.”\textsuperscript{7}

- The penetration of a given antiretroviral drug into the male genital tract is not consistent across drugs: it is highly drug-specific (see Taylor et al.\textsuperscript{8} for an in-depth description of drug concentrations). Although very few studies have evaluated drug concentrations in the female genital tract, variation also has been observed.
Similarly, the extent to which low plasma viral loads are mirrored within the male and female genital tracts also appear to depend upon the drug regimen given. Generally, combination therapy is more effective at reducing genital shedding than monotherapy; suboptimal regimens tend to be less effective.

**Stage of HIV Infection**

Primary HIV-1 infection is a stage of disease in which individuals may be particularly infectious, as plasma viral load and genital HIV secretions tend to be very high during this stage.

Similarly, advanced disease may also be a stage of increased risk for transmissibility, possibly related to increased viremia during this stage as well.

**Presence of Other Sexually Transmitted Infections**

- The presence of genital ulcer disease (e.g., herpes, syphilis, chancroid) in either sexual partner appears to increase risk of HIV transmission.

- Specifically, STIs with genital ulcers in an HIV-infected individual may increase the likelihood that that person may transmit the virus to a partner. Similarly, presence of genital ulcers in an uninfected person may also make them more susceptible to acquiring HIV.

- Even individuals with asymptomatic genital ulcer disease may be more at risk for transmitting or acquiring HIV given that reactivation of these diseases is often sub-clinical.

- Non-ulcerative STIs may also impact upon the transmissibility of HIV, but they appear to do so primarily by increasing the risk of HIV acquisition for the receptive partner.

**Other Active Illnesses**

- Systemic illnesses (e.g., active TB) and opportunistic infections may increase the likelihood of HIV transmission via their impact on viral load.
Use of Hormonal Contraception

Use of hormonal contraception in women also appears to increase a woman’s risk of acquiring and transmitting HIV. While the mechanism is unclear, it may include effects on cell-mediated and humoral immunity, increased risk of cervical ectropion, and/or increased HIV shedding.

Microbicide Use

Clinical studies suggest that nonoxynol-9 may facilitate HIV transmission vaginally and rectally, as well as other STIs (despite its anti-HIV properties in vitro), and the CDC has recommended that all individuals discontinue use of nonoxynol-9 for HIV prevention.

Studies investigating the utility of other microbicides in protecting against HIV and STIs in women are currently under way.

Circumcision

The risk of HIV transmission from females to males is higher in uncircumcised men, and there is some suggestion from studies that HIV-positive uncircumcised men may also be more infectious to their partners.

Increasing Accurate Information about Sexual Transmission of HIV/What your Patients Need to Know

1. An “undetectable” viral load does not mean you do not have HIV in your body: you can still transmit HIV even when you have an “undetectable” viral load.

2. Use of ART may reduce viral load and may make transmission of HIV less likely, but some people on ART with low or undetectable viral loads in their blood may still have high levels of the virus present in their semen or genital tracts and, therefore, still have a chance of transmitting the virus to others.

3. You can get reinfected with HIV if you have unprotected sex with partners who also have HIV. Getting reinfected may make your HIV progress faster, and/or you may get reinfected with a strain of HIV that is not responsive to medication.

4. If you acquire a sexually transmitted infection, it may make your HIV worse (or make you more likely to transmit HIV to your partners).

5. Use of nonoxynol-9 is not recommended, as it can actually make transmission of HIV more likely to occur.

6. Uncircumcised men may be at increased risk of acquiring or transmitting HIV.

7. People who have recently acquired HIV or who have advanced HIV...
disease may be more likely to transmit the virus to others, as they may have particularly high levels of the virus present.

8. Relatively speaking, oral sex (oral-genital or oral-anal) is comparatively lower-risk behavior, but there have been case reports of people who appear to have acquired HIV through oral sex. Oral-anal sex is also a risky practice for acquiring other illnesses, such as hepatitis.

9. There is no evidence that using mouthwash after oral sex will minimize the risk of acquiring HIV or another STI.

10. Rectal douching and rectal fisting may increase the likelihood of HIV transmission during subsequent anal sex, as both practices may damage the lining of the rectum and facilitate HIV entry.

11. Receptive anal sex appears to be more risky than insertive anal sex, but both carry a significant risk of HIV transmission.

12. Heterosexual intercourse while a woman is having her period may increase the risk that she will transmit HIV to her male partner.

**Medication Adherence, Viral Load, and the Options Intervention**

Studies have demonstrated that patients with low or undetectable plasma viral load tend to be less infectious to others through sexual contact (i.e., they tend to have less HIV present in their semen or genital tract). Therefore, strategies to increase patients’ adherence to medication regimens and other medical care recommendations may also have important implications for decreasing the risk of HIV transmissibility.

It is important to note, however, that plasma viral load measures do not always correlate with the amount of viral load in semen or the genital tract (see above sections on Viral Load and Antiretroviral Adherence). Therefore all individuals with HIV, regardless of their viral load, should be considered infectious.

In addition to encouraging HIV risk reduction, the Options intervention also may be beneficial to patients and their providers in promoting medication and medical care adherence.

By facilitating open and honest discussions between patients and healthcare providers about barriers and challenges for safer sex and drug use, providers may observe that their patients are more open to discussing other HIV-related challenges (such as adherence) as well as strategies for improvement.

Any intervention that strengthens the provider-patient relationship (as the Motivational Interviewing-based Options intervention is designed to do) may be useful for promoting a patient’s willingness to work as a team with their provider and follow care recommendations.
References


8. Taylor S, Boffito M, Vernazza PL. Antiretroviral therapy to reduce the sexual transmission of HIV. J HIV Ther. 2003;8:55–66.
**Recommended Reading**


There are many different types of sexual behaviors, all of which carry their own associated levels of HIV transmission risk and recommendations for risk reduction.

People living with HIV/AIDS can engage in a number of sexual behaviors that are safe, sexually satisfying, and do not involve penetration.

To assist providers in becoming familiar with the variety of sexual behaviors available and practiced, this chapter includes:

- Different types of sexual behaviors.
- Definitions of the different behaviors when appropriate.
- Information about relative risk for transmission of HIV and STIs for each behavior.
- Risk reduction strategies to make each behavior safer (as appropriate).

**Tip**

Becoming familiar with the different kinds of sexual behaviors commonly practiced within different populations can assist providers in working with their HIV-positive patients and their diverse risk reduction needs.

**Harm Reduction Options for Sexual Behavior**

Patients who are interested in learning about, trying, or adopting sexual behaviors that carry no or lowered transmission risk may consider the alternatives to penetrative sex listed in this chapter.

The risks associated with each sexual behavior are listed as well as methods of reducing those risks. It is important to work toward risk reduction rather than elimination of a risk behavior when the patient reports intending to continue the behavior.
Phone Sex

HIV Transmission Risk: None

Description:
- Talking sexually over the phone with a known partner or a consenting stranger while masturbating.
- Using phone sex services including listening to recorded messages of people talking sexually, listening to recorded ads left by people who want to be called, calling a professional sex worker, and calling live party-line connections where it is possible to talk with one or more people at a time.

HIV Transmission Risk:
- There is no risk of HIV transmission from phone sex because there is no physical contact between partners.

Other Risks:
- Phone sex services can be expensive (i.e., as much as $3 a minute) and addictive.

Cyber Sex (sex on the Internet)

HIV Transmission Risk: None

Description:
- Viewing provocative websites on the Internet or talking sexually to others via chat rooms or instant messaging programs while masturbating.

HIV Transmission Risk:
- There is no risk of HIV transmission from sex on the Internet because there is no physical contact between partners.

Other Risks:
- Not knowing the identity of the other person is risky. To avoid unnecessary social risks, the relationship should be confined to the Internet.

Fantasy

HIV Transmission Risk: None (may be higher if it includes sexual contact)

Description:
- Talking about or enacting sexual fantasies with partners, including taking on different roles, playing different parts, and dressing up in different clothes.

HIV Transmission Risk:
- While fantasy itself does not carry any risk of HIV transmission, other sexual behavior included in the enactment may carry risk. Appropriate precautions need to be taken to prevent transmission of HIV or other STIs.
Reducing Risk:
- When enacting fantasies that lead to sexual contact, condoms or other barrier methods should be used to minimize exposure to HIV and other STIs.
- Individuals who engage in sexual contact during their fantasy enactment may benefit from planning and developing strategies to incorporate prevention into their fantasy enactments.

Massage

**HIV Transmission Risk: None (may be higher if it includes sexual contact)**

**Description:**
- Massage (with or without oil) used both as a form of foreplay and by itself as a form of safer sex.

**HIV Transmission Risk:**
- Massage itself poses no risk of HIV transmission.
- If a massage leads to intercourse, any oil used during the massage will weaken latex condoms and may cause them to break.

**Reducing Risk:**
- If oil is used, it should be kept away from the vagina and penis if intercourse follows, and should be cleaned off one's hands before putting on a condom.

Frottage (external body rubbing to orgasm)

**HIV Transmission Risk: None**

**Description:**
- Rubbing one's body against his/her partner's body to achieve orgasm.

**HIV Transmission Risk:**
- Frottage poses no risk of HIV transmission because there is no penetration.

Kissing

**HIV Transmission Risk: Low**

**Description:**
- Romantic or sexual mouth-to-mouth contact.
- Often French or deep kissing which involves stimulating the lips, tongue, and mouth and the exchange of saliva.
**HIV Transmission Risk:**
- There is a low risk for HIV to be transmitted through kissing—researchers have found infectious HIV in the saliva but only in extremely low titers.
- It is very difficult to transmit HIV through kissing unless both people have open wounds in the mouth. There has been no evidence of HIV transfer via saliva alone; blood appears to be a necessary component.
- There is one documented case where HIV was thought to be transmitted from one person to another through kissing, but the transmission of HIV was found to be associated with blood in the saliva of both individuals.\(^1\) This was a unique case in which gum disease in both people caused excessive bleeding.

**Other Risks:**
- There is some risk of acquiring an STI during kissing, but generally the risk is low.
- The risk increases if one or both partners have bleeding gums, cuts, or sores in the mouth.

**Reducing Risk:**
- Taking good care of teeth and gums will help reduce any risk from kissing.

**Mutual Masturbation**

**HIV Transmission Risk: Low**

**Description:**
- Each partner self-masturbating in the presence of the other, or each partner stimulating or masturbating the other.

**HIV Transmission Risk:**
- There is no risk of HIV transmission if each partner self-masturbates in the presence of each other because there is no exchange of or contact with fluid.
- If each partner is stimulating/masturbating the other, the behavior carries a minimal risk because there is a possibility that blood, semen, or vaginal secretions can enter the body through any cuts on the hands.

**Reducing Risk:**
- The use of finger cots or gloves will reduce the risk by protecting any cuts, cracks, or scratches on one’s hands.

**Finger Play**

**HIV Transmission Risk: Low**

**Description:**
- Inserting one’s finger(s) into the vagina or anus of his/her partner.
HIV Transmission Risk:

- There is a relatively low risk for HIV transmission during finger play.
- Transmission of HIV may occur if vaginal secretions or blood from inside the vagina or anus gets into any cuts or scratches that are on the fingers of the person who is inserting his/her fingers.

Other Risks:

- Fingers can carry other infections that can be transmitted from the fingers to the vagina or anus.

Reducing Risk:

- To minimize risk of HIV transmission, the person inserting their fingers may want to wear a condom, finger cot (i.e., a piece of latex that covers a single finger), or disposable glove, especially if there are cuts, cracks, or scratches on their fingers.
- One should keep fingernails short and smooth and remove rings prior to insertion to prevent damage to the delicate membrane of the vaginal or anal wall.
- Sufficient water-based lubricant should be used to reduce the risk of tearing the membrane of the vaginal or anal wall.
- The person inserting their fingers should always wash their hands before insertion, especially if one has their own semen or vaginal secretion on them. Hands should be cleaned using hot water and antibacterial soap.
- If a person is putting their fingers inside multiple vaginas or anuses in one setting, they must clean their fingers or change gloves between partners, as HIV and other STIs can be transferred from one person to another.
- Gloves should be worn if the person has warts on their fingers or hands because warts can spread to others.
- If gloves are not worn, the person needs to clean their hands before touching their eyes, mouth, or anyone else’s genitals.

Nipple Play

HIV Transmission Risk: Low

Description:

- Manual and oral nipple stimulation and use of items such as nipple clamps, nipple suction devices, rubber bands, and hot wax.

HIV Transmission Risk:

- Most behaviors involved in nipple play have no or very low risk for HIV transmission.
- Nipple clamps with teeth that can cut the skin may allow the transfer of blood, vaginal secretions, or semen that may be infected with HIV or an STI.
Reducing Risk:
- “Spring-type” clothespins should be used in the place of nipple clamps that have teeth because they are less likely to cut the skin and inexpensive enough to throw away if they get dirty (i.e., with blood, vaginal secretions, or semen).

Shaving

HIV Transmission Risk: Low (may be higher if sharing razors)

Description:
- Shaving one’s genitals or their partner’s genitals as part of sex play.

HIV Transmission Risk:
- Shaving is a relatively low-risk activity but carries more risk if razors are shared or if bleeding occurs.

Reducing Risks:
- Clean, disposable razors should be used, and neither the razor nor the shaving cream used should be shared.
- Bleeding may occur after shaving, especially if one has sensitive skin. Therefore, sexual contact should be avoided if bleeding is present.
- It is recommended that people not have sex immediately after shaving either or both partner’s genitals. If they do have sex, condoms should be used.

Bondage

HIV Transmission Risk: Low (may be higher if skin is broken)

Description:
- Being tied up or restrained as part of sex play.
- Often used in S&M (sadomasochism) activities.

HIV Transmission Risk:
- Bondage has an increased risk of HIV transmission when the skin is broken.
- Cuts can allow HIV and other STIs into the body via blood, vaginal secretions, or semen.

Reducing Risk
- To avoid abrasions and cuts, cuffs and straps should be used rather than ropes, which are more likely to damage the skin.
Whipping/Spanking

HIV Transmission Risk: Low (may be higher if skin is broken)

Description:
- Hitting or being hit with a hand or other object including bullwhips, cat o’nines tails, and paddles as part of sex play.
- Often used in S&M (sadomasochism) activities.

HIV Transmission Risk:
- Whipping and spanking have an increased risk of HIV transmission when the skin is broken.
- Cuts can allow HIV and other STIs into the body via blood, vaginal secretions, or semen.

Reducing Risk:
- To avoid cutting the skin, cat-o-nine tails and crops should be used in place of paddles with sharp edges or whips with metal tips that are more likely to damage the skin.
- It is necessary to clean whips, paddles, and other tools after using them to remove any blood, vaginal secretions, or semen. To disinfect these items (especially those made of metal, plastic, or other nonporous materials), wash with hot soapy water, soak for 2 or 3 minutes in a 10% bleach–90% water solution, rinse well with hot water, and air-dry. For items made of leather or suede, which could be damaged by bleach, refer patients to the book *Leather and Latex Care* by Kelly J. Thibault.

Rimming (analgingus)

HIV Transmission Risk: Low

Description:
- Mouth-to-anus sexual play.

HIV Transmission Risk:
- The risk for HIV transmission during rimming is relatively low if no blood is involved.
- The risk increases if open fissures or sores are present in the mouth or rectum.

Other risks:
- The risk of transmitting parasites, hepatitis, and various forms of dysentery during rimming is very high.
- Acquiring an STI or an intestinal disease can weaken the immune system and make it more difficult for HIV-positive individuals to fight off opportunistic infections.
Reducing Risk:
- Risk can be reduced by using a dental dam, glyde dam, or plastic wrap while engaging in rimming. Only one side of the barrier should be used so that any infection will not enter the mouth.
- Showering prior to engaging in rimming may help reduce risk of transmitting infections.

Golden Showers (water sports) or Scat

HIV Transmission Risk: Low

Description:
- Using urine or fecal matter, respectively, during sexual activity.

HIV Transmission Risk:
- Sex play with urine or fecal matter has a relatively low risk of transmitting HIV unless blood is present.
- Infectious HIV exists in urine but at extremely low titers, and there have been no reports of HIV transmission via urine.
- HIV is not found in feces though blood is more commonly found in fecal matter than in urine.

Other Risks:
- Because urine and fecal matter are both bodily fluids, they can transmit hepatitis as well as intestinal infections.

Reducing Risk:
- Urine and fecal matter should be kept away from cuts, open sores, and eyes.
- Neither urine nor fecal matter should be ingested.
- Individuals engaging in these behaviors should thoroughly wash their hands or other contacted areas with disinfecting soap.

Fisting

HIV Transmission Risk: Low (but may increase transmission vulnerability without precautions)

Description:
- Inserting one’s hand/fist into a partner’s vagina or anus.
- Anal fisting or handballing refers specifically to inserting a hand/fist into an anus.

HIV Transmission Risk:
- There is a relatively low risk of transmission of HIV and other STIs during fisting if appropriate precautions are taken.
It can take up to two or three days for the anal/rectal membranes to fully recover after deep anal fisting, making a person more vulnerable to transmitting or acquiring HIV or other STIs.

The most commonly used lubricants for anal fisting are oil-based, which can weaken the latex in gloves and condoms making them more likely to break.

Reducing Risk:

- To minimize damage to the vaginal or anal wall, one should keep his/her nails short and smooth, not wear any jewelry on one’s fingers or hands, and use plenty of water-based lubricant.

- Gloves should be worn to cover any cuts on the hand.

- If any blood is noticed, fisting should cease and intercourse should be avoided.

- The use of mind-altering substances should be avoided with anal fisting as they can block pain sensations for the receiving partner that would signal the need to stop.

- Oil-based lubricants such as Crisco have traditionally been popular for anal fisting because the anal passageway needs to be well-lubricated for long periods of time during fisting, and water-based lubricants need to be reapplied or reconstituted often. However, because oil-based lubricants break down latex gloves, silicone-based lubricants should be used in place of traditional oil-based lubricants.

- A small number of advanced anal fisters have penetrated through the rectum to near the transverse colon, with the person’s arm doing the penetration inserted to near the elbow. Some healthcare professionals feel that unless there are visible cuts on the arm, it is okay to penetrate to beyond the base of the glove.

- Because oil-based lubricants are most commonly used in anal fisting, latex condoms are not recommended for use following fisting. If one is going to engage in anal intercourse after using an oil-based lubricant for fisting, a polyurethane condom should be used and extreme care taken to maintain the integrity of the barrier.

- If a person chooses to put their ungloved fingers, hands, or fists in someone’s vagina or anus/rectum, they should thoroughly clean their hands using hot water and antibacterial soap, with particular attention to beneath the fingernails before putting them in or near their own mouth or eyes or on anyone else’s genitals.

Use of Sexual Toys

HIV Transmission Risk: Low

Description:

- Using sexual toys including vibrators, dildos, butt plugs, and cock rings.
HIV Transmission Risk:

- The use of sexual ‘toys’ has a relatively low risk of transmitting HIV if the items are used safely and not shared between partners without thorough cleaning and changing of the protective condom used on them.

- The linings of the vagina and anus/rectum are easily damaged by objects inserted into them, which means that traces of HIV- or STI-infected blood can end up on the toys and be transferred if used again without cleaning.

Reducing Risk:

- When sharing toys, it is critical to cover the toys with a condom (or glove or finger cot), and then change the condom between partners, or clean the sex toys between partners by washing them thoroughly.

- Toys can be cleaned by washing them with hot water and disinfectant soap, or they can be disinfected with bleach and then rinsed well with water. (Note: Over time, bleach can cause cracks to develop in the rubber or plastic). Toys that are made of silicone, such as some dildos and butt plugs, can be boiled up to 3 minutes, cleaned with a bleach solution, or run through a dishwasher.

- Toys that are made of rubber are porous and difficult to completely sterilize. With rubber toys, it is best not to share them at all; they should be used with condoms if shared.

- Toys with batteries cannot be submerged in water and should be used with condoms if shared.

- Dildos, butt plugs, and vibrators that are made of smooth, pliable soft rubber or plastic should be used to minimize damage to the vagina and anus/rectum. Objects that are sharp, breakable, pointy, rough, hard, or inflexible should not be used as a sexual toy, and any toy that develops holes or cracks should be replaced.

- Toys with a string or handle should be used, or part of the toy left outside the body, to remove easily.

- Cock rings should not be used continuously for prolonged periods of time (longer than 24 hours) as the rings can cause tissue damage.

Piercing

HIV Transmission Risk: Low to moderate

Description:

- Piercing one’s genitals or nipples as part of sex play or having intercourse with a pierced penis.

HIV Transmission Risk:

- There is some risk of acquiring HIV when getting pierced if the equipment hasn’t been sterilized.
The vaginal or anal wall can be damaged by a pierced penis, which increases the risk of transmission of HIV and other STIs.

Condoms are more likely to break when worn over a pierced penis, increasing the risk of transmission of HIV and other STIs.

**Other Risks:**
- There is a risk of acquiring Hepatitis C when getting pierced if the equipment has not been sterilized.

**Reducing Risk:**
- To minimize the risk of acquiring blood-borne diseases, permanent piercings should only be done by an experienced piercer.
- Piercings under 2 months old should be treated as open wounds that can transfer or acquire diseases and should be protected from contact with other people.
- If a person gives or receives play piercings, it is important that the site to be pierced is first disinfected with one or more of the following: Betadine, Benzalkonium Chloride, or 70% rubbing alcohol; and applied by using pre-packaged cleansing towelettes. Sterile, disposable needles, which can be purchased from a medical or scientific supply shop, should then be used for the piercing.
- Needles should not be shared.
- Used needles should be disposed of carefully in a sharps container, which is a sealed, unbreakable container. Sharps containers should not be disposed of in the trash—individuals should contact their local health department or ask their physician about where sharps containers may be dropped off.

**Oral Sex**

**HIV Transmission Risk: Low to moderate**

**Description:**
- Using the mouth to stimulate the genitalia.
- Known as fellatio when performed on a man and as cunnilingus when performed on a woman.
- May be performed as its own sex act or as foreplay.

**HIV Transmission Risk:**
- The risk of transmitting HIV during unprotected oral sex is controversial. While there have been documented cases of HIV transmission via oral sex, it is difficult to assess the actual risk because most people who have oral sex also engage in vaginal or anal intercourse.
- Oral sex is relatively less risky than anal and vaginal sex.
HIV can enter the bloodstream of the receptive partner through chapped lips, gum disease, sores, or scrapes.

Other STIs can be transmitted which can seriously compromise or complicate the health of HIV-positive individuals.

Other risks:

- Herpes can be transmitted from mouth to genitals or genitals to mouth.
- Gonorrhea, syphilis, and genital warts can be transmitted from genitals to mouth.
- Yeast infections may also be transmitted from unprotected oral sex.

Reducing Risk:

- One oral sex risk reduction strategy is to use a condom or dental dam. When performing oral sex on a woman, dental dams, plastic wrap, and cut-up condoms may offer protection against HIV, STIs, and yeast infections. Only one side of the barrier should be used so that the vaginal secretions do not enter the mouth.
- Unprotected oral sex on a woman should be avoided when she is menstruating because blood is involved.
- If a barrier method (e.g., cut-up condom, dental dam) is not used during oral sex, the risk of transmission of HIV and other STIs may be reduced by:
  - not brushing or flossing teeth for an hour before having oral sex, as this can cause small cuts or tears in gums, increasing HIV/STI transmission risk.
  - avoiding oral sex if one has periodontal disease.
  - avoiding aggressive oral sex with a man's penis as it can do damage to the back of the throat and thus increase the risk of transmission.
  - removing the penis from the mouth before ejaculation so that semen does not enter the mouth. However, many men emit pre-ejaculate fluid during oral sex, so removing one's mouth before orgasm does not guarantee that there is no contact with HIV-infected (or STI-infected) semen.
  - spitting the semen out immediately rather than waiting or swallowing if one's partner does ejaculate in one's mouth.

Vaginal Intercourse

HIV Transmission Risk: High (without condom use)

Description:

- Insertion of the penis into the vagina.
HIV Transmission Risk:

- Vaginal intercourse without a condom is one of the most risky sexual behaviors for the transmission of HIV and STIs.

- It is estimated that women are more likely to acquire HIV during a single episode of unprotected vaginal intercourse than are men.\(^2\)

- The risk of transmitting HIV is greater when a woman is menstruating because blood is present.

- Other factors can increase the likelihood of transmitting HIV through unprotected sex, such as the presence of ulcerative STIs and a high viral load.

Other Risks:

- Unprotected vaginal sex can also result in the transmission of yeast infections and STIs.

Reducing Risk:

- The safest protection against HIV and STI transmission during vaginal sex is using a condom (a male condom or female condom) correctly and consistently.

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**Anal Intercourse**

**HIV Transmission Risk: Very high (without condom use)**

**Description:**

- Insertion of the penis into the rectum.

**HIV Transmission Risk:**

- Anal intercourse without a condom is the most risky sexual behavior for the transmission of HIV.\(^2\)

- The partner of an HIV-infected individual is at risk of acquiring HIV if a condom is not used, and HIV-infected individuals are at risk of acquiring other STIs and possibly being reinfected with another strain of HIV.

- Because rectal walls are very thin, tiny or invisible blood capillary breaks or abrasions can occur during anal intercourse. Semen can enter the microscopic rectal blood capillary breaks and infect/reinfect the individual with HIV or other STIs.

- Breaks in the mucosal lining of the rectum are not necessary for transmission to occur. Direct infection of bowel mucosal cells has been observed.

- The risk of HIV transmission is still present even if the man withdraws before he ejaculates because there is a possibility of pre-ejaculate fluids being released into his partner’s rectum.

- The risk of transmission is greater for the receptive anal sex partner than the insertive partner; however, practicing only receptive anal intercourse is not an effective risk-removal strategy for HIV-positive individuals.
The insertive partner is still at risk for HIV and other STIs because his partner’s rectal blood can enter his penis through microscopic breaks in the skin of his penis.

**Reducing Risk:**
- If one chooses to have unprotected anal intercourse, the risk of HIV transmission may be slightly reduced by practicing receptive anal sex only or avoiding ejaculation into the partner’s anal cavity.
- Condoms are the safest protection against HIV and STI transmission; use of condoms is strongly encouraged for anal intercourse.

**Group Sex**

**HIV Transmission Risk: Very high (without condom use)**

**Description:**
- Any sex act performed by more than 2 participants at a time.

**HIV Transmission Risk:**
- Engaging in group sex is a very risky behavior for transmitting HIV or other STIs because it involves the riskiest sexual behaviors (vaginal and anal sex) with multiple partners.
- All risks of HIV transmission of vaginal and/or anal sex are present in group sex, with the additional risk of passing HIV and other STIs from one partner to another.

**Reducing Risk:**
- The correct and consistent use of condoms is the safest protection against HIV and STI transmission and acquisition.
- To reduce spreading disease from one’s partner to another partner, men need to change condoms between partners, and women using the female condom need to insert a new condom with each partner.
- One partner should wear the male or female condom. Using both condoms will cause friction and may lead to tears in one or both condoms, slipping of one or both condoms, or displacing the ring inside the female condom.
- If group oral sex is performed on women and dental dams are being used, barriers need to be changed between partners so that one woman’s vaginal secretions will not be transferred to another woman.
References


The Challenge of Maintaining Behavior Change

Once a person is motivated to reduce their HIV transmission risk behavior and begins to make a change, it can be a significant challenge to maintain that behavior change over time.

As with any health behavior (e.g., exercise, eating right, smoking cessation), individuals who wish to practice safer sex, stop using drugs, or practice safer drug use will often experience “slips” or “lapses,” or will at least be tempted to give in and forego safer behavior at some time.

Note the use of the word “lapse” or “slip” instead of “relapse.” The term relapse reinforces the mistaken all-or-nothing view of behavior change where a single slip is often interpreted as a failure that one can do nothing about. The term lapse or slip emphasizes the incident as a single occurrence and not as indicative of a full-scale return to consistently practicing the less safe behavior (i.e., relapse).

It is important for providers to understand that behavior change is a process, not an all-or-nothing event. By recognizing that lapses are common, and encouraging patients to use their lapses as learning experiences, providers will be able to facilitate long-term behavior change and help patients avoid the guilt, dismay, and self-blame that often accompany a lapse (often referred to as the Abstinence Violation Effect).

The Relapse Prevention Model Applied to HIV Prevention

The Relapse Prevention (RP) model is based on a cognitive-behavioral framework that focuses on preventing and managing lapses in individuals who are in the process of a health behavior change. The RP model has been most widely applied to substance abuse but has also been successfully applied to other health behaviors and mental health problems as well.

The RP model can be applied to the reduction of HIV transmission risk behaviors to give providers and patients strategies for understanding the challenges patients face in long-term behavior change, and tools to deal with those challenges.
The goal of RP is to help individuals who have made a health behavior change to anticipate and prevent a full-blown relapse. RP strategies help patients (1) identify high-risk situations for lapses, and (2) provide skills to effectively manage those situations, cope with urges and cravings, and reframe their negative reactions to lapses.

Although RP is often used by mental health providers with patients in ongoing therapy for the target behavior, RP strategies can be useful for HIV physicians and other clinical care providers helping their patients maintain safer sex and drug use behaviors. These strategies\(^1\) include:

1. Identifying high-risk situations for relapse.
2. Developing adaptive behavioral responses and problem-solving skills to cope with high-risk situations.
3. Changing maladaptive thought patterns to better deal with high-risk situations, urges, and lapses.
4. Learning from safer sex and drug use lapses.
5. Reinforcing safer behaviors.

### Identifying High-Risk Situations

#### The Context of Safer Sex and Drug Use Lapses

Many people who are trying to change a behavior will experience one or more lapses in the process. These lapses can be seen as important learning opportunities for maintaining behavior change in the future.

Lapses typically do not occur “out of the blue.” Often they are triggered by one or more psychological, interpersonal, or social factors. High-risk situations vary from person to person and also within a given person at different times.

Aspects of high-risk situations that may be triggers include:

- People
- Places
- Events
- Social pressure (either direct or indirect)
- Interpersonal conflict
- Negative emotional states

High-risk situations may appear to arise without warning, often the result of a series of “apparently irrelevant decisions”\(^1\) that people make without realizing the implications of their choices.
For example, an HIV-positive man decides to walk to the store without his “safer sex kit” because he plans to come right home. He decides to go to a store down the street from a popular nightclub and bumps into a friend, who persuades him to go to the club for just one drink. Eventually, he goes home with another man he meets in the club and has unsafe sex.

**Identifying High-Risk Triggers**

For a person to change their sex or drug use behavior (or maintain healthy behavior changes), they need to identify the circumstances—or triggers—that are high-risk for them, as well as “apparently irrelevant decisions” that sometimes set up the high-risk situation.

Each person has a unique set of challenges or triggers. That is, certain situations may be challenging to one person but not to another. Some patients who experience lapses find it difficult to identify their own unique high-risk triggers. Encourage a period of self-monitoring of safer sex/drug use lapses using a written record of psychological and environmental circumstances surrounding the lapse to review together.

Once a person is able to identify the situations that are challenging for them personally, they can anticipate these situations and learn to handle them differently. Knowing what an individual’s own challenges are can help them have more control over their behavior.

Encourage the patient to look at several factors to understand which situations are personally challenging for them:

- Different settings or environments (e.g., bars, dance clubs, parties).
- Different people (e.g., casual partners, primary partners, specific drug-using friends).
- Mood or feeling states (e.g., depressed, lonely, angry).
- Use of alcohol and/or drugs.

**Adaptive Behavioral Responses and Problem-Solving Skills**

Once you have worked with a patient to identify and anticipate their own high-risk situations for unsafe sexual and/or drug use behaviors, help the patient develop skills for dealing with those situations.

One of the most important skills is the ability to detect early warning signals for a lapse. In recognizing their own personal risk triggers for unsafe behavior, the patient will be better prepared to identify signs of a lapse and intervene early in the process, rather than later when it may be much more difficult to do so.
For example, an IDU who is trying to avoid sharing his works with other users may find that he is most likely to do so when he is low on cash and needs to go in on a purchase with other users. It will be much easier for this person to intervene early in the process—when he realizes he is low on cash but before he jointly purchases the drugs—rather than later on, after he has spent his money to buy the drugs.

Skills needed to prevent future lapses may vary from patient to patient and should apply to one's specific psychological and environmental risk triggers.

Behavioral Skills

Behavioral skills for coping with situations that are high-risk for lapses in safer behavior include:

- **Assertiveness**
  - A patient may need to learn how to assert their desire to use condoms with their partner or to separate prepared drugs with clean needles.

- **Stress management skills**
  - A patient who is more likely to engage in unprotected sexual behavior when feeling stressed or lonely may need to learn skills for managing those emotions.

- **Relaxation training**
  - Patients can learn how to deal with high levels of stress, anxiety, or anger, and therefore avoid poor choices (such as unsafe sex or drug use) associated with those feelings.

- **Communication skills**
  - An injection drug user may need help finding ways to tell his IDU partners that he is unwilling to share works anymore.

- **Social and/or dating skills**
  - An HIV-positive woman may need help developing skills for meeting new men so that she feels less trapped in relationships where she is pressured to engage in risky sexual behaviors.

- **General problem-solving skills**
  - All patients can benefit from learning a set of highly flexible and generalizable skills for approaching and managing problems in their lives; this helps develop confidence and increases the likelihood that they will be able to deal with new situations as they arise.
Urge surfing

Patients can learn how to ride out the urge to engage in a risky behavior, as urges will inevitably peak and then subside with time. Urge-surfing is a concept that has been largely applied to alcohol and drug users who are dealing with psychological and physiological urges to use, but the concept can also be applied to safer sex and drug use behavior.

Practice is very important for the development of these behavioral skills. As a person’s ability to use these skills to deal with high-risk situations increases, their confidence about their capacity to cope effectively will also increase, and their risk for lapse will decrease.

Sometimes it is not practical to implement/rehearse these new skills in real life situations. Patients should be encouraged to rehearse them through imagining and role-playing possible and likely high-risk situations.

Stimulus Control

Stimulus control is another important tool for helping patients mitigate their risk for unsafe sexual and/or drug use behavior lapses.

Stimulus control refers to helping patients change their environment to reduce the likelihood that they will be exposed to high-risk triggers.

For example, an IDU who is trying to stop using drugs would avoid people and places previously associated with shooting drugs.

An HIV-positive gay man who is trying to consistently practice safer sex with his partners would avoid MSM “Poz Parties” where unprotected sex is common.

An HIV-positive woman who is more likely to engage in risky sex when she drinks or uses drugs would be encouraged to not drink or use drugs when there is any possibility she might have sex.

While stimulus control can be a very important tool for patients to use in promoting maintenance of healthy behavior changes, it is typically not possible to fully control a patient’s present or future environment.

Therefore, in addition to useful stimulus control strategies, patients should be encouraged to develop and practice the behavioral skills described previously for dealing with high-risk situations.
Facilitating Adaptive Cognitive Responses

In addition to developing more adaptive behavioral skills for dealing with high-risk situations, patients need to develop adaptive cognitive skills as well.

Adaptive cognitive skills for relapse prevention refer to patterns of thinking about high-risk situations, urges, and lapses that are more likely to help the person, rather than hurt them, in their attempt to maintain healthy behavior changes.

Central to this strategy is the idea that it is not a situation or event that determines a person’s emotional or behavioral response, but their appraisal (or perception) of that situation.

Examples of maladaptive cognitive patterns include:

- Believing that there is no way to change a situation to facilitate safer behavior.
- Looking at a lapse in safer behavior as proof that a person really is a failure, or doomed to never change (the Abstinence Violation Effect).
- Feeling that an urge to have unprotected sex with a given partner is so strong that a person could never fight it.
- Seeing situational or personal factors as insurmountable to reach safer injection drug use goals.

Patients should be encouraged to look at situations realistically and to avoid common maladaptive thought patterns that detract from behavior-change efforts, such as seeing things in all-or-nothing terms, “catastrophizing,” focusing only on the negative while ignoring the positive. (For more information about maladaptive thought patterns, see Feeling Good: The New Mood Therapy by David Burns.)

Learning From a Lapse

Maladaptive cognitive appraisals are common when people experience a lapse.

Some people use denial and rationalization to avoid exploring, excuse, or justify their lapses. Alternatively, some people start to “catastrophize,” or think the worst, when they have had a lapse. These are not productive and can make the lapse more likely to happen again.

When your patient slips (lapses), they, and you, can regard the situation as a unique and specific event. A lapse should not be generalized to all situations, nor should it be interpreted as meaning that your patient is a failure at practicing safer behavior. Slipping does not mean that someone is a failure, has lost control, or is lacking in willpower. It just means that the person needs to learn from the slip and try a different strategy.
Lapses should be dealt with constructively; they should be viewed as opportunities for learning rather than indications of total failure: for example, “I slipped in this situation, but I can learn from it. What can I do differently next time the situation arises?”

Unless your patient can look at the trigger situation and understand what happened, they are likely to make the same mistake again and feel even worse about themselves. To the extent that your patient can learn from their slip, even though they are feeling badly about it, the more likely they are to stay safer for the long term.

Factors to Consider in Evaluating a Lapse

To reduce the likelihood that a lapse will happen again, when examining the lapse with your patient it is important to evaluate:

- What was the sequence of events (thoughts, feelings, behaviors) that led up to the lapse?
- Was the patient’s motivation level affected by things outside the situation, such as fatigue and stress?
- Was the patient missing an important skill (or skills) to effectively cope with the situation?

Once you and your patient understand the individual-level and environmental circumstances that contributed to the lapse in safer sex or drug use behavior, you can determine what the patient needs to reduce the likelihood of future lapses.

Reinforcing Safer Behavior

Knowing how challenging it is to consistently practice safer behavior, praise your patients when they do engage in safer behavior.

Every time a patient practices safer behavior, they are helping themselves and their partner(s) stay healthy. If you and the patient want this behavior to continue, it is critical that you reinforce this behavior and not take it for granted.

Often, because of time pressures and the orientation of the healthcare system to fix what is broken, it can become all too easy to focus on the mistakes patients make and to ignore their healthy choices.

Just like everyone else, patients need encouragement, support, and acknowledgment of all their positive efforts.

Positive reinforcement can be an extremely effective tool for behavior change. As a healthcare provider, you are an important figure in your patients’ lives; your encouragement and support may go a long way in helping your patients make long-lasting healthy behavior choices.
References


Safer Sex and the Role of Assertiveness

One of the most important skills individuals with HIV can use to consistently practice safer sex is the ability to communicate clearly, effectively, and assertively with their partners.

When encouraging patients to practice safer sex, providers may incorrectly assume that their patients already have these skills.

In fact, in many situations, individuals may feel committed to safer sex (i.e., they have the motivation) but feel incapable of actually making that happen in the context of their particular relationships (i.e., they lack the behavioral skills).

In the context of the Options protocol, providers may see weaknesses in this skill manifested as very high importance ratings for safer sex and very low confidence ratings.

Tip

While patients may be motivated to perform safer sex, they may not necessarily possess the skills to negotiate the use of condoms or other risk reduction strategies.

The following sections describe the difference between assertiveness and other types of communication, as well as strategies to help patients build their assertiveness skills.

Role of the HIV Care Provider in Building Assertiveness

To the extent that time and comfort level allow, providers can work with their patients on building communication skills by:

- providing guidance about the content of safer sex communications.
- giving them support for asserting themselves.
- offering some examples of strategies they could try to become more assertive.
Referral sources should also be used if the patient is having a particularly difficult time with assertiveness or is interested in working more in-depth on building effective communication strategies.

**Considering the Risk of Domestic Violence**

 Assertiveness may be potentially dangerous in the context of relationships that are currently violent or that have been violent in the past.

**Who Is at Risk for Domestic Violence?**

While women are more likely than men to be victims of violence within intimate relationships, it is important to acknowledge that gay/bisexual men and heterosexual men are at risk for domestic violence as well.

- Approximately 20% of HIV-infected women, 8%–24% of HIV-infected heterosexual men, and 12%–17% of HIV-infected gay/bisexual men report having experienced intimate partner violence within the past 6 months.\(^1\),\(^2\)

- These prevalence rates may underestimate the lifetime experience of intimate partner violence, especially among HIV-positive women. One study of women residing in low income, urban neighborhoods found that 65% of both HIV-positive and HIV-negative women had experienced intimate partner violence as an adult.\(^3\)

Risk factors for victimization in relationships are fairly similar to risk for HIV, and include:

- Poverty\(^1\)
- Unemployment\(^1\)
- History of childhood abuse\(^1\)
- Homelessness\(^1\)
- Younger age\(^1\),\(^4\)
- Ethnic minority status\(^4\)
- History of psychiatric illness\(^4\)
- Current binge drinking or drug dependency\(^4\)

Sometimes issues related to HIV can also be a trigger for abuse in relationships when there is a history of intimate partner violence.\(^1\)
The Impact of Domestic Violence in the Context of HIV

Victims of physical abuse may be more likely than non-victims to engage in unprotected sexual behaviors.²

There is some evidence that women who are victims of domestic violence may have an increased risk of being verbally abused or threatened with physical abuse and/or abandonment when they attempt to negotiate condom use.⁵

For some women, disclosing an HIV-positive test result to their partner may also be a trigger for violence, especially for women who are already in an abusive relationship.⁵

**Tip**

It is important to assess the risk of violence when working with patients who are having difficulty asserting their desire to use condoms or engage in other risk reduction strategies with their partner(s).

As with any situation where you suspect that your patient may be in danger, use referral sources and take steps to ensure safety when violence is an issue.

The Right to Be Assertive about HIV Risk Reduction

Everyone has the right to be in control of what happens to their bodies. Often people forget this and feel that they do not have the right to be assertive.

Patients often fear that condom use demonstrates a lack of commitment to their partner.

It is not uncommon to hear HIV-positive patients talk about their partner’s annoyance over not being able to fully share everything about that patient when condoms are used.

Such perceptions must be addressed by exploring whether there are other ways to confirm commitment and acceptance that would not involve risk of HIV transmission.

Exploring these issues with partners who are insistent on having unsafe sex is extremely difficult and requires solid assertiveness and communication skills.

Assertiveness skills require time and effort to develop, but patients can be encouraged to develop them by recognizing the possible consequences of being assertive about safer sex and emphasizing the consequences of not being assertive.
Types of Communication

Assertive communication allows a person to express their feelings, thoughts, and desires in a clear manner that is respectful and does not violate the rights of the other person. Being assertive is different from being aggressive, passive, or passive-aggressive, all of which can be quite destructive to a relationship.

Aggressive Communication

What It Is: When a person is verbally aggressive, they state their goal, need, or view in a way that does not show respect for their partner’s rights.

Example: When a man’s partner tells him that he doesn’t want to use a condom because he doesn’t like the way it feels, the man responds by saying “Look, I’m using condoms whether you like it or not. I’ve already decided, and it doesn’t matter what you have to say about it.”

Disadvantage: Aggressive communication often causes the person hearing the message to get defensive and makes them less likely to hear the other person. It can be very destructive: a person may get their way when they are aggressive but probably at the expense of the relationship.

Passive Communication

What It Is: When a person is passive, they fail to state their goal, need, or view, ignoring their own needs and wishes.

Example: A woman wants to use condoms with her partner but never says anything when they have sex, fearing what he might think of her if she brings it up.

Disadvantage: Being passive, or avoiding an issue, is rarely effective. In fact, passivity can lead to resentment, depression, anger, or other problems within the relationship.

Passive-Aggressive Communication

What It Is: When a person is passive-aggressive, they fail to state their goal, need, or view but express their frustration with having an unmet need in other unproductive, sometimes destructive ways.

Example: A woman who wants to use condoms with her partner but never says anything when they have sex because she knows her partner doesn’t like the way they feel. She expresses her frustration by giving him the silent treatment after sex, without explaining why.
Disadvantage: Being passive-aggressive doesn’t solve the problem, often leaves both people feeling hurt, and can eventually be quite destructive.

**Assertive Communication and Safer Sex**

**What to Communicate**

When negotiating with a partner about safer sex, a person needs to convey the following:

- Communicating their wish to be safe.
- Communicating that they are unwilling to be unsafe.
- Communicating what specific behaviors they consider to be safe for themselves and their partner.
- Negotiating or determining what kinds of sex are acceptable both to them and their partner.

**How to Communicate**

The following guidelines will help increase the odds that your patient’s message will be heard by their partner(s):

**Clearly State Thoughts, Feelings, and/or Requests**

**Assertive:** It’s important to me that we use a condom. So if we have sex, I want us to have sex that is protected with a condom.

**Unassertive:** I’d been thinking that, well, it might be good to, you know, take precautions of some kind, if that’s OK.

**Use “I” Statements**

**Assertive:** I feel that it is very important for me to take care of my health, so I always practice safer sex.

**Aggressive:** You have to wear a condom, because who knows where you have put that thing of yours.

**Listen to What the Partner Is Saying**

This can be difficult. While the other person is talking, we are often deciding what we’re going to say next, rather than concentrating on what the other person is trying to tell us. One way to make sure we are listening is to think about how we would reflect back what has been said. Reflecting back is when we paraphrase what we just heard in our own words and check in to see if we understood what was shared. Encourage the patient to listen closely to what
a partner is saying and think about how they would put what was shared into their own words. That can help keep the focus on the content of the communication.

Be Respectful—Acknowledge the Partner’s Feelings/Opinions
This is important if the individual wants their partner to respect their feelings and opinions.

**Assertive:** I know that you think it feels better without a condom, but I made a promise to myself before I met you to only have sex with a condom.

**Aggressive:** I don’t care what you think. We’re going to do it with a condom or not at all.

Explain the Reason for the Position or Request
The person should use reasons that are about them, not their partner.

**Assertive:** I care about your health and my health so I want to be safe.

**Aggressive:** I have no idea who you’ve been sleeping with, so we are going to be safe.

Check in with the Other Person
Seek agreement or concurrence from the other individual or at least his/her acceptance with one’s own position.

