TREATING SUBSTANCE USE DISORDERS AMONG PEOPLE WITH HIV

Over one million people in the United States are living with human immunodeficiency virus (HIV) (Centers for Disease Control and Prevention, 2020a). HIV is a retrovirus that infects a type of white blood cell called CD4+ T-cells. These cells mediate the immune response to bacterial infections. If left untreated, HIV can lead to acquired immunodeficiency syndrome (AIDS). Once considered a fatal infection, HIV can now be managed as a chronic illness with antiretroviral therapy (ART). Additionally, it can be prevented through harm reduction strategies (e.g., condoms and syringe services programs) and medical interventions (e.g., pre-exposure prophylaxis [PrEP] and post-exposure prophylaxis [PEP]). The consistent use of ART can lead to viral suppression, which also reduces risk of HIV transmission.

Substance use disorders (SUDs) are more prevalent among people with HIV than the general population. For individuals living with HIV who experience a co-occurring SUD, effective SUD treatment improves both HIV- and SUD-related health outcomes (National Institute on Drug Abuse, 2020). However, people with both HIV and SUDs may delay HIV treatment initiation and underutilize SUD treatment (Goldstein et al., 2005; Grigoryan et al., 2009). Therefore, tailored and integrated services are necessary to achieve both HIV- and SUD-related treatment goals. SUD treatment programs need to be well-equipped to provide HIV risk assessments, testing, counseling, and linkage to HIV care providers. They should also provide PrEP and PEP prescriptions for those who do not have HIV to reduce their risk of contracting HIV.

Additionally, SUD providers must address factors that can affect an individual’s likelihood of accessing and engaging with both SUD and HIV treatments. For example, providers can partner with case managers to address (Substance Abuse and Mental Health Services Administration, 2020):

- SUD- and HIV-related stigma and discrimination
- Obstacles that racial/ethnic minorities often face in accessing care
- Complexities of medical comorbidities (e.g., viral hepatitis)
- Co-occurring HIV, SUDs, and mental disorders
- Additional service needs (e.g., housing, employment, child-care, food security) that can be psychological stressors affecting individual and community health outcomes
- Barriers associated with incarceration and involvement with the criminal justice system
This Advisory is based on the Substance Abuse and Mental Health Services Administration’s (SAMHSA) Treatment Improvement Protocol (TIP) 37, Substance Abuse Treatment for Persons With HIV/AIDS. It highlights strategies and considerations for SUD providers to effectively engage people with HIV in SUD treatment. It provides an overview of how SUD providers can integrate HIV services into their practice and address factors that affect an individual’s ability to access and remain engaged in both SUD and HIV treatment.

Key Messages for SUD Treatment Providers When Working with People with HIV

- Providers should offer universal HIV screenings for people experiencing a SUD.
- For clients experiencing a SUD who are not living with HIV, providers can implement ongoing HIV screenings and testing, prescribe PrEP and PEP, provide education on harm reduction strategies (e.g., condom use, not sharing needles), and implement counseling programs to support continued SUD recovery and prevent HIV.
- SUD treatment providers can quickly link clients who are living with HIV to HIV primary care and support long-term retention in services.
- To effectively implement screening, assessment, and treatment programs, providers must receive training and education.
- The co-occurrence of a SUD and HIV requires an integrated treatment plan that assesses and addresses the client’s social stressors and support systems and acknowledges potential client co-morbidities, including:
  - Chronic diseases and mental disorders
  - HIV and SUD clinical presentations
  - Symptoms
  - Medication interactions and side-effects
- Case managers are essential for developing and implementing an integrated treatment plan for SUDs and HIV.
- Case managers and providers should establish a network of referrals for services not provided within the clinic, including medical care, mental health, social supports, and more intensive SUD treatment options.
Important Considerations for Treating SUD among People with HIV

Providers may encounter a variety of challenges when working with people with co-occurring SUD and HIV, including treatment complexities of co-occurring conditions and barriers to both HIV and SUD treatment plan adherence (e.g., medication adherence).

The presence of a SUD can accelerate the progression of HIV, increasing viral load and, thereby, the likelihood of AIDS-related morbidity (even among clients who adhere to ART) (Dash et al., 2015). Illicit substances weaken the blood brain barrier (Schaefer et al., 2017; Strazza et al., 2011). This facilitates entry of HIV into the brain and triggers the release of neurotoxins, which precipitates neuroinflammation, or brain swelling (Dahal et al., 2015).

