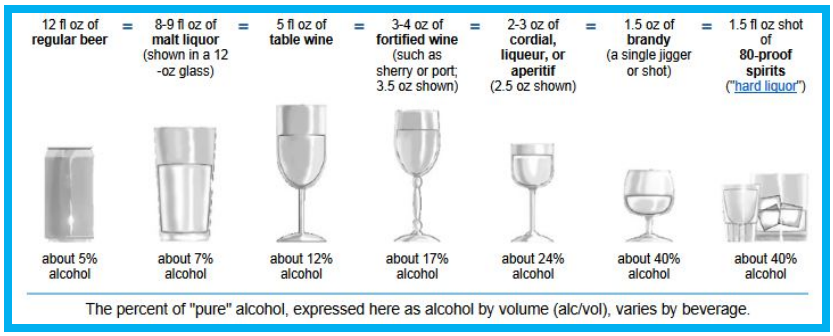
Tips for HIV clinicians working with **Alcohol Users**

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 abuseable substance (compared to marijuana, cocaine, methamphetmaine, heroin, and prescription opiates)[1-2]. 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 depressant, and even small amounts of alcohol can have an effect on the user's coordination, reactions, and judgments[3]. 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[4].

The U.S.-based National Institute on Alcohol 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 per occasion and no more than 14 drinks per week. For women, the limit is no more than 3 drinks per occasion and no more than 7 drinks per week. And for individuals 65 and older, the limits are lower (no more than 1 drink per occasion and no more than 7 drinks per week) [3].

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 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) [3]. 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 alcohol dependent patients 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 program[5].

The Intersection of Alcohol Use and HIV/AIDS

A complex relationship exists between alcohol abuse 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[6-7]. 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 HIV-infected patients 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[8].

The Impact of Alcohol and HIV on the Brain and Body

Patients who drink or who have HIV infection 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[9]. In studies comparing patients with alcoholism, HIV infection, or both, people with alcoholism had more changes in brain structure and abnormalities in brain tissues than those with HIV alone. Patients with HIV infection and alcoholism were especially likely to have difficulty remembering and to experience problems with coordination and attention[10].

Alcohol Treatment as HIV Prevention

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

It is Important to Know your Community Support Resources!

Alcohol use transcends racial/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 abuse treatment programs, and relapse prevention groups are often available for specific groups (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 addiction[11-13]. 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!

Need a local substance abuse treatment referral? Phone: 1-800-662-HELP (SAMHSA National Helpline); Website: http://findtreatment.samhsa.gov

Need a local 12-Step meeting? Alcoholics Anonymous: http://www.aa.org (On the home page, click on the "How to Find A.A. Meetings" tab and then click on either the "*Click Here*" link [for A.A. Meetings in the U.S. or Canada] or "international General Services Office" link [for meetings located outside the U.S. or Canada])

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