**Assertive:** Do you feel the same way?

**Assertive:** Can you accept that this is important to me?

Refuse to Be Coerced into Something Not Wanted
Refuse the unreasonable request or coercive behavior of the other person, especially when being pressured to behave in a manner that is inconsistent with one’s wishes.

**Assertive:** I understand how you feel. But I feel just as strongly that the way to show we care about each other is to use condoms. I care about your feelings, but I won’t have sex unless we use a condom.

**Passive:** Okay, if that’s what you want, we don’t have to use one . . . but I’d prefer to use one.

Match Nonverbal and Verbal Communication
Make sure that one’s tone of voice, emotional expression, and body language are consistent with the content of one’s message and are appropriate to the situation.
Some Strategies for Establishing Safer Sex

It is easier to set the stage for safer sex at the beginning of a physical relationship. Once a person starts engaging in unsafe or risky sex in a relationship, it may be more difficult to make the shift to safer sex.

Any of the strategies listed below can help a patient establish their commitment to safer sex at the beginning of a relationship. When the ground rules for sexual contact are set early on, they are easier to maintain over time.

Many of the strategies can also be used at any point in a relationship. It is never too late to make a change in the sexual dynamics of a relationship.

It is very important to couple these strategies with assertiveness. Effective assertive communication often involves repeating one’s message multiple times. Research has found that when people are asked to do something they don’t want to do (such as using condoms), it is often easier for them to say no the first time, but they are more likely to give in when asked repeatedly.

Any strategy—such as those illustrated below—has to be supported with assertiveness and other effective communication strategies. Inform patients that a single strategy may not make the request or pressure for unsafe sex stop entirely.

Examples of Verbal Strategies for Safer Sex

Talking is the clearest and most direct way that an individual can let someone know what they want or don’t want.

Below are some suggestions of what people practicing safe/safer sex have said or done to effectively communicate that commitment to their partners:

- Before going home or before any sexual activity starts, a person might say, “I only have sex with condoms.” or “Guys who wear rubbers turn me on. Let me put one on you.”

- If a person’s partner is going to put his uncovered penis in the person’s mouth and that person doesn’t want him to cum in their mouth, they can simply say, “Don’t cum in my mouth,” or they can request that their partner ejaculate elsewhere because it would be exciting for them to see/watch.
Phrases such as “I'm not into that” or “I like this better” are ways of saying “No” that are less likely to bring about defensiveness in partners.

People should always be encouraged to clearly state “No.” No means no, and no one should feel guilty about saying it. Everyone has the right to say no when it comes to their body.

A person can communicate safer sex desires in a manner that emphasizes how desirable and sexy a partner is. When safe/safer sex behaviors are framed as sexy or sexually stimulating, they are often responded to in-kind, and the mood of the moment is seldom compromised.

**Examples of Nonverbal Strategies for Safer Sex**

Nonverbal communication, or body language, can be a very powerful tool for communicating a person’s desires or feelings.

Examples of ways to use nonverbal strategies to communicate about safer sex include:

- Without uttering a word, a man can put a condom on himself as a way to communicate his desire to use a condom during sex.

- A woman can insert a female condom up to 8 hours before having sex. With sufficient lubrication, the condom may go unnoticed by partners, leaving it completely up to her as to whether she wants to say anything to her partner.

- Handing one's partner a condom sends a simple and direct message of the intention to use one.

- A person can put a condom in their mouth and then use their mouth to put the condom on their partner's penis (i.e., “cheeking”).

- A person can keep condoms in visible places for a sex partner to see. Some people keep condoms on a table right next to their beds, on their beds, on the floor next to their beds, or in other obvious places so that they can send a message to their sex partner that they practice safer sex.

- One way to communicate the intention to use a condom is to do a striptease, where the person puts the condom on their own or their partner’s penis as part of the striptease.

- A person can interest their partner in another sexual activity if they are being asked to do something they don’t want to. This gives a clear message about what one does and does not want to do without getting into a discussion about it.

For example, if a woman’s partner moves their head down towards the woman's vagina to perform oral sex on her without a dental dam, the woman can gently lift her partner’s head and start kissing them instead. This is a nonconfrontational way of conveying that she does not want oral sex right now.

- A person can simply stop the behavior if something happens that they don’t like or feel comfortable with.
References


Many men and women continue to engage in sexual behavior after being diagnosed with HIV. While the only way to guarantee 100% protection against transmitting HIV and other STIs is to abstain from sexual behavior, male and female condoms, as well as other barrier methods, are highly effective at preventing transmission when used properly.

**Male Condoms**

The male condom is a thin sheath of latex, polyurethane, or animal membrane (e.g., lambskin) that fits over the man’s penis and acts as a mechanical barrier to prevent pregnancy and reduce or prevent the spread of many sexually transmitted infections (STIs).

Lambskin condoms are not effective in the prevention of STIs (including HIV) and should not be used for disease prevention.

**Effectiveness of the Male Condom**

Used correctly and consistently, condoms are highly effective in preventing the transmission of HIV and most other STIs, including discharge and genital ulcer diseases.\(^1\)

Laboratory studies have demonstrated that latex condoms provide an impermeable barrier to particles that are the size of sexually transmitted pathogens, including HIV.\(^1\)

Epidemiological studies provide strong support for the effectiveness of male latex condoms in preventing HIV transmission, though evidence for protection against other STIs (including discharge and genital ulcer infections) is mixed, likely due to methodological shortcomings of studies to date.\(^1\)

Although male latex condoms should be impermeable to genital ulcer diseases (e.g., HPV, herpes, chancroid), condoms can only provide protection against these infections when the infected area or area coming in contact with a partner’s infected area is covered by the condom, which is not always the case.

Condoms lubricated with spermicides are not more effective than other lubricated condoms in protecting against HIV and other STIs, and nonoxynol-9 (N-9) should not be used when trying to prevent HIV/STI transmission, as it may actually increase risk of transmission.\(^2\)
Condom Failure

Condom use can not guarantee 100% protection against transmission of HIV and other STIs, but most condom failures result from improper use and/or storage, so it is critical that users are informed of appropriate storage and usage methods.

Condom slippage and breakage are two of the most commonly reported problems with condoms. Recent studies that have examined slippage and breakage in recent years (therefore representing the higher quality condoms manufactured today), estimate that condom failure due to slippage or breakage is between 1.6% and 3.6%.

Factors related to slippage and breakage include user familiarity and knowledge, selection of proper condom size, and proper use of additional lubricant.

Storage and Care of the Male Condom

Remind patients to always check the condom expiration date and not to use expired condoms. If someone is unsure of how old a condom is, they should discard it and replace it with a new unexpired one.

If a condom package is damaged, the condom may also be damaged and therefore should not be used.

Condoms should not be carried in a wallet for long periods of time, as this can damage the condom.

Condoms should be stored in a cool, dry place. Exposure to sunlight, heat, or humidity can break down latex, causing it to tear more easily.

How to Properly Use a Male Condom

Condom effectiveness can be greatly enhanced by ensuring proper use. To be most effective, the condom should be put on the penis prior to any contact with the vagina (or anus, in anal sex), and carefully removed immediately after ejaculation.

The following steps should be followed for proper condom use:

1. **The expiration (EXP) date should be checked to make sure the condom has not expired.**

2. **The condom package should be opened carefully with fingers—not with teeth, scissors, knives, or other sharp objects.**

   Care should be taken when opening a condom package that teeth, nails, or rings do not tear or nick the latex. (There is usually a little indentation in the packet that shows where to open it.) If the condom gets torn, it should be thrown out.

3. **Lubricant should be applied to the inside tip of the condom.**
4. The penis foreskin should be pulled back and the rolled-up condom put on the head of the penis (right side up).

5. The tip of condom should be pinched between thumb and forefinger, and the condom rolled down over the penis.

Unrolling the condom before putting it on can weaken the latex and make it difficult to use. The rolled up condom should be placed over the tip of the erect penis. The penis should be erect or the condom might fall off. The condom should be placed on the penis in the right direction. The condom should unroll onto the penis. If it is placed on the penis upside down, it won't unroll.

The receptacle or reservoir end of the condom is held between the thumb and forefinger against the head of the penis. If the penis is uncircumcised, the foreskin should be pulled back first. A space at the tip should be made so the semen will not leak out the side of the condom.

The condom should be rolled over the entire length of the penis while the tip of the condom is squeezed. The condom must be unrolled all the way.

6. Space should be left at the tip of the condom.

Some condoms are manufactured with built-in reservoirs, and some are not. If there is no built-in reservoir in the condom, one can be created by leaving some space at the tip of the condom. The reservoir is important because it leaves room for the semen and thus decreases the chance of breakage. Excess air should be removed to prevent the condom from bursting. (Friction against air bubbles is the cause of most condom breakage).

7. Once the condom is on, plenty of water-based lubricant should be applied.

The lubricant makes movement easier and decreases the chances of breakage due to friction. Putting a drop of lubricant inside the tip of the condom (before the condom is put on) can increase both sensation and safety. Oil-based products such as Crisco, lotion, Vaseline, or baby oil should never be used as they will weaken the latex and cause it to break. (Oil-based lubricants can be used with polyurethane condoms but using water-based lubricants is recommended to prevent accidental use of oil-base products on latex condoms.)

8. After ejaculation, the condom should be held at the base of the penis and the penis withdrawn from the partner.

After ejaculation, the penis should be withdrawn while still erect, and the base of the condom should be held onto to prevent it from falling off. If the penis is not withdrawn before the erection is lost, the condom might come off while inside the partner.
9. The condom should be removed from the penis and disposed of.

To remove, the condom should be gently rolled toward the tip of the penis to remove. Condoms should not be flushed down the toilet because they can clog plumbing. Condoms should be wrapped in a tissue and thrown away. Condoms cannot be reused. For added safety, some people choose to withdraw right before ejaculating in order to ensure that the condom doesn't slip off or break.

**Female Condoms**

The female condom is a transparent polyurethane condom that is intended to be used by the female partner in heterosexual intercourse. The female condom is approximately 6.5 inches in length (similar to a male condom), with a flexible ring at each end.

It is inserted into the vagina prior to sexual intercourse and forms a barrier between the penis and the vagina, cervix, and external genitalia of the female. Thus the female condom provides protection against pregnancy and most sexually transmitted infections (including HIV).

The female condom is soft but also very strong. It is stronger than latex, has no odor, causes no known allergic reactions, and has no serious side effects.\(^5\)

It contains no spermicide and is lubricated with a water-based, silicone lubricant. Unlike latex condoms, it can be used with additional oil-based or silicone lubricants.

**The female condom is FDA-approved for a single use.**

The World Health Organization (WHO) has convened several consultations to address reuse of the female condom. Based on these consultations, the WHO recommends against reuse of the female condom.\(^6-7\) Specifically, WHO suggests that a new female condom be used for each act of intercourse where there is a risk of unplanned pregnancy or sexually transmitted infection.
Effectiveness of the Female Condom

The female condom has been found to be effective in the prevention of pregnancy and sexually transmitted infections. No clinical trials have been conducted to evaluate the effectiveness of the female condom in preventing HIV transmission. However, laboratory studies demonstrate that the female condom is impermeable to most STIs and HIV.\(^5\)

The estimated annual accidental pregnancy rate for the female condom is 5% (when used correctly and consistently during vaginal intercourse), as compared to the estimated 3% estimated pregnancy rate for the conventional male condom (when used correctly and consistently).\(^5\)

How to Properly Use a Female Condom

The following steps should be followed for proper use of a female condom.\(^8\)

1. The expiration date (EXP) should be checked to make sure the condom has not expired.

2. The package should be opened carefully by tearing at the notch on the top right of the package. Scissors and knives should not be used.

3. Lubrication should be spread evenly on the condom.

4. The flexible inner ring at the closed end of the sheath should be squeezed with the thumb and middle finger so it becomes long and narrow.

5. A comfortable position (i.e., squatting, with one leg raised, sitting, or lying down) should be chosen and the inner ring should be gently inserted into the vagina.

6. The index finger should be inserted inside of the condom to push the inner ring back as far as possible.

7. The sheath should not be twisted, and approximately 1 inch of the sheath and the outer ring should remain outside the vagina.

8. The female partner should then guide the penis into the sheath’s opening to ensure it enters properly. The penis should not enter between the sheath and the vaginal wall.

9. After intercourse, the condom should be removed by grasping the outer ring, twisting it to seal in the fluid, and gently pulling the condom out.

10. The condom should be properly disposed of. The condom should be wrapped in the package or in a tissue and thrown in the garbage. Condoms should not be put in the toilet.
Tips for Female Condom Use

- Although polyurethane is strong, sharp objects like finger rings, pierced penises, and sharp or gagged nails can still tear it—therefore users should be careful. If your patient has sharp or jagged nails, he/she should consider wearing gloves when inserting the condom.

- If the female condom gets pushed in accidentally and your patient is having trouble getting it out, he/she should bend his/her knees and squat down. From this position, it will be easier to remove the condom.

- If your patient or partner is wearing the female condom, the other person should not wear a conventional male condom. This will cause friction leading to tears in one or both condoms, slipping of one or both condoms, and/or displacing the ring of the female condom inside the vagina.

- If it is noisy when using the female condom, adding more lubricant should help.

- Current recommendations are to use a new condom for each occurrence of intercourse. The female condom should be discarded once a person has ejaculated in it.

- The female condom should be discarded in the trash and not flushed down the toilet.

- Practice is very important before using the female condom for the first time. Users should anticipate that using the female condom may be awkward until they become accustomed to it, but practice will help.

- The inner ring is removable but must be in when the female condom is used for vaginal sex. Although not FDA-approved for anal sex, some men do use the female condom during anal sex, either with the inner ring in the condom, or removing it before sex.

Benefits of the Female Condom

The female condom has a number of benefits including:

- The polyurethane material of the female condom is stronger than the latex of the conventional male condom.

- The polyurethane material of the female condom is thinner than latex, so it conducts heat better and provides increased sensation.

- Because the female condom has a larger diameter than the conventional male condom, it does not feel as tight or constricting on the penis.

- The female condom can be inserted ahead of time and therefore does not interrupt sexual spontaneity.

- There are no serious side effects associated with using the female condom.
Both oil-based and water-based lubricants can be used with the female condom (unlike latex, which deteriorates when exposed to oil-based lubricants).

An erect penis is not required for its use.

It provides coverage for both the woman's internal and external genitalia (as well as the base of the penis).

### Acceptability of the Female Condom

Studies suggest the female condom is acceptable to many men and women. However, practice appears to be important in enhancing acceptance of the female condom and as such, many programs that promote the use of the female condom suggest that women try it three times before deciding if they will continue to use it or not.\(^5\)

According to the World Health Organization:\(^5\)

*Studies in numerous countries and in many different settings show that, on average, 50% to 70% of male and female participants found the female condom to be acceptable. Satisfied couples reported that use of the female condom did not interfere with sexual sensitivity and pleasure. Women and men of all ages can use the female condom. It is particularly attractive to women who experience side effects from hormonal methods; people who want to protect themselves from both STIs, including HIV/AIDS, and unwanted pregnancy; people who do not like (or whose partners do not like) the male condom; and people who are allergic to latex.*

### Use of the Female Condom by Men Having Sex with Men

The female condom has not been approved by the FDA for use during anal sex.

Men sometimes use the female condom during anal sex because it is thinner than traditional male condoms (resulting in increased sensation), much less constricting on the penis, and stronger than latex condoms.

The failure rate of the female condom during anal sex is not known.

### Availability of the Female Condom

Samples of the female condom are available free of charge from some AIDS service organizations and health departments.

Female condoms are often difficult to find in stores, but they are readily available online. The cost from Internet retailers ranges from $2.00 each to over $4.00.

The female condom is Medicaid-reimbursable in many states in the U.S. Local Medicaid offices can provide specific information about the process of reimbursement.
Sexual Lubricants

Sexual lubricants can be used during sexual activity to reduce friction within the vagina, anus, or other body parts. Using lubricants inside and outside a condom helps prevent rips and tears, and also increases sensitivity. Lubricants are typically used to enhance sexual pleasure, but not to provide protection.

Products marketed as lubricants do not provide protection against pregnancy, HIV, or other sexually transmitted infections (unless they specifically say they contain a spermicide).

There are 3 primary types of non-spermicidal sexual lubricants:

1. Water-based lubricants
2. Silicone-based lubricants
3. Oil-based lubricants

Tip

Water-based and silicone-based lubricants are safe to use with latex condoms. Oil-based lubricants weaken latex and are not safe to use with male latex condoms.

Water-based Lubricants

Water-based personal lubricants are water-soluble and are safe to use with latex condoms. Many are made with glycerine (and therefore may be referred to as glycerine-based lubricants).

One primary advantage of water-based lubricants is they rarely cause irritation. Also, they do not stain and are easy to clean up with water.

However, water-based lubricants tend to dry out during use, so reapplication may be necessary.

Examples of water-based lubricants include:

- Astroglide
- Wet Light and Wet Original Formula
- Aqua Lube
- Frixion
- K-Y Jelly
- Sliquid
- Probe Classic
Silicone-based Lubricants

Silicone-based personal lubricants are made with silicone and are also safe to use with latex condoms.

The primary difference between water-based and silicone-based lubricants is that silicone-based lubricants retain their lubrication longer and are waterproof (i.e., they do not typically require reapplication during sex and can be used in water).

Because they are waterproof, silicone-based lubricants tend to be somewhat more difficult to clean off than water-based lubricants.

Silicone-based lubricants should not be used with silicone sex toys, as they can cause damage to the sex toy.

Examples of silicone-based lubricants include:

- Eros
- Sliquid Silver
- Wet Platinum
- ID Millenium

Oil-based Lubricants

Oil-based personal lubricants are typically made with natural products such as vegetable oils, nut oils, and butter that weaken latex, thereby reducing the effectiveness of condoms.

Because oil-based lubricants reduce the effectiveness of latex, they are not recommended for use.

Oil-based lubricants are also difficult to clean off the body after sexual activity and may stain fabrics.

Examples of oil-based lubricants include Vaseline and Crisco.

The following are examples of oil-based lubricants and other products that are unsafe for use with latex condoms:

- Vaseline and petroleum jelly products
- Bag Balm
- hand and body lotions
- butter
- baby oil and massage oils
- mineral oil
- peanut butter
- petroleum jelly
- cold creams
- edible oils (olive, peanut, corn)
- rubbing alcohol
- shortening
- suntan oil and lotions
- whipped cream
- vaginal yeast infection medications
References


Recommended Reading


Your role as a healthcare provider is not only to educate your patients about the risks associated with various sexual practices, but also to help them incorporate HIV transmission risk reduction into their sex lives so that sex remains fun and satisfying as well as safe.

The most effective way to prevent the transmission of HIV during sex is through the use of condoms, but, unfortunately, many people have very negative attitudes about condoms.

Realistically, we know that many people will never learn to regard condoms as erotic, but there are strategies that you can offer, which can help them view condoms more positively.

Common Complaints about Condoms

Listed below are some of the common complaints voiced by individuals about condoms, as well as suggestions for how to respond to those complaints.

“Condoms Are Uncomfortable” or “Condoms Don’t Fit Me (or My Partner) Right”

With the variety of condoms currently available, recommend to your patient that they experiment until they (or their partner) find the one that is most comfortable and pleasurable for them. Condoms come in different sizes, colors, and textures so they can search for the condom (or condoms) that is right for them.

Some condoms, such as InSpiral, Pleasure Plus, Lifestyles Xtra Pleasure, Lifestyles Lubricated, and Durex Enhanced Pleasure Condom, have large bulbous ends on them to provide more headroom and less constriction of the head of the penis. As an alternative to the conventional male condom, your patients can also try the female condom, which is inserted into the vagina and allows the penis to move more freely.

Larger Size Condoms

Condoms that are larger and roomier include Maxx, Trojan-Enz Large, Trojan Magnum, and Avanti. (Some men complain that their penises are too large for condoms, but the reality is that most men fit quite easily into the majority of available condoms.)
Smaller Size Condoms

Smaller condoms include Lifestyles Snugger Fit and Beyond Seven, both of which are smaller, lubricated condoms.

“Condoms Don’t Taste Good”

A common complaint when condoms are used during oral sex is that they taste bad. However, condoms now come in a variety of flavors and scents: mint is a standard flavor, but there are many others including fruit flavors. Another option is to use a flavored lubricant with a nonlubricated condom. The flavored lubricant should mask the taste of the latex.

“Condoms Make Me (Or My Partner) Itch”

If your patient, or your patient’s partner, is experiencing itching while using condoms, they may be having an allergic reaction to nonoxynol-9, a spermicide used in some condoms. Patients attempting to reduce the risk of HIV transmission should not use nonoxynol-9. Recommend that patients use a condom that does not have nonoxynol-9 in it.

If your patient (or patient’s partner) reports itching, and the condoms being used do not have nonoxynol-9, suggest that they try using a different brand or type of condom, or a condom that is not lubricated. Have them experiment with different lubricants. It may be the lubricant—not the condom—that is making them (or their partner) itch.

One other possibility is that your patient (or their partner) is allergic to latex. If that is the case, they should consider switching to polyurethane condoms, or trying the female condom.

“I Can’t Feel as Much When I Wear a Condom” or “It Decreases the Sensation”

Suggest to your patient that they try putting some lubricant inside the tip of the condom before they (or their partner) put it on, as this will increase the sensation. Putting lubricant inside the condom also helps to prevent the condom from breaking. In addition, they may want to experiment with different condoms, as condoms vary in terms of how thin or thick they are and thus in how much can be felt when they are worn. Thinner condoms include Avanti, Crown (Skinless and Skinless Plus), Beyond Seven (Regular and Plus), Kimono MicroThin (Regular and Plus), Durex Extra Sensitive, Lifestyles Ultra-Thin, Contempo Bareback, and Trojan Very Thin. Another perspective that some users of condoms have expressed is that although condoms may decrease sensation slightly, this can be a benefit because it increases the duration of arousal, leading to stronger orgasms.
“It Takes Too Long to Put On a Condom” or “Condoms are Difficult to Put On”

Patients who struggle with putting on a condom may want to practice putting one on. They can practice while alone, without the pressure of someone watching them. Another option is for the man’s partner to put the condom on him rather than the man putting it on himself; this can make it more exciting and arousing.

“I Lose My Erection When I Wear a Condom”

If a patient (or their partner) has difficulty maintaining an erection while wearing a condom, it might be because they are too focused on the presence of the condom itself and are unable to relax during sex. You can suggest to your patient that they (or the patient’s partner) practice ejaculating in a condom while masturbating alone without the pressure of performing. It is important to try to relax while wearing the condom and not focus on the condom. While masturbating with the condom on, they can try visualizing a highly erotic scene, using focused fantasy to get their mind off the condom and onto arousal. When the patient is able to comfortably masturbate with a condom on, it will likely be easier to remain erect during sex with a partner.

If the patient’s partner is having difficulty maintaining an erection during condom use, the patient may want to put the condom on their partner in an erotic manner so that it becomes incorporated into their foreplay. The patient can masturbate their partner’s penis while putting on the condom, or they can put on the condom with their mouth. The patient can also distract the partner by talking erotically or saying that men who wear condoms turn them on. If wearing a condom is viewed as sexy and erotic, then the condom can enhance the erection rather than diminish it. Also, for penile-vaginal sex, a woman can try using the female condom as an alternative to the male condom.

“I (or My Partner) Can’t Cum in a Condom”

This is similar to “I lose my erection” above. The difference is that whereas some people can’t keep their erections while wearing a condom, others can keep their erections but can’t ejaculate. It may take practice to learn to ejaculate in a condom, particularly if the individual has become used to ejaculating without one. You can suggest that the patient (or the patient’s partner) practice ejaculating in a condom while masturbating alone without the pressure of performing. If that doesn’t help, the patient has the option of pulling his penis and the condom out of his partner prior to orgasm and then ejaculating outside of their partner. For penile-vaginal sex, a woman can try using the female condom as an alternative to the male condom.
“Condoms Spoil the Mood (Wreck the Moment)”
Suggest to your patient that they find a creative way to incorporate condoms into their sex life. Putting on a condom can be as erotic as taking off one’s clothes before having sex. A man can put a condom on himself or, or a person could put one on their partner in a highly erotic manner, if they choose to. For example, a person could put a condom on their partner with their mouth (called “cheeking”), masturbate their partner or themselves while putting a condom on the partner, do a striptease for the partner that incorporates putting on the condom, or tell their partner that the condom is hidden somewhere on them and their partner has to find it. The bottom line is that condom use can be fun and erotic when it becomes a natural part of sex.

“Condoms Aren’t Always Available When You Need Them”
Encourage your patients to always be prepared. Condoms will not be used unless they are nearby and readily available. Some people keep condoms in every room in their house, including the kitchen, so they can spontaneously have sex should the opportunity arise. Patients should anticipate situations and carry unexpired condoms with them if there is any possibility of sex occurring. They can carry condoms in a handbag, fanny pack, pocket, backpack, briefcase, or suitcase, wherever they can get to them easily. Some people actually have a little bag that they use just for carrying condoms and lubricant—their “Safer Sex Bag.” If a patient finds him or herself in a situation where neither the patient nor their partner has a condom, encourage him/her to consider a form of sex that doesn’t involve the risk of transmission of HIV or other STIs (see examples in Chapter 6, Sexual Behaviors, Relative Risk, and Safer Alternatives).

“Condoms Don’t Allow for Spontaneity”
Point out to your patient that if they always have condoms available, they can be as spontaneous as the moment allows. Having condoms in many rooms of their house, or having condoms with them whenever they go out, will always allow for spontaneous encounters. Putting condoms on is no less spontaneous than a person taking off their shoes or their pants. The patient just needs to incorporate using condoms into their sexual repertoire.

“Condoms Stifle My Creativity”
Rather than looking at condom use as something that stifles creativity, your patient can be encouraged to view condom use as a creative challenge. How can they bring condoms into the situation in a seductive, erotic manner? Have them explore creative ways for integrating condoms into their sex life. For example, what if they put on the condom as part of a striptease?
“Sex With Condoms Is Impersonal”

Present a different perspective: whether a person uses a condom is only one aspect of a sexual encounter. Sex consists of numerous behaviors, and a person can make any of them as personal or impersonal as they wish. It is actually very personal for someone to wear a condom to protect their partner from HIV. It means that the person cares enough about their partner to want to avoid infecting (or reinfecting) him or her.

“Using Condoms Prevents a Couple from Achieving True Intimacy”

Most individuals make sexual choices based on meaning and pleasure, in addition to considering risk. For many individuals, one of the most intimate forms of bonding involves the ejaculation of semen from one person into another person, whether that is into a person’s mouth, vagina, or anus. Some people feel that unless you ejaculate inside a person or take a person’s semen inside of you, you haven’t given all of yourself to your partner. Accepting semen may be regarded as a way of showing devotion and belonging. Thus, sex without a condom is regarded as more intimate.

As healthcare providers and health educators, we are asking people who live with HIV to give up this form of bonding because it is potentially dangerous for both them and their partners. It is important to realize that this is a true loss of intimacy for many and to acknowledge this with patients:

“For many people, bonding and intimacy has been defined as exchanging semen. It is sad to have to give that up, but that loss will keep you and your partner healthy. If you truly care about yourself and your partner, you need to find new ways to bond and show devotion. I know that that is not an easy task.”

“Some Men Won’t Have Sex with Me If I Want to Use a Condom”

Another expression of this attitude is “I am afraid that I will be rejected if I insist on a condom being used.” As discussed in Chapter 8, Safer Sex Communication Skills, some people will have tremendous difficulty in asserting their desires to have safer sex when they believe that their partner will respond negatively. Ask the patient to consider whether a partner who refuses to be safe after being specifically asked is really a partner they want in their lives. Gently support the patient in recognizing their right to make these kinds of requests. Provide them with some ideas for working condoms into the sexual encounter in a nonconfrontational manner or role-play strategies that could help them assertively communicate their desires. Again, recognize the need and desire for physical contact, but also remind the patient that they deserve to be respected.

You can also present a different perspective: Ask the patient if having sex with someone without a condom is worth the risk of compromising their health.
“Using Condoms Implies That I Am Dirty or Diseased in Some Way”

Encourage your patient to think of alternative perspectives. Ask them if there might be other reasons that people use condoms. Using condoms can be seen as making sex healthier, and using them may actually show that a person is proud of him or herself. Alternatively, the patient can tell their heterosexual partners that condoms are excellent for pregnancy prevention, regardless of STI prevention.

“If I Insist On Using A Condom, I Am Afraid That My Partner May Ask If I Am HIV+”

You have an excellent opportunity to open a discussion on HIV status disclosure if your patient expresses this concern. Encourage your patient to think through the issue of disclosure by asking about their specific concerns. Disclosing HIV status can be terrifying, and, whenever possible, provide referrals to counselors or advocates who can assist your patient in either preparing for disclosure or actually disclosing to their partners (see Chapter 4, Assisting Patients with HIV Disclosure). As previously noted, there are many advantages to using condoms, only one of which is STI prevention.

“Using Condoms Implies That I Don’t Trust My Partner”

Present a different perspective: using condoms allows the patient to convey their desire to protect their partner. In reality, your patient also needs protection against re-infection or other STIs, but this does not need to be the main rationale presented to partners. If the patient emphasizes their investment in keeping their partner safe, then distrust is not conveyed or implied. Alternative strategies to incorporate condoms into sex could be considered. If the partner is unaware of the patient’s HIV status, disclosure issues would need to be addressed.

“Condoms Are Expensive to Buy”

Inform your patient that free condoms are available at a variety of places, including AIDS service organizations. Most public health departments, health clinics, STI clinics, and family planning clinics make condoms available free of charge. Many outreach workers who are in the community carry condoms. If your patient is a gay man, tell him that he will find bowls of condoms in many of the gay bars and clubs. Your patients should not have to buy condoms if they know where to get them for free.
Women: “Since Men Wear the Condoms, I Have No Control Over Whether or Not Condoms Are Used”

It is true that men ultimately control whether or not male condoms are worn, but women control whether or not sex occurs. The exception to this is if the man uses force to have sex or threatens the woman with violence if she doesn’t have sex. Barring that, women should have a fair amount of influence in sexual negotiations but are often unaware of just how much. Ask your patient to consider some of the communication strategies discussed in Chapter 8, Safer Sex Communication Skills, or to consider using the female condom. Work with your female patients to gain a sense of control and power in sexual negotiations.

If you have any concerns about violence (or potential violence) in your patients’ relationships—for either your female or male patients—consider a referral to a social worker or domestic violence program to help the patient find ways to stay safe.

Potential Concerns and Advantages of the Female Condom

The female condom is an alternative to traditional male condoms for heterosexual couples. (Currently, female condoms are FDA-approved only for male-female vaginal intercourse.)

Because it is worn by the female, the female condom provides women with more control over HIV/STI protection during sexual intercourse and is less constricting to the man’s penis, and therefore may prove to be a more pleasurable alternative to the male condom.

For more information about the female condom, including advantages and common concerns/questions, see the following:

- Chapter 9, Condoms and Lubricants
- Appendix D, Female Condom FAQ
Chapter 11

Other Barrier Methods: Oral Barriers, Cots, and Gloves

Oral Sex and the Use of Oral Barriers

The CDC recommends that, for protection against HIV and other STIs, barrier methods be used during oral sex. Specifically, CDC recommends that condoms be used during oral-penile sex and oral barriers be used during oral-anal and oral-vaginal sex.¹

Oral barriers are flat pieces of virus-impermeable material used for protection against sexually transmitted infections during oral-anal and oral-vaginal sex.

Options for oral barriers include dental dams, Glyde dams, plastic wrap, and modified condoms and latex gloves.

Important Tips for Oral Barrier Use

All barriers should be used only once and should not be shared.

Once in place, the oral barrier should always be kept on the same side against the body to prevent STI transmission.

As with condoms, careful storage of oral barriers is important to preserve their effectiveness. They should not be stored in hot places, near sharp objects, or in areas that allow for constant friction.

Dental Dams

Dental dams are small squares of latex material that can be used for protection during oral-vaginal or oral-anal sex. Dental dams were originally designed for use during dental procedures and have not specifically been tested or FDA-approved for use during oral sex.

Made in different sizes and flavors, dental dams are placed over the area where oral sex will occur. To increase sensation and pleasure, a small amount of water-based lubricant may be placed on the receiver’s side of the dam.

The dam should be held in place by either partner and should cover the entire anal or vaginal area.
Glyde Dams

Glyde dams are the only FDA-approved oral sex barrier permitted to claim the ability to protect against sexually transmitted infections.

Glyde dams are similar to dental dams but are thinner and thus often experienced by users as able to provide more sensation than dental dams. They also come in a variety of flavors.

Plastic Wrap (Saran™ Wrap)

As an alternative to dental dams or Glyde dams, plastic wrap may be used for protection during oral sex, although its efficacy in HIV and STI prevention has not been fully evaluated. Nonetheless, in situations where your patient may not have access to other barrier methods, plastic wrap may be a viable alternative and safer than not using any barrier at all. As with dental dams and Glyde dams, the plastic wrap should be large enough to cover the entire vaginal or anal area and should be held firmly in place during use.

Modified Latex Condoms and Gloves

Nonlubricated latex condoms and latex gloves can also be modified for protective use during oral sex.

To create an oral barrier from a nonlubricated condom, the user can cut the condom up the middle and then cut off the tip to create a rectangular barrier.

To create an oral barrier from a latex glove, there are several options. The user may cut off all the fingers and then cut a slit up the middle creating a traditional oral barrier. Another alternative is to leave the thumb to provide a space where the user’s tongue may go.

Finger Cots and Gloves

Latex finger cots and latex gloves can be used during sexual activity that involves hand-genital contact (i.e., insertion of fingers or the hand into the vagina or anus). Use of latex cots and gloves can provide protection for broken or severely chapped skin and torn cuticles. It is important for users not to share or reuse finger cots or gloves, and to dispose of them after each use.

Finger cots resemble mini-condoms and are convenient barriers when one finger is being used for penetration, or for small sex toys. Finger cots can either be purchased or made by cutting the fingers off latex gloves. For added protection, it is important for the user to remove rings, keep fingernails trimmed and smooth, and use sufficient water-based lubricant (oil-based lubricant should be avoided, as it will weaken latex).

Gloves made of a substance called Nitrile (a synthetic latex substitute that does not degrade in the presence of oils) are also available. Nitrile gloves may be used for individuals who are allergic to latex or if a person is engaging in anal fisting where oil-based lubricants are often used and penetration can be relatively deep.
References

Overview of Microbicides

The term microbicide refers to a range of different substances that can be applied inside the vagina or rectum to reduce the risk of sexually transmitted infections (including HIV). Microbicides can be formulated as gels, creams, suppositories, films, lubricants, or a sponge or vaginal ring that slowly releases the active ingredient. Some microbicides also have a contraceptive effect, while others do not.

Availability of Microbicides

Currently, there is no effective microbicide available to the general public. There are approximately 60 potential microbicides under investigation, and as of January 2006, 20 of these microbicides were in various stages of clinical testing. (For the most recent update on the microbicide pipeline, see http://www.microbicide.org/publications/digest.shtml)

The majority of the microbicides being tested are for vaginal use, and given the differences in the physiology of the vagina and the rectum, it is not clear which products may be acceptable for rectal use.

Why Microbicides Are Important

Microbicides are important because they offer women the opportunity to make STI prevention decisions more directly. They also allow them to initiate prevention behaviors as opposed to negotiating with or persuading their partners to enact the behaviors (e.g., putting a male condom on), and they allow for women to do so discreetly.

Despite existing HIV prevention efforts (e.g., condoms, mutual monogamy, and STI treatment), HIV continues to spread rapidly, especially among women in developing countries.

Due to gender inequalities, many women in these settings often do not have the power to negotiate condom use with their partners. For these women, microbicides are empowering given that they offer an alternative to condoms that they can control. Microbicides can be applied prior to sexual intercourse and do not require the cooperation, or even the knowledge, of the partner.
How Microbicides Work

Microbicides can protect against HIV and other sexually transmitted infections (STIs) in several ways:\(^1\,^2\)

1. By providing a physical barrier between the pathogen and the cells of the vagina or rectum.
2. By enhancing natural vaginal defenses.
3. By disabling or killing pathogens.
4. By prohibiting viral entry into a cell or preventing viral replication of the pathogen once it has entered the cell.

Because STIs are caused by different pathogens, microbicides will not necessarily provide protection against all STIs. Many of the microbicides in development work against HIV and at least one other STI.\(^2\)

Microbicicles are substances that may be applied inside the vagina or rectum to prevent HIV and/or other sexually transmitted infections. Currently, there are no effective microbicides.

Nonoxynol-9

Because nonoxynol-9 (N-9) may be available to your patients, it is important to be aware of the history of N-9 and current recommendations concerning its use.

Nonoxynol-9 (N-9) is a spermicide that was used in a variety of contraceptive products that were available in the U.S. for many years, either as a stand-alone product or with other protective methods such as condoms and diaphragms\(^1\). N-9 was also used in some sexual lubricant products. Products containing N-9 may still be available commercially.

While N-9 demonstrated activity against HIV and several other STIs in vitro (and thus was considered as a potential microbicide), a large-scale human study of nearly 900 HIV-negative sex workers showed that N-9 use actually increased a woman’s likelihood of becoming infected with HIV and had no protective effect against gonorrhea or chlamydia.\(^3\) Women who used N-9 in the study had more vaginal lesions in a dose response manner—that is, as frequency of N-9 gel use increased, so did frequency of vaginal lesions—therefore increasing the users’ susceptibility to HIV transmission\(^3\). Nonxynol-9 has also been found to cause significant sloughing of rectal epithelium in humans and animals (even more so than vaginal use of N-9), which may also increase risk of HIV transmission.\(^4\)
As a result of this and other studies, the Centers for Disease Control, the World Health Organization, and others have recommended that nonoxynol-9 *should not be used for HIV prevention and should not be used rectally.*

The Centers for Disease Control, the World Health Organization, and others recommend that N-9 should not be used for HIV prevention, nor should it be used rectally.
References


Recommended Reading


Chapter 13

Commonly Abused Drugs and Effective Risk Reduction Strategies*

Drugs and HIV

Many drugs are associated with risk of HIV transmission (or co-infection with other pathogens) either directly through the sharing of used needles (or other contamination hazards involved in drug use), or indirectly through their association with risky sex.

Many drugs (as well as alcohol) are disinhibiting and may impair the user’s judgment, making it less likely that the user will practice safer sex behaviors.

Similarly, some drugs, especially stimulant drugs, may be experienced as sexually stimulating to the user, potentially increasing the likelihood of engaging in sexual behavior (perhaps unprotected sexual behavior) while high.

This chapter includes basic information about commonly used and abused drugs that healthcare providers may encounter when discussing sexual and drug use risk behaviors with their HIV-positive patients.

Tip

Drug use places users at risk for HIV and other pathogens beyond risks of shared injection equipment. Many drugs are disinhibiting and some are sexually stimulating, putting users at increased risk for engaging in risky sexual behaviors.

Heroin

HIV Transmission Risk: Shared needles/works.
Disinhibition may increase risk of unprotected sex.

Heroin is a highly addictive drug that is a derivative of morphine. Pure heroin is a white powder with a bitter taste. Street heroin typically varies in color from white to dark brown, depending on additives or impurities. “Black tar” heroin is a form of heroin from Mexico that is typically sticky and dark brown or black, used often in West Coast cities in the U.S. (South-American-produced “white”

*The information presented in this chapter comes from many sources that are referenced in full at the end of the chapter.
powder heroin is more common in East Coast U.S. cities). Heroin is often injected, but it can also be snorted or smoked. *Street names for heroin include called Smack, H, Skag, Silk, Horse, Junk, Bags, Blue-Steel, China White, and P-Dope.*

**The Effects of Heroin**

Soon after taking heroin, the user typically feels a very quick feeling of euphoria (a “rush”). One of the reasons heroin is so addictive is because it enters the brain quickly and produces a rapid euphoria. The rush is usually accompanied by a warm flushing of the skin, dry mouth, a heavy feeling in the arms and legs, and sometimes nausea, vomiting, and itchiness. After the initial euphoria, heroin often leads to other symptoms that may last for several hours, including drowsiness, difficulty thinking clearly, and slowed breathing/heart-rate, sometimes so extreme that it causes death.

Withdrawal symptoms (which usually occur once a person is addicted) can last from a week to several months and include restlessness, muscle and bone pain, trouble sleeping, diarrhea and vomiting, cold flashes and goose bumps, and leg movements.

Risks of heroin use include addiction (heroin is *highly addictive*); overdose; infection with HIV, hepatitis, or other pathogens when the user shares needles or works; collapsed veins; abscesses; infections of the heart; arthritis; and liver or kidney disease.

**Cocaine**

*HIV Transmission Risk: Shared needles/works if injected.*  
*Disinhibition may increase risk of unprotected sex.*

Cocaine is a highly addictive stimulant drug usually in the form of a white to light brown powder. The powdered form of cocaine can be snorted or dissolved in water and injected. Crack cocaine comes in a rock crystal that is heated and then smoked. Some users mix cocaine powder or crack with heroin (called a “speedball”). *Cocaine is sometimes called Coke, Snow, Flake, Blow, Cane, Dust, Shake, Toot, Nose Candy, and White Lady. Crack is sometimes referred to as Crack, Rock, or Free-Base.*

**The Effects of Cocaine**

The effects of cocaine are typically felt almost immediately, and disappear within a few minutes or hours, depending on the route of administration. Snorting cocaine produces a relatively slower-onset high that usually lasts 15–30 minutes, while the high from smoking crack may last 5–10 minutes. In small amounts (up to 100 mg.), cocaine induces euphoria, a feeling of energy, talkativeness, and a sense of mental alertness. Physiologically, cocaine induces constricted blood vessels, dilated pupils, increased temperature, increased heart rate, and elevated blood pressure. Large amounts of cocaine will intensify the
experienced “high” but may also lead to bizarre or violent behavior. Cocaine-related deaths are often due to cardiac arrest or seizures followed by respiratory arrest.

Cocaine may cause a strong physiological addiction, and long-term effects of cocaine may include addiction, irritability and mood disturbances, restlessness, paranoia, and hallucinations. Common medical complications of use include heart rhythm disturbances, heart attacks, chest pain, respiratory failure, strokes, seizures, headaches, abdominal pain, and nausea.

**Club Drugs**

“Club drugs” are those that are frequently used at dance parties or all night “raves.” Drugs commonly referred to as “club drugs” include methamphetamine, MDMA (Ecstasy), ketamine, GHB, inhaled nitrates (poppers), and rohypnol. Club drug use is more prevalent in the MSM population than in the general population. Numerous studies have demonstrated an association between club drug use and increased sexual risk behavior and HIV/STI infection. Although there is little literature on club drug use and HIV medication adherence, available reports suggest that some club drug users are at risk for decreased medication adherence, which may have implications for their HIV disease. In addition, significant risks may be associated with club drug-ART medication interactions.

All providers should ask their HIV-positive patients about club drug use and potential associations with risky sexual or drug use behaviors. Patients who use club drugs should also be informed of acute and long-term risks and information about risk reduction, such as adequate (but not excessive) hydration, avoidance of mixing club drugs with alcohol, and possible drug interactions.

**Methamphetamine**

**HIV Transmission Risk:** Shared needles/works if injected. Disinhibition may increase risk of unprotected sex. May be experienced as sexually stimulating.

Methamphetamine is an addictive stimulant drug created in illegal laboratories. Methamphetamine is related to amphetamine but causes more pronounced central nervous system effects than amphetamine. Methamphetamine is produced as clear chunky crystals that resemble ice. Methamphetamine can be taken orally, snorted, injected intravenously, smoked, or inserted rectally. *Street names for methamphetamine include Ice, Crystal, Glass, Chalk, and Tina.*

**The Effects of Methamphetamine**

Similar to amphetamine, methamphetamine causes increased activity, decreased appetite, and a general sense of well-being lasting 6–8 hours. When smoked or taken intravenously, methamphetamine may cause an intense “rush” that lasts
for several minutes and is described as extremely pleasurable. Following the initial euphoria associated with use, methamphetamine may lead to agitation and sometimes violent behavior.

The CNS effects of methamphetamine use include increased wakefulness, increased physical activity, decreased appetite, increased respiration, hyperthermia, and euphoria. Methamphetamine use also often leads to irritability, insomnia, confusion, tremors, convulsions, anxiety, paranoia, and aggressiveness. Methamphetamine appears to have a neurotoxic effect, damaging brain cells that contain dopamine and serotonin, and over time may cause Parkinson-like symptoms. Methamphetamine use may also cause irregular heartbeat, extreme anorexia, cardiovascular collapse, and even death.

**MDMA (Ecstasy)**

**HIV Transmission Risk:** Shared needles/works if injected disinhibition. May increase risk of unprotected sex.

MDMA is a synthetic drug that is chemically similar to methamphetamine and mescaline (a hallucinogenic). MDMA is most commonly taken by ingestion (in tablet form), but may also be dissolved and injected, crushed and snorted, or taken in suppository form. MDMA pills sold on the street may often be cut with other substances or drugs, potentially increasing the risk to users. Street names for MDMA include Ecstasy, Adam, Candy Canes, Disco Biscuit, Doves, E, Eckie, Essence, Hug Drug, Love Drug, M&M, Rolls, White Doves, X, and XTC.

**The Effects of MDMA**

MDMA induces a sense of well-being, openness, empathy, energy, and euphoria among users. It may also enhance tactile sensations. Heavy doses of MDMA may cause visual hallucinations. MDMA may also interfere with the body's ability to regulate temperature, and can cause increases in heart rate and blood pressure, muscle tension, involuntary teeth clenching, nausea, blurred vision, faintness, and chills or sweating. Often used at all-night dancing parties, MDMA can lead to severe dehydration and heat stroke. However, MDMA has been associated with hyponatremia when users ingest excessive amounts of water. MDMA users who exert themselves physically, such as dancing all evening, may benefit from rehydration with electrolyte-containing fluids such as sport drinks. Psychological effects may include confusion, depression, sleep problems, and severe anxiety. Long-term effects of MDMA use are unclear, but animal research suggests MDMA may be damaging to neurons involved in mood, thinking, and judgment.
Other “Club Drugs” (Poppers, GHB, Ketamine, Rohypnol)

Poppers (Amyl and Butyl Nitrate)

HIV Transmission Risk: Disinhibition may increase risk of unprotected sex. May be experienced as sexually stimulating.