Further, when HIV, SUD, and mental disorder treatments are fragmented, clients are at greater risk of dropping out of treatment as a result of fear, stigma, escalating substance use or mental disorder symptomatology, reduced ART adherence, and concern about decreases in viral suppression.

Other important considerations include:

1. Appropriately diagnosing individuals.

Understanding SUD and HIV symptomatology leads to effective diagnosis and treatment strategies. Providers should be able to discern whether a symptom is due to HIV or a SUD (Swan et al., 2018). Differential diagnoses are key to ensuring individuals get the individualized care they need, and that they do not experience possible adverse drug reactions or interactions if taking HIV medications. The table below lists the common symptoms that may be related to either HIV or substance use.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>HIV-Related</th>
<th>Substance Use Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constitutional:</td>
<td>HIV infection</td>
<td>Cocaine use</td>
</tr>
<tr>
<td>● Anorexia</td>
<td>Mycobacterium Avium Complex (MAC)</td>
<td>Methamphetamine use</td>
</tr>
<tr>
<td>● Weight loss</td>
<td>Cytomegalovirus</td>
<td>Injection-related bacterial infections</td>
</tr>
<tr>
<td>● Fever</td>
<td>Tuberculosis</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>● Night sweats</td>
<td></td>
<td>Heroin withdrawal</td>
</tr>
<tr>
<td>● Diarrhea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulmonary:</td>
<td>Bacterial pneumonia</td>
<td>Cocaine use</td>
</tr>
<tr>
<td>● Chest pain</td>
<td>Pneumocystis Carinii Pneumonia (PCP)</td>
<td>Marijuana use</td>
</tr>
<tr>
<td>● Cough</td>
<td></td>
<td>Tobacco use</td>
</tr>
<tr>
<td>● Shortness of breath</td>
<td></td>
<td>Aspiration pneumonia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tuberculosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pulmonary embolism</td>
</tr>
</tbody>
</table>

Medical Complications of Substance Use that May Affect Differential Diagnosis of Injection Drug Users with HIV
### Medical Complications of Substance Use that May Affect Differential Diagnosis of Injection Drug Users with HIV

<table>
<thead>
<tr>
<th>Neurologic:</th>
<th>HIV infection</th>
<th>Intoxication and withdrawal from heroin</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Altered mental state</td>
<td>Toxoplasmosis</td>
<td>Methamphetamine-induced psychosis</td>
</tr>
<tr>
<td>● Psychosis</td>
<td>Cryptococcosis</td>
<td>Cocaine</td>
</tr>
<tr>
<td>● Seizures</td>
<td>Progressive Multifocal Leukoencephalopathy (PML)</td>
<td>Alcohol</td>
</tr>
<tr>
<td>● Focal deficits</td>
<td>Human T-lymphotropic Retrovirus Type 1 (HTLV-1)</td>
<td>Benzodiazepines</td>
</tr>
<tr>
<td>● Peripheral neuropathy</td>
<td></td>
<td>Drug-related chronic encephalopathy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trauma</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alcoholic polyneuropathy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dermatologic:</th>
<th>HIV dermatitis</th>
<th>Drug-related pruritus</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Pruritus</td>
<td>HIV-related thrombocytopenia</td>
<td>Chronic hepatitis</td>
</tr>
<tr>
<td>● Rash</td>
<td></td>
<td>Cellulitis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alcohol/heroine-induced thrombocytopenia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lymphedema</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous:</th>
<th>HIV-related lymphadenopathy</th>
<th>Localized infection</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Lymphadenopathy</td>
<td>HIV-related nephropathy</td>
<td>Heroin nephropathy</td>
</tr>
<tr>
<td>● Uremia</td>
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</tr>
</tbody>
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### 2. Supporting consistent ART use.

People with HIV and a co-occurring SUD are less likely to receive ART (Gebo et al., 2005) and other clinical assessments (e.g., viral load testing) (Raboud et al., 2005). Individuals who are adherent to their HIV medications (i.e., consistent use of ART) live long and otherwise healthy lives. Consistently taking ART can lead to viral suppression, which both improves the health outcomes for individuals living with HIV and reduces potential future transmission of HIV.

