







# Tips for HIV Clinicians Working with People who Use Alcohol

**Alcohol** or ethylalcohol (ethanol) is present in varying amounts in beer, wine, and liquor. The most common route of administration is oral ingestion. Alcohol is widely available in all communities, and is the most prevalent substance used (compared to marijuana, cocaine, methamphetmaine, heroin, and prescription opioids) and second most prevalent subtance among treatment admissions in 2016<sup>1-2</sup>. Alcohol relaxes the brain and body, which some people find pleasurable. Many individuals find that moderate drinking (a drink or two of alcohol a day) helps relieve stress, encourages relaxation, and acts as an appetite stimulant. Its acute effects, however, can also alter mood and lead to physical, psychological and social problems. Alcohol is classified as a central nervous system depressant, and even small amounts of alcohol can have a negative effect on the user's coordination, reactions, and judgments<sup>3</sup>. Binge drinking can lead to poor coordination, vomiting, exaggerated emotional reactions (including sadness, tearfulness, anxiety, anger, and aggression), and can lead to unconsciousness. Women who are pregnant or planning to become so, are advised to avoid alcohol. A hangover, which may include a headache, dry mouth, feeling sick, and tired, is a common consequence of heavy drinking. These effects are caused by dehydration and toxicities. Extremely heavy drinking can lead to coma and even death<sup>4</sup>.

The U.S.-based National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines at-risk alcohol use as drinking more than the recommended limits. The recommended limit for men is no more than 4 standard drinks on any single day and no more than 14 drinks per week. For women and individuals 65 and older, the limit is no more than 3 drinks per on any single day and no more than 7 drinks per week<sup>3</sup>.

## The Definition of a Standard Drink

People have different personal definitions of what exactly constitutes an alcoholic "drink." NIAAA has developed a definition of a standard drink. The following chart, available on the NIAAA website, details the number of ounces of a standard drink of beer, malt liquor, table wine, fortified wine, cordial/liqueur/aperitif, brandy, and hard liquor/80-proof spirits (e.g., vodka, gin, or scotch)<sup>3</sup>. So, one person may consider a drink to be a "40-ouncer" of beer, which, if you use NIAAA's definition of a standard drink, would equal 3 1/3 standard drinks. It is very important for patients who drink alcohol to understand what is meant by "a drink" when you are assessing the level of risk associated with their alcohol consumption.



## Signs and Symptoms of Alcohol Withdrawal

Alcohol withdrawal refers to symptoms that may occur when a person who has been drinking too much alcohol suddenly stops. Withdrawal symptoms usually occur within 5-10 hours after the last drink is consumed, but can occur days later. Symptoms get worse in 48 - 72 hours, and may persist for weeks. People with moderate-to-severe symptoms of alcohol withdrawal may need inpatient treatment at a hospital or other facility that treats alcohol withdrawal. An individual experiencing alcohol withdrawal will be watched closely for hallucinations and other signs of delirium tremens. Treatment may include: (1) monitoring of blood pressure, body temperature, heart rate, and blood levels of different chemicals in the body; (2) IV fluids or medications; and (3) sedation using benzodiazepines until withdrawal is complete. Those with mild-to-moderate symptoms of withdrawal may be treated in an outpatient substance use disorder treatment program<sup>5</sup>.

#### The Intersection of Alcohol Use and HIV/AIDS

A complex relationship exists between alcohol use and HIV. Alcohol use is common among people at risk for HIV and has a central modifiable effect on health outcomes. Up to 50 percent of adults with HIV infection have a history of alcohol problems<sup>6-7</sup>. Alcohol use among people with HIV can affect medication adherence and antiretroviral resistance, as well as increase risky sexual behavior.

Even intermittent alcohol use can complicate the clinical management of patients living with HIV by: (1) diminishing adherence to medications; (2) increasing risk of liver injury; (3) reducing the patient's ability to practice safer sex; (4) increasing the risk of side effects from medications; and (5) changing pharmacokinetics of prescribed drugs. Alcohol can increase how fast the virus replicates, leading to higher amounts of virus (i.e., the viral load) in the body<sup>8</sup>.

### The Impact of Alcohol and HIV on the Brain and Body

Patients who drink or are infected with HIV are more likely to suffer from pneumonia and to have chronic conditions such as emphysema. Chronic alcohol consumption has been found to increase the rate at which viruses infect lungs and aid in the emergence or opportunistic infections<sup>9</sup>. In studies comparing patients living with an alcohol use disorder (AUD), HIV or both, people who have an alcohol use disorder had more changes in brain structure and abnormalities in brain tissues than those living with HIV alone. Patients with a co-occurring HIV infection and AUD were especially likely to have difficulty remembering and to experience problems with coordination and attention<sup>10</sup>.

#### **Alcohol Treatment as HIV Prevention**

Decreasing alcohol use among patients living with HIV can reduce the medical and psychiatric consequences associated with alcohol consumption. It can also decrease other drug use and HIV transmission. Screening, brief intervention, and referral to treatment for alcohol use is an integral part of clinical care for individuals living with HIV. The bottom line is that treatment for an alcohol use disorder can be considered primary HIV prevention<sup>8</sup>.

#### It is Important to Know your Community Support Resources!

Alcohol use transcends all racial and ethnic and geographic boundaries and impacts a very diverse array of populations. Though referral resources vary from location to location, Narcotics Anonymous, 12-step programs, substance use disorder treatment programs, and relapse prevention groups are often available for specific sub-populations (MSM, women, HIV+ individuals, etc.), and may even be alcohol-specific. Both medical and behavioral treatment interventions have been shown to be effective in treating alcohol use disorders<sup>11-13</sup>. You should become familiar with local treatment programs that have experience in treating alcohol abusers.

#### Keep a list of your local referral resources and update it regularly. Write down referral information you can share with your patient!

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This fact sheet was prepared and reviewed by Beth Rutkowski, MPH, and Thomas Freese, PhD – Pacific Southwest Addiction Technology Transfer Center/UCLA Integrated Substance Abuse Programs; and Maya Gil Cantu, MPH; Sandra Cuevas, Kevin-Paul Johnson; and Tom Donohoe, MBA – Pacific AIDS Education and Training Center, Los Angeles Region.