Amyl nitrate and butyl nitrate—often referred to as “poppers”—are a type of inhalant drug that are often considered “club drugs” because of their frequent use among people at nightclubs. Poppers dilate blood vessels and relax the muscles but are used primarily as sexual enhancers to heighten stimulation. Amyl and butyl nitrate come as a clear or yellow liquid in small bottles or vials and is inhaled from the bottle or cloth.

The effects of nitrates are immediate and last only several minutes. Users may experience light-headedness, giddiness, a feeling of blood rushing to the head, a warm flush, and heightened sensual awareness. Side effects include headache, nausea, vomiting, and coughing. Excessive use can cause severe vomiting, unconsciousness, increased eye pressure (especially dangerous to users with glaucoma), and death. Poppers are also sometimes referred to as Rush, Ram, Thrust, and Locker Room.

GHB

HIV Transmission Risk: Disinhibition may increase risk of unprotected sex.

GHB (gamma hydroxy-butyrate) is a central nervous system depressant that, along with rohypnol and ketamine, is sometimes referred to as a “date rape drug.” GHB is often used in liquid form (it is colorless, tasteless, odorless and therefore easily added to a drink and ingested by an unknowing individual) or sometimes as a powder. In lower doses GHB causes drowsiness, dizziness, nausea, and visual disturbances. At higher doses, GHB can induce unconsciousness, seizures, severe respiratory depression, and even coma. Withdrawal effects can include insomnia, anxiety, tremors, and sweating. Street names include Liquid Ecstasy, Soap, Easy Lay, Vita-G, and Georgia Home Boy.

Ketamine

HIV Transmission Risk: Shared needles/works if injected.
Disinhibition may increase risk of unprotected sex.

Ketamine is an anesthetic drug sometimes used legally for veterinary use. As an illegal, recreational drug, ketamine comes in a clear liquid or a white (or off-white) powder form that can be injected, consumed in drinks, or added to smokable materials. Certain doses of ketamine can cause dream-like states and hallucinations, and at high doses it can induce delirium, amnesia, impaired motor function, depression, elevated blood pressure, potentially fatal respiratory problems, and long-term memory and cognitive difficulties. Because of its dissociative effects, ketamine (like GHB and rohypnol) is also sometimes used as a “date rape drug.” Street names for ketamine include Special K, Vitamin K, Jet, Super Acid, Green, K, and Cat Valium.
Rohypnol

HIV Transmission Risk: Disinhibition may increase risk of unprotected sex.

Rohypnol—the drug most commonly referred to as the “date rape drug”—is a benzodiazepine that, when used with alcohol, can incapacitate users and produce anterograde amnesia (i.e., individuals may not remember events experienced while under the effects of the drug). Rohypnol is manufactured in a pill form and is usually taken orally but can also be crushed and snorted. In addition to chemically induced amnesia, rohypnol often causes decreased blood pressure, drowsiness, visual disturbances, dizziness, confusion, gastrointestinal disturbance, and urinary retention. The generic name for rohypnol is flunitrazepam. Street names for rohypnol include R-2, Mexican Valium, Rophies, Roofies, and Circles.

Risk Reduction Strategies And Drug Use

When discussing HIV risk reduction with patients, it is important for providers to assess whether the patient is using any illicit drugs, and, if so, whether that drug use is contributing to HIV transmission risk (either due to shared injection equipment or increased likelihood of risky sex when high).

Framing the Discussion

It is critical that questions about drug use are framed in a nonjudgmental, non-threatening manner that allows patients to feel comfortable discussing their drug use behaviors. Once the issue of drug use and its importance for HIV risk reduction has been broached, then you can probe gently to get a clearer picture of the extent of the patient’s drug use.

Example: One thing that comes up with many of my patients when we’re talking about challenges in reducing risk with HIV is drug use. Most people know that sharing needles or works is risky, but even if people aren’t injecting, when they use drugs often they are less careful about making sure they practice safer sex. I was wondering if this is ever an issue for you.

Remember, Risk Reduction Is the Primary Goal

The most important goal is to reduce the patient’s HIV risk behaviors. If in the process you are able to work with the patient to decrease (or stop) their drug use, that is an important achievement. But if the patient does not seem willing (or able) to stop using drugs at this time, it is appropriate to adopt a harm reduction perspective to minimize their HIV transmission risk within the context of their drug use.

Addressing Drug Use with Patients

You can use the strategies outlined in the Options intervention protocol regarding safer sex behaviors to address the issue of drug use behavior change. Based in motivational interviewing theory, these strategies are generalizable to many target behaviors.
For example, questions about **importance** of and **confidence** in changing drug use behavior can help clarify weaknesses in motivation and/or behavioral skills needed for change.

**If you choose to address your patient’s drug use (especially if abuse and/or dependence is evident), express your concern in a non-threatening manner that seeks their permission to discuss the issue further.**

If the patient is not open to discussing their drug use any further, you can express your concern in a caring manner that respects their wishes.

By respecting the patient, you are less likely to alienate them and are more likely to maintain the integrity of your relationship. This makes it more likely that you will be able to help them reduce their HIV transmission and drug-related risks over time.

**Example:** *I am concerned about your meth use. You mentioned that you are using at least every weekend and sometimes have unprotected sex when you’re high. I’m concerned about the negative effects that meth could have on your health. By having unprotected sex when you’re high, you can put yourself at risk for getting reinfected with HIV, or passing it on to your partner. Ultimately it’s your choice to decide whether you use or not, and I will respect that. But, I want you to know that there are ways to reduce the risks involved, and I would like your permission to talk about some of those.*

**Attempt to understand the patient’s perspective.** Asking the patient to describe what they perceive as the pros and cons of their drug use (and the pros and cons of not using) may be useful in eliciting information from the patient that can be used to build motivation for change. It also conveys that you are interested in the patient as a person.

**Patients who are motivated to change their drug use but lack the necessary skills to do so may benefit from referral to an outpatient or inpatient drug abuse clinic.** Patients receiving treatment for drug abuse are more likely to be successful in stopping their drug use than patients who do not receive treatment.

**Remember, however, that pushing patients into drug treatment when they are not yet ready to make a change in their use is typically not effective** and may actually have negative consequences for your relationship with them.

For patients not yet in the “preparation” or “action” stage of change, you may choose to provide the contact information of a drug treatment clinic without pushing them into treatment. Assure them that if and when they are ready to consider treatment, you will be there to help.

**Behavior change does not happen overnight.** If you choose to address drug use with your patient, your primary goal is to move them along the continuum of change, which often happens in small steps. Just opening the discussion and allowing the patient to openly express their thoughts can be a good first step.
If your patient chooses to continue their drug use, encourage them to practice risk reduction strategies to reduce the risk of transmission of HIV or other STIs, such as:

- Consider using drugs (or alcohol) only when there is little or no chance that they will engage in risky or unprotected sexual behaviors.

- Practice consistent safer sex behaviors when not using drugs to increase the likelihood that these behaviors will become habits and therefore easier to engage in when under the influence of drugs (or alcohol).

- For patients who use injection drugs, encourage use of the strategies outlined in Chapter 14, *HIV and Injection Drug Use*, to help reduce their HIV transmission risk.
Sources


Recommended Reading


Halkitis PN, Green KA, Mourgues P. Longitudinal investigation of methamphetamine use among gay and bisexual men in New York City: findings from project BUMPS. *J Urban Health.* 2005;82:i18-i25.


Injection Drug Use and Risk of HIV Transmission

Injection drug use presents multiple risks for potential HIV transmission. Research suggests that HIV-infected injection drug users (IDUs) often demonstrate a broad array of risky sexual and drug use behaviors, not only needle sharing.

Risk behaviors associated with injection drug use include:

- Syringe-sharing (one of the most efficient methods of transmitting HIV)
- Sharing injection equipment, such as cookers, water, drug solutions, and cottons
- Increased likelihood of unsafe sexual behaviors by impairing users’ judgment, decreasing inhibitions, and opportunities to trade sex for drugs/money

HIV-infected IDUs who share needles or works are at risk for:

- Transmitting HIV to other users
- Acquiring or transmitting hepatitis and other blood-borne pathogens
- Acquiring or transmitting additional strains of HIV to partners
  - Transmission or acquisition of drug-resistant HIV is a particular concern for all HIV-infected individuals.
  - One study of HIV-infected IDUs found that 14% of participants reporting high-risk sexual and/or drug behavior at study visits also demonstrated clinically significant drug-resistant HIV.

Who Is at Risk?

Although the incidence of HIV among IDU decreased from 1994–2000 (CDC 2003) and again from 2001–2005, injection drug users continued to account for at least 14% of all new HIV cases in 2005.
All injection drug users (IDUs) who share needles or works are at risk, even if they are already HIV-positive.

IDUs may be at particular risk for sharing needles if they³:

- are homeless.
- have a lower income.
- have a sexual partner that is also an injection drug user.
- inject daily.
- trade sex for drugs.

Women injection drug users may be at particular risk for transmission risk factors beyond the injection drug use itself.

- In one study of high-risk behaviors among IDUs, among those who were sexually active, women were almost twice as likely to have unprotected sex than men (even controlling for other variables such as alcohol use, trading sex for drugs, and frequency of sex).³

Factors Associated with the Decline in HIV Prevalence Among IDUs

Factors that may be contributing to the decline in new HIV diagnoses among IDUs include:

- **Syringe Exchange Programs (SEPs)**

  Since SEPs were legalized and expanded in New York City, rates of distributed sharing (passing on used needles to others) and receptive sharing (injecting with a needle used by someone else) have both decreased significantly.⁶

  In a study of global cities with and without programs that distributed clean needles and syringes, cities with needle–distributing programs had annual decreases in HIV seroprevalence of IDUs while cities with no distribution programs had an increase in HIV seroprevalence among IDUs.⁷

- **Substance Abuse Treatment**

  Entering and remaining in substance abuse treatment reduces drug use and HIV transmission risk behaviors.⁸

- **Prevention Norms of IDUs**

  Some IDUs report that when using drugs in a group without enough needles for each person, they engage in “informed altruism” (disclosing their HIV status) and “ordered sharing” (having HIV-negative users use a needle first) to reduce transmission risks.⁶
Similarly, many IDUs encourage other users in their communities to engage in self-protective behaviors, helping to facilitate a norm of HIV transmission risk reduction (termed “intraventions”).

**Injection Drug Use and Risk of Hepatitis C Coinfection**

IDUs are at particular risk for being infected not only with HIV but with the Hepatitis C virus as well. It is estimated that 50%–90% of HIV-infected IDUs are infected with Hepatitis C.

Injection drug use is the main risk factor for acquisition of Hepatitis C, and the virus is rapidly acquired among IDUs. Between 50% and 80% of users become infected within 5 years of starting injection drug use, and 60% of new cases in 2000 occurred among IDUs.

The primary risk factor for Hepatitis C transmission is when blood from an infected person enters the body of an uninfected person—for example through shared injection drug equipment or shared needles in other activities (e.g., piercings, tattooing). There is also a small risk of Hepatitis C transmission through other body fluids such as semen or vaginal fluid.

Many patients with Hepatitis C are unaware that they are infected because symptoms in newly acquired cases are mild or nonexistent. Hepatitis C infection is more serious in HIV-infected patients and can lead to liver damage more quickly and affect the treatment of HIV infection.

**Tip**

*HIV transmission risk reduction strategies also apply to Hepatitis C risk reduction. Prevention messages to IDUs should include reducing the risk of Hepatitis C acquisition and transmission.*

**Sources of Risk for Injection Drug Users**

**Possible Sources of Risk during Injection Drug Use**

Although much attention has been paid to the risks of needle sharing during injection drug use, there are other drug-sharing behaviors that present risk for transmission of HIV, including the sharing of cookers, cotton filters, and water.

Sharing of these “works” may actually be more common than needle sharing and poses a significant risk of HIV and hepatitis transmission.

For example, in a study of drug use behaviors among IDUs, it was found that direct sharing of syringes occurred relatively infrequently (reported by only 22% of users during their last injection episode). High-risk drug preparation
practices, however, were quite common among IDUs (ranging from 58%–86% of users during their last injection episode).\textsuperscript{12}

Research suggests needle sharing may be relatively infrequent among some injection drug users, whereas other risky drug-sharing behaviors (such as sharing cookers and using common syringes to partition drugs) may actually be more common among IDUs.

Injection drug use practices that may facilitate the transmission of HIV, Hepatitis B, and Hepatitis C often occur during the preparation and distribution of drugs for injection that are purchased jointly.

These practices commonly include:

- **Sharing “cookers” or “spoons”**
  
  An IDU may use a syringe to pull their portion of a drug from a communal cooker, or they may squirt some of the drug solution from their syringe back into the cooker (e.g., if too much is taken or a single “shot” is further divided and shared).

- **Sharing or reusing cotton filters**
  
  An IDU may share or reuse a filter, or they may use a filter that has been saturated with shared drug solution to get more of the drug (a practice referred to as “beating the cotton,” “a rinse,” “cotton shot” or “a wash”). During this practice, the user puts water on the filter, puts it in the cooker, then draws up the solution and injects it.

- **Sharing water**
  
  IDUs may share water for mixing drugs into solution or for rinsing their syringe or other drug paraphernalia.

- **Partitioning drugs**
  
  When injection drugs are purchased for joint use, the drug is typically heated in a cooker and then drawn back into the preparer’s syringe to measure each participant’s share using the calibrations on the syringe barrel. This can be done in several ways:

  - **Frontloading**
    
    Frontloading is a method of distributing shared drugs through a needle with a detachable syringe. The drug solution is drawn up into a “donor” syringe and then measured out into one or more
other syringes. It is referred to as “frontloading” because the drug solution is squirted through the front of the syringe.

- **Backloading**
  
  Backloading is a method of distributing shared drugs from one syringe into the barrel of another. It differs from frontloading in that the syringes used have fixed needles: the recipient syringe plunger is removed, and the drug solution is squirted in from the donor syringe through the back opening.

  Squirting the drugs back into the cooker to be drawn up by the other users

**These indirect sharing practices appear to be quite common among IDUS.**

In a study of IDUs and the people they used drugs with (their drug-sharing “network”), at least one member in many networks participated in risky drug use behaviors:

- 82% of the drug-sharing networks divided the drug as a liquid.
- 86% used a common cooker.
- 35% reported use of a used, unbleached syringe to prepare the drug solution.
- 67% reported use of water that syringes had been rinsed in for mixing drugs.
- 58% beat a cotton.
- 5% reported backloading.

Indirect sharing may be particularly common among users who do not have a safe place to use. That is, they want to prepare and inject their drugs as quickly as possible and prefer to use the least amount of equipment possible to avoid getting caught.

**Sexual Risk for IDUs**

IDUs may be at additional risk for sexual transmission of HIV given that individuals under the influence of some substances are more likely to engage in sexual risk-taking behavior and some drug users eventually exchange sex for drugs or money.

**HIV prevention interventions for IDUs must be comprehensive.** Interventions need to provide information on how to prevent HIV transmission through sexual behavior risk reduction strategies as well as IDU risk reduction strategies.
Specifically, HIV providers need to address use of condoms and other barrier methods, disclosure of HIV status to sexual partners, triggers for high-risk sexual behavior, and other issues related to sexual behavior risk reduction for all patients, regardless of whether or not they are injection drug users.¹⁴

**Discussing IDU Risks with Patients**

While one’s own personal style of interacting with patients will set the tone of discussions about IDU behavior, several kinds of questions should be avoided since they do not facilitate open discussions. When talking with your patients about injection drug use:

▶ **Avoid close-ended questions like “Do you share needles?”**

Most patients are aware that sharing needles is “bad” and may be reluctant to admit to such behaviors when questions are framed that way. It is easy to say “no” and avoid the discussion.

Instead, try open-ended questions like “What situations have been most difficult for you in terms of lending or borrowing needles or works?” “Can you describe a situation where you might feel like you’d have to borrow or lend works or needles?”

▶ **Avoid leading questions like “You’re not sharing, are you?”**

Instead, ask questions that allow the patient to answer openly, like “What have you been able to try in terms of lending or borrowing needles? What has worked for you and what doesn’t?”

▶ **Use the Motivational Interviewing (MI) techniques of the Options intervention to elicit your patient’s perspective and understand the motivation and/or behavioral skills barriers involved.**

The fundamental components of the Options intervention can be implemented in conversations about IDU to minimize resistance to discussing risk behaviors. Often patients who use drugs expect their healthcare providers to be unable to understand them, and, therefore, of no potential use or help. It is critical to challenge that belief through MI techniques, open listening, and nonjudgmental discussion.

**Safer Injection Drug Use Strategies**

**Encouraging Patients to Stop Using Injection Drugs**

There is no “safe” drug use. Stopping use of injection (and other) drugs is the safest strategy in preventing HIV transmission.

*How the topic of drug use and potentially “quitting” is approached* has important implications for determining how productive the ensuing conversation between provider and patient will be.

Patients often anticipate that their providers will simply instruct them to quit using and may even lecture or chastise them for using. As such, an open dialogue with a patient who is using may be difficult to achieve.
The provider must first earn the trust of the patient and “prove” that they are interested in exploring options and working with the patient “where they are at.” Lecturing, oversimplifying, or issuing prescriptive advice to simply quit is rarely effective and can in fact be damaging to an otherwise collaborative relationship.

Thus, when providers discuss the possibility of quitting use, it is best to present it as an option, one of many. Framing the discussion in terms of the patient’s thoughts on the issue can provide an opportunity for the provider to tell the patient about local resources and support, but not as a directive.

For those patients who are ready to get “clean,” be knowledgeable about community resources for drug abuse and relapse prevention treatment referral.

See Chapter 13, Commonly Abused Drugs and Effective Risk Reduction Strategies, for more information about strategies to help patients overcome drug abuse.

The Harm Reduction Approach

While stopping drug use is the safest prevention strategy, patients sometimes do not view this as a viable option.

When patients indicate to you, either verbally or nonverbally, that they are not in a position to consider stopping their drug use at this point, it is critical that a harm reduction approach be adopted.

Harm reduction strategies are commonly used in medical and public health practices to reduce the risk of transmitting HIV or acquiring other infections for patients who are not ready to enter treatment or to stop using injection drugs.

If your patient is not ready or currently interested in entering treatment or stopping IDU, there are a number of strategies he/she can use to reduce the risk of transmitting HIV or acquiring other infections (such as hepatitis).

Harm Reduction Options for IDUs:14–15

- Use an alternate (non-injection) method of taking drugs.
- Reduce frequency of injection drug use.
- When possible, use a new, sterile syringe to prepare and inject drugs.
  
  The patient should use only sterile syringes obtained from a reliable source (e.g., a pharmacy or a syringe access program) and should not lend or borrow syringes.

  Options for obtaining syringes include Syringe Exchange Programs and Expanded Syringe Access Demonstration Programs (i.e., pharmacies).

- Use bleach as an alternative if no new syringe is available.
If it is not possible to use a new, unused, sterile syringe, the syringe should be cleaned and disinfected with full-strength bleach. However, inform patients that a disinfected syringe is not a sterile syringe: even the best disinfection procedure can not guarantee that all viruses have been killed.6

- **Avoid reusing, lending or borrowing syringes.**
- **Avoid reusing or sharing water or other drug preparation equipment.**
- **If possible, use sterile water to prepare drugs.**
  
  If this is not possible, use clean water from a reliable source (e.g., fresh tap water). Any leftover water should be discarded. Once the sterile water has been opened, it should be thrown out because once opened it may contain bacteria from the air or end up being used by another person.

- **Make every effort to use a new or disinfected container (“cooker”) and a new filter (“cotton”) to prepare drugs.**
  
  IDUs should mark their spoons (or other “cookers”) for easier identification, keep them in a place where other people do not have access to them, clean them with bleach, and rinse them thoroughly before use.13 (Use the same procedure for any other receptacle used for mixing drugs.)

- **Avoid contamination of other materials used during drug use, including the drug preparation site and other items (e.g., knives).**

- **Safely dispose of syringes after one use.**
  
  See suggestions below in “Safe Syringe Disposal”

- **Follow other harm reduction procedures during injection drug use, such as:**
  
  — Always wash hands and arms before preparing to inject.
  
  — Use a clean surface to prepare drugs or spread out a piece of clean paper.
  
  — Use an alcohol pad to clean the skin where the user is going to inject.
  
  — After injecting, use a gauze pad to stop the bleeding.
  
  — Put a bandage on the place where the user injected.
  
  — Throw away the used alcohol pad, gauze, and all other drug preparation equipment.
  
  — Clean anything else blood might have touched (such as the tourniquet, the injection space, or clothes).
  
  — Wash hands again to clean off dirt, blood and viruses.
**Syringe Disinfection**

Below are instructions for syringe disinfection from the Centers for Disease Control and Prevention:16

1. Fill the syringe with clean water (such as water right from a tap or a new bottle of water), and shake or tap. Squirt out the water and throw it away. Repeat until you don't see any blood in the syringe.

2. Completely fill the syringe with fresh, full-strength household bleach. Keep it in the syringe for 30 seconds or more. Squirt it out and throw the bleach away.

3. Fill the syringe with clean water and shake or tap. Squirt it out and throw the water away.

4. If you don't have any bleach, use clean water to vigorously flush out the syringe: fill the syringe with water and shake or tap it. Squirt out the water and throw it away. Do this several times.

**Safe Syringe Disposal**

There are several ways your injection drug using patients can safely store, and then dispose of, used syringes. Encourage your IDU patients to follow these strategies17 for their own safety and for the safety of others.

- **Do** put used syringes in a sharps container or a puncture-resistant, plastic bottle (for example, a bleach or laundry detergent bottle). Close the screw-on top tightly. You may want to tape it as well. Label the bottle, “Contains Sharps.”

- **Do keep** sharps containers away from children and pets.

- **Don't** put sharps in soda cans, milk cartons, glass bottles, or in any containers that are not puncture resistant. Coffee cans are not recommended because the plastic lids come off too easily and may leak.

- **Don't** flush sharps down the toilet or drop them into a storm sewer.

- **Don't** put sharps containers out with the recycling. Loose needles, syringes, or lancets should never be thrown into a recycling bin.

- Once the sharps container is ready for disposal, there are several safe disposal options that patients can use to help protect themselves, others, and the environment.

For example:

- You (or your healthcare organization) can prepare a handout about local sharps disposal options to give to your injection drug-using patients.

- You can help your patient find out the days and times that local hospitals or nursing homes accept sharps for disposal.
— Your patient can call their local public works department or trash collector. (Check the blue pages of the telephone book for their numbers.) Some communities have special household medical waste collection or drop-off days.

— Your patient can call their local health department and ask the health educator on staff about sharps collection programs in their county.

**Overdose Prevention**

The risk of overdose due to heroin use may be as high as 2% per year.\(^\text{14}\)

Death usually occurs 1 to 3 hours after injection, is more common when opioids are mixed with alcohol or benzodiazepines, and is often witnessed by someone who does not recognize the danger.\(^\text{14}\)

Clinicians should discuss harm-reduction topics related to opioid overdose including:

- The risk of using alone.
- The risk of using after a period of abstinence.
- The danger of mixing other depressants with heroin.
- Signs of possible heroin overdose in another user.
- Learning mouth-to-mouth breathing or CPR.
- Calling 911 to report someone who is unconscious or not breathing. Be prepared for possible police involvement. When the ambulance comes, report exactly what the person took.
- Use of naloxone (Narcan) to help reduce an opioid overdose.

— A law that took effect in April 2006 in New York State allows for the use of injectable naloxone as first aid if administered in good faith by a nonprofessional intending to reverse an opioid overdose. Unlicensed individuals are permitted to carry and administer naloxone without fear of prosecution. Syringe exchange programs and some drug treatment programs train users in overdose prevention, recognition, and response including the use of naloxone. Clinicians can refer patients to these services and cooperate by prescribing naloxone to patients who have been trained in its use.
The Importance of Multidisciplinary Care

Comprehensive care for HIV-infected substance users often requires the services of providers from multiple disciplines. Clinicians should be familiar with community resources available and should coordinate the care of their substance using patients. Services may be collocated at one site linked across several sites:

Colocated Services

Colocated services offer interdisciplinary care to patients in a single-site treatment. Primary care centers augmented by staff such as psychologists, social workers, and addiction counselors are examples of colocated programs. Services in New York provide HIV primary care to substance users within drug treatment programs.

Organizations in New York that provide colocated HIV care within drug treatment facilities include:

- Addiction Research & Treatment Corporation
- Beth Israel Medical Center
- Center for Comprehensive Health Practice
- Greenwich House
- Lower Eastside Service Center
- Narco Freedom
- Promesa
- St. Vincent’s Catholic Medical Center
- West Midtown Medical Group
- Albert Einstein College of Medicine
- Bronx Lebanon Hospital Center
- Daytop Village
- Interfaith Medical Center
- Montefiore Medical Center
- Project Samaritan Health Services
- Staten Island University Hospital
- VIP Community Services
Interagency Services

When a patient receives services from multiple agencies, exchange of information should be well coordinated. The primary care clinician should clearly assign responsibilities for important elements of the patient’s care including making referrals to social services, following up with the patient and other members of the healthcare team if the patient drops out of treatment, and notifying other members of the healthcare team if a major change in status occurs.

Case Management

A case manager should coordinate care for patients receiving services in more than one setting. Providers should work with the case management team to coordinate medical care, referrals, and ongoing services.

Appropriate Drug Treatment Referrals

Drug treatment programs may be available through hospitals or community-based programs, and providers should work with social workers and other mental health providers (when available) to refer the patient to the most appropriate drug treatment program to best meet the patient’s needs.
References


Recommended Reading


HIV Counseling & Testing Directory


For HIV information, referrals, or information on how to obtain a free HIV test without having to give the client’s name and without waiting for an appointment, call the regional program closest to the county where the client lives:

<table>
<thead>
<tr>
<th>Region</th>
<th>Toll Free #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany</td>
<td>800–962–5065</td>
</tr>
<tr>
<td>Buffalo</td>
<td>800–962–5064</td>
</tr>
<tr>
<td>Nassau</td>
<td>800–462–6785</td>
</tr>
<tr>
<td>New Rochelle</td>
<td>800–828–0064</td>
</tr>
<tr>
<td>Queens</td>
<td>800–462–6785</td>
</tr>
<tr>
<td>Rochester</td>
<td>800–962–5063</td>
</tr>
<tr>
<td>Suffolk</td>
<td>800–462–6786</td>
</tr>
<tr>
<td>Syracuse</td>
<td>800–562–9423</td>
</tr>
<tr>
<td>New York State DOH AIDS</td>
<td>800–541-AIDS</td>
</tr>
<tr>
<td>Hotline</td>
<td></td>
</tr>
<tr>
<td>SIDA Hotline (Spanish)</td>
<td>800–233–7432</td>
</tr>
<tr>
<td>New York City DOH AIDS</td>
<td>800-TALK-HIV</td>
</tr>
<tr>
<td>Hotline</td>
<td>800–825–5448</td>
</tr>
</tbody>
</table>

HIV Counseling Hotline: 800–872–2777 (M–F: 4pm–8pm; S/S: 10am–6pm)

Full Provider List: http://www.health.state.ny.us/diseases/aids/testing/directory/index.htm
Testing is anonymous—clients do not have to provide names to obtain HIV tests. Each client is given a code number that is used to keep track of their test record. Written on a return appointment card, this number enables clients to receive their results.

Methods include rapid testing, oral fluid testing (no needles) and blood testing for HIV antibodies. Results are provided in-person during the same session if rapid testing is selected or at a post-test appointment. Clients with positive test results have the option to convert their test records to confidential—benefits of this include avoiding the need for retesting and allowing more immediate access to care.

PNAP & CNAP

Partner Assistance Program (PNAP) and Contact Notification Assistance Program (CNAP) for HIV-positive Individuals

PNAP and CNAP help individuals with HIV or AIDS inform their partners or contacts that they may have been exposed to HIV. PNAP or CNAP services are free of charge and completely confidential.

<table>
<thead>
<tr>
<th>Area</th>
<th>Telephone #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo</td>
<td>716–858–7853</td>
</tr>
<tr>
<td>Western New York Southern Tier</td>
<td>716–661–8111</td>
</tr>
<tr>
<td>Rochester</td>
<td>800–757–5803</td>
</tr>
<tr>
<td>Syracuse</td>
<td>315–477–8116</td>
</tr>
<tr>
<td></td>
<td>800–878–3827</td>
</tr>
<tr>
<td>Onondaga County</td>
<td>315–435–3236</td>
</tr>
<tr>
<td>Oneida/Herkimer</td>
<td>315–798–5747</td>
</tr>
<tr>
<td>Central New York Southern Tier</td>
<td>800–878–3827</td>
</tr>
<tr>
<td>Central New York Northern Tier</td>
<td>315–785–2277</td>
</tr>
<tr>
<td>Albany/Schenectady</td>
<td>518–402–7411</td>
</tr>
<tr>
<td>Dutchess</td>
<td>845–486–3558</td>
</tr>
<tr>
<td>Orange</td>
<td>845–568–5333</td>
</tr>
<tr>
<td>Westchester</td>
<td>914–813–5115</td>
</tr>
<tr>
<td>Nassau</td>
<td>516–571–0216</td>
</tr>
<tr>
<td>Suffolk</td>
<td>631–853–2255</td>
</tr>
<tr>
<td>Rockland</td>
<td>845–364–2992</td>
</tr>
<tr>
<td>Ulster, Sullivan, Putnam Counties</td>
<td>914–654–7158</td>
</tr>
<tr>
<td>New York City (CNAP)</td>
<td>212–693–1419</td>
</tr>
</tbody>
</table>
Syringe Exchange

Expanded Syringe Access Demonstration Program (ESAP)

For full list of ESAP providers, see: http://www.health.state.ny.us/diseases/aids/harm_reduction/needles_syringes/esap/provdirect.htm

Questions concerning ESAP can be directed as follows:

- **ESAP Registration Process**: Bureau of Controlled Substances at (518) 402–0707.
- **Other program information**: AIDS Institute at (212) 417–4770
- **By e-mail**: ESAP@health.state.ny.us

NYS Department of Health-Approved Syringe Exchange Programs (SEPs)

**New York City**

- **AIDS Center of Queens County**
  4257 Hunter Street
  Long Island City, NY 11101
  718–869–2500

- **Family Services Network of NY**
  1639 Broadway
  Brooklyn, NY 11207
  718–573–3358

- **CitiWide Harm Reduction Program**
  250 E. 143rd St., 3rd Floor
  Bronx, NY 10451
  718–292–7718

- **FROST’D**
  369 8th Avenue
  New York, NY 10001
  212–924–3733

- **Housing Works (SEP open to Housing Works’ clients only)**
  130 Crosby Street
  New York, NY 10012
  347–473–7404

- **Lower East Side Harm Reduction Center**
  25 Allen Street
  New York, NY 10002
  212–226–6333

- **NY Harm Reduction Educators (Bronx-Harlem)**
  903 Dawson Street
  Bronx, NY 10459
  718–842–6050
Positive Health Project  
301 W. 37th St., 2nd Floor  
New York, NY 10018  
212–465–8304

Queens Hospital Center  
166–10 Archer Avenue  
Jamaica, NY 11433  
718–883–4027

St. Ann’s Corner of Harm Reduction  
310 Walton Avenue, Ste. 201  
Bronx, NY 10451  
718–585–5544

The After Hours Project  
1232 Broadway  
Brooklyn, NY 11221  
718–249–0755

Outside of New York City

AIDS Rochester  
844 N. Clinton Avenue  
Rochester, NY 14605  
716–454–5556

Southern Tier AIDS Program (STAP)  
501 South Meadow Street, Rt. 13  
Ithaca, NY 14850  
607–272–4098

Kaleida Health/PROJECT REACH  
206 S. Elmwood Avenue  
Buffalo, NY 14201  
716–845–0172

Urban League of Westchester  
10 Fiske Place  
Mount Vernon, NY 10550  
914–667–1010

Information about the above programs may also be located at:

http://www.harmreduction.org/usnep/newyork/hours.html (Note: Go to “Resources,” then “Syringe Exchange,” then to “US Needle Exchange Locations and Hours,” then “New York (State and City).”)

Sharps Disposal

- For information on days and times for sharps disposal by region, call 800–522–5006 (TTY: 800–655–1789)
- To find places with sharps disposal kiosks call 800–541–2437
- For a list of disposal sites by county, see: http://www.health.state.ny.us/diseases/aids/harm_reduction/needles_syringes/sharps/directory_sharpscollection.htm
- For information from the CDC about safe community needle disposal in New York State, see: http://www.cdc.gov/needledisposal
- For information about sharps disposal from the American Diabetes Association, call 888–232–2737 or see http://www.BDdiabetes.com to learn about their mail-in sharps disposal program.

Drug Treatment Referrals

- New York State Office of Alcohol and Substance Abuse Services (OASAS): 800–522–5353
- In New York City, call 800-LIFENET (543–3638)

  LIFENET is an anonymous help line run by the Mental Health Association of New York City for persons seeking treatment for drugs, alcohol or emotional problems.

- To find a drug treatment center near you, visit: http://oasasapps.oasas.state.ny.us/portal/pls/portal/OASASREP.DYN_PROV_SEARCH.show

Other Resources

Clinical Resources for HIV

- New York State Department of Health AIDS Institute
  http://www.hivguidelines.org

Clinical Trials

- AIDS Community Research Initiative of America (ACRIA)
  http://www.acria.org
  212–924–3934

- AIDS Clinical Trials Information Service
  800–TRIALS–A
  treatmented@acria.org
Confidentiality
- New York State Confidentiality
  800–962–5065
- Legal Action Center
  212–243–1313

Day Treatment Programs
- NYS Department of Health, Division of HIV Health Care, Chronic Care Unit
  518–474–8162

Designated AIDS Centers
- New York State Department of Health, Division of HIV Health Care
  518–486–1383

Domestic Violence Services
- New York State Domestic Violence Hotline
  800–621-HOPE

Educational Materials about HIV/AIDS
- Order Forms for Free HIV/AIDS Education and Prevention Materials
  http://www.health.state.ny.us/diseases/aids/publications/index.htm
  518–474–9866
  hivpubs@health.state.ny.us

General Information about HIV/AIDS
- New York State Department of Health, HIV/AIDS Hotline
  800–541-AIDS (2437)—English
  800–233-SIDA (7432)—Spanish
- New York City Department of Health
  800–825–5448
- Centers for Disease Control and Prevention (CDC)
  800–342–2437 (English)
  800–344–7432 (Spanish)
  Monday–Friday, 8am–2am
- New York State Department of Health
  TTY HIV/AIDS Information Line
  212–925–9560
  Voice callers can use the New York Relay System, 711 or 800–421–1220
  (ask the operator for 212–925–9560)
CHAPTER 15

Home Care

- NYS Department of Health, Division of HIV Health Care, Chronic Care Unit
  518–474–8162

Human Rights/Discrimination

- New York State Division of Human Rights
  800–523–2437

- New York City Commission on Human Rights
  212–306–7500

Incarcerated Persons

- NYS Prison HIV Hotline
  718–854–5469
  Monday–Friday, 12–8pm; Saturday–Sunday, 10am–6pm; collect calls are accepted from inmates in NYS Correctional Facilities.

Insurance Regulations

- New York State Insurance Department
  800–342–3736
  Medical Care

- HIV Uninsured Care Program
  800–542–2437
  518–459–0121 (TDD)

- AIDS Drug Assistance Program (ADAP)
  800–542–2437

Newborn Regulations and Testing

- Regulations and Guidance on DNA PCR Testing
  518–869–4568

- Specimen Tracking
  518–474–4543

- HIV Antibody Test Interpretation
  518–474–2163

- PCR Test Interpretation
  518–869–4568

Nursing Facilities

- New York State AIDS Institute, Chronic Care Section
  518–474–8162
Postexposure Prophylaxis (PEP)
- NYS Department of Health
  212–417–4536
  Monday–Friday, 9am–5pm
  917–453–0488
  Evenings and Weekends

Sexual Abuse
- NYSDOH Rape Crisis Program
  For general information on the NYSDOH protocol for the management of sexual abuse victims.
  518–474–3664

Sexually Transmitted Diseases
- Centers for Disease Control (CDC) National STD Hotline
  800–227–8922 (English)
  800–344–7432 (Spanish)
- New York State Department of Health, Bureau of STD Control
  518–474–3598
- NYC Department of Health, STD Education Office
  212–427–5120

Special Needs Plans (SNPs)
- New York Medicaid CHOICE HelpLine
  800–505–5678
  888–329–1541 TTY/TDD

Training Information for HIV/AIDS
- General HIV/AIDS Training Information and Calendar of Events
  518–474–3045
- Clinical HIV/AIDS Education (clinicians only)
  518–473–8815
General HIV/AIDS Resources

AIDS Education and Treatment Center (AETC) Resource Center
http://www.aids-ed.org/

CDC HIV/AIDS Prevention
http://www.cdc.gov/hiv/dhap.htm

HIV Clinical Resource (Office of the Medical Director—New York AIDS Institute)
http://www.hivguidelines.org/

UNAIDS: The Joint United Nations Programme on HIV/AIDS
www.unaids.org

World Health Organization—HIV/AIDS Programme
http://www.who.int/hiv/en/

National Institute of Allergy and Infectious Diseases

UCSF Center for AIDS Prevention Studies
http://www.caps.ucsf.edu/

AIDS Treatment Data Network
http://www.atdn.org

Glossaries and Dictionaries

General HIV/AIDS

AIDSinfo Glossary (U.S. Department of Health and Human Services)
AIDSinfoTools

Gay Men's Health Crisis (GMHC)—AIDS Medical Glossary and Drug Chart
http://www.gmhc.org/health/glossary.html
CHAPTER 16

Sexual Behavior
The Lounge—Gay, Lesbian, Bisexual and Transgender Slang Dictionary
http://andrejkoymasky.com/lou/dic/dic00.html

Gay City USA—Gay Slang Dictionary

Drug Use
Street Drug Slang Dictionary (Indiana Prevention Resource Center)
http://www.drugs.indiana.edu/slang/SearchSlang.aspx

Street Terms: Drugs and Drug Trade (U.S. Office of National Drug Control Policy)

Prevention for People Living with HIV
General
Integrating HIV Prevention into the Care of People with HIV (HIV InSite)
http://hivinsite.ucsf.edu/InSite?page=kb-07–04–17

Incorporating HIV Prevention into the Medical Care of Persons Living with HIV
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5212a1.htm

CDC Resources On Behavioral Modification
CDC REP+ (Replicating Effective Programs Plus)
http://www.cdc.gov/hiv/projects/rep/default.htm

CDC Compendium of HIV Prevention Interventions with Evidence of Effectiveness
http://www.cdc.gov/hiv/pubs/hivcompendium/hivcompendium.htm

HIV Infection Rates
General

HIV/AIDS Epidemic Update: December, 2005—WHO and UNAIDS

By Demographics
List of all CDC HIV Fact Sheets
http://www.cdc.gov/hiv/pubs/facts.htm
CDC HIV/AIDS Surveillance Supplemental Report (Race/Ethnicity)
http://www.cdc.gov/hiv/stats/hasrsuppV0110N01.htm

CDC Fact Sheet: HIV/AIDS Among African Americans

CDC Fact Sheet: HIV/AIDS Among Hispanics
http://www.cdc.gov/hiv/pubs/Facts/hispanic.htm

CDC Fact Sheet: HIV/AIDS Among Asians and Pacific Islanders
http://www.cdc.gov/hiv/pubs/Facts/API.htm

CDC Fact Sheet: HIV/AIDS Among Women

CDC Fact Sheet: HIV/AIDS & U.S. Women Who Have Sex With Women (WSW)

CDC Fact Sheet: HIV/AIDS & U.S. Men who have Sex with Men (MSM)

CDC: AIDS Cases by Exposure Category
http://www.cdc.gov/hiv/stats.htm#exposure

By State
Cumulative AIDS Cases by Age, Race and Exposure
(Kaiser Family Foundation)
http://www.statehealthfacts.kff.org/cgi-bin/healthfacts.cgi?action=compare&welcome=1&category=HIV%2fAIDS

State Facts and Health Agencies
State Health Agencies from the U.S. Food and Drug Administration:
http://www.fda.gov/oca/sthealth.htm

Kaiser Family Foundation: State Health Facts
http://www.statehealthfacts.kff.org

Guide To Sexual and Drug Histories
Guide to Sexual History Taking
(California STD/HIV Prevention Training Center)

The Clinical Approach to the STD Patient (National Network of STD and HIV Prevention Training Centers)
Sexual History Taking (Association of Reproductive Health Professionals)
http://www.arhp.org/healthcareproviders/cme/onlinecme/maturecme/cpm/
sexualhistory.cfm?ID=44

HIV Transmission and Safer Sex Options

Male Latex Condoms and Sexually Transmitted Diseases (CDC)
http://www.cdc.gov/hiv/pubs/facts/condoms.htm

Safer Sex Methods (HIV InSite)
http://hivinsite.ucsf.edu/InSite?page=kb-07&doc=kb-07–02–02

What You Should Know About Oral Sex (CDC)

Women Who Have Sex With Women (CDC)

Resources for HIV Transmission & Prevention in Transgender People
(HIV InSite)
http://hivinsite.ucsf.edu/InSite?page=kbr-07–04–16

Resources for Sexual Transmission of HIV (HIV InSite)
http://hivinsite.ucsf.edu/InSite?page=kbr-07–02–01

Resources for HIV Transmission and Prevention in Gay Men (HIV InSite)
http://hivinsite.ucsf.edu/InSite?page=kbr-07–04–04

Drug Use Resources

General

Index of NIDA InfoFacts

How do Club Drugs Impact HIV Prevention? (Center for AIDS
Prevention Studies)
http://www.caps.ucsf.edu/pdfs/ClubDrugsFS.pdf

SAMHSA Center for Substance Abuse Prevention (CSAP)
http://www.prevention.samhsa.gov/

SAMHSA Center for Substance Abuse Treatment
http://www.csat.samhsa.gov/

National Clearinghouse for Alcohol and Drug Information
http://www.health.org

NIDA National Institute on Drug Abuse
http://www.drugabuse.gov/
Injection Drug Use
CDC Fact Sheets for HIV Prevention Among IDUs
http://www.cdc.gov/iday

Syringe Disinfection for Injection Drug Users (CDC)
http://www.cdc.gov/iday/facts/disinfection.htm

Access to Sterile Syringes (CDC)
http://www.cdc.gov/iday/facts/aed_idu_acc.htm

Syringe Exchange Programs (CDC)
http://www.cdc.gov/iday/facts/aed_idu_syr.htm

Viral Hepatitis and Injection Drug Users (CDC)
http://www.cdc.gov/iday/hepatitis/index.htm

IDU HIV Prevention Needs
(Center for AIDS Prevention Studies—CAPS)
http://www.caps.ucsf.edu/IDU.html

North American Syringe Exchange Network
http://www.nasen.org/

U.S.—Based Needle Exchange and Needle Access Programs
(thebody.com)
http://www.thebody.com/whatis/druguse_needle_programs.html

Recreational Drug Interactions with Antiretrovirals
HIV Drug Interactions (University of Liverpool)
http://www.hiv-druginteractions.org/

Interactions with Illegal and Recreational Drugs (NAM—AIDSmap.com)

HIV Testing Resources
CDC National HIV Testing Resources
http://www.hivtest.org/index.htm
Incorporating HIV Prevention into the Medical Care of Persons Living with HIV
Incorporating HIV Prevention into the Medical Care of Persons Living with HIV

Recommendations of CDC, the Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America
SUGGESTED CITATION
Centers for Disease Control and Prevention. Incorporating HIV prevention into the medical care of persons living with HIV: recommendations of CDC, the Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. MMWR 2003;52(No. RR-12):[inclusive page numbers].

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Disclosure of Relationship
The preparers of this report have no conflict of interest with the manufacturers or products discussed herein.
Incorporating HIV Prevention into the Medical Care of Persons Living with HIV

Recommendations of CDC, the Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America

Summary

Reducing transmission of human immunodeficiency virus (HIV) in the United States requires new strategies, including emphasis on prevention of transmission by HIV-infected persons. Through ongoing attention to prevention, risky sexual and needle-sharing behaviors among persons with HIV infection can be reduced and transmission of HIV infection prevented. Medical care providers can substantially affect HIV transmission by screening their HIV-infected patients for risk behaviors; communicating prevention messages; discussing sexual and drug-use behavior; positively reinforcing changes to safer behavior; referring patients for services such as substance abuse treatment; facilitating partner notification, counseling, and testing; and identifying and treating other sexually transmitted diseases (STDs).

To help incorporate HIV prevention into the medical care of HIV-infected persons, CDC, the Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America developed these recommendations. The recommendations are general and apply to incorporating HIV prevention into the medical care of all HIV-infected adolescents and adults, regardless of age, sex, or race/ethnicity. They are intended for all persons who provide medical care to HIV-infected persons (e.g., physicians, nurse practitioners, nurses, physician assistants); they might also be useful to those who deliver prevention messages (e.g., case managers, social workers, health educators).

The recommendations were developed by using an evidence-based approach. For each recommendation, the strength of the recommendation, the quality of available evidence supporting the recommendation, and the outcome for which the recommendation is rated are provided. The recommendations are categorized into three major components: screening for HIV transmission risk behaviors and STDs, providing brief behavioral risk-reduction interventions in the office setting and referring selected patients for additional prevention interventions and other related services, and facilitating notification and counseling of sex and needle-sharing partners of infected persons.