For people with HIV and a co-occurring SUD, ART adherence can be challenging, especially if someone is actively using substances. For people with HIV and a co-occurring SUD who need additional support to adhere to ART, providers can implement client education and empowerment strategies focused on:

- The fundamentals of HIV, including destigmatizing the disease, routes of transmission, and the importance of testing
- Harm reduction strategies to prevent HIV transmission
- Treatment program policies regarding HIV
- Confidentiality rules and expectations
- Local HIV-specific resources, including testing sites and hotlines
- Available medical and social services and how to obtain them

In addition to creating barriers to ART adherence, co-occurring SUDs and mental disorders can increase medical complexities for people with HIV. Providers must understand interactions between ART, medications for SUDs (e.g., methadone, buprenorphine, naltrexone), and pharmacotherapies for mental disorders to closely monitor for interactions between prescribed medications. Additionally, providers should consider the interactions between prescribed medications and other drugs. For all clients with HIV, and especially those who are pregnant, clinicians should monitor for negative interactions between HIV medications, opioid use disorder medications, substances such as cocaine, and other prescribed medications (McCance-Katz, 2011).

For more information on HIV medication interactions, visit University of California San Francisco InSite and HIV.gov.

Strategies for Providers

While there are many considerations when treating SUDs among people with HIV, numerous approaches have been found effective for addressing these complexities and challenges.

1. Conduct universal HIV testing.

In the United States, about one in seven (14 percent) of the more than 1 million people with HIV do not know they have the disease (Centers for Disease Control and Prevention, 2020a). Testing identifies an individual’s HIV status and is the first step in linking those newly diagnosed with HIV to care. Testing also helps prevent HIV transmission and new infections (Mayo Clinic, 2020). Individuals who are undiagnosed or unaware of their HIV status account for nearly 40 percent of ongoing HIV transmissions (Centers for Disease Control and Prevention, 2020b; Skarbinski et al., 2015).

The U.S. Preventive Services Task Force recommends providers conduct screening for HIV infection among individuals aged 15 to 65, younger adolescents, and older adults at increased risk (e.g., people who inject drugs, have condomless sex, participate in transactional or commercial sex), and all pregnant women. By giving the recommendation an “A” rating, this requires health insurance companies to provide free HIV testing (Centers for Medicare and Medicaid Services, 2010; Moyer, 2013; Owens et al., 2019a).

In a 2019 “Dear Colleague Letter,” SAMHSA called on mental health and substance use providers to increase onsite, same-day oral fluid HIV testing and include HIV testing as part of the standard of care (SAMHSA, 2019). People can self-administer oral fluid tests and receive results in under 30 minutes (Centers for Disease Control and Prevention, 2020c). SUD treatment providers who screen for HIV often do so for viral hepatitis, as well. This is an important first step for addressing potentially serious co-occurring HIV and viral hepatitis infections (Centers for Disease Control and Prevention, 2020d).

Treatment providers should prescribe PEP to those who may have been exposed to HIV, and risk reduction counseling and intervention for clients at risk for infection.

HIV counseling should be part of a SUD provider’s approach, both before and after testing. Counseling is an opportunity to help people assess their risks, encourage and reinforce harm reduction and prevention strategies, and refer people with HIV to clinical care. Counselors should be specifically trained in HIV counseling.
2. If a client does not have HIV, provide primary and secondary HIV prevention strategies.

Primary HIV prevention reduces the incidence of transmission (i.e., fewer people get HIV), whereas secondary HIV prevention reduces the prevalence and severity of the disease through early detection and prompt intervention (i.e., fewer people with HIV progress to AIDS). There are multiple pathways for HIV prevention:

- **Harm reduction**: Safer sex education and syringe service programs can increase an individual’s access to harm reduction supplies and education (Behrends et al., 2017; Dasgupta et al., 2019; Kerr et al., 2010; Rudolph et al., 2010; Williams & Metzger, 2010).

- **PrEP and PEP**: The U.S. Preventive Services Task Force gave PrEP a “Grade A” recommendation (Owens et al., 2019b). It is an effective tool for reducing HIV transmission, including among populations vulnerable to HIV, such as people who inject drugs (PWID) and people who may be exposed to HIV through sexual contact. PrEP is approximately 99 percent effective at preventing HIV when taken consistently and adhering to prescription guidelines (Centers for Disease Control and Prevention, 2020e).

  PrEP is recommended for people who have had an increased risk of getting HIV in the past six months. The risks and benefits of uptake and continuing should be an ongoing discussion between the client and provider. Difficulty following the PrEP regimen, which requires daily medication, can be a barrier to effective HIV prevention, particularly among individuals with SUDs (SAMHSA, 2020).

3. Assess for specific SUD type and severity to determine SUD treatment plan.

Prior to treatment initiation, providers should screen and assess individuals for SUD type and severity. During the screening and assessment process, they should discuss treatment preferences, previous experiences with treatment, and client treatment goals to identify the most appropriate treatment options.

4. Coordinate and integrate care for people with HIV and a SUD.

Untreated or undertreated mental illnesses and/or SUDs can create obstacles to initiating and continuing PrEP and ART. This increases the potential for HIV transmission. Providers can use specific strategies to engage and retain in care people with or at risk for HIV who may have multiple co-occurring health and ancillary service needs (Backus et al., 2015; Health Resources and Services Administration, 2018; Ojikutu et al., 2014; SAMHSA & National Council for Behavioral Health, 2020).

Successful strategies include integrated testing (as previously described) and service delivery (e.g., multi-disciplinary teams and one-stop-shop models that provide co-located or coordinated substance use, mental health, medical, and social services). Coordinated care, linkage to HIV care, and client follow-up and monitoring within behavioral health settings are also key to facilitating HIV prevention and treatment.

5. Provide case management.

For individuals living with HIV and a SUD, case management can better facilitate coordinated care and service delivery. The term “case management” has been used to describe a wide range of interventions for a diverse number of populations. For the purposes of this advisory, case management is the term used for coordination of care provided to people with co-occurring HIV and SUDs that attempts to meet the multiple psychosocial and physical needs of individuals seeking assistance. Professionals such as social workers, patient navigators, community health workers, and peer navigators can fill case management roles.
For more information on case management, please refer to the American Case Management Association’s *Case Management Standards of Practice* and SAMHSA’s TIP 27, *Comprehensive Case Management for Substance Abuse Treatment*.

As the primary coordinator of care for a given client, case managers can:

- **Address ancillary service needs**: Managing treatment and myriad ancillary service needs can be a burden for people living with HIV and a SUD. Case managers can identify ancillary service needs, such as stable housing, food assistance, financial assistance, childcare, legal services, employment, and transportation, through a client care plan. They can then assist the client in accessing and maintaining any needed supports. Case managers bolster the goals of medical providers by providing consultations, follow-up, and helping acquire resources that affect the client’s ability to obtain prescriptions and keep appointments.

- **Build referral networks for clients**: Creating medical referral networks or institutional linkages facilitates rapid linkage to and retention in care. Case managers who work with individuals with co-occurring HIV and SUDs should familiarize themselves with local AIDS Service Organizations (ASOs), treatments for mental disorders, medical and dental services, welfare benefits, unemployment and disability benefits, food stamps, housing supports, vocational rehabilitation, and hospice care.

6. **Provide counseling to support treatment adherence.**

Adherence to medical care means more than simply taking medications as prescribed. The foremost challenge in providing HIV and SUD treatment is engaging clients and encouraging them to be active participants in their own care. Providers can use motivational interviewing to strengthen clients’ motivation and commitment to treatment goals. Client education also facilitates client engagement and empowerment, and empowerment results in better adherence to medical care.

<table>
<thead>
<tr>
<th>For people with HIV and SUDs who are managing their ART and need additional support to adhere to their SUD treatment plan, providers can suggest the following to prevent restarting drug use:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Individual counseling</td>
</tr>
<tr>
<td>● Participation in a peer support group</td>
</tr>
<tr>
<td>● Medical attention to relieve physical discomfort and alleviate anxiety</td>
</tr>
<tr>
<td>● Relaxation and stress management techniques</td>
</tr>
<tr>
<td>● Expressing concerns or questions in a timely manner</td>
</tr>
</tbody>
</table>

7. **Train providers and clinic staff on cultural, ethical, and cross-cutting issues.**

Effective providers benefit from training on a wide range of topics, including:

- **Implicit bias and HIV- and SUD-related stigma**: Stigmatizing attitudes are still pervasive within the United States and can negatively impact an individual’s willingness to seek care and remain engaged in it. Stigmatizing beliefs may be related to fear of transmission or ideas about who is at risk for being diagnosed with HIV or a SUD (National Academies of Sciences, Engineering, and Medicine, 2020; Turan et al., 2017; Vanable et al., 2006).
Additional issues providers may confront when working with this client population include:

- Powerlessness, helplessness, and loss of control
- Shame and guilt
- Homophobia
- Anger and hostility
- Frustration
- Over-identification
- Denial
- Racial, gender, and economic inequity
- Burnout

These beliefs may be subconscious or deeply internalized, making them challenging to confront and address. Regular clinical supervision and specialized training can help providers improve their counseling skills.