Introduction

Despite substantial advances in the treatment of human immunodeficiency virus (HIV) infection, the estimated number of annual new HIV infections in the United States has remained at 40,000 for over 10 years (1). HIV prevention in this country has largely focused on persons who are not HIV infected, to help them avoid becoming infected. However, further reduction of HIV transmission will require new strategies, including increased emphasis on preventing transmission by HIV-infected persons (2,3). HIV-infected persons who are aware of their HIV infection tend to reduce behaviors that might transmit HIV to others (4–7). Nonetheless, recent reports suggest that such behavioral changes often are not maintained and that a substantial number of HIV-infected persons continue to engage in behaviors that place others at risk for HIV infection (8–13).

Reversion to risky sexual behavior might be as important in HIV transmission as failure to adopt safer sexual behavior immediately after receiving a diagnosis of HIV (14). Unprotected anal sex appears to be occurring more frequently in some urban centers, particularly among young men who have sex with men (MSM) (15). Bacterial and viral sexually transmitted diseases (STDs) in HIV-infected men and women receiving outpatient care have been increasingly noted (16,17), indicating ongoing risky behaviors and opportunities for HIV
transmission. Further, despite declining syphilis prevalence in the general U.S. population, sustained outbreaks of syphilis among MSM, many of whom are HIV infected, continue to occur in some areas; rates of gonorrhea and chlamydial infection have also risen for this population (18–21). Rising STD rates among MSM indicate increased potential for HIV transmission, both because these rates suggest ongoing risky behavior and because STDs have a synergistic effect on HIV infectivity and susceptibility (22). Studies suggest that optimism about the effectiveness of highly active antiretroviral therapy (HAART) for HIV may be contributing to relaxed attitudes toward safer sex practices and increased sexual risk-taking by some HIV-infected persons (12,23–27).

Injection drug use also continues to play a key role in the HIV epidemic; at least 28% of AIDS cases among adults and adolescents with known HIV risk category reported to CDC in 2000 were associated with injection drug use (28). In some large drug-using communities, HIV seroincidence and seroprevalence among injection drug users (IDUs) have declined in recent years (29,30). This decline has been attributed to several factors, including increased use of sterile injection equipment, declines in needle-sharing, shifts from injection to noninjection methods of using drugs, and cessation of drug use (31–33). However, injection-drug use among young adult heroin users has increased substantially in some areas (34,35), a reminder that, as with sexual behaviors, changes to less risky behaviors may be difficult to sustain.

Clinicians providing medical care to HIV-infected persons can play a key role in helping their patients reduce risk behaviors and maintain safer practices and can do so with a feasible level of effort, even in constrained practice settings. Clinicians can greatly affect patients’ risks for transmission of HIV to others by performing a brief screening for HIV transmission risk behaviors; communicating prevention messages; discussing sexual and drug-use behavior; positively reinforcing changes to safer behavior; referring patients for such services as substance abuse treatment; facilitating partner notification, counseling, and testing; and identifying and treating other STDs (36,37). These measures may also decrease patients’ risks of acquiring other STDs and bloodborne infections (e.g., viral hepatitis). Managed care plans can play an important role in HIV prevention by incorporating these recommendations into their practice guidelines, educating their providers and enrollees, and providing condoms and educational materials. In the context of care, prevention services might be delivered in clinic or office environments or through referral to community-based programs. Some clinicians have expressed concern that reimbursement is often not provided for prevention services and note that improving reimbursement for such services might enhance the adoption and implementation of these guidelines.

This report provides general recommendations for incorporating HIV prevention into the medical care of all HIV-infected adolescents and adults, regardless of age, sex, or race/ethnicity. The recommendations are intended for all persons who provide medical care to HIV-infected persons (e.g., physicians, nurse practitioners, nurses, physician assistants). They may also be useful to those who deliver prevention messages (e.g., case managers, social workers, health educators). Special considerations may be needed for some subgroups (e.g., adolescents, for whom laws and regulations might exist governing providing of services to minors, the need to obtain parental consent, or duty to inform). However, it is beyond the scope of this report to address special considerations of subgroups. Furthermore, the recommendations focus on sexual and drug-injection behaviors, since these behaviors are responsible for nearly all HIV transmission in the United States. Separate guidelines have been published for preventing perinatal transmission (38–40).

These recommendations were developed by using an evidence-based approach (Table 1). The strength of each recommendation is indicated on a scale of A (strongest recommendation) to E (recommendation against); the quality of available evidence supporting the recommendation is indicated on a scale of I (strongest evidence for) to III (weakest evidence for), and the outcome for which the recommendation is rated is provided. The recommendations are categorized into three

<table>
<thead>
<tr>
<th>Rating</th>
<th>Strength of the Recommendation</th>
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<tbody>
<tr>
<td>A</td>
<td>Should always be offered. Both strong evidence for efficacy and substantial benefit support recommendation for use.</td>
</tr>
<tr>
<td>B</td>
<td>Should generally be offered. Moderate evidence for efficacy — or strong evidence for efficacy but only limited benefit — supports recommendation for use.</td>
</tr>
<tr>
<td>C</td>
<td>Optional. Evidence for efficacy is insufficient to support a recommendation for use.</td>
</tr>
<tr>
<td>D</td>
<td>Should not be offered. Moderate evidence for lack of efficacy or for adverse outcome supports a recommendation against use.</td>
</tr>
<tr>
<td>E</td>
<td>Should never be offered. Good evidence for lack of efficacy or for adverse outcome supports a recommendation against use.</td>
</tr>
</tbody>
</table>

**Quality of Evidence Supporting the Recommendation**

I  Evidence from at least one properly randomized, controlled trial.

II  Evidence from at least one well-designed clinical trial without randomization, from cohort or case-controlled analytic studies (preferably from more than one center), or from multiple time-series studies. Or dramatic results from uncontrolled experiments.

III Evidence from opinions of respected authorities based on clinical experience, descriptive studies, or reports of expert committees.
Risk Screening

Risk screening is a brief assessment of behavioral and clinical factors associated with transmission of HIV and other STDs (Table 2). Risk screening can be used to identify patients who should receive more in-depth risk assessment and HIV risk-reduction counseling, other risk-reduction interventions, or referral for other services (e.g., substance abuse treatment). Risk screening identifies patients at greatest risk for transmitting HIV so that prevention and referral recommendations can be focused on these patients. Screening methods include probing for behaviors associated with transmission of HIV and other STDs, eliciting patient reports of symptoms of other STDs, and laboratory testing for other STDs. Although each of these methods has limitations, a combination of methods should increase the sensitivity and effectiveness of screening. In conducting risk screening, clinicians should recognize that risk is not static. Patients’ lives and circumstances change, and a patient’s risk of transmitting HIV may change from one medical encounter to another. Also, clinicians should recognize that working with adolescents may require special approaches and should be aware of and adhere to all laws and regulations related to providing services to minors.

TABLE 2. Recommendations for screening of human immunodeficiency virus (HIV)-infected persons for HIV transmission risk

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rating</th>
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<tbody>
<tr>
<td>HIV-infected patients should be screened for behaviors associated with HIV transmission by using a straightforward, nonjudgmental approach. This should be done at the initial visit and subsequent routine visits or periodically, as the clinician feels necessary, but at a minimum of yearly. Any indication of risky behavior should prompt a more thorough assessment of HIV transmission risks.</td>
<td>A-II (for identifying transmission risk)</td>
</tr>
<tr>
<td>At the initial and each subsequent routine visit, HIV-infected patients should be questioned about symptoms of STDs (e.g., urethral or vaginal discharge; dysuria; intermenstrual bleeding; genital or anal ulcers; anal pruritus, burning, or discharge; and, for women, lower abdominal pain with or without fever). Regardless of reported sexual behavior or other epidemiologic risk information, the presence of such signs or symptoms should always prompt diagnostic testing and, when appropriate, treatment.</td>
<td>A-I (for identifying and treating STDs)</td>
</tr>
</tbody>
</table>
| At the initial visit  
  • All HIV-infected women and men should be screened for laboratory evidence of syphilis. Women should also be screened for trichomoniasis. Sexually active women aged ≤25 years and other women at increased risk, even if asymptomatic, should be screened for cervical chlamydial infection.  
  • Consideration should be given to screening all HIV-infected men and women for gonorrhea and chlamydial infections. However, because of the cost of screening and the variability of prevalence of these infections, decisions about routine screening for these infections should be based on epidemiologic factors (including prevalence of infection in the community or the population being served), availability of tests, and cost. (Some HIV specialists also recommend type-specific serologic testing for herpes simplex virus type 2 for both men and women.). | A-II (for identifying STDs) |
| Screening for STDs should be repeated periodically (i.e., at least annually) if the patient is sexually active or if earlier screening revealed STDs. Screening should be done more frequently (e.g., at 3-6-month intervals) for asymptomatic persons at higher risk (see Box 2). | B-II (for identifying STDs) |
| At the initial and each subsequent routine visit, HIV-infected women of childbearing age should be questioned to identify possible current pregnancy, interest in future pregnancy, or sexual activity without reliable contraception. They should be referred for appropriate counseling, reproductive health care, or prenatal care, as indicated. Women should be asked whether they suspect pregnancy or have missed their menses and, if so, should be tested for pregnancy. | A-I (for preventing perinatal HIV transmission) |
screening questions can be either open-ended or closed (directed) (Box 1). Use of open-ended questions avoids simple “yes” or “no” responses and encourages patients to discuss personal risks and the circumstances in which risks occur (15,44,54). Open-ended questions also help the clinician gather enough detail to understand potential transmission risks and make more meaningful recommendations. However, although well received by patients, the open-ended approach may initially be difficult for clinicians schooled in directed questioning, who tend to prefer directed screening questions. Directed questions are probably useful for identifying patients with problems that should be more thoroughly discussed. Among directed approaches, technical tools like computer-, audio-, and video-assisted interviews have been found to elicit more self-reported risk behaviors than did interviewer-administered questionnaires, particularly among younger patients (41,51–53,55). Studies suggest that clinicians who receive some training, particularly that including role-play and feedback concerning clinical performance, are more likely to perform effective risk screening (46–49).

Sex-related behaviors important to address in risk screening include whether the patient has been engaging in sex; number and sex of partners; partners’ HIV serostatus (infected, not infected, or unknown); types of sexual activity (oral, vaginal, or anal sex) and whether condoms are used; and barriers to abstinence or correct condom use (e.g., difficulty talking with partners about or disclosing HIV serostatus, alcohol and other drug use before or during sex). Also, because the risk for perinatal HIV transmission is high without appropriate intervention, clinicians are advised to assess whether women of childbearing age might be pregnant, are interested in becoming pregnant, or are not specifically considering pregnancy but are sexually active and not using reliable contraception (39,56,57). Women who are unable to become pregnant because of elective sterilization, hysterectomy, salpingooophorectomy, or other medical reasons might be less likely to use condoms because of a lack of concern for contraception; these women should be counseled regarding the need for use of condoms to prevent transmission of HIV. Patients who wish to conceive and whose partner is not infected also might engage in risky behavior. Patients interested in pregnancy, for themselves or their partner, should be referred to a reproductive health specialist (58).

Injection-drug–related behaviors important to address in screening include whether the patient has been injecting illicit drugs; whether the patient has been sharing needles and syringes or other injection equipment; how many partners the patient has shared needles with; whether needle-sharing partners are known to be HIV infected, not infected, or of

<table>
<thead>
<tr>
<th>BOX 1. Examples of screening strategies to elicit patient-reported risk for human immunodeficiency virus (HIV) transmission*</th>
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<tbody>
<tr>
<td><strong>Open-ended question by clinician, similar to one of the following:</strong></td>
</tr>
<tr>
<td>• “What are you doing now that you think may be a risk for transmitting HIV to a partner?”</td>
</tr>
<tr>
<td>• “Tell me about the people you’ve had sex with recently.”</td>
</tr>
<tr>
<td>• “Tell me about your sex life.”</td>
</tr>
</tbody>
</table>

**Screening questions (checklist) for use with a self-administered questionnaire; computer-, audio-, or video-assisted questionnaire; or a face-to-face interview:** †§

“Since your last checkup here,” or, if first visit, “Since you found out you were infected with HIV,”:

• “Have you been sexually active; that is, have you had vaginal, anal, or oral sex with a partner?”

If yes
  — “Have you had vaginal or anal intercourse without a condom with anyone?”

If yes
  — “Were any of these people HIV-negative, or are you unsure about their HIV status?”
  — “Have you had oral sex with someone?”

If yes
  — (For a male patient) “Did you ejaculate into your partner’s mouth?”
  • “Have you had a genital sore or discharge, discomfort when you urinate, or anal burning or itching?”
  • “Have you been diagnosed or treated for a sexually transmitted disease (STD), or do you know if any of your sex partners have been diagnosed or treated for an STD?”
  • “Have you shared drug-injection equipment (needles, syringes, cotton, cooker, water) with others?”

If yes
  — “Were any of these people HIV negative, or are you unsure about their HIV status?”

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* Source: Adapted from CDC. Revised guidelines for HIV counseling, testing, and referral. MMWR 2001;50(No. RR-19).
† This checklist can be administered by the patient or clinician and should take approximately 4 minutes.
§ A positive response to any of the screening questions should cue the clinician to have a more in-depth discussion to ensure that specific risks are clearly understood.
unknown HIV serostatus; whether the patient has been using new or sterilized needles and syringes; and what barriers exist to ceasing illicit drug use or, failing that, to adopting safer injection practices (e.g., lack of access to sterile needles and syringes).

**Approaches to Screening for Behavioral Risk Factors**

The most effective manner for screening for behavioral risk factors is not well defined; however, simple approaches are more acceptable to both patients and health-care providers (53). Screening tools should be designed to be as sensitive as possible for identifying behavioral risks; a more detailed, personalized assessment can then be used to improve specificity and provide additional detail. The sensitivity of screening instruments depends on obtaining accurate information. However, accuracy of information can be influenced by a variety of factors: recall, misunderstanding about risk, legal concerns, concern about confidentiality of the information and how the information will be used, concern that answers may affect ability to receive services, concern that answers may affect social desirability (i.e., the tendency to provide responses that will avoid criticism), and the desire for social approval (the tendency to seek praise) (45,55). Interviewer factors also influence the accuracy of information. Surveys indicate that patients are more likely to discuss risk behaviors if they perceive their clinicians are comfortable talking about stigmatized topics such as sex and drug use (46–49) and are nonjudgmental, empathetic, knowledgeable, and comfortable counseling patients about sexual risk factors (41,46–50). These factors need to be considered when interpreting responses to screening questions. To the extent possible, screening and interventions should be individualized to meet patient needs. Examples of two screening approaches are provided (Box 1).

**Incorporating Screening for Behavioral Risk Factors into the Office Visit**

Before the patient is seen by the clinician, screening for behavioral risks can be done with a self-administered questionnaire; a computer-, audio-, or video-assisted questionnaire; or a brief interview with ancillary staff; the clinician can then review the results on the patient's medical record. Alternatively, behavioral risk screening can be done during the medical encounter (e.g., as part of the history); either open-ended questions or a checklist approach with in-depth discussion about positive responses can be used (Box 1). Because, given patients' immediate health needs, it can be difficult in the clinical care setting to remember less urgent matters such as risk screening and harm reduction, provider reminder systems (e.g., computerized reminders) have been used by health-care systems to help ensure that recommended procedures are done regularly. Multicomponent health-care system interventions that include a provider reminder system and a provider education program are effective in increasing delivery of certain prevention services (59). Risk screening might be more likely to occur in managed care settings if the managed care organization specifically calls for it (60).

**Screening for Clinical Risk Factors**

**Screening for STDs**

Recommendations for preventive measures, including medical screening and vaccinations, that should be included in the care of HIV-infected persons (16,21,39,44,54,61–69) have been published previously. This report is not intended to duplicate existing recommendations; it addresses screening specifically to identify clinical factors associated with increased risk for transmission of HIV from infected to noninfected persons. In this context, STDs are the primary infections of concern for three reasons. First, the presence of STDs often suggests recent or ongoing sexual behaviors that may result in HIV transmission. Second, many STDs enhance the risk for HIV transmission or acquisition (22,70–73). Early detection and treatment of bacterial STDs might reduce the risk for HIV transmission. Third, identification and treatment of STDs can reduce the potential for spread of these infections among high-risk groups (i.e., sex or drug-using networks).

Screening and diagnostic testing serve distinctly different purposes. By definition, screening means testing on the basis of risk estimation, regardless of clinical indications for testing, and is a cornerstone of identifying persons at risk for transmitting HIV to others. Clinicians should routinely ask about STD symptoms, including urethral or vaginal discharge; dysuria; intermenstrual bleeding; genital or anal ulcers or other lesions; anal pain, pruritus, burning, discharge, or bleeding; and, for women, lower abdominal pain with or without fever. Regardless of reported sexual behavior or other epidemiologic risk information, the presence of such symptoms should always prompt diagnostic testing and, when appropriate, treatment. However, clinical symptoms are not sensitive for identifying many infections because most STDs are asymptomatic (74–81); therefore, laboratory screening of HIV-infected persons is an essential tool for identifying persons at risk for transmitting HIV and other STDs.

**Laboratory Testing for STDs**

Identification of syphilis requires direct bacteriologic (i.e., dark-field microscopy) or serologic testing. However, noninvasive, urine-based nucleic acid amplification tests
(NAATs) have greatly simplified testing for *Neisseria gonorrhoeae* and *Chlamydia trachomatis*. Although they are more costly than other screening tests, their ease of use and sensitivity—similar to the sensitivity of culture for detection of *N. gonorrhoeae* and substantially higher than the sensitivity of all other tests for *C. trachomatis* (including culture)—for detecting genital infection are great advantages. Detection of rectal or pharyngeal gonorrhea still requires culture. Pharyngeal infection with *C. trachomatis* is uncommon, and routine screening for it is not recommended (63,82). NAATs have not been approved for use with specimens collected from sites other than the urethra, cervix, or urine. Recommended screening strategies and diagnostic tests for detecting asymptomatic STDs are described (Box 2, Table 3).

Local and state health departments have reporting requirements, which vary among states, for HIV and other STDs. Clinicians need to be aware of and comply with requirements for the areas in which they practice; information on reporting requirements can be obtained from health departments.

**Screening for Pregnancy**

Women of childbearing age should be questioned during routine visits about the possibility of pregnancy. Women who state that they suspect pregnancy or have missed their menses

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**BOX 2. Examples of laboratory screening strategies to detect asymptomatic sexually transmitted diseases**

<table>
<thead>
<tr>
<th>First Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>For all patients</td>
</tr>
<tr>
<td>• Test for syphilis: nonreponemal serologic test (e.g., rapid plasma reagin [RPR] or Venereal Disease Research Laboratory [VDRL] test).</td>
</tr>
<tr>
<td>• Consider testing for urogenital gonorrhea: urethral (men) or cervical (women) specimen for culture, or urethral/cervical specimen or first-catch urine (men and women) nucleic acid amplification test (NAAT) for <em>Neisseria gonorrhoeae</em>.§</td>
</tr>
<tr>
<td>• Consider testing for urogenital chlamydial infection: urethral (men) or cervical (women) specimen or first-catch urine (men and women) specimen for NAAT for <em>Chlamydia trachomatis</em>.§</td>
</tr>
</tbody>
</table>

| For women |
|• Test for trichomoniasis: wet mount examination or culture of vaginal secretions for *Trichomonas vaginalis*. |
|• Test for urogenital chlamydia: cervical specimen for NAAT for *C. trachomatis*§ for all sexually active women aged ≤25 years and other women at increased risk, even if asymptomatic. |

| For patients reporting receptive anal sex |
|• Test for rectal gonorrhea: anal swab culture for *N. gonorrhoeae*.§ |
|• Test for rectal chlamydia: anal swab culture for *C. trachomatis*,§ if available. |

| For patients reporting receptive oral sex |
|• Test for pharyngeal gonococcal infection: culture for *N. gonorrhoeae*.§ |

| Subsequent Routine Visits |
|• The tests described here should be repeated periodically (i.e., at least annually) for all patients who are sexually active. More frequent periodic screening (e.g., at 3-month to 6-month intervals) may be indicated for asymptomatic persons at higher risk. Presence of any of the following factors may support more frequent than annual periodic screening: 1) multiple or anonymous sex partners; 2) past history of any STD; 3) identification of other behaviors associated with transmission of HIV and other STDs; 4) sex or needle-sharing partner(s) with any of the above-mentioned risks; 5) developmental changes in life that may lead to behavioral change with increased risky behaviors (e.g., dissolution of a relationship); or 6) high prevalence of STDs in the area or in the patient population. |

* These recommendations apply to persons without symptoms or signs of STDs. Patients with symptoms (e.g., urethral or vaginal discharge; dysuria; intermenstrual bleeding; genital or anal lesions; anal pruritus, burning, or discharge; and lower abdominal pain with or without fever) or known exposure should have appropriate diagnostic testing regardless of reported sexual behavior or other risk factors.

§ First-catch urine (i.e., the first 10–30 mL of urine voided after initiating the stream) should be used.

§ The yield of testing for *N. gonorrhoeae* and *C. trachomatis* is likely to vary, and screening for these pathogens should be based on consideration of patient’s risk behaviors, local epidemiology of these infections, availability of tests (e.g., culture for *C. trachomatis*), and cost. Appropriate diagnostic tests for different pathogens causing STDs are described (Table 3).

Note: Testing or vaccination for hepatitis, pneumococcal disease, influenza, and other infectious diseases (e.g., screening pregnant women for syphilis, gonorrhea, chlamydia, and hepatitis B surface antigen) should be incorporated into the routine care of HIV-infected persons as recommended elsewhere (16,21,39,44,54,61–67).

Note: Symptomatic and asymptomatic herpes simplex virus (HSV) infection, especially with HSV type 2, is prevalent among HIV-infected persons and might increase the risk of transmitting and acquiring HIV. Therefore, some HIV specialists recommend routine, type-specific serologic testing for HSV-2. Patients with positive results should be informed of the increased risk of transmitting HIV and counseled regarding recognition of associated symptoms (16,54,67). Only tests for detection of HSV glycoprotein G are truly type-specific and suitable for HSV-2 serologic screening.

Note: Local and state health departments have reporting requirements for HIV and other STDs, which vary among states. Clinicians should be aware of and comply with requirements for the areas in which they practice; information on reporting requirements can be obtained from health departments.
should be tested for pregnancy. Early pregnancy diagnosis would benefit even women not receiving antiretroviral treatment because they could be offered treatment to decrease the risk for perinatal HIV transmission.

**Behavioral Interventions**

Behavioral interventions are strategies designed to change persons’ knowledge, attitudes, behaviors, or practices in order to reduce their personal health risks or their risk of transmitting HIV to others (Table 4). Behavioral change can be facilitated by environmental cues in the clinic or office setting, messages delivered to patients by clinicians or other qualified staff on-site, or referral to other persons or organizations providing prevention services. Because behavior change often occurs in incremental steps, a brief behavioral intervention conducted at each clinic visit could result in patients, over time, adopting and maintaining safer practices. Behavioral interventions should be appropriate for the patient’s culture, language, sex, sexual orientation, age, and developmental level (44). In settings where care is delivered to HIV-infected adolescents, for example, approaches need to be specifically tailored for this age group (83). Also, clinicians should be aware of and adhere to all laws and regulations related to providing services to minors.

**Structural Approaches To Support and Enhance Prevention**

Clinic or office environments can be structured to support and enhance prevention. All patients, especially new patients, should be provided printed information about HIV transmission risks, preventing transmission of HIV to others, and...
TABLE 4. Recommendations for behavioral interventions to reduce human immunodeficiency virus (HIV) transmission risk

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinics or office environments where patients with HIV infection receive care should be structured to support and enhance HIV prevention.</td>
<td>B-III (for enhancing patient recall of prevention messages)</td>
</tr>
<tr>
<td>Within the context of HIV care, brief general HIV prevention messages should be regularly provided to HIV-infected patients at each visit or periodically, as determined by the clinician, and at a minimum of twice yearly. These messages should emphasize the need for safer behaviors to protect their own health and the health of their sex or needle-sharing partners, regardless of perceived risk. Messages should be tailored to the patient’s needs and circumstances.</td>
<td>A-III (for efficacy in promoting safer behaviors)</td>
</tr>
<tr>
<td>Patients should have adequate, accurate information regarding factors that influence HIV transmission and methods for reducing the risk for transmission to others, emphasizing that the most effective methods for preventing transmission are those that protect noninfected persons against exposure to HIV (e.g., sexual abstinence; consistent and correct use of condoms made of latex, polyurethane or other synthetic materials; and sex with only a partner of the same HIV status). HIV-infected patients who engage in high-risk sexual practices (i.e., capable of resulting in HIV transmission) with persons of unknown or negative HIV serostatus should be counseled to use condoms consistently and correctly.</td>
<td>A-III (for using brief clinician-delivered messages to influence patient behavior)</td>
</tr>
<tr>
<td>Patients’ misconceptions regarding HIV transmission and methods for reducing risk for transmission should be identified and corrected. For example, ensure that patients know that 1) per-act estimates of HIV transmission risk for an individual patient vary according to behavioral, biologic, and viral factors; 2) highly active antiretroviral therapy (HAART) cannot be relied upon to eliminate the risk of transmitting HIV to others; and 3) nonoccupational postexposure prophylaxis is of uncertain effectiveness for preventing infection in HIV-exposed partners.</td>
<td>A-III (for efficacy in promoting safer behaviors)</td>
</tr>
<tr>
<td>Tailored HIV prevention interventions, using a risk-reduction approach, should be delivered to patients at highest risk for transmitting HIV.</td>
<td>A-I (for efficacy of multisession, clinic-based interventions in promoting safer behaviors)</td>
</tr>
<tr>
<td>After initial prevention messages are delivered, subsequent longer or more intensive interventions in the clinic or office should be delivered, if feasible.</td>
<td>A-I (for efficacy of HIV prevention interventions conducted in nonclinic settings)</td>
</tr>
<tr>
<td>HIV-infected patients should be referred to appropriate services for issues related to HIV transmission that cannot be adequately addressed during the clinic visit.</td>
<td>A-II (for reducing risky drug use and associated sexual behaviors)</td>
</tr>
<tr>
<td>Persons who inject illicit drugs should be strongly encouraged to cease injecting and enter into substance abuse treatment programs (e.g., methadone maintenance) and should be provided referrals to such programs.</td>
<td>A-II (for reducing risk for HIV transmission)</td>
</tr>
<tr>
<td>Persons who continue to inject drugs should be advised to always use sterile injection equipment and to never reuse or share needles, syringes, or other injection equipment and should be provided information regarding how to obtain new, sterile syringes and needles (e.g., syringe exchange program).</td>
<td>A-II (for reducing risk for HIV transmission)</td>
</tr>
</tbody>
</table>

Interventions Delivered On-Site

Prevention Messages for All Patients

All HIV-infected patients can benefit from brief prevention messages emphasizing the need for safer behaviors to protect both their own health and the health of their sex or needle-sharing partners. These messages can be delivered by clinicians, nurses, social workers, case managers, or health educators. They include discussion of the patient’s responsibility for appropriate disclosure of HIV serostatus to sex and needle-sharing partners. Brief clinician-delivered approaches have been effective with a variety of health issues, including depression (84), smoking (85–90), alcohol abuse (91,92), weight and diet (93), and physical inactivity (94). This diverse experience with other health behaviors suggests that similar approaches may be effective in reducing HIV-infected patients’ transmission risk behaviors. For patients already taking steps to reduce their risk of transmitting HIV, hearing the messages can reinforce continued risk-reduction behaviors. These patients should be commended and encouraged to continue these behaviors.

General HIV Prevention Messages

Patients frequently have inadequate information regarding factors that influence HIV transmission and methods for preventing acquisition of other STDs. Information can be disseminated at various locations in the clinic; for example, posters and other visual cues containing prevention messages can be displayed in examination rooms and waiting rooms. These materials usually can be obtained through local or state health department HIV/AIDS and STD programs or from the National Prevention Information Network (NPIN) (1-800-458-5231; http://www.cdcnpin.org). Additionally, condoms should be readily accessible at the clinic. Repeating prevention messages throughout the patient’s clinic visit reinforces their importance, increasing the likelihood that they will be remembered (68).
preventing transmission. The clinician should ensure that patients understand that the most effective methods for preventing HIV transmission remain those that protect noninfected persons against exposure to HIV. For sexual transmission, the only certain means for HIV-infected persons to prevent sexual transmission to noninfected persons are sexual abstinence or sex with only a partner known to be already infected with HIV. However, restricting sex to partners of the same serostatus does not protect against transmission of other STDs or the possibility of HIV superinfection unless condoms of latex, polyurethane, or other synthetic materials are consistently and correctly used. Superinfection with HIV has been reported and appears to be rare, but its clinical consequences are not known (95,96). For injection-related transmission, the only certain means for HIV-infected persons to prevent transmission to noninfected persons are abstaining from injection drug use or, for IDUs who are unable or unwilling to stop injecting drugs, refraining from sharing injection equipment (e.g., syringes, needles, cookers, cottons, water) with other persons. Neither antiretroviral therapy for HIV-infected persons nor postexposure prophylaxis for partners is a reliable substitute for adopting and maintaining behaviors that guard against HIV exposure (97).

Identifying and Correcting Misconceptions

Patients might have misconceptions about HIV transmission (98), particularly with regard to the risk for HIV transmission associated with specific behaviors, the effect of antiretroviral therapy on HIV transmission, or the effectiveness of postexposure prophylaxis for nonoccupational exposure to HIV.

Risk for HIV Transmission Associated with Specific Sexual Behaviors. Patients often ask their clinicians about the degree of HIV transmission risk associated with specific sexual activities. Numerous studies have examined the risk for HIV transmission associated with various sex acts (99–113). These studies indicate that some sexual behaviors do have a lower average per-act risk for transmission than others and that replacing a higher-risk behavior with a relatively lower-risk behavior might reduce the likelihood that HIV transmission will occur. However, risk for HIV transmission is affected by numerous biological factors (e.g., host genetics, stage of infection, viral load, coexisting STDs) and behavioral factors (e.g., patterns of sexual and drug-injection partnering) (105,114), and per-act risk estimates based on models that assume a constant per-contact infectivity could be inaccurate (110,113). Thus, estimates of the absolute per-episode risk for transmission associated with different activities could be highly misleading when applied to a specific patient or situation. Further the relative risks of becoming infected with HIV, from the perspective of a person not infected with HIV, might vary greatly according to the various choices related to sexual behavior (Table 5) (115,116).

Effect of Antiretroviral Therapy on HIV Transmission.

High viral load is a major risk factor for HIV transmission (117–125). Among untreated patients, the risk for HIV transmission through heterosexual contact has been shown to increase approximately 2.5-fold for each 10-fold increase in plasma viral load (126) (Table 6). By lowering viral load, antiretroviral therapy might reduce risk for HIV transmission, as has been demonstrated with perinatal transmission (127,128) and indirectly suggested for transmission via genital secretions (semen and cervical fluid) (2,129–133). However, because HIV can be detected in the semen, rectal secretions, female genital secretions, and pharynx of HIV-infected patients with undetectable plasma viral loads (16,134–137) and because consistent reduction of viral load depends on high

| TABLE 5. Estimated per-act relative risk for a person without human immunodeficiency virus (HIV) infection acquiring HIV infection, based on sex act and condom use |
|---|---|
| **Sex act** | **Relative risk for a person without HIV infection of acquiring HIV infection** |
| Insertive fellatio | 1 |
| Receptive fellatio | 2 |
| Insertive vaginal sex | 10 |
| Receptive vaginal sex | 20 |
| Insertive anal sex | 13 |
| Receptive anal sex | 100 |
| **Condom use** | **Relative risk for a person without HIV infection of acquiring HIV infection** |
| Yes | 1 |
| No | 20 |

Note: This table quantifies the relative risk for HIV transmission in a way that can help compare the effects of a person's choices of sex act and condom use. It is presented from the point of view of a person without HIV infection and should be used to educate the HIV-infected patient regarding risks for transmission to partners who are not HIV infected or have unknown HIV serostatus. These risks are estimated from available data. Risks can vary depending on several factors, including presence of STDs in either partner and the HIV-infected partner's viral load. In addition, the relative frequency of performance of higher- and lower-risk sex acts will affect risk for transmission (see Prevention Messages for All Patients).

Note: The risks of these choices are multiplicative. Compared with the lowest relative risk (performing insertive fellatio using a condom; referent group, RR = 1), the overall relative risk increases to 2,000 when performing receptive anal sex (RR = 100) without a condom (RR = 20).

* Data regarding risk for transmission from sharing drug injection equipment are too limited to be included in this table.


adherence to antiretroviral regimens, the clinician should assume that all patients who are receiving therapy, even those with undetectable plasma HIV levels, can still transmit HIV. Patients who have treatment interruptions, whether scheduled or not, should be advised that this will likely lead to a rise in plasma viral load and increased risk for transmission. Another concern related to adherence to antiretroviral therapy is the development of drug-resistant mutations with subsequent transmission of drug-resistant viral strains. Several reports suggest that transmission of drug-resistant HIV occurs in the United States (138–141). Recent reports suggest that drug-resistant HIV strains might be less easily transmitted than wild-type virus (142), but these data are limited and their significance is unclear.

**Effectiveness of Postexposure Prophylaxis for Nonoccupational Exposure to HIV.** Although the U.S. Public Health Service recommends using antiretroviral drugs to reduce the likelihood of acquiring HIV infection from nonoccupational exposure (e.g., accidental needle sticks received by health care workers) (143), limited data are available on efficacy of prophylaxis for nonoccupational exposure (97,143–147). Observational data suggesting effectiveness have been reported (148); however, postexposure prophylaxis might not protect against infection in all cases, and effectiveness of these regimens might be further hindered by lack of tolerability, potential toxicity, or viral resistance. Thus, avoiding exposure remains the best approach to preventing transmission, and the potential availability of postexposure prophylaxis should not be used as justification for engaging in risky behavior.

**TABLE 6. Adjusted rate ratios of the risk for transmission and acquisition of human immunodeficiency virus type 1 (HIV-1) among discordant partners**

<table>
<thead>
<tr>
<th>Serum viral load of HIV-infected partners (copies/mL)</th>
<th>Risk for transmission to partners not infected with HIV (adjusted rate ratio; 95% confidence interval)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3500</td>
<td>Referent</td>
</tr>
<tr>
<td>3500–9999</td>
<td>5.80 (2.28–17.80)</td>
</tr>
<tr>
<td>10,000–49,999</td>
<td>6.91 (2.96–20.15)</td>
</tr>
<tr>
<td>&gt;50,000</td>
<td>11.87 (5.02–34.88)</td>
</tr>
<tr>
<td>Per log increment viral load</td>
<td>2.45 (1.85–3.26)</td>
</tr>
</tbody>
</table>

† Patients in this study did not receive antiretroviral medications, and those with low viral loads might have been long-term nonprogressors. Risks might not be equivalent for treated persons with low viral loads. Viral load in the blood may not be predictive of viral load in the genital tract; therefore, risks may vary with genital tract viral load.

**Tailored Interventions for Patients at High Risk for Transmitting HIV**

Interventions tailored to the individual patient's risks can be delivered to patients at highest risk for transmitting HIV infection and for acquiring new STDs. This includes patients whose risk screening indicates current sex or drug-injection practices that may lead to transmission, who have a current or recent STD, or who have mentioned items of concern in discussions with the clinician (149,150). Any positive results of screening for behavioral risks or STDs should be addressed in more detail with the patient so a more thorough risk assessment can be done and an appropriate risk-reduction plan can be discussed and agreed upon.

Although the efficacy of brief clinician-delivered interventions with HIV-infected patients has not been studied extensively, substantial evidence exists for the efficacy of provider-delivered, tailored messages for other health concerns (151–155). An attempt should be made to determine which of the patient's risk behaviors and underlying concerns can be addressed during clinic visits and which might require referral (Box 3).

At a minimum, an appropriate referral should be made and the patient should be informed of the risks involved in continuing the behavior. HIV-infected persons who remain sexually active should be reminded that the only certain means for preventing transmission to noninfected persons is to restrict sex to partners known to be already infected with HIV and that they have a responsibility for disclosure of HIV serostatus to prospective sex partners. For mutually consensual sex with a person of unknown or discordant HIV serostatus, consistent and correct use of condoms made of latex, polyurethane, or other synthetic materials can substantially reduce the risk for HIV transmission. Also, some sex acts have relatively less risk for HIV transmission than others (Table 5). For HIV-infected patients who continue injection drug use, the provider should emphasize the risks associated with sharing needles and should provide information regarding substance abuse treatment and access to clean needles (Box 4) (156–158). Examples of targeted motivational messages on condom use and needle sharing are provided (Figures 1 and 2), and providers can individualize their own messages using these as a guide.

**Clinician Training**

Clinicians can prepare themselves to deliver HIV prevention messages and brief behavioral interventions to their patients by 1) developing strategies for incorporating HIV risk-reduction interventions into patients’ clinic visits (159); 2) obtaining training on speaking with patients about sex and drug-use behaviors and on giving explanations in simple, everyday language (68,87,160,161); 3) becoming familiar with interventions that have demonstrated effectiveness (162); 4) becoming familiar with the underlying causes of and concerns related to risk behaviors among HIV-infected persons...
(e.g., domestic violence) (13,163); and 5) becoming familiar with community resources that address risk reduction. Free training on risk screening and prevention can be obtained at CDC-funded STD/HIV Prevention Training Centers (http://depts.washington.edu/nnpctc) and HRSA-funded AIDS Education and Training Centers (http://www.aids-ed.org), which also offer continuing medical education credit for this training. Ongoing training will help clinicians refine their counseling skills as well as keep current with prevention concerns at the community level, thus increasing their ability to appropriately counsel and provide support to patients.

**BOX 3. Examples of which concerns to address and which to refer**

**Topics that can be successfully addressed by clinicians and clinic support staff:**
- lack of knowledge about HIV transmission risks;
- misconceptions about risk of specific types of sexual and drug-use practices;
- misconceptions about viral load and transmission of HIV;
- how to disclose HIV-seropositive status to a sex partner, family member, or friend;
- importance of using condoms or not exchanging fluids with partners;
- ways to reduce number of sex or drug partners;
- ways to keep condoms accessible;
- ways to remember to use condoms;
- how to persuade a sex partner to use a condom;
- ways to obtain support (e.g., emotional, financial) from family, friends, and lovers;
- ways to clean/disinfect injection equipment;
- ways to obtain clean needles;
- ways to avoid sharing injection equipment; or
- ways to deal with mild psychological distress stemming from situational circumstances.

**Issues that might need referral to outside agencies**
- need for intensive HIV prevention intervention;
- excessive use of alcohol or recreational drug use;
- drug addiction, including injection drug use;
- depression, anger, guilt, fear, or other mental health needs;
- need for social support;
- sexual compulsivity;
- sexual or physical abuse (victim or perpetrator);
- desire to have children, contraceptive counseling;
- housing or transportation needs;
- nutritional needs;
- financial emergencies;
- child custody, parole, or other legal matters; or
- insurance coverage.

**BOX 4. Examples of messages that should be communicated to drug users who continue to inject**

Persons who inject drugs should be regularly counseled to do the following:
- Stop using and injecting drugs.
- Enter and complete substance abuse treatment, including relapse prevention.
- Take the following steps to reduce personal and public health risks, if they continue to inject drugs:
  - Never reuse or share syringes, water, or drug preparation equipment.
  - Use only syringes obtained from a reliable source (e.g., pharmacies).
  - Use a new, sterile syringe to prepare and inject drugs.†
  - If possible, use sterile water to prepare drugs; otherwise, use clean water from a reliable source (such as fresh tap water).
  - Use a new or disinfected container (cooker) and a new filter (cotton) to prepare drugs.
  - Clean the injection site with a new alcohol swab before injection.
  - Safely dispose of syringes after one use.

In addition, drug users should be provided information regarding how to prevent HIV transmission through sexual contact and, for women, information regarding reducing the risk of mother-to-infant HIV transmission.

†If new, sterile syringes and other drug preparation and injection equipment are not available, previously used equipment should be boiled or disinfected with bleach by using the methods recommended by CDC (Source: CDC National Prevention Information Network. HIV connect. Vol. 11, No.8. Available at http://www.cdcnpin.org).

**Ongoing Delivery of Prevention Messages**

Prevention messages can be reinforced by subsequent longer or more intensive interventions in clinic or office environments by nurses, social workers, or health educators. Advantages of a multidisciplinary approach are that skill sets vary among staff members from various disciplines and that a patient may be more receptive to discussing prevention-related issues with one team member than with another. For HIV-negative persons or persons of unknown HIV serostatus, randomized controlled trials provide strong evidence for the efficacy of short, one- or two-session interventions (164–170) and for longer or multisession interventions in clinics for individuals and groups (164,171–173). For example, for persons who continue to engage in risky behaviors, CDC recommends client-centered counseling, a specific model of HIV prevention counseling.
**FIGURE 1. Example of tailoring messages regarding condom use for sexually active, HIV-infected persons**

<table>
<thead>
<tr>
<th>Never/Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>“How often do you use condoms when you have sex?”</td>
<td></td>
</tr>
<tr>
<td>“What do you plan to do about using condoms in the future?”</td>
<td>“How long have you been using condoms?”</td>
</tr>
<tr>
<td>No plans</td>
<td>&lt;1 month</td>
</tr>
<tr>
<td>Undecided</td>
<td>1–6 months</td>
</tr>
<tr>
<td>Has plan</td>
<td>&gt;6 months</td>
</tr>
</tbody>
</table>

- “Do you know that you could catch an STD that way, and it could make your HIV infection worse?”
- “How do you think not using condoms affects you and the people you are having sex with?”
- “What problems do you anticipate when you start using condoms? How do you plan to deal with these problems?”
- “What problems have you encountered as you started using condoms? How are you dealing with these problems?”
- “How do you handle a situation when you want to use condoms but think your partner doesn’t?”
- “You’ve done great! How do you feel about yourself now?” or “You’ve done great! Have you ever thought of changing anything else?”

*This is an example, not a comprehensive list of all questions that could be asked*

**FIGURE 2. Example of tailoring messages regarding needle sharing for HIV-infected persons who continue to inject drugs**

<table>
<thead>
<tr>
<th>Sometimes/Always</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>“How often do you borrow or share a needle or works?”</td>
<td></td>
</tr>
<tr>
<td>“What do you plan to do about sharing needles in the future?”</td>
<td>“How long have you been using your own and not sharing?”</td>
</tr>
<tr>
<td>No plans</td>
<td>&lt;1 month</td>
</tr>
<tr>
<td>Undecided</td>
<td>1–6 months</td>
</tr>
<tr>
<td>Has plan</td>
<td>&gt;6 months</td>
</tr>
</tbody>
</table>

- “Have you heard that HIV can survive in the cotton and rinse water?” or “Can you tell me something about sharing needles?”
- “How do you think sharing needles and works affects you and the people you’re shooting with?” or “Does anyone close to you ever talk to you about bleaching? What do they say?”
- “How do you think your friends will deal with you when you don’t share needles or works?” or “What are some of the good things that might happen if you started bleaching needles before you share?”
- “What problems have you encountered as you stopped sharing needles or works?” or “What are some of the good things that have happened since you stopped sharing needles or works?”
- “How do you handle a situation when you don’t want to share but your friend is begging you to?”
- “You’ve done great! How do you feel about not sharing?” or “You’ve done great! What do you do to reward yourself?”

*This is an example, not a comprehensive list of all questions that could be asked*
Evidence for the efficacy of multisession interventions for HIV-infected patients, individually or in groups, in clinical settings is limited to a few randomized, controlled trials (69,174,175) and other studies that might not have assessed behavioral outcomes (6,176–180). The studies of single-session interventions for individual HIV-infected patients in clinical settings have not been randomized controlled trials (181–187).

Referrals for Additional Prevention Interventions and Other Services

Types of Referrals

Certain patients need more intensive or ongoing behavioral interventions than can feasibly be provided in medical care settings (44). Many have underlying problems that impede adoption of safer behaviors (e.g., homelessness, substance abuse, mental illness), and achieving behavioral change is often dependent on addressing these concerns. Clinicians will usually not have time or resources to fully address these issues, many of which can best be addressed through referrals for services such as intensive HIV prevention interventions (e.g., multisession risk-reduction counseling, support groups), medical services (e.g., family planning and contraceptive counseling, substance abuse treatment), mental health services (e.g., treatment of depression, counseling for sexual compulsivity), and social services (e.g., housing, child care and custody, protection from domestic violence). For example, all patients should be made aware of their responsibility for appropriate disclosure of HIV serostatus to sex and needle-sharing partners; however, full consideration of the complexities of disclosure, including benefits and potential risks, may not be possible in the time available during medical visits (188). Patients who are having, or are likely to have, difficulty initiating or sustaining behaviors that reduce or prevent HIV transmission might benefit from prevention case management. Prevention case management provides ongoing, intensive, one-on-one, client-centered risk assessment and prevention counseling, and assistance accessing other services to address concerns that affect patients’ health and ability to change HIV-related risk-taking behavior. For HIV-seronegative persons, randomized controlled trials provide evidence for the efficacy of HIV prevention interventions delivered by health departments and community-based organizations (164,189–198). For HIV-infected persons, efficacy studies of such interventions are limited to a few randomized controlled trials (199–201), only one of which documented change in risk-related behavior (199), and to other studies, the majority of which did not assess behavioral outcomes (7,202–207).

Referrals for IDUs

For IDUs, ceasing injection-drug use is the only reliable way to eliminate the risk of injection-associated HIV transmission; however, most IDUs are unable to sustain long-term abstinence without substance abuse treatment. Several studies have examined the effect of substance abuse treatment, particularly methadone maintenance treatment, on HIV risk behaviors among IDUs (208–210). These include controlled (211–217) and noncontrolled (218–221) cohort studies, case-control studies (222), and observational studies with controls (223,224), and collectively they provide evidence that methadone maintenance treatment reduces risky injection and sexual behaviors and HIV seroconversion. Thus, early entry into substance abuse treatment programs, maintenance of treatment, and sustained abstinence from injecting are crucial for reducing the risk for HIV transmission from infected IDUs. For those IDUs not able or willing to stop injecting drugs, once-only use of sterile syringes can greatly reduce the risk for injection-related HIV transmission. Substantial evidence from cohort, case-control, and observational studies (225) indicates that access to sterile syringes through syringe exchange programs reduces HIV risk behavior and HIV seroconversion among IDUs. Physician prescribing and pharmacy programs can also increase access to sterile syringes (226–231). Disinfecting syringes and other injection equipment by boiling or flushing with bleach when new, sterile equipment is not available has been suggested to reduce the risk for HIV transmission (156); however, it is difficult to reliably disinfect syringes, and this practice is not as safe as using a new, sterile syringe (232–234). Information on access to sterile syringes and safe syringe disposal can be obtained through local health departments or state HIV/AIDS prevention programs.

Engaging the Patient in the Referral Process

When referrals are made, the patient’s willingness and ability to accept and complete a referral should be assessed. Referrals that match the patient’s self-identified priorities are more likely to be successful than those that do not; the services need to be responsive to the patient’s needs and appropriate for the patient’s culture, language, sex, sexual orientation, age, and developmental level. For example, adolescents should be referred to behavioral intervention programs and services that work specifically with this population. Discussion with the patient can identify barriers to the patient’s completing the referral (e.g., lack of transportation or child care, work schedule, cost). Accessibility and convenience of services predict whether a referral will be completed. The patient should be given specific information regarding accessing referral services and might need assistance (e.g., scheduling appointments, obtaining transportation) in completing referrals. The likelihood that
referrals will be completed successfully could possibly be increased if clinicians or other health-care staff assist patients with making appointments to referral services. When a clinician does not have the capacity to make all appropriate referrals, or when needs are especially complex, a case manager can help make referrals and coordinate care. Outreach workers, peer counselors or educators, treatment advocates, and treatment educators can also help patients identify needs and complete referrals successfully. Health department HIV/AIDS prevention and care programs can provide information on accessing these services. Assessing the success of referrals by documenting referrals made, the status of those referrals, and patient satisfaction with referrals will further assist clinicians in meeting patient needs. Information obtained through follow-up of referrals can identify barriers to completing the referral, responsiveness of referral services to patient needs, and gaps in the referral system, and can be used to develop strategies for removing the barriers.

Referral Guides and Information

Preparation for making patient referrals includes 1) learning about local HIV prevention and supportive social services, including those supported by the Ryan White CARE Act; 2) learning about available resources and having a referral guide listing such resources; and 3) contacting staff in local programs to facilitate subsequent referrals. Referral guides and other information usually can be obtained from local and state health department HIV/AIDS prevention and care programs, which are key sources of information about services available locally. Health departments and some managed care organizations are also a source of educational materials, posters, and other prevention-related material. Health departments can provide or suggest sources of training and technical assistance on behavioral interventions. A complete listing of state AIDS directors and contact information is available from the National Alliance of State and Territorial AIDS Directors (NASTAD) at http://www.nastad.org. In addition, information can be obtained from local health planning councils, consortia, and community planning groups; local, state, and national HIV/AIDS information hotlines and Internet websites; and community-based health and human service providers (Box 5).

Examples of Case Situations for Prevention Counseling

1. A patient with newly diagnosed HIV infection comes to your office for initial evaluation. Of the many things that must be addressed during this initial visit (e.g., any emergent medical or psychiatric problems, education about HIV, history, physical, initial laboratory work [if not already done]), how does one address prevention? What is the minimum that should be done, and how can it be incorporated into this visit?

   Assuming no emergent issues preclude a complete history and physical examination during this visit, the following should be done:
   - During the history, question how the patient might have acquired HIV, current risk behaviors, current partners and whether they have been notified and tested for HIV, and current or past STDs.
   - During the physical examination, include genital and rectal examinations, evaluation and treatment of any current STD, or, if asymptomatic, appropriate screening for STDs.
   - Discuss current risk behavior, at least briefly. Emphasize the importance of using condoms; address active injection-drug use.
   - Discuss the need for disclosure of HIV serostatus to sex and needle-sharing partners, and discuss potential barriers to disclosure.
   - Note issues that will require follow-up; e.g., risk behavior that will require continuing counseling and referral and partners who will need to be notified by either the patient or a health department.

2. A patient with chronic, stable HIV comes to you with a new STD. What prevention considerations should be covered in this visit?

   For the patient who has had a stable course of disease, a new STD can be a sign of emerging social, emotional, or substance problems that must be addressed (Box 6 and 7).
abuse problems. These potential problems should be addressed in addition to the STD.

- During the history, cover topics related to acquisition of the new STD—number of new partners, number of episodes of unsafe sex, and types of unsafe sex.
- Address the personal risks associated with high-risk behavior, e.g., viral superinfection and HIV/STD interactions.
- Address personal or social problems (including substance abuse and domestic violence) that might have led to a change in behavior resulting in the acquisition of the new STD; refer to social services, if necessary.
- Address other issues (e.g., adherence to HAART) that may be affected by personal or social problems. Check viral load if nonadherence is evident or is suspected.
- During the physical examination, include a careful genital and rectal examination and screen for additional STDs, such as syphilis, trichomoniasis, (for women), chlamydial infection (for sexually active women aged ≤25 years and selected populations of men and women), and gonorrhea (for selected populations of men and women).
- Discuss the need for partner notification and referral for counseling and testing.
- Note in the chart that risk behavior should be addressed in future visits and that tailored counseling may be needed for the patient.

3. A patient with chronic, stable HIV has been seen regularly in a health care setting. What should be included in this patient’s routine clinical care?

Discussion of sexual and needle-sharing practices should be integrated into a routine part of clinical care.

- Periodically (e.g., annually) screen for STDs. STDs to be included in screening should be determined by patient’s sex, history of high-risk behavior, and local epidemiology of selected STDs.
- Reiterate general prevention messages and patient education regarding partner notification, high-risk behaviors associated with transmission, prevention of transmission, or condom use, as deemed appropriate by the clinician.

4. A patient who has been treated with HAART for 2 years comes to you. At the time of treatment initiation, CD4+ count was 200 cells/µL and the viral load was 50,000 copies/ml. The response to therapy was prompt; CD4+ count increased to 500 cells/µL, and the viral load has been undetectable since soon after treatment began. The patient now has mildly elevated cholesterol, some mild lipodystrophy, and facial wasting. He states that he would like to stop HAART because of the side effects. What should you tell this patient?

- Inform the patient that upon stopping HAART, CD4+ count and viral load will likely return to pretreatment levels with risk for opportunistic infections and progression of immune deficiency.
- Inform the patient that increase in viral load to pretreatment levels will likely result in increased infectiousness and risk for transmission of HIV to sex or needle-sharing partners.
- Counsel the patient regarding the option of changing the HAART regimen to limit progression of metabolic side effects.

**Partner Counseling and Referral Services, Including Partner Notification**

HIV-infected persons are often not yet aware of their infection; thus, they cannot benefit from early medical evaluation and treatment and do not know that they may be transmitting HIV to others. Reaching such persons as early after infection as possible is important for their own health and is a critical strategy for reducing HIV transmission in the community. Furthermore, interviews of HIV-infected persons in various settings suggest that >70% are sexually active after receiving their diagnosis, and many have not told their partners about their infection (188). Partner counseling and referral services (PCRS), including partner notification, are intended to address these problems by 1) providing services to HIV-infected persons and their sex and needle-sharing partners so the partners can take steps to avoid becoming infected or, if already infected, to avoid infecting others and 2) helping infected partners gain earlier access to medical evaluation, treatment, and other services (Table 7). A key element of PCRS involves informing current partners (and past partners who may have been exposed) that a person who is HIV infected has identified them as a sex or needle-sharing partner and advising them to have HIV counseling and testing (235–238).

Informing partners of their exposure to HIV is confidential; i.e., partners are not told who reported their name or when the reported exposure occurred. It is voluntary in that the infected person decides which names to reveal to the interviewer. Studies have indicated that infected persons are more likely to name their close partners than their more casual partners (204,239,240). Limited reports of partner violence after notification suggest a need for caution, but such violence seems to be rare (241–2). When asked, 92% of notified partners reported that they believe the health department should continue partner notification services (243). No studies have directly shown that PCRS prevents disease in a community.
However, studies have demonstrated that quality HIV prevention counseling can reduce the risk of acquiring a new STD (164) and that persons who become aware of their HIV infection can take steps to protect their health and prevent further transmission (244); in addition, before–after studies have suggested that partners change their behavior after they are notified (245). Finally, compelling arguments have been offered regarding partners' rights to know this information that is important to their health.

**Laws and Regulations Related to Informing Partners**

The majority of states and some cities or localities have laws and regulations related to informing partners that they have been exposed to HIV. Certain health departments require that, even if a patient refuses to report a partner, the clinician report to the health department any partner of whom he or she is aware. Many states also have laws regarding disclosure by clinicians to third parties known to be at high risk for future HIV transmission from patients known to be infected (i.e., duty to warn) (246). Clinicians should know and comply with any such requirements in the areas in which they practice. With regard to PCRS, clinicians should also be aware of and adhere to all laws and regulations related to providing services to minors.

**Approaches to Notifying Partners**

Partners can be reached and informed of their exposure by health department staff, clinicians in the private sector, or the infected person. In the only randomized controlled trial that has been conducted to date (175), 35 HIV-infected persons were asked to notify their partners themselves, and 10 partners were notified. Another 39 HIV-infected persons were assigned to health department referral; and for these, 78 partners were notified. Thus, notification by the health department appears to be substantially more effective than notification by the infected person. Other studies, with less rigorous designs, have demonstrated similar results (247,248).

Some persons, when asked, prefer to inform their partners themselves. This could have a benefit if partners provide support to the infected person. However, patients frequently find that informing their partners is more difficult than they anticipated. Certain health departments offer contract referral, in which the infected person has a few days to notify his or her partners. If by the contract date the partners have not had a visit for counseling and testing, they are then contacted by the health department. In practice, patients' difficulties in informing their partners usually means notification is done by the health department.

Although clinicians might wish to take on the responsibility for informing partners, one observational study has indicated that health department specialists were more successful than physicians in interviewing patients and locating partners (249). Health departments have staff who are trained to do partner notification and skilled at providing this free, confidential service. These disease intervention specialists can work closely with public and private sector clinicians who treat persons with other STDs. With regard to partner notification, the clinician should be sensitive to concerns of domestic violence or abuse by the informed partner.

All partners should be notified at least once. Persons who continue to have sex with an HIV-infected person despite an earlier notification may have erroneously concluded that someone else was the infected partner. Thus, renotification might be important, although no research is available on renotification.

**TABLE 7. Recommendations for partner counseling and referral, including partner notification**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>In HIV health-care settings, all applicable requirements for reporting sex and needle-sharing partners of HIV-infected patients to the appropriate health department should be followed.</td>
<td>A-III (for identifying patients who should be referred for partner counseling and referral services [PCRS])</td>
</tr>
<tr>
<td>At the initial visit, patients should be asked if all of their sex and needle-sharing partners have been informed of their exposure to HIV.</td>
<td>A-III (for identifying patients who should be referred for PCRS)</td>
</tr>
<tr>
<td>At routine follow-up visits, patients should be asked if they have had any new sex or needle-sharing partners who have not been informed of their exposure to HIV.</td>
<td>A-III (for identifying patients who should be referred for PCRS)</td>
</tr>
<tr>
<td>All patients should be referred to the appropriate health department to discuss sex and needle-sharing partners who have not been informed of their exposure and to arrange for their notification and referral for HIV testing.</td>
<td>A-I (for increasing partner counseling and referral and voluntary testing of partners)</td>
</tr>
<tr>
<td>In HIV health-care settings, access to available community partner counseling and referral resources should be established.</td>
<td>A-III (for establishing a working relationship and increasing understanding about partner counseling and referral procedures)</td>
</tr>
</tbody>
</table>
Additional information, recommendations, and requirements related to PCRS are available through health department HIV/AIDS programs. A complete listing of state AIDS directors and contact information is available from the National Alliance of State and Territorial AIDS Directors (NASTAD) at http://www.nastad.org.

Acknowledgments

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Screening for STDs should be repeated periodically (i.e., at least annually) if the patient is sexually active or if earlier screening revealed STDs. Screening exposure and to arrange for their notification and referral for HIV testing.

At the initial visit, patients should be asked if all of their sex and needle-sharing partners have been informed of their exposure to HIV.

In HIV health-care settings, all applicable requirements for reporting sex and needle-sharing partners of HIV-infected patients to the appropriate health department should be followed.

Persons who continue to inject drugs should be advised to always use sterile injection equipment and to never reuse or share needles, syringes, or other injection equipment and should be provided information regarding how to obtain new, sterile syringes and needles (e.g., syringe exchange programs).

In HIV health-care settings, access to available community partner counseling and referral resources should be established.

*Letters indicate the strength of the recommendation, and roman numerals indicate the quality of evidence supporting it, respectively (see Table 1).
HIV and Its Transmission
HIV and Its Transmission

Research has revealed a great deal of valuable medical, scientific, and public health information about the human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). The ways in which HIV can be transmitted have been clearly identified. Unfortunately, false information or statements that are not supported by scientific findings continue to be shared widely through the Internet or popular press. Therefore, the Centers for Disease Control and Prevention (CDC) has prepared this fact sheet to correct a few misperceptions about HIV.

**How HIV is Transmitted**

HIV is spread by sexual contact with an infected person, by sharing needles and/or syringes (primarily for drug injection) with someone who is infected, or, less commonly (and now very rarely in countries where blood is screened for HIV antibodies), through transfusions of infected blood or blood clotting factors. Babies born to HIV-infected women may become infected before or during birth or through breast-feeding after birth.

In the health care setting, workers have been infected with HIV after being stuck with needles containing HIV-infected blood or, less frequently, after infected blood gets into a worker’s open cut or a mucous membrane (for example, the eyes or inside of the nose). There has been only one instance of patients being infected by a health care worker in the United States; this involved HIV transmission from one infected dentist to six patients. Investigations have been completed involving more than 22,000 patients of 63 HIV-infected physicians, surgeons, and dentists, and no other cases of this type of transmission have been identified in the United States.

Some people fear that HIV might be transmitted in other ways; however, no scientific evidence to support any of these fears has been found. If HIV were being transmitted through other routes (such as through air, water, or insects), the pattern of reported AIDS cases would be much different from what has been observed. For example, if mosquitoes could transmit HIV infection, many more young children and preadolescents would have been diagnosed with AIDS.

All reported cases suggesting new or potentially unknown routes of transmission are thoroughly investigated by state and local health departments with the assistance, guidance, and laboratory support from CDC. *No additional routes of transmission have been recorded,* despite a national sentinel system designed to detect just such an occurrence.

The following paragraphs specifically address some of the common misperceptions about HIV transmission.

**HIV in the Environment**

Scientists and medical authorities agree that HIV does not survive well in the environment, making the possibility of environmental transmission remote. HIV is found in varying concentrations or amounts in blood, semen, vaginal fluid, breast
milk, saliva, and tears. (See page 3, *Saliva, Tears, and Sweat.*) To obtain data on the survival of HIV, laboratory studies have required the use of artificially high concentrations of laboratory-grown virus. Although these unnatural concentrations of HIV can be kept alive for days or even weeks under precisely controlled and limited laboratory conditions, CDC studies have shown that drying of even these high concentrations of HIV reduces the amount of infectious virus by 90 to 99 percent within several hours. Since the HIV concentrations used in laboratory studies are much higher than those actually found in blood or other specimens, drying of HIV-infected human blood or other body fluids reduces the theoretical risk of environmental transmission to that which has been observed—essentially zero. Incorrect interpretation of conclusions drawn from laboratory studies have unnecessarily alarmed some people.

Results from laboratory studies should not be used to assess specific personal risk of infection because (1) the amount of virus studied is not found in human specimens or elsewhere in nature, and (2) no one has been identified as infected with HIV due to contact with an environmental surface. Additionally, HIV is unable to reproduce outside its living host (unlike many bacteria or fungi, which may do so under suitable conditions), except under laboratory conditions, therefore, it does not spread or maintain infectiousness outside its host.

**Households**

Although HIV has been transmitted between family members in a household setting, this type of transmission is very rare. These transmissions are believed to have resulted from contact between skin or mucous membranes and infected blood. To prevent even such rare occurrences, precautions, as described in previously published guidelines, should be taken in all settings—including the home—to prevent exposures to the blood of persons who are HIV infected, at risk for HIV infection, or whose infection and risk status are unknown. For example,

- Gloves should be worn during contact with blood or other body fluids that could possibly contain visible blood, such as urine, feces, or vomit.
- Cuts, sores, or breaks on both the care giver’s and patient’s exposed skin should be covered with bandages.
- Hands and other parts of the body should be washed immediately after contact with blood or other body fluids, and surfaces soiled with blood should be disinfected appropriately.
- Practices that increase the likelihood of blood contact, such as sharing of razors and toothbrushes, should be avoided.
- Needles and other sharp instruments should be used only when medically necessary and handled according to recommendations for health-care settings. (Do not put caps back on needles by hand or remove needles from syringes. Dispose of needles in puncture-proof containers out of the reach of children and visitors.)

**Businesses and Other Settings**

There is no known risk of HIV transmission to co-workers, clients, or consumers from contact in industries such as food-service establishments (see information on survival of HIV in the environment). Food-service workers known to be infected with HIV need not be restricted from work unless they have other infections or illnesses (such as diarrhea or hepatitis A) for which any food-service worker, regardless of HIV infection status, should be restricted. CDC recommends that all food-service workers follow recommended standards and practices of good personal hygiene and food sanitation.

In 1985, CDC issued routine precautions that all personal-service workers (such as hairdressers, barbers, cosmetologists, and massage therapists) should follow, even though there is no evidence of transmission from a personal-service worker to a client or vice versa. Instruments that are intended to penetrate the skin (such as tattooing and acupuncture needles, ear piercing devices) should be used once and disposed of or thoroughly cleaned and sterilized. Instruments not intended to penetrate the skin but which may become contaminated with
blood (for example, razors) should be used for only one client and disposed of or thoroughly cleaned and disinfected after each use. Personal-service workers can use the same cleaning procedures that are recommended for health care institutions.

CDC knows of no instances of HIV transmission through tattooing or body piercing, although hepatitis B virus has been transmitted during some of these practices. One case of HIV transmission from acupuncture has been documented. Body piercing (other than ear piercing) is relatively new in the United States, and the medical complications for body piercing appear to be greater than for tattoos. Healing of piercings generally will take weeks, and sometimes even months, and the pierced tissue could conceivably be abraded (torn or cut) or inflamed even after healing. Therefore, a theoretical HIV transmission risk does exist if the unhealed or abraded tissues come into contact with an infected person’s blood or other infectious body fluid. Additionally, HIV could be transmitted if instruments contaminated with blood are not sterilized or disinfected between clients.

**Kissing**

Casual contact through closed-mouth or “social” kissing is not a risk for transmission of HIV. Because of the potential for contact with blood during “French” or open-mouth kissing, CDC recommends against engaging in this activity with a person known to be infected. However, the risk of acquiring HIV during open-mouth kissing is believed to be very low. CDC has investigated only one case of HIV infection that may be attributed to contact with blood during open-mouth kissing.

**Biting**

In 1997, CDC published findings from a state health department investigation of an incident that suggested blood-to-blood transmission of HIV by a human bite. There have been other reports in the medical literature in which HIV appeared to have been transmitted by a bite. Severe trauma with extensive tissue tearing and damage and presence of blood were reported in each of these instances. Biting is not a common way of transmitting HIV. In fact, there are numerous reports of bites that did not result in HIV infection.

**Saliva, Tears, and Sweat**

HIV has been found in saliva and tears in very low quantities from some AIDS patients. It is important to understand that finding a small amount of HIV in a body fluid does not necessarily mean that HIV can be transmitted by that body fluid. HIV has not been recovered from the sweat of HIV-infected persons. Contact with saliva, tears, or sweat has never been shown to result in transmission of HIV.

**Insects**

From the onset of the HIV epidemic, there has been concern about transmission of the virus by biting and bloodsucking insects. However, studies conducted by researchers at CDC and elsewhere have shown no evidence of HIV transmission through insects—even in areas where there are many cases of AIDS and large populations of insects such as mosquitoes. Lack of such outbreaks, despite intense efforts to detect them, supports the conclusion that HIV is not transmitted by insects.

The results of experiments and observations of insect biting behavior indicate that when an insect bites a person, it does not inject its own or a previously bitten person’s or animal’s blood into the next person bitten. Rather, it injects saliva, which acts as a lubricant or anticoagulant so the insect can feed efficiently. Such diseases as yellow fever and malaria are transmitted through the saliva of specific species of mosquitoes. However, HIV lives for only a short time inside an insect and, unlike organisms that are transmitted via insect bites, HIV does not reproduce (and does not survive) in insects. Thus, even if the virus enters a mosquito or another sucking or biting insect, the insect does not become infected and cannot transmit HIV to the next human it feeds on or bites. HIV is not found in insect feces.
There is also no reason to fear that a biting or bloodsucking insect, such as a mosquito, could transmit HIV from one person to another through HIV-infected blood left on its mouth parts. Two factors serve to explain why this is so—first, infected people do not have constant, high levels of HIV in their bloodstream and, second, insect mouth parts do not retain large amounts of blood on their surfaces. Further, scientists who study insects have determined that biting insects normally do not travel from one person to the next immediately after ingesting blood. Rather, they fly to a resting place to digest this blood meal.

**Effectiveness of Condoms**

Condoms are classified as medical devices and are regulated by the Food and Drug Administration (FDA). Condom manufacturers in the United States test each latex condom for defects, including holes, before it is packaged. The proper and consistent use of latex or polyurethane (a type of plastic) condoms when engaging in sexual intercourse—vaginal, anal, or oral—can greatly reduce a person’s risk of acquiring or transmitting sexually transmitted diseases, including HIV infection.

There are many different types and brands of condoms available—however, only latex or polyurethane condoms provide a highly effective mechanical barrier to HIV. In laboratories, viruses occasionally have been shown to pass through natural membrane (“skin” or lambskin) condoms, which may contain natural pores and are therefore not recommended for disease prevention (they are documented to be effective for contraception). Women may wish to consider using the female condom when a male condom cannot be used.

For condoms to provide maximum protection, they must be used consistently (every time) and correctly. Several studies of correct and consistent condom use clearly show that latex condom breakage rates in this country are less than 2 percent. Even when condoms do break, one study showed that more than half of such breaks occurred prior to ejaculation.

When condoms are used reliably, they have been shown to prevent pregnancy up to 98 percent of the time among couples using them as their only method of contraception. Similarly, numerous studies among sexually active people have demonstrated that a properly used latex condom provides a high degree of protection against a variety of sexually transmitted diseases, including HIV infection.

For more detailed information about condoms, see the CDC publication “Male Latex Condoms and Sexually Transmitted Diseases.”

**CDC’s Response**

CDC is committed to providing the scientific community and the public with accurate and objective information about HIV infection and AIDS. It is vital that clear information on HIV infection and AIDS be readily available to help prevent further transmission of the virus and to allay fears and prejudices caused by misinformation. For a complete description of CDC’s HIV/AIDS prevention programs, see “Facts about CDC’s Role in HIV and AIDS Prevention.”

For more information...

**CDC National AIDS Hotline:**
1-800-342-AIDS (2437)
Spanish: 1-800-344-SIDA (7432) (HIV and STDs)
Deaf: 1-800-243-7889

**CDC National Prevention Information Network:**
P.O. Box 6003
Rockville, Maryland 20849-6003
1-800-458-5231

**Internet Resources:**
DHAP: http://www.cdc.gov/hiv
NCHSTP: http://www.cdc.gov/nchstp/od/nchstp.html
NPIN: http://www.cdcnpin.org
What You Should Know About Oral Sex

(Centers for Disease Control and Prevention)
Preventing the Sexual Transmission of HIV, the Virus that Causes AIDS
What You Should Know about Oral Sex

Oral Sex Is Not Considered Safe Sex
Like all sexual activity, oral sex carries some risk, particularly when one partner or the other is known to be infected with HIV, when either partner’s HIV status is not known, and/or when one or the other partner is not monogamous or injects drugs. Numerous studies have demonstrated that oral sex can result in the transmission of HIV and other sexually transmitted diseases (STDs). Abstaining from oral, anal, and vaginal sex all together or having sex only with a mutually monogamous, uninfected partner are the only ways that individuals can be completely protected from the sexual transmission of HIV.

Oral Sex is a Common Practice
Oral sex involves giving or receiving oral stimulation (i.e. sucking or licking) to the penis, the vagina, and/or the anus. Fellatio is the technical term used to describe oral contact with the penis. Cunnilingus is the technical term which describes oral-vaginal sex. Anilingus (sometimes called “rimming”) refers to oral-anal contact. Studies indicate that oral sex is commonly practiced by sexually active male-female and same-gender couples of various ages, including adolescents. Although there are only limited national data about how often adolescents engage in oral sex, some data suggest that many adolescents who engage in oral sex do not consider it to be sex; therefore they may use oral sex as an option to experience sex while still, in their minds, remaining abstinent. Moreover, many consider oral sex to be a safe or no risk sexual practice. In a recent national survey of teens conducted for The Kaiser Family Foundation, 26% of sexually active 15 to 17 year olds surveyed responded that one “cannot become infected with HIV by having unprotected oral sex”, and an additional 15% didn’t know whether or not one could become infected in that manner.

Oral Sex and the Risk of HIV Transmission
The risk of HIV transmission from an infected partner through oral sex is much smaller than the risk of HIV transmission from anal or vaginal sex. Because of this, measuring the exact risk of HIV transmission as a result of oral sex is very difficult. In addition, since most sexually active individuals practice oral sex in addition to other forms of sex, such as vaginal and/or anal sex, when transmission occurs, it is difficult to determine whether or not it occurred as a result of oral sex or other more risky sexual activities. Finally, several co-factors can increase the risk of HIV transmission through oral sex, including: oral ulcers, bleeding gums, genital sores, and the presence of other STDs.

When scientists describe the risk of transmitting an infectious disease, like HIV, the term “theoretical risk” is often used. Very simply, “theoretical risk” means that passing an infection from one person to another is possible, even though there may not yet be any actual documented cases. “Theoretical risk” is not the same as likelihood. In other words, stating that HIV infection is “theoretically possible” does not necessarily mean it is likely to happen—only that it might. Documented risk, on the other hand, is used to describe transmission that has actually occurred, been investigated, and documented in the scientific literature.
### Theoretical and Documented Risk of HIV Transmission During Oral-Penile Contact

**Theoretical:**
In fellatio, there is a theoretical risk of transmission for the receptive partner (the person who is sucking) because infected pre-ejaculate (“pre-cum”) fluid or semen can get into the mouth. For the insertive partner (the person who is being sucked), there is a theoretical risk of infection because infected blood from a partner's bleeding gums or an open sore could come in contact with a scratch, cut, or sore on the penis.

**Documented:**
Although the risk is many times smaller than anal or vaginal sex, HIV has been transmitted to receptive partners through fellatio, even in cases when insertive partners didn't ejaculate (“cum”).

### Theoretical and Documented Risk of HIV Transmission During Oral-Vaginal Contact

**Theoretical:**
Cunnilingus carries a theoretical risk of HIV transmission for the insertive partner (the person who is licking or sucking the vaginal area) because infected vaginal fluids and blood can get into the mouth. (This includes, but is not limited to, menstrual blood). Likewise, there is a theoretical risk of HIV transmission during cunnilingus for the receptive partner (the person who is having her vagina licked or sucked) if infected blood from oral sores or bleeding gums comes in contact with vulvar or vaginal cuts or sores.

**Documented:**
The risk of HIV transmission during cunnilingus is extremely low compared to vaginal and anal sex. However, there have been a few cases of HIV transmission most likely resulting from oral-vaginal sex.

### Theoretical and Documented Risk of HIV Transmission During Oral-Anal Contact

**Theoretical:**
Anilingus carries a theoretical risk of transmission for the insertive partner (the person who is licking or sucking the anus) if there is exposure to infected blood, either through bloody fecal matter (bodily waste) or cuts/sores in the anal area. Anilingus carries a theoretical risk to the receptive partner (the person who is being licked/sucked) if infected blood in saliva comes in contact with anal/rectal lining.

**Documented:**
There has been one published case of HIV transmission associated with oral-anal sexual contact.

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**Other STDs Can Also Be Transmitted From Oral Sex**
Scientists have documented a number of other sexually transmitted diseases that have also been transmitted through oral sex. Herpes, syphilis, gonorrhea, genital warts (HPV), intestinal parasites (amebiasis), and hepatitis A are examples of STDs which can be transmitted during oral sex with an infected partner.

For more information see *Oral Sex and STDs* Fact Sheet.

**Reducing the Risk of HIV Transmission Through Oral Sex**
The consequences of HIV infection are life-long, life-threatening, and extremely serious. You can lower any already low risk of getting HIV from oral sex by using latex condoms each and every time. For cunnilingus or anilingus, plastic food wrap, a condom cut open, or a dental dam can serve as a physical barrier to prevent transmission of HIV and many other STDs. Because anal and vaginal sex are much riskier and because most individuals who engage in unprotected (i.e. without a condom) oral sex also engage in unprotected anal and/or vaginal sex, the exact proportion of HIV infections attributable to oral sex alone is unknown, but is likely to be very small. This has led some people to believe that oral sex is completely safe. **It is not.**
Female Condom FAQ
1. **How easy to use are FC female condoms?**

FC female condoms are not difficult to use, but you may want to practice to get used to them. Women should practice putting it in and removing it, prior to using it for the first time during sexual intercourse. Research has indicated that FC may need to be tried up to three times before users become confident and comfortable using it. New users should try to insert the device several times, and each time with the body in a different position (e.g. lying down, crouching, sitting) to find which is the most comfortable for you. While individual counseling and personal fitting may help to reassure women, group sessions and peer groups may overcome early abandonment, as women can share anxieties, ideas and laughter with each other.

2. **Are any precautions necessary for correctly using FC female condoms?**

It is important that the penis is guided into the centre of an FC female condom, taking care not to insert between the vaginal wall and the outer side of the condom—you are not protected if that happens. Diagrams and/or anatomical models should be referenced to illustrate this problem. If the penis does enter incorrectly, the man should withdraw his penis and the couple should start over.

3. **Can a lubricant be used with FC female condoms and, if so, what kind of lubricant can be used?**

FC female condoms come pre-lubricated with a silicone-based, non-spermicidal lubricant. This lubrication helps assist in the insertion of the device and allows easy movement during intercourse. The lubricant may make FC a little slippery at first. If the outer ring of FC gets pushed in or pulled out of the vagina, more lubricant may be needed. Also, if FC makes noise during sex, simply add more lubricant.

FC female condoms can be used with both water-based and oil-based lubricants.

4. **Can FC female condoms be used more than once?**

Both FC and FC2 are approved for a single use only.

For the original FC female condom, re-use has been reported in several countries. WHO, UNAIDS and USAID among others have conducted studies to investigate the safety of disinfection, washing, drying, storage and re-lubrication, followed by re-use, and WHO has convened two technical consultations to review data from these studies.
WHO recommends use of a new male or female condom for every act of intercourse, where there is a risk of unintended pregnancy and/or STI/HIV infection. Recognizing the urgent need for risk-reduction strategies for women who cannot or do not access new condoms, WHO has developed a protocol for the safe handling and preparation of a used (original) FC female condom that is intended for re-use. WHO does not recommend or promote re-use, but has made available the protocol, together with guidelines on programmatic issues, to programme managers who intend to evaluate the feasibility of re-use and application in local settings. WHO’s Information Update on re-use is available on-line at www.who.int/reproductive-health/rtis/reuse.en.html

5. What if I find that the inner ring is uncomfortable for me or my partner?

Some people have reported that both the inner and outer rings add to both a man’s and a woman’s sexual pleasure. However, some women do report that the inner ring can be uncomfortable. If this happens to you, you can try to place FC differently (i.e. reinsert or re-position the device) so that the inner ring is tucked back behind the cervix and out of the way.

6. What size are FC female condoms?

If you compare FC female condoms with an unrolled male condom you will find that they are the same length but wider than the male condom. It is important to note that, due to size, FCs provide added protection because the base of the penis and the external female genitalia are partly covered during use. Although the initial reaction to their size may be negative, this feeling diminishes with use. To reduce potential negative reactions, some programmes have introduced FC rolled up to minimise the size; and have suggested that the female insert FC before the initiation of sexual activity. It is also significant to reinforce the advantages of the wider diameter, since many men complain that male condoms can be constricting.

7. How do I dispose of FC female condoms?

FC female condoms do not need to be removed immediately after a man ejaculates, unlike the male condom. But they should be taken out before the woman stands up to avoid having the semen spill out.

1. The outer ring of FC should be twisted (clockwise) to seal the condom so that no semen comes out.

2. FC can be pulled out and wrapped in the package it came in and/or in tissue.

3. FC should be disposed of in waste containers and not in the toilet.

Also, since in many countries women dispose of sanitary napkins in a clean and private way, the same procedures can be promoted for the disposal of FC.

8. Can FC female condoms be used in different sexual positions?

FC female condoms can be used in any sexual position; however, additional lubricant may be needed. Some women may feel more comfortable learning to use FC in the missionary position, and then adding other positions after that. Group counseling sessions are often ideal for women to learn from each other how to use the device while having sex in different positions.

Continued on next page
FC female condoms are not specifically approved or recommended for anal sex.

There are reports from all over the world, however, that the original FC has been used for anal sex. Several studies have been done and published and others are on-going.

9. Can an FC female condom and a male condom be used at the same time?

You should not use two condoms at the same time. Using the condoms simultaneously may cause friction resulting in either or both condoms slipping or tearing, and/or the displacing of the outer ring of FC to the inside of the vagina.

10. How long can FC female condoms be kept, and are there any special storage requirements?

Both FC and FC2 have a shelf life of 5 years from the date of manufacture. There are no special storage requirements.

11. Who can and/or should use FC female condoms?

- People who want to protect themselves and their partners from unintended pregnancy and STIs, including HIV/AIDS, and show their partners that they care.
- People whose partners cannot or will not use the male condom.
- Women who are menstruating.
- Women who have recently given birth.
- Women who have had a hysterectomy.
- Women who are in perimenopause or post-menopause.
- People who are allergic or sensitive to latex should use FC as an alternative to the male latex condom.
- People who are HIV+ or have HIV+ partners.
Appendix E: 

What is FC Female Condom?
What is FC female condom?

FC female condom is a strong, soft, transparent polyurethane sheath that is 17 centimetres long (about 6.5 inches, the same length as a male condom) with a flexible ring at each end. It is inserted into the vagina prior to sexual intercourse and provides protection against both pregnancy and sexually transmitted infections (STIs) including HIV/AIDS. The inner ring aids insertion and secures the device in place during intercourse while the softer outer ring remains outside the vagina.

**FC female condom:**
- provides both men and women with an additional choice to prevent unintended pregnancies and protect themselves from STIs, including HIV/AIDS
- forms a barrier between the penis and the vagina, cervix and external genitalia, thereby providing additional protection
- is stronger than latex, odourless and causes no allergic reactions and, unlike latex, may be used with both oil and water based lubricants
- can be inserted up to 8 hours before intercourse so will not interrupt sexual spontaneity, is not dependent on the male erection and does not require immediate withdrawal after ejaculation
- conducts/retains heat, so sexual intercourse can feel very sensitive and natural
- is not tight or constricting
- is the only new prevention technology invented and approved since the advent of the HIV/AIDS epidemic and the sole female initiated protective method currently available.
1. Open the package carefully; tear the notch on the top right of the package. Do not use scissors or a knife to open.

2. The outer ring covers the area around the opening of the vagina. The inner ring is used for insertion and to hold the sheath in place during intercourse.

3. Hold the sheath at the closed end; grasp the flexible inner ring and squeeze it with the thumb and middle finger so it becomes long and narrow.

4. Choose a position that is comfortable for insertion – squat, raise one leg, sit or lie down. Gently insert the inner ring into the vagina. Feel the inner ring go up and move into place.

5. Place the index finger on the inside of the condom, and push the inner ring up as far as it will go. Be sure the sheath is not twisted. The outer ring should remain on the outside of the vagina.

6. The female condom is now in place and ready for use with your partner.

7. Gently guide your partner’s penis into the sheath’s opening using your hand to make sure that it enters properly.

8. Be sure that the penis is not entering on the side, between the sheath and the vaginal wall.

9. To remove the condom, twist the outer ring and gently pull the condom out. Wrap the condom in the package or in a tissue and throw it in the garbage. Do not put it in the toilet.

FC female condom is not difficult to use but it may take some practice to become comfortable with it. Women should practice putting it in and removing it prior to using it for the first time during sexual intercourse. Insertion becomes easier with time – try it at least 3 times before making any decisions.
What is FC2 Female Condom?
FC2 female condom has the same design and instructions for use as the FC female condom. The material has been changed to improve affordability, while maintaining the high quality, reliability and features of FC. FC2’s sheath, with its outer ring, is made from a synthetic nitrile. Insert FC2 prior to sexual intercourse to provide protection against HIV/AIDS, other STIs and unintended pregnancies. The inner ring aids insertion and helps to secure the device in place during intercourse while the softer outer ring remains outside the vagina.

**What is FC2 Female Condom?**

**FC2 female condom**

- is a new second generation female condom made of synthetic nitrile. It was designed to improve affordability, particularly in large volumes, while maintaining the high quality, reliability and features of the original FC female condom.
- has been shown in studies to be as effective as FC. These assessments include preclinical safety studies of the new material and a direct comparison study evaluating efficacy in terms of rips, tears and slippage.

**Like FC, FC2**

- provides women and men with an additional choice to protect themselves against HIV/AIDS, other STIs and unintended pregnancies.
- forms a barrier between the penis and the vagina, cervix and external genitalia, thereby providing additional protection.
- is strong, hypoallergenic and, unlike latex, may be used with both oil and water-based lubricants.
- can be inserted up to 8 hours before intercourse, to allow for sexual spontaneity.
- is not dependent on the male erection, does not require immediate withdrawal and is not tight or constricting.
- is the sole female-initiated protection method invented and approved since the advent of the HIV/AIDS epidemic.

_The Female Health Company_

515 North State Street, Suite 2225
Chicago, Illinois 60610
Tel: +1 312 595 9123
Fax: +1 312 595 9122
Email: info@femalecondom.org
www.femalehealth.com
FC2 female condom is not difficult to use but it may take some practice to become comfortable with it. Women should practice inserting and removing it prior to using it for the first time during sexual intercourse. Insertion becomes easier with practice — try it at least 3 times before making any decisions about future use.

1. Open the package carefully by tearing the notch on the top right of the package. Do not use scissors or a knife to open.

2. The outer ring covers the area around the opening of the vagina. The inner ring is used for insertion and to hold the sheath in place during intercourse.

3. Hold the sheath at the closed end, grasp the flexible inner ring and squeeze it with the thumb and middle finger so it becomes long and narrow.

4. Choose a position that is comfortable for insertion — squat, raise one leg sit or lie down. Gently insert the inner ring into the vagina. Feel the inner ring go up and move into place.

5. Place the index finger on the inside of the condom, and push the inner ring up as far as it will go. Be sure the sheath is not twisted. The outer ring should remain on the outside of the vagina.

6. FC2 female condom is now in place and ready for use with your partner.

7. Gently guide your partner’s penis into the sheath’s opening using your hand to make sure that it enters properly.

8. Be sure that the penis is not entering on the side, between the sheath and the vaginal wall.

9. To remove the condom, twist the outer ring and gently pull the condom. Wrap the condom in the package or in a tissue and throw it in the garbage. Do not put it in the toilet.
FAQ About Microbicides
What is a microbicide?

A microbicide (mî-KRO'-bi-sid) is a substance that can substantially reduce transmission of sexually transmitted diseases (STIs) when applied either in the vagina or rectum. A microbicide could be produced in many forms, including gels, creams, suppositories, films, lubricants, or in the form of a sponge or a vaginal ring that slowly releases the active ingredient. The word “microbicides” refers to a range of different products that share one common characteristic: the ability to prevent the sexual transmission of HIV and other STI pathogens when applied topically.

Are microbicides currently available?

No. Scientists are currently testing many substances to see whether they help protect against HIV and/or other STIs, but no safe and effective microbicide is currently available to the public. However, scientists are seriously pursuing dozens of product leads, including 16 that have proven safe and effective in animals and are now being tested in people. If one of these leads proves successful and with sufficient investment, a successful microbicide could be on the market by the end of the decade.

How would a microbicide work?

A microbicide could prevent HIV and STIs by:

1) killing or otherwise immobilizing pathogens
2) blocking infection by creating a barrier between the pathogen and the cells of the vagina or rectum; or
3) preventing the infection from taking hold after it has entered the body.

Ideally, a microbicide would combine these mechanisms for extra effectiveness.

Would a microbicide eliminate the need for condoms?

No. When used consistently and correctly, male or female condoms are likely to provide better protection against HIV and STIs than microbicides, so they will still be the preferred option. But for people who cannot or will not use condoms, and particularly for women whose partners refuse condoms, using microbicides can save lives and have a substantial impact on the spread of HIV. In fact, researchers developed a mathematical model that shows that if even a small proportion of women in lower income countries used a 60% efficacious microbicide in half the sexual encounters where condoms are not used, 2.5 million HIV infections could be averted over 3 years.

Would a microbicide protect against all sexually transmitted infections?

Since STIs are caused by different pathogens (some viral, some bacterial), a microbicide that works against one STI pathogen would not necessarily protect against another. Many of the microbicides currently being tested work against HIV and at least one other STI. Eventually, a product that combines different microbicides and mechanisms of action may offer a protection from a wide range of sexually transmitted infections, including HIV.

What if a woman wants to get pregnant?

Some of the microbicides being investigated prevent pregnancy and some do not. It is important to have both non-contraceptive microbicides and “dual-action” microbicides that prevent pregnancy and infection, so that women and couples can protect their health and still have children. This is not possible with condoms.
Would microbicides be safe?
Any new product must go through rigorous safety testing before becoming available to consumers. Women’s health activists and researchers are working closely together to ensure that the clinical testing of microbicides is thorough and ethical. Fortunately, many of the substances and mechanisms of action under investigation are already commonly used in over the counter products.

Would men benefit from microbicides as well?
Current clinical trials are evaluating whether microbicides could protect HIV negative women from infection, but there is hope that some products may eventually be shown to protect men if their female partner is HIV positive. Evaluating whether a microbicide protects male partners, however, will require separate clinical trials.

Who is working on microbicide research and development?
Virtually all microbicide research to date has been conducted by non-profit and academic institutions or small biotech companies. Studies are funded by charitable foundations and government grants. These public funds also support basic science, social and behavioural research, and clinical trial infrastructure that contribute to microbicide research and development. Large pharmaceutical companies have not invested significantly in this field, primarily because microbicides are a classic “public health good” which would yield tremendous benefits to society but for which the profit incentive to private investment is low.

Why do we need microbicides if we will eventually have an HIV-vaccine?
No one strategy or technology will “solve” the AIDS pandemic. We must employ all existing prevention strategies-- such as behaviour change, voluntary counselling and testing, STI diagnosis and treatment, broad access to male and female condoms, access to sterile syringes, and anti-retroviral interventions—as well as expand our repertoire of tools and technologies. Microbicides will likely be available and accessible sooner than an HIV-vaccine. Even after a safe and effective vaccine is discovered, vaccines and microbicides will have different, complementary roles to play in an integrated, multi-faceted global HIV prevention strategy.

How much will microbicides cost, and will people be able to afford them?
It is essential that microbicides get into the hands of women and men who need it at a price they can afford. In the past, new health technologies have rarely become widely available in developing countries until more than a decade after their approval in the US and Europe, an unacceptable delay for this life-saving technology developed primarily with public funds. Advocates are working with researchers and policy makers now to emphasize the need to address issues of access and affordability up front, in order to be prepared to deliver a microbicide rapidly as soon as one is proven safe and effective.

How can you get involved?
Visit the Global Campaign for Microbicides website: www.global-campaign.org to sign a petition, sign up for our electronic newsletter, write to your legislators, meet up with local advocacy groups in your region, and learn more about microbicides. We need your help to make a safe and effective microbicide available as soon as possible.

The Global Campaign for Microbicides

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PATH
Background
Heroin was first synthesized in 1874 from morphine, a naturally occurring substance extracted from the seed pod of certain varieties of poppy plants. It was commercially marketed in 1898 as a new pain remedy and became widely used in medicine in the early 1900s until it became a controlled substance in 1914 under the Harrison Narcotic Act. Heroin is a highly addictive drug and is considered the most abused and most rapidly acting opiate.

Heroin comes in various forms, but pure heroin is a white powder with a bitter taste. Most illicit heroin comes in powder form in colors ranging from white to dark brown. The colors are due to the impurities left from the manufacturing process or the presence of additives. “Black tar” is another form of heroin that resembles roofing tar or is hard like coal. Color varies from dark brown to black.

Effects
Heroin can be injected, smoked, or snorted. Intravenous injection produces the greatest intensity and most rapid onset of euphoria. Effects are felt in 7 to 8 seconds. Even though effects for sniffing or smoking develop more slowly, beginning in 10 to 15 minutes, sniffing or smoking heroin has increased in popularity because of the availability of high-purity heroin and the fear of sharing needles. Also, users tend to mistakenly believe that sniffing or smoking heroin will not lead to addiction.