- **Screening and referral for client needs:** SUD treatment, medical care, housing, mental health care, nutritional care, dental care, ancillary services, and support systems are available for clients with HIV and a co-occurring SUD. Staff need training on the availability of these services in their communities.

- **Cross-cutting resources:** To effectively provide appropriate referrals and services, case managers may need additional training to work in an integrated setting or across HIV- and SUD-specific settings. For example, stable housing for an individual with HIV and a SUD could be the determining factor in maintaining treatment adherence. Several federally funded programs subsidize housing costs for people with HIV, such as the Department of Housing and Urban Development’s Housing Opportunities for Persons with AIDS (HOPWA) program. These same services may not be available to an individual who is in recovery for a SUD only.

- Cross-cutting trainings can also include trainings on techniques to build rapport and therapeutic alliance, such as motivational interviewing, reflective listening, and using “person-first language.” For more information on use of motivational techniques, please refer to SAMHSA’s TIP 35, *Enhancing Motivation for Change in Substance Use Disorder Treatment*.

- **Cultural competency:** Clients respond best to providers who are representative of their communities or otherwise respect their background and identities. Providers should become familiar with “person-first” language, issues around race, ethnicity, gender, and socio-economic status, and create a learning environment where they can continually grow their cultural understanding. Five essential elements contribute to cultural competence:
  1. Valuing diversity
  2. Cultural self-assessment
  3. Dynamics of difference
  4. Institutionalization of cultural knowledge
  5. Adaptations to diversity

For more information, please refer to SAMHSA’s TIP 59, *Improving Cultural Competence*. 

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Ethical considerations related to disclosure, consent, confidentiality, and privacy: These ethical considerations fall into two main categories:

1. HIV disclosure and consent: Disclosure of HIV and/or SUD status can be complicated and challenging for clients. To support their clients, providers should become experts on state laws related to HIV disclosure. In 21 states, laws require people with HIV who are aware of their status to disclose their status to sex partners, and 12 states require disclosure to needle-sharing partners (Centers for Disease Control and Prevention, 2020f).

2. Confidentiality and privacy: Ensuring confidentiality is perhaps the strongest element in the foundation of a therapeutic relationship. Clients with HIV and/or a SUD may be concerned about their privacy and fear that their disclosure to providers will lead to stigma within the healthcare setting or that their information will be shared outside of the healthcare setting. Clients must feel that what they say to a provider is protected information.

Providers must use caution when notifying clients of test results and should comply with regulations to ensure a client’s confidentiality is preserved. Even when clients trust their provider, they may be wary of electronic methods of communication. Laws like Health Insurance Portability and Accountability Act (HIPAA) exist to protect client confidentiality through verbal communication and electronic health records. Staff should be aware of state reporting laws and federal and state rules about consent and privacy. Clinical settings should post their policies related to confidentiality and privacy publicly to reaffirm that their settings are safe places to discuss client concerns and health care.
Resources

- Substance Abuse and Mental Health Services Administration
  - FindTreatment.gov
  - HIV Resources (Addiction Technology Transfer Center Network)
  - Prevention and Treatment of HIV Among People Living with Substance Use and/or Mental Disorders
  - TIP 35, Enhancing Motivation for Change in Substance Use Disorder Treatment
  - TIP 37, Substance Abuse Treatment for Persons With HIV/AIDS
  - TIP 59, Improving Cultural Competence
  - TIP 63, Medications for Opioid Use Disorder

- National Coordinating Resource Center
  - AIDS Education & Training Center Program

- American Society of Addiction Medicine
  - Patient Resources

- Centers for Disease Control and Prevention
  - Ending the HIV Epidemic
  - Health Insurance Portability and Accountability Act (HIPAA)
  - Hotlines and Referrals
  - Let’s Stop HIV Together
  - PrEP (pre-exposure prophylaxis)
  - Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States

- Health Resources and Services Administration
  - HIV and AIDS Bureau, Ryan White HIV/AIDS Program

- National Center for Complementary and Integrative Health
  - Relaxation Techniques for Health

- National Institute of Allergy and Infectious Diseases
  - HIV/AIDS

- National Institute on Drug Abuse
  - Common Comorbidities with Substance Use Disorders Research Report Part 3: The Connection between Substance Use Disorders and HIV
  - Screening and Assessment Tools Chart
  - What about 12-step programs – Do they work?

- NIH Office of AIDS Research
  - Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents Living with HIV

- University of Washington
  - National HIV Curriculum
Bibliography


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