After ingestion, heroin crosses the blood-brain barrier. While in the brain, heroin converts to morphine and binds rapidly to opioid receptors. Users tend to report feeling a “rush” or a surge of pleasurable sensations. The feeling varies in intensity depending on how much of the drug was ingested and how rapidly the drug enters the brain and binds to the natural opioid receptors. The rush is usually accompanied by a warm flushing of the skin, dry mouth, and a heavy feeling in the user’s arms and legs. The user may also experience nausea, vomiting, and severe itching. Following the initial effects, the user will be drowsy for several hours with clouded mental function and slow cardiac function. Breathing is slowed, possibly to the point of death.

Repeated heroin use produces tolerance and physical dependence. Physical dependence causes the user’s body to adapt to the presence of the drug and withdrawal symptoms occur if use is reduced. Withdrawal symptoms begin within a few hours of last use and can include restlessness, muscle and bone pain, insomnia, diarrhea, vomiting, cold flashes with goose bumps, and involuntary leg movements. These symptoms peak between 24 and 48 hours after the last dose and subside after about a week, but may persist for up to a month. Heroin withdrawal is not usually fatal in an otherwise healthy adult, but can cause death to the fetus of a pregnant addict.

Prevalence Estimates
Although it is difficult to obtain an exact number of heroin users because of the transient nature of this population, several surveys have attempted to provide estimates. A rough estimate of the hardcore addict population in the United States places the number between 750,000 and 1,000,000 users.

The U.S. Department of Health and Human Services’ National Household Survey on Drug Abuse found that, in 2001, approximately 3.1 million Americans (1.4%) 12 years old and older had used heroin at least once in their lifetime. Persons ages 18 to 25 reported the highest percentage of lifetime heroin use with 1.6% in 2001 (see table 1).
According to the Community Epidemiology Work Group (CEWG), as of December 2002, heroin use indicators increased in four CEWG sites, decreased in one, were stable in seven, and were mixed in nine. Despite mixed patterns, heroin abuse indicators remain high in many CEWG areas. The sites where heroin indicators increased were Atlanta, Boston, Detroit, and Washington, D.C.

The Arrestee Drug Abuse Monitoring Program (ADAM) collects data on male arrestees testing positive for opiates at the time of arrest in 36 ADAM sites. During 2002, the percentage of adult male arrestees testing positive ranged from 0% in Woodbury, Iowa, to 26% in Chicago. Of the 28 ADAM sites collecting female arrestee data, the percentage of female arrestees testing positive for opiates at the time of arrest ranged from 0% in Woodbury, Iowa, to 18% in Portland, Oregon, and Washington, D.C. The ADAM program also collects data on reported drug use by arrestees in the past 30 days. For adult male arrestees during 2002, the average number of days that arrestees reported using heroin ranged from 0.7 days in Omaha to 21.5 days in Woodbury, Iowa. The average number of days reported by adult female arrestees ranged from zero days in Woodbury, Iowa, to 16 days in New York City.

### Availability

According to What America’s Users Spend on Illegal Drugs, heroin expenditures were an estimated $22 billion in 1990, and decreased to $10 billion in 2000. During 1990, Americans consumed 13.6 metric tons of heroin. Current estimates of heroin consumption remain relatively unchanged and show that 13.3 metric tons of heroin were consumed in 2000.

### Production and Trafficking

According to the National Drug Intelligence Center’s National Drug Threat Assessment 2003, heroin is cultivated from opium poppies in four source areas: South America, Mexico, and Southeast and Southwest Asia. Opium cultivation decreased from 5,082 metric tons during 2000 to 1,255 metric tons during 2001. This led to a reduction in heroin production from 482.2 metric tons during 2000 to 109.3 metric tons during 2001.

South American heroin is the most prevalent type of heroin in the United States. Colombian criminal groups, operating independently of major cocaine cartels, dominate the smuggling of South American heroin into the United States. Others involved in the transportation of South American heroin include Bahamian, Dominican, Guatemalan, Haitian, Jamaican, and Puerto Rican criminal groups.

### Regional Observations

According to Pulse Check: Trends in Drug Abuse, during the first half of 2002, heroin was perceived to be the drug associated with the most serious consequences (medical, legal, and societal) in 15 of the 20 Pulse Check sites across the United States. Heroin users are predominantly white males, over age 30, who live in central city areas. Most heroin sellers tend to be young adults between the ages of 18 and 30.

The different forms of heroin vary in availability across the Pulse Check sites in the United States. High-purity, South American (Colombian) white heroin is widely available across the Northeast, South, and Midwest. Mexican black tar, a less pure form of heroin, is more commonly found in the West. Southeast Asian heroin is considered widely available in New Orleans, Portland, Maine, and Washington, D.C., and Southwest Asian heroin (the least common form of heroin) is only considered widely available in Chicago and New Orleans.
Heroin is smuggled into the United States through the air, sea, land, and mail services. Once in the United States, heroin is distributed at the wholesale level, most frequently by Columbian, Dominican, Mexican, Nigerian, and Chinese criminal groups described as small, independent, and loosely structured. Retail- or street-level distribution of heroin is handled by a larger array of criminal groups. Gangs also are involved in the wholesale and retail distribution of heroin. Many members of national gangs, such as the Gangster Disciples, Vice Lords, and Latin Kings, keep links to heroin traffickers to guarantee a constant supply of the drug.

**Price and Purity**

During 2001, wholesale prices for South American heroin ranged from $50,000 to $250,000 per kilogram. Southeast and Southwest Asian heroin wholesale prices ranged from $35,000 to $120,000 per kilogram, and Mexican heroin ranged from $15,000 to $65,000 per kilogram. Street-level heroin usually sells for $10 per dose, although prices vary throughout the country.

According to the Drug Enforcement Administration (DEA), during 2000, retail purity levels of heroin ranged from 48.1% for South American heroin, to 34.6% for Southwest Asian heroin, to 20.8% for Mexican heroin. The national average purity for retail heroin from all sources was 36.8%.

**Enforcement**

**Arrests**

The Federal Bureau of Investigation estimates that, during 2001, heroin or cocaine and their derivatives accounted for 9.7% of drug arrests for sale and manufacturing and 23.1% of drug arrests for possession (estimates of heroin arrests alone are not available).

From October 1, 1999, to September 30, 2000, there were 3,557 arrests by DEA for opiates out of 38,411 total drug arrests. These figures represent only DEA’s portion of heroin arrests nationwide during 2000.

**Seizures**

According to the Federal-wide Drug Seizures System (FDSS), 1,587 kilograms of heroin were seized from January to September 2002 by U.S. Federal law enforcement authorities, a decline from 2,493 kilograms in 2001. FDSS comprises information about drug seizures made within the jurisdiction of the United States by DEA, the Federal Bureau of Investigation, the U.S. Customs Service, and the U.S. Border Patrol, as well as maritime seizures made by the U.S. Coast Guard. FDSS eliminates duplicate reporting of seizures involving more than one Federal agency.

**Adjudication**

During FY 2001, 1,757 Federal drug offenders were convicted of committing an offense involving heroin. Of those convicted of a Federal drug offense for heroin, 61.3% were Hispanic, 23% were black, 14% were white, and 1.7% were of another race.

**Corrections**

In FY 2001, the average length of sentence received by Federal heroin offenders was 63.4 months, compared to 115 months for crack cocaine offenders, 88.5 months for methamphetamine offenders, 77 months for powder cocaine offenders, 38 months for marijuana offenders, and 41.1 months for other drug offenders. According to a 1997 Bureau of Justice Statistics survey of Federal and State prisoners, approximately 10% of Federal and 12.8% of State drug offenders were incarcerated for an offense involving heroin or other opiates.

**Consequences of Use**

Chronic heroin use can lead to medical consequences such as scarred and/or collapsed veins, bacterial infections of the blood vessels and heart valves, abscesses and other soft-tissue infections, and liver or kidney disease. Poor health conditions and depressed respiration from heroin use can cause lung complications, including various types of pneumonia and tuberculosis.

Addiction is the most detrimental long-term effect of heroin use because it is a chronic, relapsing disease characterized by compulsive drug seeking and use, as well as neurochemical and molecular changes in the brain.

Long-term effects of heroin use also can include arthritis and other rheumatologic problems and infection of bloodborne pathogens such as HIV/AIDS and hepatitis B and C (which are contracted by sharing and reusing syringes and other injection paraphernalia). It is estimated that injection drug use has been a factor in one-third of all HIV and more than half of all hepatitis C cases in the United States.

Heroin use by a pregnant woman can result in a miscarriage or premature delivery. Heroin exposure in utero can increase a newborns’ risk of SIDS (sudden infant death syndrome).

Street heroin is often cut with substances such as sugar, starch, powdered milk, strychnine and other poisons, and other drugs. These additives may not dissolve when injected in a user’s system and can clog the blood vessels that lead to the lungs, liver, kidneys, or brain, infecting or killing patches of cells in vital organs. In addition, many users do not know their
heroin’s actual strength or its true contents and are at an elevated risk of overdose or death.

According to Drug Abuse Warning Network (DAWN) emergency department (ED) data, there were 93,064 reported mentions of heroin in 2001, an increase of 47.4% since 1994 (see table 2). Preliminary ED data for the first half of 2002 revealed that there were 42,571 mentions of heroin. A drug mention refers to a substance that was recorded (mentioned) during a visit to the ED. Heroin represented 15% of 638,484 total ED episodes in 2001. Approximately 56% of heroin ED mentions were for people ages 35 and older. Almost half (43%) of heroin ED mentions were for whites.

According to DAWN’s 2001 mortality data, of the 42 metropolitan areas studied, 19 areas saw a decrease in the number of heroin/morphine mentions, while 9 areas reported an increase in heroin/morphine mentions.

Table 2. Number of emergency department mentions of heroin, 1994–2001

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<tr>
<td></td>
<td>63,158</td>
<td>69,556</td>
<td>72,980</td>
<td>70,712</td>
<td>75,688</td>
<td>82,192</td>
<td>94,804</td>
<td>93,064</td>
</tr>
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</table>

Source: Drug Abuse Warning Network.

Treatment

According to Treatment Episode Data Set, heroin accounted for 15.2% of all treatment admissions in 2000 (243,523 admissions). Males accounted for 66.9% of heroin treatment admissions. Treatment admissions by race/ethnicity ranged from 47.3% white, to 24.7% Hispanic, to 24.2% black.

Eighty-one percent of heroin treatment admissions reported daily use of the drug. Almost 80% of heroin admissions had been in treatment before the current episode and 25% had been in treatment five or more times. Methadone treatment was planned to be used for 40% of primary heroin admissions.

Methadone has been used to treat opioid addiction for more than 30 years. This synthetic narcotic suppresses opioid withdrawal symptoms for 24 to 36 hours. Although the patient remains physically dependent on the opioid, the craving from heroin use is reduced and the highs and lows are blocked. This permits the patient to be free from the uncontrolled, compulsive, and disruptive behavior associated with heroin addiction.

Other pharmaceutical approaches to heroin treatment include detoxification, naloxone and naltrexone, LAAM (levo-alpha-acetyl-methadol), and buprenorphine.

Detoxification relieves the withdrawal symptoms experienced when substance use is discontinued. Detoxification is not a treatment for addiction, although it can be used to aid in the transition to long-term treatment.

Naloxone and naltrexone are medications that inhibit the effects of opiates such as morphine and heroin. LAAM, a synthetic opiate similar to methadone, is used to treat heroin addiction. This treatment’s long duration of action (up to 72 hours) allows patients to administer their dosage three times a week instead of daily. Buprenorphine, another opiate treatment, causes weaker opiate effects and is not as likely to cause overdose. Buprenorphine creates a lower level of physical dependence and makes it easier for patients to discontinue medication.

Scheduling and Legislation

Heroin was first controlled in the United States under the Harrison Narcotic Act of 1914. Currently, heroin falls under Schedule I of the Controlled Substances Act. A Schedule I Controlled Substance has a high potential for abuse, is not currently accepted for medical use in treatment in the United States, and lacks accepted safety for use under medical supervision.

Street Terms

<table>
<thead>
<tr>
<th>Street terms for heroin</th>
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<tbody>
<tr>
<td>Al Capone</td>
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<tr>
<td>Antifreeze</td>
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<tr>
<td>Ballot</td>
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<tr>
<td>Bart Simpson</td>
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<tr>
<td>Big bag</td>
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<td>Big H</td>
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<tr>
<td>Brown sugar</td>
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<td>Capital H</td>
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<td>Cheese</td>
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<tr>
<td>Chip</td>
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<tr>
<td>Crank</td>
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<tr>
<td>Dead on arrival</td>
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<tr>
<td>Dirt</td>
</tr>
<tr>
<td>Dr. Feelgood</td>
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<tr>
<td>Ferry dust</td>
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<tr>
<td>George smack</td>
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<tr>
<td>Golden girl</td>
</tr>
<tr>
<td>Good horse</td>
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<tr>
<td>Hard candy</td>
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<tr>
<td>Hazel</td>
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<tr>
<td>Hero</td>
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<tr>
<td>Hombre</td>
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<tr>
<td>Horse</td>
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<td>HRN</td>
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This fact sheet was prepared by Jennifer Lloyd of the ONDCP Drug Policy Information Clearinghouse. The data presented are as accurate as the sources from which they were drawn. Responsibility for data selection and presentation rests with the Clearinghouse staff. The Clearinghouse is funded by the White House Office of National Drug Control Policy to support drug control policy research. The Clearinghouse is a component of the National Criminal Justice Reference Service. For further information about the contents or sources used for the production of this fact sheet or about other drug policy issues, call:

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www.whitehousedrugpolicy.gov
Cocaine

Background
Cocaine, the most potent stimulant of natural origin, is extracted from the leaves of the coca plant (Erythroxylon). It was originally used in South America in the mid-19th century by natives of the region to relieve fatigue. Pure cocaine (cocaine hydrochloride) was first used as a local anesthetic for surgeries in the 1880s and was the main stimulant drug used in tonics and elixirs for treatment of various illnesses in the early 1900s. Crack, the freebase form of cocaine, derives its name from the crackling sound made when heating the sodium bicarbonate (baking soda) or ammonia used during production. Crack became popular in the mid-1980s because of its immediate high and its inexpensive production cost.

Cocaine most often appears as a white crystalline powder or an off-white chunky material. Powder cocaine is commonly diluted with other substances such as lactose, inositol, mannitol, and local anesthetics such as lidocaine to increase the volume of the substance and the profits of the drug dealer. Powder cocaine is usually snorted or dissolved in water and injected. Crack, or “rock,” is most often smoked.

Effects
The effects of cocaine normally occur immediately after ingestion and can last from a few minutes to a few hours. The duration of the drug’s effects depends on how it is ingested. Snorting cocaine produces a slow onset of effects that can last from 15 to 30 minutes, while the effects of smoking cocaine last from 5 to 10 minutes and produce a more intense high. Cocaine produces euphoric effects by building up dopamine in the brain, causing the continuous stimulation of neurons. Users often feel euphoric, energetic, talkative, and mentally alert after taking small amounts of cocaine. Cocaine use can also temporarily lessen a user’s need for food or sleep. Short-term physiological effects include constricted blood vessels, dilated pupils, and increased temperature, heart rate, and blood pressure. Ingesting large amounts of cocaine can intensify the user’s high, but can also lead to bizarre, erratic, and violent behavior. Users who ingest large amounts may experience tremors, vertigo, muscle twitches, and paranoia. Other possible effects of cocaine use include irritability, anxiety, and restlessness.

Cocaine is a powerfully addictive drug. A tolerance is often developed when a user, seeking to achieve the initial pleasure received from first use, increases the dosage to intensify and prolong the euphoric effects.

Prevalence Estimates
During 2000, there were an estimated 2,707,000 chronic cocaine users and 3,035,000 occasional cocaine users in the United States.

According to What America’s Users Spend on Illegal Drugs, users spent $35.3 billion on cocaine in 2000, a decrease from the $69.9 billion spent in 1990. Americans consumed 259 metric tons of cocaine in 2000, a decrease from the 447 metric tons consumed in 1990.

The U.S. Department of Health and Human Services’ Results From the 2002 National Survey on Drug Use and Health: National Findings found that more than 33 million people age 12 and older (14.4%) in 2002 reported that they had used cocaine at least once in their lifetime (see table 1). More than 8 million Americans
(3.6%) age 12 and older had used crack cocaine at least once in their lifetime (see table 2).

According to the University of Michigan’s Monitoring the Future Study, in 2002, 3.6% of 8th graders, 6.1% of 10th graders, and 7.8% of 12th graders reported using cocaine at least once during their lifetime (see table 3). Of the students surveyed, 2.5% of 8th graders, 3.6% of 10th graders, and 3.8% of 12th graders reported using crack within their lifetime (see table 4).

The study also showed that, in 2002, 8.2% of college students and 13.5% of young adults (ages 19 to 28) reported using cocaine during their lifetime. Almost 2% of college students and 4.3% of young adults reported using crack cocaine during their lifetime.

In another study, among the high school students surveyed in 2001 as part of the Youth Risk Behavior Surveillance System, 9.4% reported using cocaine in their lifetime and 4.2% reported using cocaine in the 30 days before the survey. Hispanic students reported the highest percentage of lifetime cocaine use (14.9%), followed by white students (9.9%), and black students (2.1%). Male students (10.3%) were more likely than female students (8.4%) to report lifetime cocaine use.

**Regional Observations**

According to *Pulse Check: Trends in Drug Abuse*, during the first half of 2002 powder and crack cocaine were widely to somewhat available in the 20 Pulse Check sites across the United States. Among powder cocaine users, the predominant group consisted of white males who were older than 30 and lived in the central city. Crack cocaine users tended to be young adults between the ages of 18 and 30 who lived in the central city and were usually from low socioeconomic backgrounds. Blacks were twice as likely as whites to be reported as the predominant crack cocaine user group by Pulse Check sites.

In December 2002, the 21 Community Epidemiology Work Group (CEWG) sites reported that cocaine/crack indicators showed mixed patterns of stabilization or decline in 10 sites, while 8 sites remained stable, 1 reported an increase, and 2 reported decreases.

The Arrestee Drug Abuse Monitoring (ADAM) Program collects data on male arrestees testing positive for cocaine at the time of arrest in 36 ADAM sites. According to preliminary 2002 data, the percentage of adult male arrestees testing positive ranged from 9.1% in Honolulu to 49.4% in Atlanta. Of the 23 ADAM sites collecting female-arrestee data, the percentage of female arrestees testing positive for cocaine at the time of arrest ranged from 7.4% in Honolulu to 55.2% in Indianapolis.

**Availability**

**Production and Trafficking**

According to the National Drug Intelligence Center’s *National Drug Threat Assessment 2003*, cocaine is the primary drug threat in the United States because of its high demand and availability, its expanding distribution to new markets, the high rate of overdose associated with it, and its relation to violence. Cocaine consumed in the United States originates from coca plants grown in South America. In 2002, there was the potential for 550 metric tons of cocaine production. Some 352
metric tons of export-quality cocaine was available in U.S. markets.

Approximately 75% of the coca cultivated for processing into cocaine is currently grown in Colombia, and Colombian drug trafficking organizations (DTOs) are responsible for most of the cocaine production, transportation, and distribution. Bahamian, Dominican, Haitian, Jamaican, and Puerto Rican criminal groups transport cocaine, usually under the supervision of Colombian DTOs. Mexican DTOs are involved in wholesale cocaine distribution in the United States. Gangs control retail distribution of powder and crack cocaine in urban areas, while local independent dealers are the primary distributors in suburban and rural areas.

Of the cocaine that enters the United States, 72% passes through the Mexico/Central America corridor. Another 27% moves through the Caribbean and 1% comes directly from South America.

Cocaine is readily available in most major cities in the United States. Powder cocaine is typically shipped to one of six main transportation hubs—Central Arizona (Phoenix/Tulsa), El Paso, Houston, Los Angeles, Miami, and Puerto Rico. New York City also is becoming a main transportation hub. Powder cocaine is then distributed through one of the primary distribution centers—Atlanta, Chicago, Dallas, Detroit, New York City, and Philadelphia.

Crack cocaine is not usually transported in large quantities or over long distances due to the more severe mandatory sentencing for possession and distribution of the drug. Retail distributors often convert powder cocaine into crack closer to the marketing areas.

**Price and Purity**

In 2001, the wholesale price for powder cocaine ranged from $10,000 to $36,000 per kilogram, $400 to $1,800 per ounce, and $20 to $200 per gram. Prices for crack cocaine ranged from $3 to $50 per rock, with prices usually ranging from $10 to $20. In 2001, the average nationwide purity of powder cocaine was 69% for kilogram quantities and 56% for gram quantities.

**Enforcement**

**Arrests**

The Federal Bureau of Investigation estimates that, during 2001, cocaine and heroin and their derivatives accounted for 9.7% of drug abuse violation arrests for sale and manufacturing and 23.1% for possession arrests (estimates of cocaine arrests alone are not available).

From October 1, 2000, to September 30, 2001, there were 12,457 Federal drug arrests for cocaine, representing 37% of all Federal drug arrests. Of those arrested by Federal agents for cocaine, 40% were white and 59% were black.

**Seizures**

According to the Federal-wide Drug Seizure System (FDSS), U.S. Federal law enforcement authorities seized 105,885 kilograms of cocaine in 2001 and 60,874 kilograms from January to September 2002. FDSS consolidates information about drug seizures made within the jurisdiction of the United States by DEA, the Federal Bureau of Investigation, and U.S. Customs and Border Protection, as well as maritime seizures made by the U.S. Coast Guard. FDSS eliminates duplicate reporting of seizures involving more than one Federal agency.

According to U.S. Customs and Border Protection, more than 171,000 pounds of cocaine were seized nationally during fiscal year (FY) 2002. Large amounts of cocaine were seized at the Southwest border and in South Florida—a total of more than 30,000 pounds at each location.

**Adjudication**

During FY 2001, 5,356 Federal drug offenders were convicted of committing an offense involving powder cocaine and 4,999 were convicted of committing a crack cocaine offense. Of those convicted of a Federal drug offense for powder cocaine, 50.2% were Hispanic, 30.5% were black, 18.1% were white, and 1.2% were of another race. Of those convicted of a Federal drug offense involving crack cocaine, 82.8% were black, 9.3% were Hispanic, 7% were white, and 0.9% fell into another race category.

**Corrections**

Federal drug offenders received longer sentences for crack cocaine than for any other drug. In FY 2001, the average length of sentence received by Federal crack cocaine offenders was 115 months, compared with 88.5 months for methamphetamine offenders, 77 months for powder cocaine offenders, 63.4 months for heroin offenders, 38 months for marijuana offenders, and 41.1 months for other drug offenders. According to a 1997 Bureau of Justice Statistics survey of Federal and State prisoners, approximately 65.5% of Federal and 72.1% of State drug offenders were incarcerated for a cocaine offense.

**Consequences of Use**

Cocaine use can lead to medical complications such as cardiovascular effects (disturbances in heart rhythm, heart attacks), respiratory failure, neurological effects (strokes, seizure, and headaches), and gastrointestinal complications such as abdominal pain and nausea. Cocaine use has been linked to heart disease, has been found to trigger ventricular fibrillation (chaotic
heart rhythms), can accelerate a user’s heart beat and breathing, and can increase a user’s blood pressure and body temperature. Additional physical symptoms of cocaine use include blurred vision, fever, muscle spasms, convulsions, and coma. In rare instances, sudden death can occur on the first use of cocaine or unexpectedly thereafter. Cocaine-related deaths are often a result of cardiac arrest or seizures followed by respiratory arrest.

Other medical complications are related to the method of ingestion. For example, users who snort cocaine may lose their sense of smell, have nose bleeds, have problems swallowing, and have an overall irritation of their nasal septum that leads to a chronic runny nose.

Combined cocaine and alcohol use converts in the body to cocaethylene and causes a longer duration of effects in the brain that is more toxic than each drug used alone. This mixture results in more drug-related deaths than any other combination of drugs.

Although the effects of prenatal cocaine exposure are not completely understood, scientific studies have shown that such afflicted babies are often born prematurely, have low birth weights and smaller head circumferences, and are shorter in length. Originally thought to suffer irreversible neurological damage, these “crack babies” now appear to recover from the drug exposure. This is not to underestimate the many subtle but significant effects such babies later experience because of their exposure to cocaine, including impairment in behaviors that are crucial to concentrating in school.

According to emergency department (ED) data collected by the Drug Abuse Warning Network (DAWN), there were 135,711 reported mentions of cocaine in 1995 (see table 5). A drug mention refers to a substance that was recorded (mentioned) during a visit to the ED. This number increased to 199,198 in 2002.

According to DAWN’s 2001 mortality data, of the 42 metropolitan areas studied, 14 reported a decrease in cocaine mentions and 14 saw an overall increase since 2000. The remaining metropolitan areas had stable cocaine mentions.

### Treatment

Medications to treat cocaine addiction are not available, although researchers are working to identify and test new options. The most promising experimental medication is selegiline, which still needs an appropriate method of administration. Disulfiram, a medication that has been used to treat alcoholism, has been shown to be effective in treating cocaine abuse in clinical trials. Antidepressants are usually prescribed to deal with mood changes that come with cocaine withdrawal.

Medical treatments are also being developed to deal with cocaine overdose.

Treatments such as cognitive-behavioral coping skills have been shown to be effective in addressing cocaine addiction but are a short-term approach that focuses on the learning processes. Behavioral treatment attempts to help patients recognize, avoid, and cope with situations in which they are most likely to use cocaine.

According to the Treatment Episode Data Set, cocaine was the third most common illicit drug responsible for treatment admissions in 2000, accounting for 13.6% of all drug treatment admissions. There were 158,524 total admissions for smoked cocaine, accounting for 9.9% of all drug treatment admissions (73% of all cocaine admissions), and 59,787 total admissions for non-smoked cocaine, accounting for 3.7% of all drug treatment admissions.

Those admitted for smoking crack cocaine were predominantly black (59%), followed by whites (32%) and Hispanics (6.3%). Approximately 42% of those admitted for smoking crack were female. Of all individuals admitted for smoking crack, most (59%) did not use the drug until age 21 or older and 41% reported daily use.

Those admitted for nonsmoked cocaine were predominantly white males (29%), followed by black males (23%), white females (18%), and black females (12%). More than 40% of those admitted for nonsmoked cocaine reported first using the drug by the age of 18. The more common form of nonsmoked cocaine ingestion was by inhalation (70%), followed by injection (15%).

### Scheduling and Legislation

Cocaine was first controlled in the United States under the Harrison Narcotic Act of 1914. Currently, cocaine falls under Schedule II of the Controlled Substances Act. A Schedule II Controlled Substance has a high potential for abuse, is currently accepted for medical use in treatment in the United States, and may lead to severe psychological or physical dependence. Currently, cocaine can be administered by a doctor for legitimate medical uses, such as for a local anesthetic for some eye, ear, and throat surgeries.
### Street Terms

<table>
<thead>
<tr>
<th>Street terms for cocaine</th>
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<tbody>
<tr>
<td>All American drug</td>
</tr>
<tr>
<td>Aspirin (powder cocaine)</td>
</tr>
<tr>
<td>Barbs</td>
</tr>
<tr>
<td>Basa (crack cocaine)</td>
</tr>
<tr>
<td>Base (crack cocaine)</td>
</tr>
<tr>
<td>Bernie</td>
</tr>
<tr>
<td>Big C</td>
</tr>
<tr>
<td>Black rock (crack cocaine)</td>
</tr>
<tr>
<td>CDs (crack cocaine)</td>
</tr>
<tr>
<td>Candy sugar (powder cocaine)</td>
</tr>
<tr>
<td>Coca</td>
</tr>
<tr>
<td>Crack</td>
</tr>
<tr>
<td>Double bubble</td>
</tr>
<tr>
<td>Electric Kool-Aid (crack cocaine)</td>
</tr>
<tr>
<td>Flave (powder cocaine)</td>
</tr>
<tr>
<td>Florida snow</td>
</tr>
<tr>
<td>Foo foo</td>
</tr>
<tr>
<td>Gin</td>
</tr>
<tr>
<td>Gold dust</td>
</tr>
<tr>
<td>Happy dust</td>
</tr>
</tbody>
</table>

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Methamphetamine

Background
Methamphetamine, a derivative of amphetamine, is a powerful stimulant that affects the central nervous system. Amphetamines were originally intended for use in nasal decongestants and bronchial inhalers and have limited medical applications, which include the treatment of narcolepsy, weight control, and attention deficit disorder. Methamphetamine can be smoked, snorted, orally ingested, and injected. It is accessible in many different forms and may be identified by color, which ranges from white to yellow to darker colors such as red and brown. Methamphetamine comes in a powder form that resembles granulated crystals and in a rock form known as “ice,” which is the smokeable version of methamphetamine that came into use during the 1980s.

Effects
Methamphetamine use increases energy and alertness and decreases appetite. An intense rush is felt, almost instantaneously, when a user smokes or injects methamphetamine. Snorting methamphetamine affects the user in approximately 5 minutes, whereas oral ingestion takes about 20 minutes for the user to feel the effects. The intense rush and high felt from methamphetamine results from the release of high levels of dopamine into the section of the brain that controls the feeling of pleasure. The effects of methamphetamine can last up to 12 hours. Side effects include convulsions, dangerously high body temperature, stroke, cardiac arrhythmia, stomach cramps, and shaking.

Chronic use of methamphetamine can result in a tolerance for the drug. Consequently, users may try to intensify the desired effects by taking higher doses of the drug, taking it more frequently, or changing their method of ingestion. Some abusers, while refraining from eating and sleeping, will binge, also known as “run,” on methamphetamine. During these binges, users will inject as much as a gram of methamphetamine every 2 to 3 hours over several days until they run out of the drug or are too dazed to continue use.

Chronic methamphetamine abuse can lead to psychotic behavior including intense paranoia, visual and auditory hallucinations, and out-of-control rages that can result in violent episodes. Chronic users at times develop sores on their bodies from scratching at “crank bugs,” which describes the common delusion that bugs are crawling under the skin. Long-term use of methamphetamine may result in anxiety, insomnia, and addiction.

After methamphetamine use is stopped, several withdrawal symptoms can occur, including depression, anxiety, fatigue, paranoia, aggression, and an intense craving for the drug. Psychotic symptoms can sometimes persist for months or years after use has ceased.

Prevalence Estimates
According to the U.S. Department of Health and Human Services’ Results From the 2002 National Survey on Drug Use and Health: National Findings, more than 12 million people age 12 and older (5.3%) reported that they had used methamphetamine every 2 to 3 hours over several days until they run out of the drug or are too dazed to continue use.

Chronic methamphetamine abuse can lead to psychotic behavior including intense paranoia, visual and auditory hallucinations, and out-of-control rages that can result in violent episodes. Chronic users at times develop sores on their bodies from scratching at “crank bugs,” which describes the common delusion that bugs are crawling under the skin. Long-term use of methamphetamine may result in anxiety, insomnia, and addiction.

After methamphetamine use is stopped, several withdrawal symptoms can occur, including depression, anxiety, fatigue, paranoia, aggression, and an intense craving for the drug. Psychotic symptoms can sometimes persist for months or years after use has ceased.
2.2% among 8th graders, to 3.9% among 10th graders, to 3.6% among 12th graders.

The study also collected data on methamphetamine use by college students and young adults ages 19 to 28. During 1999, 3.3% of college students and 2.8% of young adults tried methamphetamine in the past year (see table 3). In 2002, annual use of methamphetamine declined to 1.2% for college students and 2.5% for young adults.

According to the Centers for Disease Control and Prevention’s *Youth Risk Behavior Surveillance—United States, 2001* study, 9.8% of high school students had used methamphetamine within their lifetime. Overall, white (11.4%) and Hispanic (9.1%) students were more likely than black students (2.1%) to report lifetime methamphetamine use.

### Regional Observations

The widespread availability of methamphetamine is illustrated by increasing numbers of methamphetamine seizures, arrests, indictments, and sentences. According to the National Drug Intelligence Center (NDIC), methamphetamine is widely available throughout the Pacific, Southwest, and West Central regions and is increasingly available in the Great Lakes and Southeast.

Similarly, the National Institute on Drug Abuse’s Community Epidemiology Work Group (CEWG) reports that, in 2002, methamphetamine indicators remained highest in West Coast areas and parts of the Southwest, as well as Hawaii. Methamphetamine abuse is spreading in areas such as Atlanta, Chicago, Detroit, St. Louis, and Texas. Relatively low indicators were found in East Coast and Mid-Atlantic CEWG areas, although abuse is increasing.

According to the Arrestee Drug Abuse Monitoring Program sites, during 2002, methamphetamine use by adult arrestees was concentrated in the Western region of the United States. Out of 36 sites, the highest percentages of adult male arrestees testing positive for methamphetamine were located in Honolulu (44.8%), Sacramento (33.5%), San Diego (31.7%), and Phoenix (31.2%). Out of 23 sites, the highest percentages of adult female arrestees testing positive for methamphetamine were located in Honolulu (50%), San Jose (42.8%), Phoenix (41.7%), Salt Lake City (37.7%), and San Diego (36.8%).

According to *Pulse Check: Trends in Drug Abuse*, law enforcement agencies and epidemiologic/ethnographic sources surveyed in 2002 reported that methamphetamine availability increased in the following sites: Boston, Billings, Chicago, Columbia (South Carolina), Denver, Detroit, Honolulu, Los Angeles, Memphis, Miami, New York, and Sioux Falls (South Dakota). The remaining 12 Pulse Check sites reported stable methamphetamine availability. There were no reported decreases in availability.

### Availability

Yaba, the Thai name for a tablet form of methamphetamine mixed with caffeine, is appearing in Asian communities in California. These tablets are popular in Southeast and East Asia where they are produced. The tablets are small enough to fit in the end of a drinking straw and are usually reddish-orange or green with various logos. There are indications that methamphetamine tablets are becoming more popular in the rave scene because their appearance is similar to club drugs such as Ecstasy.

### Production and Trafficking

Methamphetamine trafficking and abuse have changed in the United States during the past 10 years. Mexican drug trafficking organizations have become the dominant manufacturing and distribution group in cities in the Midwest and the West. Methamphetamine production

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**Table 1. Percentage of lifetime methamphetamine use among U.S. population by age group, 2002**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Lifetime</th>
<th>Past Year</th>
<th>Past Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>12–17</td>
<td>1.5%</td>
<td>0.9%</td>
<td>0.3%</td>
</tr>
<tr>
<td>18–25</td>
<td>5.7%</td>
<td>1.7%</td>
<td>0.5%</td>
</tr>
<tr>
<td>26 and older</td>
<td>5.7%</td>
<td>0.4%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Total population</td>
<td>5.3%</td>
<td>0.7%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source: National Survey on Drug Use and Health.

**Table 2. Percentage of methamphetamine use by secondary school students, by grade, 1999–2002**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Lifetime 1999</th>
<th>Lifetime 2000</th>
<th>Lifetime 2001</th>
<th>Lifetime 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th graders</td>
<td>4.5%</td>
<td>4.2%</td>
<td>4.4%</td>
<td>3.5%</td>
</tr>
<tr>
<td>10th graders</td>
<td>7.3%</td>
<td>6.9%</td>
<td>6.4%</td>
<td>6.1%</td>
</tr>
<tr>
<td>12th graders</td>
<td>8.2%</td>
<td>7.9%</td>
<td>6.9%</td>
<td>6.7%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>Annual 1999</th>
<th>Annual 2000</th>
<th>Annual 2001</th>
<th>Annual 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th graders</td>
<td>3.2%</td>
<td>2.5%</td>
<td>2.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td>10th graders</td>
<td>4.6%</td>
<td>4.0%</td>
<td>3.7%</td>
<td>3.9%</td>
</tr>
<tr>
<td>12th graders</td>
<td>4.7%</td>
<td>4.3%</td>
<td>3.9%</td>
<td>3.6%</td>
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</tbody>
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</thead>
<tbody>
<tr>
<td>8th graders</td>
<td>1.1%</td>
<td>0.8%</td>
<td>1.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>10th graders</td>
<td>1.8%</td>
<td>2.0%</td>
<td>1.5%</td>
<td>1.8%</td>
</tr>
<tr>
<td>12th graders</td>
<td>1.7%</td>
<td>1.9%</td>
<td>1.5%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Source: Monitoring the Future Study.
Table 3. Percentage of methamphetamine use by college students and young adults, 1999–2002

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Lifetime</th>
<th>Annual</th>
<th>Past 30 Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>College students</td>
<td>7.1%</td>
<td>5.1%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Young adults</td>
<td>8.8%</td>
<td>9.3%</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

Source: Monitoring the Future Study.

and abuse were previously controlled by independent laboratory operators, such as outlaw motorcycle gangs, which continue to operate but to a smaller extent. The Mexican criminal organizations are able to manufacture in excess of 10 pounds of methamphetamine in a 24-hour period, producing high-purity, low-cost methamphetamine.

Methamphetamine precursor chemicals usually include pseudoephedrine and ephedrine drug products. Mexican organizations sometimes use methylsulfonylmethane (MSM) to “cut” the methamphetamine in the production cycle. MSM is legitimately used as a dietary supplement for horses and humans. The supplement is readily available at feed/livestock stores and in health/nutrition stores. By adding MSM, the volume of methamphetamine produced is increased, which in turn increases the profits for the dealer.

**Price and Purity**

According to the Drug Enforcement Administration (DEA), during 2001, the price of methamphetamine ranged nationally from $3,500 to $23,000 per pound, $350 to $2,200 per ounce, and $20 to $300 per gram. The average purity of methamphetamine decreased from 71.9% in 1994 to 40.1% in 2001. International controls have reduced the availability of chemicals used to produce high-purity methamphetamine and may have contributed to the decrease in purity levels.

**Enforcement**

**Arrests**

From October 1, 2000, to September 30, 2001, there were 3,932 Federal drug arrests for amphetamine/methamphetamine, representing 12% of all Federal drug arrests.

**Seizures**

According to the Federal-wide Drug Seizure System (FDSS), 2,807 kilograms of methamphetamine were seized in 2001 by U.S. Federal law enforcement authorities, down from 3,373 kilograms in 2000. FDSS consolidates information about drug seizures made within the jurisdiction of the United States by DEA, the Federal Bureau of Investigation, and U.S. Customs and Border Protection, as well as maritime seizures made by the U.S. Coast Guard. FDSS eliminates duplicate reporting of seizures involving more than one Federal agency.

In addition, Federal authorities seized 301,697 Southeast Asian methamphetamine tablets in U.S. Postal Service facilities in Oakland, Los Angeles, and Honolulu in 2000, representing a 656% increase from the 1999 seizures of 39,917 tablets.

According to the El Paso Intelligence Center’s National Clandestine Laboratory Seizure System, 8,290 methamphetamine labs were seized in 2001. In 2001, there were 303 “superlabs” with the capacity to produce 10 or more pounds of methamphetamine in one production cycle seized in the United States.

**Adjudication**

During FY 2001, 3,404 Federal drug offenders were convicted of committing an offense involving methamphetamine. Of those convicted of a Federal drug offense for methamphetamine, 59% were white, 35.2% were Hispanic, 4.2% were of another race, and 1.6% were black.

**Corrections**

In FY 2001, the average length of sentence received by Federal methamphetamine offenders was 88.5 months, compared with 115 months for crack cocaine offenders, 77 months for powder cocaine offenders, 63.4 months for heroin offenders, 38 months for marijuana offenders, and 41.1 months for other drug offenders.

**Consequences of Use**

Chronic methamphetamine abuse can result in inflammation of the heart lining and, for injecting drug users, damaged blood vessels and skin abscesses. Social and occupational connections progressively deteriorate for chronic methamphetamine users. Acute lead poisoning is another potential risk for methamphetamine abusers because of a common method of production that uses lead acetate as a reagent.

Medical consequences of methamphetamine use can include cardiovascular problems such as rapid heart rate, irregular heartbeat, increased blood pressure, and
stroke-producing damage to small blood vessels in the brain. Hyperthermia and convulsions can occur when a user overdoses and, if not treated immediately, can result in death. Research has shown that as much as 50% of the dopamine-producing cells in the brain can be damaged by prolonged exposure to relatively low levels of methamphetamine and that serotonin-containing nerve cells may be damaged even more extensively.

Methamphetamine abuse during pregnancy can cause prenatal complications such as increased rates of premature delivery and altered neonatal behavior patterns, such as abnormal reflexes and extreme irritability, and may be linked to congenital deformities. Methamphetamine abuse, particularly by those who inject the drug and share needles, can increase users’ risks of contracting HIV/AIDS and hepatitis B and C.

During 1995, hospitals participating in the Drug Abuse Warning Network (DAWN) reported 15,933 mentions of methamphetamine (see table 4). A drug mention refers to a substance that was recorded (mentioned) during a drug-related visit to the emergency department (ED). By 1999, the number of methamphetamine ED mentions decreased to 10,447. This number increased to 17,696 in 2002.

In 2001, DAWN’s mortality data for methamphetamine mentions to medical examiners remained concentrated in the Midwest and West regions of the United States. The metropolitan areas reporting the most methamphetamine mentions were Phoenix (122), San Diego (94), and Las Vegas (53). The East Coast area that reported the highest number of methamphetamine mentions was Long Island (49). Out of 42 metropolitan areas studied, 15 areas reported fewer than 5 methamphetamine mentions.

**Treatment**

According to the Treatment Episode Data Set, during 2000 methamphetamine treatment admissions accounted for 4.1% of total admissions or 66,052 admissions. Those admitted for methamphetamine/amphetamine were primarily white (79%) and male (53%). In 1994, there were half as many admissions for methamphetamine, 33,432 or about 2% of all admissions for treatment.

There are no pharmacological treatments for methamphetamine dependence. Antidepressant medications can be used to combat the depressive symptoms of withdrawal. The most effective treatment for methamphetamine addiction is cognitive behavioral interventions, which modify a patient’s thinking, expectancies, and behavior while increasing coping skills to deal with life stressors.

**Clandestine Laboratories**

Methamphetamine can be easily manufactured in clandestine laboratories (meth labs) using ingredients purchased in local stores. Over-the-counter cold medicines containing ephedrine or pseudoephedrine and other materials are “cooked” in meth labs to make methamphetamine.

The manufacture of methamphetamine has a severe impact on the environment. The production of one pound of methamphetamine releases poisonous gas into the atmosphere and creates 5 to 7 pounds of toxic waste. Many laboratory operators dump the toxic waste down household drains, in fields and yards, or on rural roads.

Due to the creation of toxic waste at methamphetamine production sites, many first response personnel incur injury when dealing with the hazardous substances. The most common symptoms suffered by first responders when they raid meth labs are respiratory and eye irritations, headaches, dizziness, nausea, and shortness of breath.

Meth labs can be portable and so are easily dismantled, stored, or moved. This portability helps methamphetamine manufacturers avoid law enforcement authorities. Meth labs have been found in many different types of locations, including apartments, hotel rooms, rented storage spaces, and trucks. Methamphetamine labs have been known to be boobytrapped and lab operators are often well armed.

According to DEA, in 2001 there were 12,715 methamphetamine laboratory incidents reported in 46 States. The West Coast accounted for most of the laboratory incidents. On the East Coast, the following States reported the highest incident rates: Georgia (51), North Carolina (31), and Florida (29). Nationally, the highest rate of lab activity took place in Missouri, which reported 2,207 incidents. California and Washington also had high incident rates with 1,847 and 1,477, respectively.

**Scheduling and Legislation**

Methamphetamine is a Schedule II drug under the Controlled Substance Act of 1970. A Schedule II

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**Table 4. Number of emergency department methamphetamine mentions, 1995–2002**

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15,933</td>
<td>11,002</td>
<td>17,154</td>
<td>11,486</td>
<td>10,447</td>
<td>13,505</td>
<td>14,923</td>
<td>17,696</td>
</tr>
</tbody>
</table>

Source: Drug Abuse Warning Network.
Controlled Substance has high potential for abuse, is currently accepted for medical use in treatment in the United States, and may lead to severe psychological or physical dependence.

The chemicals that are used to produce methamphetamine also are controlled under the Comprehensive Methamphetamine Control Act of 1996 (MCA). This legislation broadened the restrictions on listed chemicals used in the production of methamphetamine, increased penalties for the trafficking and manufacturing of methamphetamine and listed chemicals, and expanded the controls of products containing the licit chemicals ephedrine, pseudoephedrine, and phenylpropanolamine (PPA).

The Methamphetamine Anti-Proliferation Act was passed in July 2000. The act strengthens sentencing guidelines and provides training for Federal and State law enforcement officers on methamphetamine investigations and the handling of the chemicals used in clandestine meth labs. It also puts in place controls on the distribution of the chemical ingredients used in methamphetamine production and expands substance abuse prevention efforts.

Street Terms

### Street terms for methamphetamine

<table>
<thead>
<tr>
<th>Street Term</th>
<th>English Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue meth</td>
<td>Meth</td>
</tr>
<tr>
<td>Chicken feed</td>
<td>OZs</td>
</tr>
<tr>
<td>Cinnamon</td>
<td>Peanut butter</td>
</tr>
<tr>
<td>Crink</td>
<td>Sketch</td>
</tr>
<tr>
<td>Crystal meth</td>
<td>Spooch</td>
</tr>
<tr>
<td>Desocins</td>
<td>Stove top</td>
</tr>
<tr>
<td>Geep</td>
<td>Super ice</td>
</tr>
<tr>
<td>Granulated orange</td>
<td>Tick tick</td>
</tr>
<tr>
<td>Hot ice</td>
<td>Trash</td>
</tr>
<tr>
<td>Ice</td>
<td>Wash</td>
</tr>
<tr>
<td>Kaksonjae</td>
<td>Working man’s cocaine</td>
</tr>
<tr>
<td>L.A. glass</td>
<td>Yellow barn</td>
</tr>
<tr>
<td>Lemon drop</td>
<td>Yellow powder</td>
</tr>
</tbody>
</table>

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This fact sheet was prepared by Jennifer Lloyd of the ONDCP Drug Policy Information Clearinghouse. The data presented are as accurate as the sources from which they were drawn. Responsibility for data selection and presentation rests with the Clearinghouse staff. The Clearinghouse is funded by the White House Office of National Drug Control Policy to support drug control policy research. The Clearinghouse is a component of the National Criminal Justice Reference Service. For further information about the contents or sources used for the production of this fact sheet or about other drug policy issues, call:

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Write the Drug Policy Information Clearinghouse, P.O. Box 6000, Rockville, MD 20849–6000, or visit the World Wide Web site at:

www.whitehousедrugpolicy.gov
Methamphetamine and HIV: Basic Facts for Service Providers

Methamphetamine use is a serious public health concern in New York State. New cases of HIV and other sexually transmitted diseases (STDs), particularly among gay men and other men who have sex with men (MSM), may be related to methamphetamine use. Other people are affected as well. Although methamphetamine does not directly cause new HIV infections, research has shown that people who use the drug are more likely to have high-risk sex that increases their chances of HIV and STD infection. HIV-positive methamphetamine users may also harm themselves by not taking their medications on schedule and neglecting important aspects of their health. This fact sheet explains the physical and psychological effects of methamphetamine on users. It also details the short-term and long-term adverse effects of this dangerous, illegal drug.

What is methamphetamine and how is it taken?

Methamphetamine — often called “crystal meth” — is a powerful drug that stimulates the central nervous system and lasts for many hours. It generally comes in a white powder or solid crystal-like chunks, but its color may vary. It can be snorted, swallowed, smoked, injected into a vein, or inserted into the rectum. Some people call injection “slamming.” The slang terms “booty bumping” and “keistering” are used to describe inserting methamphetamine into the rectum. Compared with other illegal drugs, it is rather inexpensive and provides a strong high that lasts 6 to 12 hours. It is fairly simple to manufacture, but the process is dangerous because it involves heating chemicals that can explode.

What are the effects of methamphetamine?

Some of the desired effects include:
- A great boost in energy and mental focus that allows users to work or play for long periods without getting tired.
- A stronger sense of self-confidence and self-worth.
- Lower sexual inhibitions and increased sex drive. However, men who use methamphetamine may be less able to get and keep an erection without using erectile dysfunction drugs, such as Viagra® (sildenafil), Levitra® (vardenafil), and Cialis® (tadalafil).

Short-term adverse effects include:
- An increase in blood pressure, heart rate, and body temperature, sometimes to dangerous levels, which can lead to a heart attack or stroke.
- A “crash” period often occurs after several straight days of using methamphetamine. When they crash, users have little energy and feel depressed and isolated.

Longer-range adverse effects include:
- Intense craving for methamphetamine when not taking it. Users are likely to develop tolerance for the drug (more and more is needed to get high) and become dependent on it or addicted to it. However, some people can use methamphetamine, even for long periods, and not become addicted.
- Deterioration of teeth and gums is common and often severe.
- Reduced appetite, weight loss, and poor eating habits can be harmful, especially to people with HIV or AIDS.
- Potentially serious damage to nerve cells in the brain. The person may need to stop using the drug entirely for the brain to heal — but the damage may be permanent and cannot be reversed.
- Impaired memory, reasoning, and ability to process information.
- Psychological problems: depression, psychosis, aggressive behavior, hallucinations, and paranoia.
- Damage to the cardiovascular system, lungs, liver, muscles, and nerve cells; skin lesions.

Continued on next page
How does methamphetamine increase the risk of transmitting HIV and other STDs?

• It lowers sexual inhibitions and affects personal judgment, making users more likely to have unprotected sex.
• Users who cannot keep an erection may switch to receptive anal intercourse (“bottoming”), which can raise their risk of getting infected with HIV.
• Some methamphetamine users also take drugs to treat the erectile dysfunction (not able to get or keep an erection) that results from using methamphetamine. This may lead to having longer, more aggressive periods of sex, especially anal sex. When this occurs, condoms can break and tears can occur in the skin of the penis, anus, and rectum, which can cause bleeding and HIV transmission. The drug also causes skin tissues to dry out and be more likely to tear.
• Methamphetamine increases the likelihood of having unprotected sex. Its use is probably a factor in higher rates of new syphilis cases in the New York City area.

What are the specific risks of injection and rectal use?

Although methamphetamine can be swallowed, smoked, or snorted, injection and rectal use carry specific risks for disease transmission.

• Injecting the drug into the bloodstream increases the risk of transmitting blood-borne infections — HIV, hepatitis B, and hepatitis C — if syringes and other drug injection equipment (“works”) are shared. Users can greatly lower the risk of transmission by not sharing drug injection equipment.
• Inserting crystal meth into the rectum can damage this delicate tissue, making it more likely to tear and possibly transmit HIV by exchanging blood.

How does methamphetamine affect people who are HIV-positive?

Some research studies that used animals found that methamphetamine can damage the immune system. Other research also suggests that methamphetamine quickens the progress of HIV-related dementia (loss of mental function) in humans.

Methamphetamine is not known to have an effect on HIV medications. However, some protease inhibitors (a type of anti-HIV medication) cause the body to absorb methamphetamine at a much faster rate — which may cause severe reactions or possible overdose.

Methamphetamine can affect the health and well-being of HIV-positive persons in less direct ways. When users are high, they may forget to take their medication or experience other symptoms that could lead to illness or death.

Why do gay men/MSM use methamphetamine?

Like other users, many gay men and MSM use methamphetamine because it allows them to work longer and party longer. It lowers sexual inhibitions and gives them the energy, confidence, and stimulation to engage in sexual activities for long periods of time — sometimes for hours or even days. They may engage in specific types of sex they would only have while under the influence of methamphetamine, especially unprotected anal sex (“barebacking”).

• Many methamphetamine users say the drug provides an escape from stress, depression, alienation, and loneliness.
• Gay men and MSM may find the drug helps them cope with the homophobia and prejudice they experience in everyday life.
• HIV-positive gay men and MSM may be more vulnerable to using methamphetamine as a way to deal with their illness and the stigma of having HIV.
HIV medications or lose their motivation to stay on their treatment schedule. This can lead to drug resistance (anti-HIV drugs fail to work properly); users would then have fewer treatment options and possibly develop AIDS more quickly. HIV-positive users also may not take proper care of their health, such as getting enough sleep and eating well.

What should service providers tell their clients about methamphetamine?

Health care and supportive service providers should educate clients about the effects and risks of methamphetamine use and the advantages of prevention and harm reduction. Clients may or may not feel comfortable talking about their substance use at a particular time. Ask clients about their substance use — including their methamphetamine use — during intake. Try to maintain an ongoing dialogue with clients about substance use during routine visits. Here are suggested key messages for clients:

**Prevention messages for non-users**
- Avoid or limit the use of methamphetamine. This may greatly improve your ability to prevent HIV infection and live a healthy life with HIV. If you can’t stay within your limits, it may be a sign you need help.
- To prevent HIV infection, always use a latex condom correctly each time you have sex.
- Avoid sharing syringes and other drug injection equipment.
- Be aware that many people become addicted to using methamphetamine.

**Harm reduction messages for users**
- Make a plan to protect yourself BEFORE using methamphetamine.
- Have plenty of condoms and water-based lubricant ready before having sex.
- Try to eat some food, drink plenty of fluids, and get sleep while taking methamphetamine.

**What types of help can people get to quit using methamphetamine?**

For some users, quitting methamphetamine is very difficult, even with professional help. Many users have withdrawal symptoms that include intense cravings, anxiety, depression, and possible psychosis. Relapse is common. There is no specific medical treatment for methamphetamine use. Treatment options include:
- Supportive individual and group counseling sessions.
- Cognitive behavioral therapy.
- Motivational interviewing.
- 12-step programs, including Crystal Meth Anonymous in places where it is available.
- Medical support to handle the symptoms of quitting methamphetamine use, including withdrawal and depression.

**How can service providers help prevent or reduce methamphetamine use?**

Being on the front lines of HIV/AIDS counseling and treatment, service providers can help prevent or reduce methamphetamine use by taking these steps:
- Monitor the specific impact of methamphetamine on the communities you serve.
- Include methamphetamine education and prevention in programs that target gay men, MSM, and people who have HIV/AIDS.
- Identify other populations in your community (college students, rural residents, etc.) that use methamphetamine or who seem most vulnerable to the drug so they can receive education and services.
- Share ideas and “best practices” with other service providers for reducing methamphetamine use and HIV/STD transmission.
- Learn about treatment providers in the community who can help methamphetamine users and create referral relationships with them.

Continued on next page
Methamphetamine and HIV (continued)

Resources for information and client treatment

New York State Department of Health AIDS Institute
For more information on methamphetamine and HIV, visit the New York State Department of Health website at: www.health.state.ny.us/diseases/aids_harm_reduction/crystalmeth/index.htm. The site also has a methamphetamine-related literature base.

For information on treatment programs:

New York State Office of Substance Abuse Services (OASAS) Electronic Methamphetamine Clearinghouse
www.oasas.state.ny.us/meth/index.htm
1-800-522-5353
LIFENET
1-800-LIFENET (New York City only)

For counseling and treatment:

Crystal Meth Anonymous
www.cristalmeth.org
New York City Crystal Meth Anonymous
www.nycma.org
212-642-5029
Gay Men’s Health Crisis (GMHC)
www.gmhc.org
1-800-AIDS-NYC (1-800-243-7692)
The Lesbian, Gay, Bisexual, and Transgender Community Center
www.gaycenter.org
212-620-7310

Callen-Lorde Community Health Center
www.callen-lorde.org
212-271-7200
Greenwich House
www.greenwichhouse.org
212-242-4140
Addiction Institute of New York (formerly Smithers)
www.addictionresourcesguide.com/listings/addictioninstitute.html
212-523-6491
LIFENET
1-800-LIFENET (New York City only)

How to get new syringes and dispose of used ones

The New York State Expanded Syringe Access Demonstration Program (ESAP) allows drug stores to sell new syringes to persons aged 18 years or older without a prescription. You can also go to Syringe Exchange Programs to trade in a used syringe for a new one. To find ESAP drug stores, Syringe Exchange Programs, or disposal sites for used syringes, call: 1-800-541-AIDS (English) or 1-800-233-SIDA (Spanish). These are toll-free calls within New York State.

For more information, visit the New York State Department of Health website:
Background
The designer drug MDMA (3,4-methylenedioxymethamphetamine) or “ecstasy” is a synthetic drug with both psychedelic and stimulant effects. In the past, some therapists in the United States used the drug to facilitate psychotherapy. In 1988, however, MDMA became a Schedule I substance under the Controlled Substances Act.

In response to the Ecstasy Anti-Proliferation Act of 2000, the U.S. Sentencing Commission increased the guideline sentences for trafficking ecstasy. The new amendment, which became effective in May 2001 on an emergency basis, increases the sentence for trafficking 800 pills (approximately 200 grams) of ecstasy by 300%, from 15 months to 5 years. It also increases the penalty for trafficking 8,000 pills by almost 200%, from 41 months to 10 years. This new increase will affect the upper middle-level distributors. The amendment became permanent on November 1, 2001.

Currently, MDMA is predominantly a “club drug” and is commonly used at all-night dance parties known as “raves.” However, recent research indicates that the use of MDMA is moving to settings other than nightclubs, such as private homes, high schools, college dorms, and shopping malls.

Effects
MDMA is a stimulant whose psychedelic effects can last between 4 and 6 hours and it is usually taken orally in pill form. The psychological effects of MDMA include confusion, depression, anxiety, sleeplessness, drug craving, and paranoia. Adverse physical effects include muscle tension, involuntary teeth clenching, nausea, blurred vision, feeling faint, tremors, rapid eye movement, and sweating or chills. Because of MDMA’s ability to increase heart rate and blood pressure, an extra risk is involved with MDMA ingestion for people with circulatory problems or heart disease.

Rave party attendees who ingest MDMA are at risk of dehydration, hyperthermia, and heart or kidney failure. These risks are due to a combination of the drug’s stimulant effect, which allows the user to dance for long periods of time, and the hot, crowded atmosphere of rave parties. The combination of crowded all-night dance parties and MDMA use has been reported to cause fatalities.

Research shows that MDMA causes damage to the parts of the brain that are critical to thought and memory. MDMA increases the activity levels of neurotransmitters such as serotonin, dopamine, and noradrenaline. The drug causes the release of the neurotransmitters from their storage sites, which increases brain activity. By releasing large amounts of the neurotransmitters and also interfering with neurotransmitter synthesis, MDMA causes a significant depletion in the neurotransmitters. It takes the brain a significant length of time to rebuild the amount of serotonin and other neurotransmitters needed to perform important functions.

In addition to the dangers associated with MDMA itself, users are also at risk of being given a substitute drug. For example, PMA (paramethoxyamphetamine) is an illicit, synthetic hallucinogen that has stimulant effects similar to MDMA. However, when users take PMA believing they are ingesting MDMA, they often think they have taken weak ecstasy because PMA’s
effects take longer to appear. They then ingest more of the substance to attain a better high, which can result in death by overdose.

Adulterants may be added to ecstasy without the user’s knowledge, resulting in additional danger to the user. According to the November 2002 Pulse Check report, ecstasy adulterants in Memphis included mescaline and methamphetamine, while in Los Angeles adulterants included codeine, dextromethorphan (DXM), and PMA.

In 1995, hospitals participating in the Drug Abuse Warning Network (DAWN) reported 421 mentions of MDMA. These mentions document the number of times a reference to MDMA was made during a drug-related emergency department (ED) visit. The number of ED MDMA mentions reported in 2002 reached 4,026 out of more than 1 million total drug mentions.

During 2002, approximately 75% of the ED MDMA mentions were attributed to ED patients age 25 and under. The primary reason for going to the ED after using MDMA was “unexpected reaction,” cited in 1,578 of the ED visits involving MDMA. Another 1,215 MDMA-related ED visits were the result of an overdose.

Prevalence Estimates

The number of new MDMA users has risen since 1993, when there were 168,000 initiates. By 2001, the number of MDMA initiates reached 1.8 million. The National Survey on Drug Use and Health found that 15.1% of 18- to 25-year-olds surveyed in 2002 had used MDMA at least once in their lifetime (see table 1). There were 676,000 current MDMA users in 2002, meaning that they had used the drug within the month before being surveyed.

<table>
<thead>
<tr>
<th>Year</th>
<th>8th Grade</th>
<th>10th Grade</th>
<th>12th Grade</th>
<th>College Students</th>
<th>Young Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>2.3%</td>
<td>4.6%</td>
<td>4.6%</td>
<td>2.8%</td>
<td>1.7%</td>
</tr>
<tr>
<td>1997</td>
<td>2.3%</td>
<td>3.9%</td>
<td>4.0%</td>
<td>2.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>1998</td>
<td>1.8%</td>
<td>3.3%</td>
<td>3.6%</td>
<td>3.9%</td>
<td>2.9%</td>
</tr>
<tr>
<td>1999</td>
<td>1.7%</td>
<td>4.4%</td>
<td>5.6%</td>
<td>5.5%</td>
<td>3.6%</td>
</tr>
<tr>
<td>2000</td>
<td>3.1%</td>
<td>5.4%</td>
<td>8.2%</td>
<td>9.1%</td>
<td>7.2%</td>
</tr>
<tr>
<td>2001</td>
<td>3.5%</td>
<td>6.2%</td>
<td>9.2%</td>
<td>9.2%</td>
<td>7.5%</td>
</tr>
<tr>
<td>2002</td>
<td>2.9%</td>
<td>4.9%</td>
<td>7.4%</td>
<td>6.8%</td>
<td>6.2%</td>
</tr>
<tr>
<td>2003</td>
<td>2.1%</td>
<td>3.0%</td>
<td>4.5%</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

NA: Not available.  
Source: Monitoring the Future Study.

The Monitoring the Future Study also measures perceived harmfulness and disapproval of use by students. The 2003 study found that 41.9% of 8th graders, 49.7% of 10th graders, and 56.3% of 12th graders thought that trying MDMA once or twice was a great risk. This is up from 38.9%, 43.5%, and 52.2%, respectively, in 2002. Approximately 22% of 8th graders, 36% of 10th graders, and 58% of 12th graders surveyed in 2003 felt that MDMA was “fairly easy” or “very easy” to obtain.

Table 1. MDMA use among U.S. population, 2002

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Lifetime</th>
<th>Past Year</th>
<th>Past Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>12–17</td>
<td>3.3%</td>
<td>2.2%</td>
<td>0.5%</td>
</tr>
<tr>
<td>18–25</td>
<td>15.1%</td>
<td>5.8%</td>
<td>1.1%</td>
</tr>
<tr>
<td>26 and older</td>
<td>2.6%</td>
<td>0.5%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total population</td>
<td>4.3%</td>
<td>1.3%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source: National Survey on Drug Use and Health.

Ecstasy was emerging, or was continuing to emerge, as a drug of abuse in all but five Pulse Check sites in 2002: Detroit, Miami, New Orleans, New York City, and Portland, Maine. In these five sites, ecstasy has either leveled off or is now considered an established drug of abuse. In 25 of the 40 Pulse Check sites, ecstasy is considered widely available by enforcement and epidemiologic/ethnographic sources.

Most ED visits involving club drugs also involve other drugs. In 2002, other drugs were found in 72% of the ED visits involving MDMA. Ecstasy continues to be taken with alcohol or marijuana, or both. It is also sometimes taken in combination or sequentially with various other legal and illegal drugs including LSD, GHB, ketamine, heroin, prescription pills (benzodiazepines or antidepressants), cough syrup, Viagra, and nitrous oxide.
Raves

MDMA is often found at nightclubs and raves. Raves first appeared in the United States in the late 1980s in cities such as San Francisco and Los Angeles. By the early 1990s, rave parties and clubs were present in most American metropolitan areas.

Raves are characterized by high entrance fees, extensive drug use, and overcrowded dance floors. Club owners often seem to promote the use of MDMA at their clubs. They sell overpriced bottled water and sports drinks to try to manage the hyperthermia and dehydration effects of MDMA use; pacifiers to prevent involuntary teeth clenching; and menthol nasal inhalers and neon glowsticks to enhance some of the other effects of MDMA.

Raves often are promoted as alcohol-free events, which gives parents a false sense of security that their children will be safe attending these parties. In reality, raves may be havens for the illicit sale and abuse of club drugs.

Cities and communities throughout the United States have attempted to reduce the number of raves in their areas and to curb the use of club drugs in these raves. Several cities have passed new ordinances designed to regulate rave activity. Other cities have reduced rave activity through enforcement of juvenile curfews, fire codes, health and safety ordinances, liquor laws, and licensing requirements for large public gatherings.

Production, Trafficking, and Enforcement

MDMA is most often manufactured clandestinely in Western Europe, primarily in Belgium and the Netherlands. These countries produce 80% of the MDMA consumed worldwide. This is primarily because of the availability of precursor and essential chemicals and international transportation hubs in this area of the world.

In the United States, the Drug Enforcement Administration’s (DEA’s) Chemical Control Program is working to disrupt the production of MDMA and other controlled substances by preventing the diversion of the precursor chemicals used to produce these substances. DEA registration, recordkeeping, and suspicious order reporting requirements apply to those who import, export, manufacture, and distribute the chemicals being monitored by DEA.

The United States works with other countries to prevent the diversion of precursor chemicals. As a result of the 1988 United Nations Drug Convention, parties to the convention became obligated to control their chemical commerce and to cooperate with each other in their efforts to prevent chemical diversion. The United States and other governments use the annual meetings of the United Nations Commission on Narcotic Drugs to promote international acceptance of chemical control and to highlight emerging chemical control concerns. During 1999, the International Criminal Police Organization (Interpol) reported several seizures of precursor chemicals in areas such as Spain, the Slovak Republic, and the Netherlands.

The majority of the MDMA produced in other countries is trafficked to the United States by Israeli and Russian organized crime syndicates that have forged relationships with Western European drug traffickers and gained control over most of the European market. These groups recruit American, Israeli, and Western European nationals as couriers. In addition, traffickers use express mail services, commercial flights, and airfreight shipments to deliver their merchandise. All major airports in Europe act as shipping points for MDMA destined for the United States. Currently, Los Angeles, Miami, and New York are the major gateway cities for the influx of MDMA from abroad.

According to DEA data, the national wholesale price range for MDMA tablets was $5 to $17 per dosage unit during 2001. The national retail price range during the year was $10 to $60 per tablet.

Domestically, DEA seized 196 MDMA tablets in 1993, 174,278 tablets in 1998, more than 1 million in 1999, more than 3 million in 2000, and more than 5.5 million in 2001. The U.S. Customs Service (USCS), now part of U.S. Customs and Border Protection, also reported a large increase in the number of MDMA tablets seized. USCS seized approximately 3.5 million MDMA tablets in 1999 and 9.3 million tablets in 2000.

According to Interpol, more than 14.1 million MDMA tablets were seized in Europe during 1999. This is nearly triple the amount seized in 1998 (5 million tablets). During the first half of 2000, more than 8.4 million MDMA tablets were seized in Europe. In 1999, global MDMA seizures totaled approximately 22 million tablets, up from 5.6 million in 1998.

Prevention and Enforcement Initiatives

In recent years, some initiatives have been developed to curb the use of MDMA and other club drugs. In 1999, the National Institute on Drug Abuse (NIDA) and its partners (American Academy of Child and Adolescent Psychiatry, Community Anti-Drug Coalitions of America, Join Together, and National Families in Action) launched a national research and education initiative, “Club Drugs: Raves, Risks, and Research,” to combat the increased use of club drugs. Through this initiative, NIDA increased funding for
club drug research and launched a multimedia public education strategy to alert teens, young adults, parents, educators, and others about the dangers associated with MDMA and other club drugs.

In February 2002, the Partnership for a Drug-Free America (PDFA) launched a national MDMA education campaign. The campaign consists of television and print advertising and an MDMA microsite found within PDFA’s Web site. The campaign is aimed at teens and their parents.

In 2002, DEA began Operation X-Out, a multifaceted, year-long initiative that focuses on identifying and dismantling organizations that produce and distribute MDMA and similar drugs in the United States and abroad. Some results of Operation X-Out include increasing the number of DEA investigations involving MDMA and other club drugs, enhancing airport interdiction task forces, creating new task forces in cities such as Miami and New York, creating a task force on Internet drug trafficking, and expanding cooperation with international law enforcement.

Street Terms

<table>
<thead>
<tr>
<th>Street terms for MDMA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam</td>
<td>Ecstasy</td>
</tr>
<tr>
<td>B-bombs</td>
<td>E</td>
</tr>
<tr>
<td>Bens</td>
<td>Essence</td>
</tr>
<tr>
<td>Clarity</td>
<td>Eve</td>
</tr>
<tr>
<td>Cristal</td>
<td>Go</td>
</tr>
<tr>
<td>Decadence</td>
<td>Hug drug</td>
</tr>
<tr>
<td>Dex</td>
<td>Iboga</td>
</tr>
<tr>
<td>Disco biscuit</td>
<td>Love drug</td>
</tr>
</tbody>
</table>

Conclusion

The synthetic drug MDMA is commonly found at rave parties, nightclubs, and, more recently, other settings such as schools, malls, and private homes that are frequented by youth and young adults. The damaging effects of the drug can be long lasting and are possible after only a small number of uses. The trafficking of MDMA is increasing at an alarming rate, and multiple agencies have reported large seizures of the drug.

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Office of National Drug Control Policy

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www.whitehousedrugpolicy.gov/streetterms/default.asp

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National Institute on Drug Abuse


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Substance Abuse and Mental Health Services Administration

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Other Source:
Partnership for a Drug-Free America
www.drugfreeamerica.org

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Gamma Hydroxybutyrate (GHB)

Background
Gamma hydroxybutyrate (GHB) is a powerful, rapidly acting central nervous system depressant. It was first synthesized in the 1920s and was under development as an anesthetic agent in the 1960s. GHB is produced naturally by the body in small amounts but its physiological function is unclear.

GHB was sold in health food stores as a performance-enhancing additive in bodybuilding formulas until the Food and Drug Administration (FDA) banned it in 1990. It is currently marketed in some European countries as an adjunct to anesthesia. GHB is abused for its ability to produce euphoric and hallucinogenic states and for its alleged function as a growth hormone that releases agents to stimulate muscle growth. GHB became a Schedule I Controlled Substance in March 2000.

In the United States, GHB is produced in clandestine laboratories with no guarantee of quality or purity, making its effects less predictable and more difficult to diagnose. GHB can be manufactured with inexpensive ingredients and using recipes on the Internet. Gamma butyrolactone (GBL) and 1,4-butanediol are analogs of GHB that can be substituted for it. Once ingested, these analogs convert to GHB and produce identical effects. GBL, an industrial solvent, is used as an immediate precursor in the clandestine production of GHB. The FDA has issued warnings for both GBL and 1,4-butanediol, stating that the drugs have a potential for abuse and are a public health danger.

Effects
GHB is usually taken orally. It is sold as a light-colored powder that easily dissolves in liquids or as a pure liquid packaged in vials or small bottles. In liquid form, it is clear, odorless, tasteless, and almost undetectable when mixed in a drink. GHB is typically consumed by the capful or teaspoonful at a cost of $5 to $10 per dose. The average dose is 1 to 5 grams and takes effect in 15 to 30 minutes, depending on the dosage and purity of the drug. Its effects last from 3 to 6 hours.

Consumption of less than 1 gram of GHB acts as a relaxant, causing a loss of muscle tone and reduced inhibitions. Consumption of 1 to 2 grams causes a strong feeling of relaxation and slows the heart rate and respiration. At this dosage level, GHB also interferes with blood circulation, motor coordination, and balance. In stronger doses, 2 to 4 grams, pronounced interference with motor and speech control occurs. A coma-like sleep may be induced, requiring intubation to wake the user. When mixed with alcohol, the depressant effects of GHB are enhanced. This can lead to respiratory depression, unconsciousness, coma, and overdose.

Side effects associated with GHB may include nausea, vomiting, delusions, depression, vertigo, hallucinations, seizures, respiratory distress, loss of consciousness, slowed heart rate, lowered blood pressure, amnesia, and coma. GHB can become addictive with sustained use.

Patients with a history of around-the-clock use of GHB (every 2 to 4 hours) exhibit withdrawal symptoms including anxiety, insomnia, tremors, and episodes of tachycardia (abnormally fast heart rates), and may progress to delirium and agitation. Because GHB has a short duration of action and quickly leaves the user’s system, withdrawal symptoms may occur within 1 to 6 hours of the last dose. These symptoms may last for many months.
According to the Drug Abuse Warning Network (DAWN), GHB emergency department (ED) mentions have increased from 56 in 1994 to 3,340 in 2001 (see table).

<table>
<thead>
<tr>
<th>Year</th>
<th>GHB ED Mentions</th>
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<tbody>
<tr>
<td>1994</td>
<td>56</td>
</tr>
<tr>
<td>1995</td>
<td>145</td>
</tr>
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<td>638</td>
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<td>1999</td>
<td>3,178</td>
</tr>
<tr>
<td>2000</td>
<td>4,969</td>
</tr>
<tr>
<td>2001</td>
<td>3,340</td>
</tr>
</tbody>
</table>

Source: Drug Abuse Warning Network.

GHB-related deaths have occurred in several Community Epidemiology Work Group (CEWG) sites. In 1999, there were three reported deaths involving GHB in Texas and two in Minnesota. Missouri has reported five GHB-related deaths and two near deaths in which GHB was used to facilitate rapes. In Florida, during 2000, GHB was detected in 23 deaths and identified as the cause of death in 6 cases. Since 1990, the U.S. Drug Enforcement Administration (DEA) has documented more than 15,600 overdoses and law enforcement encounters and 72 deaths relating to GHB.

**Prevalence Estimates**

GHB is often ingested with alcohol by young adults and teens at nightclubs and parties. It is used as a pleasure enhancer that depresses the central nervous system and induces intoxication. It also can be used as a sedative to reduce the effects of stimulants (cocaine, methamphetamine, ephedrine) or hallucinogens (LSD, mescaline) and to prevent physical withdrawal symptoms.

Since 2000, GHB has been included in the University of Michigan’s Monitoring the Future Survey questionnaire. Survey results indicate that annual GHB use by secondary school students in 2000 ranged from 1.1% among 10th graders to 1.2% among 8th graders and 1.9% among 12th graders. In 2001, estimates of annual GHB use ranged from 1.0% among 10th graders to 1.1% among 8th graders and 1.6% among 12th graders.

**Regional Observations**

According to CEWG, as of 2001, 15 CEWG areas reported increases in GHB indicators. They were Boston, Chicago, Dallas/Houston, Denver, Los Angeles, Miami, Minneapolis/St. Paul, Newark, New York, Philadelphia, Phoenix, St. Louis, San Diego, San Francisco, and Seattle. Atlanta, Baltimore, and Washington, D.C., reported stable GHB indicators. Only two CEWG sites, Detroit and New Orleans, reported declines in GHB indicators. Most CEWG areas report that GHB is frequently used in combination with alcohol, causing users to overdose.

In 2000, according to the National Drug Intelligence Center (NDIC), GHB availability was stable or increasing in nearly every DEA Field Division and High Intensity Drug Trafficking Area. Many areas reported that the increased availability of GHB occurred in concert with a rise in rave activity. Law enforcement also reported increases in the number of cases involving GHB analogs.

According to *Pulse Check: Trends in Drug Abuse*, GHB users and sellers tend to be between the ages of 18 and 30. Most users are middle-class white males. GHB is typically packaged in plastic bottles (mostly water or sports drink bottles) and distributed by the capful for $5–$20 per dose. Additional packaging includes eyedropper bottles, glass vials, and mouthwash bottles.

**Drug-Facilitated Rape**

Drug-facilitated rape is defined as sexual assault made easier by the offender’s use of an anesthetic-type drug that renders the victim physically incapacitated or helpless and unable to consent to sexual activity. Whether the victim is unwittingly administered the drug or willingly ingests it for recreational use is irrelevant—the person is victimized because of their inability to consciously consent to sexual acts.

According to NDIC, GHB has surpassed Rohypnol (flunitrazepam) as the most common substance used in drug-facilitated sexual assaults. GHB can mentally and physically paralyze an individual, and these effects are intensified when the drug is combined with alcohol. To date, DEA has documented 15 sexual assaults involving 30 victims who were under the influence of GHB. Of the 711 drug-positive urinalysis samples submitted from victims of alleged sexual assault, 48 tested positive for GHB.

It is difficult to estimate the incidence of drug-facilitated rape involving GHB. Victims may not seek help until days after the assault, in part because the drug impairs their memory and in part because they may not identify signs of sexual assault. GHB is only detectable in a person’s system for a limited amount of time and, if the victim does not seek immediate help, the opportunity to detect the drug can quickly pass. Also, law enforcement agencies may not be trained to gather necessary evidence and may not be using equipment that is sensitive enough to test for the drug.

**Scheduling and Legislation**

In response to the use of drugs in sexual assaults, Congress passed the Drug-Induced Rape Prevention and Punishment Act of 1996 to combat drug-facilitated crimes of violence, including sexual assaults. The act
imposes harsh penalties for distribution of a controlled substance to an individual without the individual’s knowledge and consent with intent to commit a crime of violence, including rape.

On February 18, 2000, the Hillory J. Farias and Samantha Reid Date-Rape Prevention Act of 2000 (Public Law 106-72) became law. It made GBL a List I chemical subject to the criminal, civil, and administrative sanctions of the Federal Controlled Substances Act of 1970. As a result of the law, GHB became a Schedule I Controlled Substance. A Schedule I drug has a high potential for abuse, is not currently accepted for medical use in treatment in the United States, and lacks accepted safety for use under medical supervision.

On March 20, 2001, the Commission on Narcotic Drugs placed GHB in Schedule IV of the 1971 Convention of Psychotropic Substances. This placement affects international drug control laws with which countries that are a part of the convention must comply. Schedule IV mandates international requirements on licensing for manufacture, trade, and distribution of the drug. It also requires parties to comply with prohibition of and restrictions on export and import of the drug and to adopt measures for the repression of acts contrary to these laws and regulations.

On July 17, 2002, Xyrem, a drug with an active ingredient of sodium oxybate or GHB, was approved by the FDA to treat cataplexy attacks in patients with narcolepsy. Cataplexy is a condition characterized by weak or paralyzed muscles. Xyrem, when used as medically prescribed, is a Schedule III Controlled Substance. A Schedule III Controlled Substance has less potential for abuse than Schedule I and II categories, is currently accepted for medical use in treatment in the United States, and may lead to moderate or low physical dependence. Illicit use of Xyrem is subject to Schedule I penalties.

Street Terms

<table>
<thead>
<tr>
<th>Street terms for GHB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cherry Meth</td>
</tr>
<tr>
<td>Fantasy</td>
</tr>
<tr>
<td>GBH</td>
</tr>
<tr>
<td>Georgia home boy</td>
</tr>
<tr>
<td>Great hormones at bedtime</td>
</tr>
<tr>
<td>Grievous bodily harm</td>
</tr>
<tr>
<td>Liquid E</td>
</tr>
<tr>
<td>Liquid Ecstasy</td>
</tr>
<tr>
<td>Liquid X</td>
</tr>
<tr>
<td>Organic quaalude</td>
</tr>
<tr>
<td>Salty water</td>
</tr>
<tr>
<td>Scoop</td>
</tr>
<tr>
<td>Sleep-500</td>
</tr>
<tr>
<td>Soap</td>
</tr>
<tr>
<td>Somatomaz</td>
</tr>
<tr>
<td>Vita-G</td>
</tr>
</tbody>
</table>

Resources


Rapists Are Using a New Weapon to Overpower Their Victims. Santa Monica Hospital Medical Center, Rape Treatment Center, 1997. www.911rape.org/request/blowouts/brochure.html

Sources

Executive Office of the President:

Office of National Drug Control Policy


Street Terms: Drugs and the Drug Trade. www.whitehousedrugpolicy.gov/streetterms/default.asp

U.S. Department of Health and Human Services:

National Institute on Drug Abuse


Substance Abuse and Mental Health Services Administration

“Detailed Emergency Department Tables From the Drug Abuse Warning Network, 2001,” Emergency Department
This fact sheet was prepared by Jennifer Lloyd of the ONDCP Drug Policy Information Clearinghouse. The data presented are as accurate as the sources from which they were drawn. Responsibility for data selection and presentation rests with the Clearinghouse staff. The Clearinghouse is funded by the White House Office of National Drug Control Policy to support drug control policy research. The Clearinghouse is a component of the National Criminal Justice Reference Service. For further information about the contents or sources used for the production of this fact sheet or about other drug policy issues, call:

1–800–666–3332

Write the Drug Policy Information Clearinghouse, P.O. Box 6000, Rockville, MD 20849–6000, or visit the World Wide Web site at:

www.whitehousedrugpolicy.gov
Background Information

Rohypnol is the trade name for the drug flunitrazepam, a benzodiazepine (central nervous system depressant) like Valium, yet 10 times more potent. Outside the United States, Rohypnol is legally manufactured by Hoffman-LaRoche, Inc., and is available by prescription for the short-term treatment of severe sleep disorders. It is widely available in Europe, Mexico, and Colombia, but is neither manufactured nor approved for sale in the United States.

Illicit use of Rohypnol began in the 1970s in Europe and appeared in the United States in the early 1990s. Much of the concern surrounding Rohypnol is its abuse as a “date rape” drug. Rohypnol is a tasteless and odorless drug and, until recent manufacturer efforts, dissolved clear in liquid, which masked its presence. Rohypnol comes in pill form and is usually sold in the manufacturer’s bubble packaging, which can mislead users in the United States into believing the drug is safe and legal. Since February 1999, reformulated Rohypnol tablets, which turn blue in a drink to increase visibility, have been approved and marketed in 20 countries. The old noncolored tablets are still available, however. In response to the reformulated blue tablets, people who intend to commit a sexual assault facilitated by Rohypnol are now serving blue tropical drinks and punches in which the blue dye can be disguised.

Effects

Rohypnol can be ingested orally, snorted, or injected. It is often combined with alcohol or used as a remedy for the depression that follows a stimulant high. The effects of Rohypnol begin within 15 to 20 minutes of administration and, depending on the amount ingested, may persist for more than 12 hours. The drug’s metabolic properties are detectable in urine for up to 72 hours after ingestion.

Under Rohypnol, individuals may experience a slowing of psychomotor performance, muscle relaxation, decreased blood pressure, sleepiness, and/or amnesia. Some of the adverse side effects associated with the drug’s use are drowsiness, headaches, memory impairment, dizziness, nightmares, confusion, and tremors. Although classified as a depressant, Rohypnol can induce aggression and/or excitability.

Prevalence Estimates

Rohypnol is popular with youth because of its low cost, which is usually less than $5 per tablet. It has been used throughout the United States by high school and college students, street gang members, rave and nightclub attendees, drug addicts, and alcohol abusers. Rohypnol is used in combination with alcohol, marijuana, cocaine, heroin, ecstasy, and LSD. The predominant user age group is 13- to 30-years-old and users tend to be male.

A questionnaire about Rohypnol use was included in the Monitoring the Future Survey for the first time in 1996. Lifetime Rohypnol use by secondary school students in 1996 ranged from 1.5% among 8th and 10th graders to 1.2% among 12th graders (table 1). Current estimates of lifetime Rohypnol use range from 1.1% among 8th graders, to 1.5% among 10th graders, to 1.7% among 12th graders.

Availability, Trafficking, and Seizures

Because Rohypnol is not manufactured nor approved for medical use in the United States, distributors must obtain their supply from other countries. Colombian traffickers ship Rohypnol to the United States via mail services and/or couriers using commercial airlines.
Distributors also travel to Mexico to obtain supplies of the drug and smuggle it into the United States.

In the late 1980s, Rohypnol abuse and distribution were occasionally reported in Florida and in the border areas of Arizona, California, and Texas. Beginning around 1993, the abuse and distribution of Rohypnol began to spread, with the vast majority of Rohypnol-related law enforcement cases occurring between January 1993 and December 1996. The two largest Rohypnol seizures occurred in February 1995. At that time, more than 52,000 tablets were seized in Louisiana and 57,000 tablets were seized in Texas. By June 1996, the Drug Enforcement Administration (DEA) had documented more than 2,700 Federal, State, and local law enforcement encounters with Rohypnol.

On March 5, 1996, the U.S. Customs Service began seizing Rohypnol at United States borders on advice from DEA and the U.S. Food and Drug Administration. By December 1997, Customs Service efforts had substantially reduced the availability of the drug.

In May 2000, DEA, along with the U.S. Border Patrol, seized 900 Rohypnol tablets in Texas. In July 2000, multiagency investigations led to the closure of a pharmacy in Mexico that used the mail to distribute Rohypnol to California.

According to DEA’s System to Retrieve Information from Drug Evidence (STRIDE) data, Rohypnol seizures were at their highest in 1995, with 164,534 dosage units, and have since decreased to 4,967 units in 2000.

**Regional Observations**

According to *Pulse Check: Trends in Drug Abuse*, Rohypnol is now the least available club drug in the United States. Nevertheless, Los Angeles and El Paso report that the drug is widely available. The remaining Pulse Check sites report it as somewhat, not very, or not at all available.

In El Paso, speedball (a combination of heroin and cocaine) users often use Rohypnol to “soften the fall when coming down.” El Paso treatment centers also report clients using “roche,” which is presumed to be Rohypnol smuggled in from Mexico.

According to the Community Epidemiology Work Group (CEWG), reports of Rohypnol use have been declining since recent legislation and its use is very low or nonexistent in the majority of CEWG areas. Cities that are exceptions to this decline in use include Atlanta and New Orleans. Poison control calls involving Rohypnol in combination with other drugs have increased in Atlanta where Rohypnol sells for $5 to $10 per pill. In New Orleans, Rohypnol is common in nightclubs and private rave parties.

Texas has experienced increases in poison control calls and treatment admissions for Rohypnol, especially among Hispanic youth close to the Mexican border. In the first quarter of 2000, DEA reported increases in Rohypnol seizures in Laredo, Beaumont, and Austin.

**Drug-Facilitated Rape**

Drug-facilitated rape can be defined as sexual assault made easier by the offender’s use of an “anesthesia”-type drug that can render the victim physically incapacitated or helpless and unable to give consent to sexual activity. Whether the victim is unwittingly administered the drug or willingly ingests it for recreational use is irrelevant. The person is victimized because of an inability to consciously consent to sexual acts.

Rohypnol is one of the drugs most commonly implicated in drug-facilitated rape. It can mentally and physically paralyze an individual. Effects of the drug are of particular concern in combination with alcohol and can lead to anterograde amnesia, where events that occurred during the time the drug was in effect are forgotten.

During 2000, some 261,000 rapes/sexual assaults occurred, but it is unknown how many were drug-facilitated. Many factors contribute to this lack of data, including the short period of time that the drug can be detected in the victim’s system. Also, victims may not seek help until days after the assault, partly because the drug impairs their memory and partly because of their inability to recognize signs of sexual assault. As with any sexual assault, survivors need help regaining a sense of control and security. Many victims rely on a support system to help them deal with the flood of emotions in the aftermath of the assault.
**Scheduling and Legislation**

As a result of the 1971 United Nations Convention on Psychotropic Substances, the United States placed Rohypnol under Schedule IV of the Controlled Substances Act in 1984. Rohypnol is not approved for manufacture or sale within the United States.

By March 1995, the United Nations Commission on Narcotic Drugs had transferred Rohypnol from a Schedule IV to a Schedule III drug. DEA is reviewing the possibility of reclassifying Rohypnol as a Schedule I drug. At the State level, Rohypnol already has been reclassified as a Schedule I substance in Florida, Idaho, Minnesota, New Hampshire, New Mexico, North Dakota, Oklahoma, and Pennsylvania.

In response to Rohypnol abuse and use of the drug to facilitate sexual assaults, the U.S. Congress passed the Drug Induced Rape Prevention and Punishment Act, effective October 13, 1996. The law provides for harsher penalties regarding the distribution of a controlled substance to an individual without the individual’s consent and with the intent to commit a crime of violence, including rape. The law imposes a penalty of up to 20 years in prison and a fine for the importation and distribution of 1 gram or more of Rohypnol. Simple possession is punishable by 3 years in prison and a fine.

In 1997, penalties for possession, trafficking, and distribution of Rohypnol were further increased by the U.S. Sentencing Commission’s Federal Sentencing Guidelines to those of a Schedule I substance because of growing abuse of the drug.

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**Street Terms**

<table>
<thead>
<tr>
<th>Street terms for Rohypnol</th>
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<tbody>
<tr>
<td>Circles</td>
</tr>
<tr>
<td>Forget me drug</td>
</tr>
<tr>
<td>Forget me pill</td>
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<tr>
<td>Getting roached</td>
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<tr>
<td>La Rocha</td>
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<tr>
<td>Lunch money drug</td>
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<td>Mexican valium</td>
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<td>R-2</td>
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<tr>
<td>Row-shay</td>
</tr>
<tr>
<td>Ruffles</td>
</tr>
<tr>
<td>Wolfies</td>
</tr>
</tbody>
</table>

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**Resources**

*Rapists Are Using a New Weapon To Overpower Their Victims.* Santa Monica Hospital Medical Center, Rape Treatment Center, 1997.

www.911rape.org/request/blowouts/brochure.html


www.ncjrs.org/club_drugs/club_drugs.html


www.clubdrugs.org

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Office of National Drug Control Policy

*Pulse Check: Tends in Drug Abuse, April 2002*, NCJ 193398.

www.whitehousedrugpolicy.gov/publications/drugfact/pulsechk/apr02/index.html

*Pulse Check: Trends in Drug Abuse, November 2001*, NCJ 191248.


Street Terms: Drugs and the Drug Trade.

www.whitehousedrugpolicy.gov/streetterms/default.asp

**U.S. Department of Justice:**

Drug Enforcement Administration

Flunitrazepam (Rohypnol).

www.usdoj.gov/dea/concern/flunitrazepam.html

Flunitrazepam (Rohypnol) “roofies.”

www.usdoj.gov/dea/pubs/rohypnol/rohypnol.htm

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**Controlled Substances Act—Formal Scheduling**

**Schedule I**—The drug has a high potential for abuse, is not currently accepted for medical use in treatment in the United States, and lacks accepted safety for use under medical supervision.

**Schedule II**—The drug has a high potential for abuse, is currently accepted for medical use in treatment in the United States, and may lead to severe psychological or physical dependence.

**Schedule III**—The drug has less potential for abuse than drugs in Schedule I and II categories, is currently accepted for medical use in treatment in the United States, and may lead to moderate or low physical dependence or high psychological dependence.

**Schedule IV**—The drug has low potential for abuse relative to other drugs, is currently accepted for medical use in treatment in the United States, and may lead to limited physical dependence or psychological dependence relative to drugs in Schedule III.

**Schedule V**—The drug has a low potential for abuse relative to drugs in Schedule IV, is currently accepted for medical use in treatment in the United States, and may lead to limited physical or psychological dependence relative to drugs in Schedule IV.

National Drug Intelligence Center


Bureau of Justice Assistance


National Institute of Justice


National Institutes of Health:

National Institute on Drug Abuse


Rohypnol and GHB INFOFAX. www.drugabuse.gov/Infofax/RohypnolGHB.html

American Prosecutors Research Institute:


Other Source:


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www.whitehousedrugpolicy.gov
Drug Associated HIV Transmission Continues in the U.S.
Sharing syringes and other equipment for drug injection is a well-known route of HIV transmission, yet injection drug use contributes to the epidemic’s spread far beyond the circle of those who inject. People who have sex with an injection drug user (IDU) also are at risk for infection through the sexual transmission of HIV. Children born to mothers who contracted HIV through sharing needles or having sex with an IDU may become infected as well.

Since the epidemic began, injection drug use has directly and indirectly accounted for more than one-third (36%) of AIDS cases in the United States. This disturbing trend appears to be continuing. Of the 42,156 new cases of AIDS reported in 2000, 11,635 (28%) were IDU-associated.

Noninjection drugs (such as “crack” cocaine) also contribute to the spread of the epidemic when users trade sex for drugs or money, or when they engage in risky sexual behaviors that they might not engage in when sober. One CDC study of more than 2,000 young adults in three inner-city neighborhoods found that crack smokers were three times more likely to be infected with HIV than non-smokers.

**Strategies for IDUs Must Be Comprehensive**

Comprehensive HIV prevention interventions for substance abusers must provide education on how to prevent transmission through sex.

Numerous studies have documented that drug users are at risk for HIV through both drug-related and sexual behaviors, which places their partners at risk as well. Comprehensive programs must provide the information, skills, and support necessary to reduce both risks. Researchers have found that many interventions aimed at reducing sexual risk behaviors among drug users have significantly increased the practice of safer sex (e.g., using condoms, avoiding unprotected sex) among participants.

**Drug abuse treatment is HIV prevention, but drug treatment slots are scarce.**

In the United States, drug use and dependence are widespread in the general population. Experts generally agree that there are about 1 million active IDUs in this country, as well as many others who use noninjection drugs or abuse alcohol. Clearly, the need for substance abuse treatment vastly exceeds our capacity to provide it. Effective substance abuse treatment that helps people stop using drugs not only...
eliminates the risk of HIV transmission from sharing contaminated syringes, but, for many, reduces the risk of engaging in risky behaviors that might result in sexual transmission.

**For injection drug users who cannot or will not stop injecting drugs, using sterile needles and syringes only once remains the safest, most effective approach for limiting HIV transmission.**

To minimize the risk of HIV transmission, IDUs must have access to interventions that can help them protect their health. They must be advised to always use sterile injection equipment; warned never to reuse needles, syringes, and other injection equipment; and told that using syringes that have been cleaned with bleach or other disinfectants is not as safe as using new, sterile syringes.

**Having access to sterile injection equipment is important, but it is not enough.**

Preventing the spread of HIV through injection drug use requires a comprehensive approach that incorporates several basic principles:

- ensure coordination and collaboration among all providers of services to IDUs, their sex partners, and their children,
- ensure coverage, access to, and quality of interventions,
- recognize and overcome stigma associated with injection drug use, and
- tailor services and programs to the diverse populations and characteristics of IDUs.

Strategies for prevention should include:

- preventing initiation of drug injection,
- using community outreach programs to reach drug users on the streets,
- improving access to high quality substance abuse treatment programs,
- instituting HIV prevention programs in jails and prisons,
- providing health care for HIV-infected IDUs, and
- making HIV risk-reduction counseling and testing available for IDUs and their sex partners.

**Better integration of all prevention and treatment services is critically needed.**

HIV prevention and treatment, substance abuse prevention, and sexually transmitted disease treatment and prevention services must be better integrated to take advantage of the multiple opportunities for intervention—first, to help the uninfected stay that way; second, to help infected people stay healthy; and third, to help infected individuals initiate and sustain behaviors that will keep themselves safe and prevent transmission to others.

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**For more information...**

CDC National STD & AIDS Hotlines:
- 1-800-342-AIDS
- Spanish: 1-800-344-SIDA
- Deaf: 1-800-243-7889

CDC National Prevention Information Network:
- P.O. Box 6003
- Rockville, Maryland 20849-6003
- DHAP: http://www.cdc.gov/hiv
- IDU: http://www.cdc.gov/idu
- NPIN: http://www.cdcnpin.org

Internet Resources:
- NCHSTP: http://www.cdc.gov/nchstp/od/nchstp.html
- DHAP: http://www.cdc.gov/hiv
- IDU: http://www.cdc.gov/idu
- NPIN: http://www.cdcnpin.org
Appendix J:

Viral Hepatitis and Injection Drug Users

(Centers for Disease Control and Prevention)
In the United States, viral hepatitis is an important public health problem because it causes serious illness, it affects millions, and it has a close connection with HIV. This series of fact sheets addresses viral hepatitis, particularly hepatitis B and C — two important blood-borne infections that have a major impact on injection drug users (IDUs).

The fact sheets in this series are:

- Viral Hepatitis and Injection Drug Users
- Medical Management of Chronic Hepatitis B and Chronic Hepatitis C
- Vaccines to Prevent Hepatitis A and Hepatitis B
- Hepatitis C Virus and HIV Coinfection
- Viral Hepatitis and the Criminal Justice System

See the end of this fact sheet for information on how to get this series and other materials on preventing HIV and other blood-borne infections among IDUs.

http://www.cdc.gov/.idu
Viral Hepatitis is an Important Health Issue for the Nation

Hepatitis, literally an “inflammation of the liver,” has a number of causes. Viral infection is one of them. The most common types are hepatitis A, hepatitis B, and hepatitis C.

Viral hepatitis affects millions.

Hepatitis C virus (HCV) infection occurs when blood (or to a lesser extent, other body fluids such as semen or vaginal fluid) from an infected person enters the body of an uninfected person. Injection drug use is the major risk factor for HCV infection. About 3.9 million Americans have been infected with HCV and approximately 1.25 million people have chronic HCV infection. Like hepatitis C, hepatitis B disproportionately affects people of color. An estimated 73,000 new HCV infections occurred in 2000. Most infections occurred in young adults, aged 20-39 years. Hepatitis C can be prevented through immunization.

Hepatitis B virus (HBV) infection occurs when blood or body fluids from an infected person enter the body of an uninfected person. High-risk sexual behaviors (unprotected sex with multiple partners) and injection drug use are the major risk factors. About 5% of people in the U.S. have evidence of past infection with HBV and approximately 1.25 million people have chronic HBV infection. Like hepatitis C, hepatitis B disproportionately affects people of color. An estimated 73,000 new HBV infections occurred in 2000. Most infections occurred in young adults, aged 20-39 years. Hepatitis B can be prevented through immunization.

Hepatitis A virus (HAV) is primarily transmitted through the fecal-oral route, when a person puts something in his or her mouth (such as food or a beverage) that has been contaminated with the feces of a person infected with HAV. Outbreaks occur more easily in overcrowded areas where poor sanitary conditions exist. Outbreaks of hepatitis A also have been reported among IDUs. About one-third of Americans have evidence of past infection with HAV. Hepatitis A can be prevented through immunization.

The medical and health care costs of viral hepatitis are high.

Each year, 8,000 to 10,000 people die from the complications of liver disease caused by hepatitis C and about 5,000 die from complications caused by hepatitis B. Chronic liver disease is currently the 10th leading cause of death, and liver failure due to hepatitis C is the leading reason for liver transplants. Annual health care costs and lost wages associated with hepatitis-related liver disease are estimated to be $600 million for hepatitis C and $700 million for hepatitis B. The costs to individuals and society of illness related to hepatitis A are also substantial.

Viral hepatitis can be insidious.

Frequently, symptoms of newly acquired (acute) infection are mild or nonexistent, so people may not even be diagnosed as having viral hepatitis. Those who do have symptoms might experience “flu-like” symptoms, fatigue, nausea, pain in the upper abdomen, and sometimes jaundice.

People who get HAV infection are able to clear the virus from their bodies and recover fully. They develop a lifelong immunity to the virus. The situation is different with hepatitis B and hepatitis C:

- The majority of people who acquire HBV infection after age 5 are able to clear the virus from their bodies. However, about 2%-6% are not able to clear the virus and go on to become chronically infected. A much higher percentage of those who
acquire HBV infection as infants (90%) or young children (30%) become chronically infected.

- About 75%-85% of people with HCV infection are unable to clear the virus and become chronically infected.

Many people with chronic infection – 60% of those with HBV infection and 70% of those with HCV infection – develop chronic liver disease, a situation in which the virus damages the liver. The damage may progress to severe disease, including cirrhosis, liver cancer, and liver failure. This progressive liver disease usually develops slowly over 20 to 30 years. Because symptoms are so frequently mild or nonexistent, the majority of people with chronic HBV and HCV infections do not know they are infected and can unknowingly transmit the virus to others. For many, signs and symptoms appear only when liver disease is advanced and treatments are less effective.

Hepatitis C is a particular concern.

- So many people have been infected with HCV. During the 1960s, 1970s, and early 1980s, the number of new cases every year was very high, averaging an estimated 240,000 per year during the 1980s. Because many were unaware they were infected, the risks of transmitting the infection to others were extremely high. Since then, the incidence of HCV infection has declined dramatically (only 30,000 new infections estimated in 2000). Most of this decline has occurred among IDUs. The reasons are not fully understood but may be due to safer injection practices resulting from intensive HIV prevention programs and to the very high proportion of drug users already infected.

- Most people with HCV infection develop chronic infection, which frequently leads to chronic liver disease.

- The impact of HCV infection may explode over the next 10-20 years. Because it takes 20-30 years for chronic liver disease, cirrhosis, and liver cancer to develop, it is conservatively estimated that illness and deaths from HCV-related liver disease among the millions of people infected during earlier years will increase 2- to 3-fold over the next two decades. Direct medical costs may range from $6.5 to $13.6 billion, with even larger indirect and societal costs.

- No vaccine to prevent HCV infection is available.

Viral Hepatitis is a Very Significant Problem Among IDUs

Because HBV and HCV are transmitted through exposure to infected blood and body fluids, IDUs are at very high risk of acquiring and transmitting both viruses. For example, it is estimated that 60%, or 17,000, of the 30,000 new cases of HCV that occurred in 2000 occurred among IDUs. It is estimated that 17%, or 13,000 of the 73,000 new cases of hepatitis B that occurred in 2000, occurred among IDUs.

<table>
<thead>
<tr>
<th>Hepatitis A, B, and C at a Glance</th>
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<tr>
<td><strong>Risk of Transmission</strong></td>
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<tr>
<td>Injecting</td>
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<td>A low*</td>
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<td>B high</td>
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<td>C high</td>
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*Hepatitis A outbreaks occur among IDUs; mechanisms of transmission are not known with certainty but are related to poor hygiene and sharing drugs, drug solution, syringes, and drug preparation equipment (water, drug solution containers, cotton filters).
HBV and HCV infections are also acquired relatively rapidly among IDUs. Within 5 years of beginning injection drug use, 50%-70% of IDUs become infected with HBV. Between 50%-80% of IDUs become infected with HCV within 5 years of beginning injection drug use; it is usually the first blood-borne virus they acquire. Several factors favor the rapid spread of HCV infection among IDUs:

- **Viral factors** - HCV is transmitted efficiently through blood exposure.
- **Host factors** - A large number of individuals are infected and this provides multiple opportunities for transmission to others.
- **IDU factors** - IDUs often jointly purchase drugs and prepare the drug solution together; this solution is divided among users. Sharing the drug solution, syringes, or other drug preparation equipment (such as water, drug mixing containers, and cotton filters) all increase the risk of transmission if any of these components are infected with HCV.

Other circumstances also contribute to the heavy impact of viral hepatitis on IDUs:

- IDUs are at very high risk of coinfection with HIV and HCV.
- Many IDUs drink alcohol, which damages the liver and accelerates the progression of liver disease.
- HAV infection can be severe and very dangerous in those who already have liver disease from chronic hepatitis B or chronic hepatitis C.
- Treatment of chronic hepatitis B or chronic hepatitis C can be complicated and adherence difficult for infected IDUs because many have other conditions (HIV, mental illness, alcoholism, other illnesses), are poor, and have unstable living situations. The stigma surrounding injecting drugs also means that many IDUs are marginalized and have little or no contact with health care providers.

**Agencies and Providers Face a Number of Pressing Issues in their Efforts to Address Viral Hepatitis**

In many ways, the current challenges of viral hepatitis, especially hepatitis B and hepatitis C, resemble those of HIV in the late 1980s and early 1990s. Awareness of viral hepatitis as an important public health issue is growing, but agencies, providers, community-based organizations, and others who work with those at risk must address several key issues:

- **Prevention.** Viral hepatitis is not inevitable for IDUs and others at risk. All three strains of viral hepatitis can be prevented. HAV and HBV infections can be prevented through immunization. All IDUs should be immunized against HAV and HBV infections unless they have already had the infection. Reducing or eliminating high-risk sexual and drug-use behaviors can help prevent HAV, HBV, and HCV infections. Substance abuse treatment is an important way to help IDUs reduce or eliminate drug use.

- **Transmission.** Because symptoms of viral hepatitis are often mild or non-existent, many people do not know they’re infected. This means that a very large pool of individuals with chronic HBV and HCV infections may not be using any measures to reduce the possibility of transmitting these infections to others.

- **Treatment.** Antiviral therapies for chronic hepatitis B and chronic hepatitis C are expensive, only moderately effective, and not appropriate for everyone infected with these viruses. Determining whether to begin treatment, and monitoring and adjusting treatment over time for those who do begin antiviral therapy can be difficult.

**Capacity.** Currently, public health agencies, community-based organizations, and health care professionals are limited in their ability to respond to needs in viral hepatitis. For example, fewer than half of state and local public health laboratories are able to perform tests to determine HCV infection. Many health care facilities (such as emergency rooms) that treat IDUs and others at increased risk do not routinely provide immunizations against hepatitis A and hepatitis B. In addition, primary care physicians may not have the training or expertise to diagnose or medically manage chronic hepatitis B or chronic hepatitis C. Staff of HIV and sexually transmitted disease (STD) clinics, substance abuse treatment programs, and correctional facilities have limited training and expertise in viral hepatitis issues.

- **Education.** The need to educate, train, and reach the general public, groups at increased risk, and health care professionals is enormous. This effort needs to:
  - improve the understanding of viral hepatitis and its risk factors so that individuals can reduce their chances of acquiring or transmitting the infections and providers can better serve infected and at-risk individuals;
  - encourage high-risk groups to be tested for HCV infection, receive pre- and post-test counseling, and receive medical treatment if appropriate;
  - improve hepatitis A and hepatitis B immunization rates by encouraging high-risk groups to get vaccinated;
  - integrate viral hepatitis prevention messages and interventions into existing HIV, STI, substance abuse treatment, and criminal justice initiatives; and
  - work to reduce bias and stigma toward groups at increased risk of infection.
The National Hepatitis C Prevention Strategy is One Key Response

In 2001, in collaboration with other federal, state, and private sector agencies, the Centers for Disease Control and Prevention (CDC) launched the National Hepatitis C Prevention Strategy. This effort is aimed at lowering the incidence of acute HCV infections in the U.S. and reducing the disease burden from chronic hepatitis C. The principal components of this effort are:

- education of health care and public health professionals;
- education of the public and individuals at increased risk of infection;
- clinical and public health activities to identify, counsel, and test persons at risk and to improve medical evaluations and referrals to care;
- outreach and community-based prevention programs;
- surveillance to monitor viral hepatitis trends; and
- research.

For more information about the Strategy, visit: http://www.cdc.gov/ncidod/diseases/hepatitis/c_strategy.htm

To Learn More About This Topic

Visit websites of the CDC (www.cdc.gov/ idu) and the Academy for Educational Development (www.healthstrategies.org/ pubs/ publications.htm) for these and related materials:

- Preventing Blood-borne Infections Among Injection Drug Users: A Comprehensive Approach, which provides extensive background information on HIV and viral hepatitis infection in IDUs and the legal, social, and policy environment, and describes strategies and principles of a comprehensive approach to addressing these issues.
- Interventions to Increase ID U’s Access to Sterile Syringes, a series of six fact sheets.
- Drug Use, HIV, and the Criminal Justice System, a series of eight fact sheets.
- Substance Abuse Treatment and Injection Drug Users, a series of six fact sheets.

Visit the CDC’s Viral Hepatitis website (www.cdc.gov/ hepatitis) for information materials and on-line training for health professionals.

Visit these websites for additional information on viral hepatitis:

- The American Liver Foundation: www.liverfoundation.org/
- Hepatitis Foundation International: www.hepfi.org/
- Hepatitis C Support Project: www.hcadvocate.org/
- National AIDS Treatment Advocacy Project: www.natap.org/

Check out these sources of information:


Produced by the Academy for Educational Development, with funding from CDC.
Coinfection with HIV and Hepatitis C Virus

Overview

- Persons with HIV, especially injection drug users, may also be infected with the hepatitis C virus (HCV).
- HCV infection is more serious in persons with HIV.
- Many persons with HCV don’t have any symptoms.

HCV infection can be treated. Injecting drugs is one of the main ways people become infected with HIV. It is also the main way of becoming infected with the hepatitis C virus (HCV). In fact, 50%-90% of HIV-infected injection drug users are also infected with hepatitis C.

HCV infection is more serious in HIV-infected persons.* It leads to liver damage more quickly. Coinfection with HCV may also affect the treatment of HIV infection. Therefore, it’s important for HIV-infected persons to know whether they are also infected with HCV and, if they aren’t, to take steps to prevent infection.

Many people with hepatitis C don’t have any symptoms of the disease. So your doctor or other health care provider will have to test your blood to check for the virus. If you test positive, he or she may also do a liver biopsy to determine the amount of damage to your liver.

Chronic† hepatitis C can be treated successfully, even in HIV-infected persons. Treatment for chronic hepatitis C is with a single drug or combination of two drugs. Treatment will usually take 6-12 months. You should drink little or no alcohol during treatment and may be advised not to have alcohol ever again. Vaccination against hepatitis A and hepatitis B is also recommended.

*It is not known yet whether coinfection with HCV makes HIV disease progress faster.
†“Chronic” means having the disease for a long time.

Other Ways of Becoming Infected with HCV

There are other ways of becoming infected with HCV. Persons with hemophilia who received clotting factor concentrates before 1987 commonly have HCV infection. Becoming infected through sexual contact is possible, but the risk is much lower than the risk for HIV. Mothers can pass the infection to their newborn babies, but here too the risk is less than that for HIV.

How to Prevent HCV Infection

The best way to prevent infection with HCV is to stop injecting drugs or never to start. Substance abuse programs may help. If you continue to inject drugs, always use new, sterile syringes and never reuse or share syringes, needles, water or drug preparation equipment. Do not share toothbrushes, razors and other items that might be contaminated with blood. Tattooing or body piercing may also put you at increased risk for infection with any bloodborne pathogen if dirty needles or other instruments are used. Practice safer sex.
Liver Biopsy

During a liver biopsy, a tiny piece of your liver is removed through a needle. The tiny piece (or specimen) is then checked for amount of liver damage.

Treating HCV Infection

Alpha interferon or pegylated interferon alone, or one of these in combination with ribavirin are the drugs given to patients with chronic hepatitis C who are at greatest risk for progression to serious disease. Treatment is not always successful, but even HIV-infected patients may benefit from treatment. Your doctor or other health care provider will need to make the final decision about if and when you should receive treatment.

For more information . . .

CDC HIV/AIDS
http://www.cdc.gov/hiv
CDC HIV/AIDS resources

CDC Viral Hepatitis
http://www.cdc.gov/ncidod/diseases/hepatitis/index.htm
CDC viral hepatitis resources

CDC-INFO
1-800-232-4636
Information about personal risk and where to get an HIV test

CDC National HIV Testing Resources
http://www.hivtest.org
Location of HIV testing sites

CDC National Prevention Information Network (NPIN)
1-800-458-5231
http://www.cdcnpin.org
CDC resources, technical assistance, and publications

AIDSinfo
1-800-448-0440
http://www.aidsinfo.nih.gov
Resources on HIV/AIDS treatment and clinical trials
Appendix L: Syringe Disinfection for Injection Drug Users

(Centers for Disease Control and Prevention)
How Did Disinfection Become a Widely-used HIV Prevention Strategy?

The strategy of disinfecting syringes to prevent HIV emerged in California in the 1980s. East Coast epidemics among IDUs (especially in New York) made public health officials fear that HIV would be a major threat to California IDUs. California IDUs, like those in other parts of the country, shared and reused syringes, in part because it was hard for them to get new, sterile ones. This greatly increased their risk of HIV transmission (see box, page 2). State law made it illegal for drug users to buy syringes from pharmacies and a crime to possess them. Restricted access to sterile syringes, combined with limited capacity of substance abuse treatment programs, forced prevention programs to focus on reducing injection-related risks among IDUs who would not or could not stop injecting. Field research in California showed that IDUs would act to reduce their risks if acceptable measures were available to them. One such measure was syringe disinfection with household bleach. (Disinfection means using something to kill viruses and bacteria that cause infection.) Laboratory tests had shown that bleach killed HIV. Bleach also was cheap, quick, and available everywhere.

This led community programs to train outreach workers to teach IDUs how they could reduce the risk of infection by disinfecting their syringes and needles. Distribution of bleach kits — small (usually 1-oz. size) bottles of full-strength household bleach with instructions on how to disinfect syringes — quickly became a standard component of IDU prevention in San Francisco. Other U.S. cities then rapidly adopted this strategy.

How Disinfection Can Reduce Transmission Risk: It Reduces the Number of Viruses and It Kills Them

Current disinfection recommendations are based on the following steps:

- Flush out blood, drugs, and other organic matter from the syringe. These can contain viruses and do interfere with the disinfection process.

Substance abuse treatment and access to sterile syringes through pharmacies, physician prescription, and syringe exchange programs are essential components of HIV prevention efforts among injection drug users. See “To Learn More About This Topic” at the end of this fact sheet for information on how to get fact sheets on these topics as well as other materials on HIV prevention among IDUs.
The drugs used by IDUs (heroin, cocaine, amphetamines) usually are sold as a powder that must be dissolved in water before they can be injected. Some injection drugs, such as black-tar heroin, which is a gummy solid not a powder, must be heated in a spoon or bottle cap (a “cooker”) to speed up the dissolving. Once dissolved, the drug is drawn into a syringe through a filter (a “cotton”) that prevents small particles in the solution from clogging the needle. The drug is then injected into a vein. Sometimes, two or more IDUs will draw up drugs from the same cooker.

Before injecting, a user must be sure that the needle is in a vein. He or she does this by pulling back on the plunger after pushing the needle through the skin in a likely spot. Blood entering the syringe (“registering”) shows that the needle is in a vein. Once the drug has been injected, the IDU may pull back the plunger, drawing blood back into the syringe, and then re-inject it into the vein (“booting” or “jacking”). After injecting, the user rinses out the syringe with water to prevent any remaining blood from clogging the needle. Users often dissolve drug powder and rinse their syringes with water from the same container.

HIV and hepatitis C virus (HCV) can be transmitted when IDUs share the same syringe. These viruses also can be transmitted when users divide drug solution among several syringes, share rinse water or a cotton or cooker, or mix the drug solution with a used syringe. Transmission can occur when any element — syringe, water, cotton, cooker, drug solution — becomes contaminated with blood that is infected with HIV or HCV because that element can contaminate any other element it touches. Even if an IDU is careful to always use a new, sterile syringe to inject drugs, the process of sharing contaminated equipment, drug solution, or water can increase his or her risk of acquiring or transmitting HIV or HCV. (For more information about drug preparation and viral transmission, see Koester, 1998.)
disinfection procedures, or the time necessary for adequate disinfection.

Studies of IDUs Do Not Prove That Bleach Disinfection Protects them Against HIV or Viral Hepatitis

Studies have looked for differences in the number of new infections between injectors who say they always disinfect and injectors who say they do not disinfect. They have found no significant difference in new infections among IDUs in the two groups. One possible explanation is that bleach disinfection does not protect against infection. Other factors also may help explain these findings.

• Studies don’t measure risk behaviors completely. Studies don’t always collect detailed risk information and may focus only on an IDU’s risky drug practices. As a result, a study focusing on disinfection may not show anything if the infection is due to something else, such as having unprotected sex with infected partners.

• Some studies have technical limitations. For example, sometimes it is hard for a scientist to know whether a person is really a “disinfector” or a “non-disinfector.” IDUs in the study may not remember correctly whether or how many times they used bleach during a certain period in the past. Or, they may think that saying they used bleach is the answer the scientists want to hear. As a result, IDUs who say they disinfect may seem to be at the same risk of infection as those who say they don’t disinfect.

Barriers Make it Hard for IDUs to Disinfect Correctly and Can Prevent Them from Doing It At All

IDUs may agree that disinfection is a good idea if they cannot get new, sterile syringes. However, some investigators have found that few IDUs actually use bleach to disinfect syringes or they don’t go through all the recommended steps if they do use it. Many factors make it hard for IDUs to disinfect:

• Current instructions involve a lot of steps and IDUs may think it is impossible to do correctly.

• IDUs may not be able to get clean water.

• They may not want to carry bleach or other disinfectants because it marks them as drug users.

Bleach has Advantages and Disadvantages as a Disinfectant

Advantages:

• It can reduce the amount of infectious HIV, HBV, and HCV in a used syringe.

• It is readily available.

• It is inexpensive.

Disadvantages:

• IDUs, outreach workers, and policymakers may mistakenly believe that disinfecting with bleach is as safe as using a new, sterile syringe.

• It does not sterilize the syringe, so the syringe may still carry infectious viruses after disinfection.

• Studies have not shown that bleach disinfection prevents HIV or HCV transmission.

• If a person carries small bottles of bleach, police may assume he or she is a drug user.

• Sunlight, warm temperatures, and exposure to air gradually weaken bleach so that it doesn’t work anymore; IDUs have to be sure to use fresh, full-strength bleach.

• It damages the syringe.
Withdrawal symptoms (being “drug sick”) and the overpowering need to inject as soon as possible also may drive an IDU to inject without disinfecting.

Some IDUs need help to inject and other people give them the injection. The person doing the injecting may not disinfect thoroughly.

Drug users may not have time to disinfect carefully because they must prepare the drug solution and inject quickly (for example, police are nearby).

Once the IDU has injected, the effects of the drug may prevent him or her from disinfecting carefully before the next injection (this may be especially true with cocaine, which is commonly injected multiple times in a drug use session).

What are the Take-Home Messages?

- The way that an IDU prepares and injects drugs is important in determining the risk of that person getting or transmitting HIV, HBV, and HCV:
  - Any item — syringe, water, drug solution, cooker, cotton — that is contaminated with blood containing these viruses can contaminate all the other items.
  - Even if an IDU uses a sterile syringe each time, he or she can become infected if the drug solution or preparation equipment is shared with others who are infected.
  - Disinfection will not make injecting drugs “safe.” It may make injecting “less risky” because it can reduce the number of and kill some of the HIV, HBV, or HCV in a syringe. As a result, disinfection can be a useful back-up strategy for IDUs.

- We don’t have clear, consistent laboratory evidence about the best disinfection procedure and we don’t know how effective this strategy is. So, we suggest steps that seem logical.

- Disinfection should be used only when an IDU has no safe options for preventing transmission.
  - Disinfection is not as good as stopping injecting, getting into substance abuse treatment, using a new sterile syringe, and not sharing drug solution and equipment.
  - Bleach and other disinfectants do NOT sterilize the syringe.

What Should We Tell IDUs?

Education and outreach workers should stress the following messages when they talk to IDUs:

- The best way for you to prevent HIV, HBV, and HCV transmission is to NOT inject drugs.
- Entering substance abuse treatment can help you reduce or stop injecting. This will lower your chances of infection.
- Get vaccinated against hepatitis A and hepatitis B. You can prevent these kinds of viral hepatitis if you get vaccinated.
- If you cannot or will not stop injecting, you should:
  - Use a new, sterile syringe obtained from a reliable source to prepare and divide drugs for each injection.
  - Never reuse or share syringes, water, cookers, or cottons.
  - Use sterile water to prepare drugs each time, or at least clean water from a reliable source.

Keeping Everything Clean is an Important Part of Reducing HIV and Viral Hepatitis Risk

More and more, health workers are realizing that cleanliness and good hygiene can go a long way to reducing an IDU’s risk of getting or transmitting HIV or HCV. Good hygiene can also help prevent sores and bacterial infections in the skin where IDUs inject. The following tips are an important part of the prevention message to IDUs who cannot or will not stop injecting:

- Wash your hands and arms before preparing to inject.
- Use a clean surface to prepare drugs for injection, or spread out a piece of clean paper.
- Use an alcohol pad to clean the skin where you’re going to inject.
- After injecting, use a gauze pad to stop the bleeding.
- Put a bandage on the place where you injected.
- Throw away the used alcohol pad and gauze, and all the other drug preparation equipment.
- Clean anything else blood might have touched (such as the tourniquet, your injecting space, or your clothes).
- Safely dispose of the syringe.
- Wash your hands again to clean off dirt, blood, and viruses.

Sources: Marcia Bigyer of SafetyWorks, Inc., Mamaroneck NY, and Allen Clear of Harm Reduction Coalition, New York, NY (www.harmreduction.org)
Keep everything as clean as possible when injecting (see box, left).

- If you can’t use a new, sterile syringe and clean equipment each time, then disinfecting with bleach may be better than doing nothing at all:
  - Fill the syringe with clean water and shake or tap. Squirt out the water and throw it away. Repeat until you don’t see any blood in the syringe.
  - Completely fill the syringe with fresh, full-strength household bleach. Keep it in the syringe for 30 seconds or more. Squirt it out and throw the bleach away.
  - Fill the syringe with clean water and shake or tap. Squirt out the water and throw it away.
  - If you don’t have any bleach, use clean water to vigorously flush out the syringe:
    - Fill the syringe with water and shake or tap. Squirt out the water and throw it away.
    - Do this several times.

Disinfection should be used **ONLY** when an IDU has no safe options for preventing transmission.

**To Learn More about This Topic**

Visit websites of the Centers for Disease Control and Prevention (www.cdc.gov/idd) and the Academy for Educational Development (www.healthstrategies.org/pubs/publications.htm) for these and related materials:

- Preventing Blood-borne Infections Among Injection Drug Users: A Comprehensive Approach, which provides extensive background information on HIV and viral hepatitis infection in IDUs and the legal, social, and policy environment, and describes strategies and principles of a comprehensive approach to addressing these issues.
- Interventions to Increase IDUs’ Access to Sterile Syringes, a series of six fact sheets.
- Drug Use, HIV, and the Criminal Justice System, a series of eight fact sheets.
- Substance Abuse Treatment and Injection Drug Users, a series of six fact sheets.
- Viral Hepatitis and Injection Drug Users, a series of five fact sheets.

Small numbers of these publications can be ordered at no charge from www.cdc.gov/idiu.

See the July 1994 issue of the Journal of Acquired Immune Deficiency Syndromes. This issue of the Journal includes seven papers from a workshop on the use of bleach to disinfect drug injection equipment. The papers provide an historical perspective on the use of bleach in HIV/AIDS prevention activities, review results of laboratory studies on the effectiveness of various agents in inactivating HIV, and describe the results of field studies on the disinfection practices of IDUs. (Journal of Acquired Immune Deficiency Syndromes 1994;7(7):741-776.)

See the April 1993 CDC/CSAT/NIDA HIV/AIDS Prevention Bulletin. This publication reviews the topic of disinfection and concludes that stopping injection or using new, sterile syringes is superior to disinfection. (Curran JC, Scheckel LW, Millstein RA. HIV/AIDS prevention bulletin. Centers for Disease Control, Center for Substance Abuse Treatment, and National Institute on Drug Abuse, April 19, 1993.) www.cdc.gov/idd/pubs/bleach_letter.htm

Check out these sources of information:


Appendix M: Physician Prescription of Sterile Syringes to Injection Drug Users (Centers for Disease Control and Prevention)
Injection Drug Users are at High Risk of HIV and Hepatitis. They Also Need Medical Care and Substance Abuse Treatment

HIV and hepatitis B and C can be transmitted directly when infected IDUs share syringes with others. These viruses can also be transmitted when infected IDUs jointly prepare and use drugs and share other drug injection equipment. As a result, the U.S. Public Health Service and other scientific and governmental agencies have recommended that IDUs who continue to inject should always use sterile syringes and use them only once. This recommendation is a central strategy in the effort to prevent HIV and other blood-borne diseases. However, IDUs often have difficulty obtaining sterile syringes because of laws, regulations, and pharmacy and prescription rules that limit the sale and possession of syringes.

Many IDUs also suffer from other serious problems, including drug overdoses, sexually transmitted diseases (STDs), liver disease, tuberculosis, abscesses, bacterial infections, mental illness, and violence.

Because of the illicit nature of their drug use and the stigma attached to it, IDUs often fear and mistrust health care providers and have few or no links to regular health care or social services. This reduces their chances to obtain needed medical care and enter substance abuse treatment.

Physician Prescription of Sterile Syringes Can Help IDUs in Several Important Ways

Because physicians are key gatekeepers to syringe access, efforts to encourage them to prescribe syringes to IDUs will help ensure that those who continue to inject can legally obtain sterile syringes. Involving physicians also illustrates the medical rationale for increasing IDUs’ access – that improving access to sterile syringes has a legitimate medical purpose in preventing disease.

Physician prescription on its own may not have a large-scale public health impact, but it adds another valuable option to efforts to improve IDUs’ access to sterile syringes. These efforts include initiatives to review and revise laws and policies, support syringe exchange programs, and collaborate with pharmacists.

Encouraging physician involvement in syringe prescription has another important benefit – it provides a way for programs and providers to reach out to high-risk and stigmatized individuals. Placing syringe prescription within a broader physician-patient relationship can:

- create links to other health care and social services;
- create links to substance abuse treatment; and
- open the door for doctors and patients to discuss and take action on a range of high-risk behaviors and activities.

The Rhode Island Experience

Currently, few physicians in the United States prescribe syringes to IDUs. However, a research study in Rhode Island is examining the feasibility of physician prescription in a community care setting, with promising results.

In the spring of 1999, the state’s Department of Health, with the support of the Rhode Island Medical Society, the Rhode Island Pharmacists’ Association, the Rhode Island Board of Medical Licensure and Discipline, the Rhode Island State Board of Pharmacy, and others, invited all the state’s physicians to participate in a clinical program to prescribe sterile syringes to IDUs. In her letter of invitation, the director of the Health Department informed physicians that syringe prescription was legal.

This pilot program now operates at two locations and includes a staff of four physicians, one substance abuse referral specialist, one nurse, one interviewer, and one administrator.
To date, the clinic has prescribed more than 60,000 syringes to 350 participants. Participants who have received syringe prescriptions have also received basic clinical exams, medical care, tests for HIV and viral hepatitis, hepatitis A and B immunizations, and links to substance abuse treatment and social services. The services are provided free of charge. An in-depth evaluation of the program is underway. Preliminary findings indicate that:

- patients are not requesting prescriptions for more syringes than they are using;
- most patients report appropriate disposal of syringes; and
- some drug-use behaviors have declined.

**Fostering Physician Prescription Requires Work on a Community and Individual Level**

**The community level**

As the Rhode Island experience shows, communities that are working to encourage physician prescription can help the process by obtaining the support of the state and local health departments, pharmacy boards, medical boards, and other key stakeholders. Formal endorsement and promotion of this practice by these bodies can do much to reassure physicians that this activity is both legal and a legitimate medical practice.

Communities also should act to educate and persuade physicians, pharmacists, and other health providers about the public health and individual benefits of prescribing sterile syringes to IDUs and how it should be done within the medical care setting. Education about how to help patients dispose of syringes appropriately and safely should also be included. Establishing regular communication among interested physicians, through periodic meetings or a newsletter, may stimulate physicians’ willingness and ability to work with IDUs. Tracking physician prescription activity, evaluating its outcomes, and publishing these data can be another important way to cultivate support.

**The individual level**

Individual physicians who wish to prescribe sterile syringes to IDU patients should first know the legal status in their community of prescribing syringes to IDUs. Other important recommendations include:

- Prescribing syringes should be one element of a comprehensive relationship between the physician and the patient and should be done within the context of the patient's overall medical and health needs.
- Success is more likely if physicians can work with IDU patients in a non-judgmental, culturally sensitive way that includes an openness to discussing injection-related activities and a willingness to provide links to other needed programs and services.
- In these discussions, physicians should first emphasize the dangers of continued injection and urge their patients to stop injecting. Recommending reducing or stopping drug use without alienating the patient can be challenging, however. Training or continuing education may help physicians improve their skills and abilities to deal with these sensitive drug use issues.
- Physicians should document in the patient’s medical record the recommendation to stop injecting and the need and rationale for the decision to prescribe syringes (similar to that done for any other prescription). Physicians should also record alternative options that have been explored, such as referrals to substance abuse treatment.

**Physician Prescription of Syringes to IDUs is Feasible but It Faces Challenges**

**Legal issues**

In 1999, at the start of the Rhode Island study, the investigators conducted a survey of all the state's infectious disease and addiction medicine physicians on their attitudes toward and practices in prescribing syringes to IDUs. The responses of these physicians may well echo those of others around the country. Responding physicians:

- believed that syringe prescription was a useful tool for preventing transmission of blood-borne infections;
- were willing to prescribe if it were clearly legal, though none had ever prescribed a syringe for the express purpose of preventing infection in an IDU; and
- had doubts about the legality of physician prescription; many expressed concern that they could lose their medical license or be sued if they prescribed syringes to IDUs.

Prescribing and dispensing sterile injection equipment is governed principally by state law. A recently published analysis of the laws in all 50 states, the District of Columbia, and Puerto Rico showed that prescribing and dispersing injection equipment to patients as a means of preventing disease transmission during drug use is clearly legal in most states:

- Physician prescription of injection equipment is legal in 48 of the 52 jurisdictions (it is illegal in Delaware and Kansas).
- In two other jurisdictions (Ohio and Oklahoma) physicians have a “reasonable claim to legality.” This means that the laws in that jurisdiction neither explicitly allow nor forbid prescribing or dispensing, so that an attorney “acting ethically and in good faith” could argue that the practice was legal (see Burris et al., 2000).
- It is also legal for pharmacists to fill the prescriptions in 26 states (it is illegal only in Delaware, Kansas, Georgia, and Hawaii). In 22 other jurisdictions they have a “reasonable claim to legality.”

The authors of this analysis note that although states differ, physicians generally have broad discretion to prescribe drugs and devices that they believe are medically beneficial for their patients. Several major medical and legal societies, including the American Medical Association, the Infectious Diseases Society of America, and the American Bar Association all support efforts to improve IDUs’ access to sterile syringes, including physician prescription.

**Attitudinal issues**

For physician prescription to become more common, both physicians and IDU patients may need to gain a greater understanding of the issues facing people who inject and how to address health behaviors that might be changed. Physicians may need to:

- become willing to openly acknowledge and discuss patients' injection drug use;
- accept that syringe prescription is helpful to the patient because it can prevent disease; and
• become more knowledgeable about the issue, how to recognize patients who may be IDUs, and how to help IDU patients.

IDUs may need to:

• overcome fear and mistrust of physicians and the medical establishment and be open to developing a trusting relationship with a physician; and

• be willing to discuss their concerns about any legal ramifications of having a prescription (for example, will it help them if they are stopped by the police?).

To Learn More About This Topic

Read the overview fact sheet in this series on interventions to increase IDUs’ access to sterile syringes – “Access to Sterile Syringes.” It provides basic information, links to the other fact sheets in this series, and links to other useful information (both print and web).

Visit these websites of the Centers for Disease Control and Prevention (www.cdc.gov/ids) and the Academy for Educational Development (www.healthstrategies.org/pubs/publications.htm) to get:

• Preventing Blood-borne Infections Among Injection Drug Users: A Comprehensive Approach, which provides extensive information on HIV and viral hepatitis infection in IDUs and the legal, social, and policy environment, and describes strategies and principles of a comprehensive approach to addressing these issues.

• Drug Use, HIV, and the Criminal Justice System, a series of eight fact sheets.

• Substance Abuse Treatment and Injection Drug Users, a series of six fact sheets.

Visit the website of the Project on Harm Reduction in the Health Care System (www.temple.edu/lawschool/aidspolicy/default.htm), located at the Beasley School of Law, Temple University. The Project investigates the prescribing and dispensing of sterile injection equipment as one strategy for reducing harm to injection drug users who cannot or will not enter drug treatment.


Check out these sources of information:


Syringe Exchange Programs

(Centers for Disease Control and Prevention)
In 1997, a Report to Congress concluded that needle exchange programs can be an effective component of a comprehensive strategy to prevent HIV and other blood-borne infectious diseases in communities that choose to include them. Federal funding to carry out any program of distributing sterile needles or syringes to IDUs has been prohibited by Congress since 1988. In addition, several states have restricted the funding or operation of syringe exchange programs (SEPs).

As of 2004, injection drug use accounted for about one-fifth of all HIV infections and most hepatitis C infections in the United States. Injection drug users (IDUs) become infected and transmit the viruses to others through sharing contaminated syringes and other drug injection equipment and through high-risk sexual behaviors. Women who become infected with HIV through sharing needles or having sex with an infected IDU can also transmit the virus to their babies before or during birth or through breastfeeding.

To succeed in effectively reducing the transmission of HIV and other blood-borne infections, programs must consider a comprehensive approach to working with IDUs. Such an approach incorporates a range of pragmatic strategies that address both drug use and sexual risk behaviors. One of the most important of these strategies is ensuring that IDUs who cannot or will not stop injecting drugs have access to sterile syringes. (See the related fact sheet Access to Sterile Syringes.) This strategy supports the "one-time-only use of sterile syringes" recommendation of several institutions and governmental bodies, including the U.S. Public Health Service.

What Are Syringe Exchange Programs?

It is estimated that an individual IDU injects about 1,000 times a year. This adds up to millions of injections, creating an enormous need for reliable sources of sterile syringes. Syringe exchange programs (SEPs) provide a way for those IDUs who continue to inject to safely dispose of used syringes and to obtain sterile syringes at no cost. (See the related fact sheets Syringe Disposal and Pharmacy Sales of Sterile Syringes.)

The first organized SEPs in the U.S. were established in the late 1980s in Tacoma, Washington; Portland, Oregon; San Francisco; and New York City. By 2002, there were 184 programs in more than 36 states, Indian Lands and Puerto Rico. These programs exchanged more than 24 million syringes.

In addition to exchanging syringes, many SEPs provide a range of related prevention and care services that are vital to helping IDUs reduce their risks of acquiring and transmitting blood-borne viruses as well as maintain and improve their overall health.

These services may include:
• HIV/AIDS education and counseling;
• condom distribution to prevent sexual transmission of HIV and other sexually transmitted diseases (STDs);
• referrals to substance abuse treatment and other medical and social services;
• distribution of alcohol swabs to help prevent abscesses and other bacterial infections;
• on-site HIV testing and counseling and crisis intervention;
• screening for tuberculosis (TB), hepatitis B, hepatitis C, and other infections; and
• primary medical services.

SEPs operate in a variety of settings, including storefronts, vans, sidewalk tables, health clinics, and places where IDUs gather. They vary in their hours of operation, with some open for 2-hour street-based sessions several times a week, and others open continuously. They also vary in the number of syringes allowed for exchange. Many also conduct outreach efforts in the neighborhoods where IDUs live.(7)

**What Is the Public Health Impact of SEPs?**

SEPs have been shown to be an effective way to link some hard-to-reach IDUs with important public health services, including TB and STD screening and treatment. Through their referrals to substance abuse treatment, SEPs can help IDUs stop using drugs.(8) Studies also show that SEPs do not encourage drug use among SEP participants or the recruitment of first-time drug users. In addition, a number of studies have shown that IDUs will use sterile syringes if they can obtain them.(9) SEPs provide IDUs with an opportunity to use sterile syringes and share less often.(10)

The results of this research, and the clear dangers of syringe sharing, led the National Institutes of Health Consensus Panel on HIV Prevention to stated that:(11)

"An impressive body of evidence suggests powerful effects from needle exchange programs....Studies show reduction in risk behavior as high as 80%, with estimates of a 30% or greater reduction of HIV in IDUs."

Economic studies have concluded that SEPs are also cost effective. At an average cost of $0.97 per syringe distributed, SEPs can save money in all IDU populations where the annual HIV seroincidence exceeds 2.1 per 100 person years.(12) The cost per HIV infection prevented by SEPs has been calculated at $4,000 to $12,000, considerably less than the estimated $190,000 medical costs of treating a person infected with HIV.(13)

**What Issues Do SEPs Face?**

SEPs face a variety of issues in their operation. One of the most substantial is coverage. For example, Montreal—a city that has active and well-supported SEPs, allows sales of syringes without prescription, and encourages pharmacy sales—was able to meet less than 5 percent of the need for sterile syringes in 1994.(14) Of the 126 SEPs participating in a 2002 survey, the 11 largest exchanged almost half of the 24.8 million
syringes exchanged. Most of the remaining SEPs exchanged much smaller numbers (the 22 smallest volume SEPs exchanged fewer than 5,000 syringes each). (6)

SEPs also face significant legal and regulatory restrictions. For example, 47 states have drug paraphernalia laws that establish criminal penalties for the distribution and possession of syringes. Eight states and one territory have laws that prohibit dispensing or possessing syringes without a valid medical prescription. (See the related fact sheet, State and Local Policies Regarding IDUs’ Access to Sterile Syringes.) Public health authorities in communities have employed a number of strategies to ensure the legal provision of SEP services, including declaring public health emergencies. (15)

Local community opposition also can be an issue. Residents may be concerned that the programs will encourage drug use and drug traffic and increase the number of used discarded syringes in their neighborhoods. Studies have found no evidence of increases in discarded syringes around SEPs. (16) Finally, some IDUs avoid SEPs because they fear that using a program that serves IDUs will identify them as IDUs. For others, the fear of arrest, fines, and possible incarceration if caught carrying syringes to or from the SEP is a potent deterrent. (17)

What Have Communities Done?

Activities have included:

- Supporting community-based discussions of the role that SEPs can play in comprehensive HIV and viral hepatitis prevention and care programs, in particular in getting SEP users into substance abuse treatment programs.
- Educating policy makers about the facts of injection-related transmission of blood-borne pathogens and the public health benefits of providing access to sterile syringes as part of a comprehensive public health approach.
- Encouraging collaborative review of the public health impact of repealing drug paraphernalia laws that penalize the possession or carrying of syringes.

For More Information

Read A Comprehensive Approach: Preventing Blood-Borne Infections Among Injection Drug Users, which provides extensive background information on HIV and viral hepatitis infection in IDUs and on the legal, social, and policy environment. It also describes strategies and principles for addressing these issues.

Sources

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