

Chapter 6—Substance Misuse and Cognitive Impairment

KEY MESSAGES

- Substance misuse can increase the risk of having cognitive problems as an older adult.
- Screening for mental disorders that co-occur with substance misuse and can negatively affect cognition is very important. Doing such screening will help you quickly get clients the substance use disorder (SUD) treatment, mental health services, and medical evaluation they need.
- Treatment should be offered as needed for the full scope of problems facing an older client. Treatment should address a client's substance misuse; co-occurring mental conditions, including depression or anxiety; and cognitive impairment.

Chapter 6 of this Treatment Improvement Protocol (TIP) will most benefit providers. It will help them understand how to screen, diagnose, and treat older clients who misuse substances and have, or are at risk for, cognitive problems. Changes in how people think and how their brains work are normal parts of getting older and vary a lot from person to person. But some age-related cognitive changes are abnormal, such as Alzheimer's disease. However, for older adults who misuse substances, difficulties with cognition and other brain functions can be more serious. Older individuals are more sensitive than younger and middle-aged adults to the negative effects of drugs and alcohol on the brain.⁹⁴⁹ This puts older people who misuse substances at increased risk for certain problems with thinking (also called cognitive impairment or cognitive disorders), such as dementia and delirium.

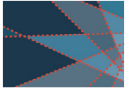
Who Can Benefit From Chapter 6 of This TIP and How?

Chapter 6 of TIP 26 is for behavioral health service, healthcare, and social service providers who provide care to older adults who misuse substances. Such providers include physicians and other healthcare professionals, psychiatrists, psychologists, counselors, social workers, drug and alcohol counselors, and other behavioral health workers, such as peer recovery support specialists.

Screening, diagnosis, and treatment of older clients who misuse substances and have cognitive problems may require help from many different types of providers. One type of provider may screen; another may make the diagnosis; yet another may treat the client or work with the client's caregiver.

If you work with older adults in any setting, you are likely seeing more and more older clients who misuse substances. **Chapter 6 will support you in decreasing your clients' chances of developing dementia and other cognitive problems by helping them address substance misuse and adopt healthier lifestyles.^{950,951} Chapter 6 will help you:**

- **Teach older clients** about risks of cognitive disorders related to substance misuse, such as dementia.
- **Understand why you need to screen older clients who misuse substances** for cognitive impairment, as well as conditions that co-occur with substance misuse and increase the risk for cognitive problems. These include depression, anxiety, and posttraumatic stress disorder (PTSD).



- **Refer older clients** with cognitive impairment for further cognitive testing and evaluation to make sure they receive the correct diagnosis.
- **Offer treatments** for SUDs, co-occurring mental disorders, and cognitive disorders, including education, drug and alcohol counseling, mental health services, referral for medication treatment, or a combination of these.
- **Work with caregivers** of older clients who misuse substances, have cognitive disorders, or both. Caregivers often need help improving their own coping and stress management skills. This is important because when caregivers suffer, the care they give can suffer too.

Organization of Chapter 6 of This TIP

Chapter 6 covers education, screening, assessment, and treatment of older adults who misuse substances and may also have, or be at risk for, cognitive impairment.

The first section of Chapter 6 discusses how common substance misuse is in older adults. Many people think substance misuse is “just a young person’s problem.” But this is not true. This section will help you understand the importance of offering substance-related screening and treatments.

The second section addresses whether substance misuse causes cognitive problems in older people. The findings from research studies are not always clear. But what is clear is why you need to look for cognitive problems in older clients who misuse substances and how you can do that.

In the third section, you will learn more about mental disorders that commonly occur in older clients who misuse substances and can negatively affect their thinking. These include depression, anxiety, and PTSD. If untreated, these conditions can also make a client’s substance misuse worse. Similarly, untreated SUDs can make these co-occurring mental disorders worse.

The fourth section offers recommendations on how to help older clients who misuse substances reduce their chances of developing cognitive problems through screening, assessment, and treatment (or referral to treatment). Screening and assessment are discussed in more detail in Chapter 3 of this TIP (which includes many of the actual screening measures you can use in your program).

The fifth section guides you in helping caregivers of older clients who misuse substances and have cognitive difficulties. Caregivers face many struggles and are often in great need of information and resources—not only to help your older clients but also to help themselves.

The final section offers resources to support your program and resources to share with your clients and their family members. More detailed resources are in Chapter 9 of this TIP.

The Appendix presents two screening instruments: one for depression and another for PTSD. For definitions of key terms you will find in Chapter 6 of this TIP, see Exhibit 6.1.

EXHIBIT 6.1. Key Terms

- **Addiction*:** The most severe form of SUD, associated with compulsive or uncontrolled use of one or more substances. Addiction is a chronic brain disease that has the potential for both recurrence (relapse) and recovery.
- **Alcohol misuse:** The use of alcohol in any harmful way, including heavy drinking, binge drinking, and alcohol use disorder (AUD).
- **At-risk/high-risk drinking:** Drinking alcohol in excessive amounts. This definition encompasses both binge drinking and heavy drinking. Additionally, any alcohol consumption is considered risky when

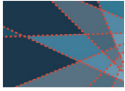
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carried out by individuals with certain medical conditions that are worsened by alcohol, those taking medicine that can interact harmfully with alcohol, those driving a car or engaged in other activities that require alertness, or people recovering from AUD.^{952,953} Note that for purposes of this TIP, at-risk drinking and high-risk drinking are synonymous and either term is acceptable to describe an older adult's drinking patterns.

- **AUD:** The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) defines this disorder.⁹⁵⁴ An AUD diagnosis is given to people who use alcohol and meet at least 2 of the 11 DSM-5 symptoms in a 12-month period. Key aspects of AUD include tolerance, withdrawal, loss of control, and continued use despite negative consequences. AUD covers a range of severity and replaces what the previous edition of DSM termed alcohol abuse and alcohol dependence.
- **Binge drinking:** A drinking pattern that leads to blood alcohol concentration levels of 0.08 grams per deciliter or greater. This usually takes place after four or more drinks for women and five or more drinks for men.^{955,956} However, older adults are more sensitive to the effects of alcohol, and treatment providers may need to lower these numbers when screening for alcohol misuse.⁹⁵⁷ Additionally, other factors such as weight, decrease in enzyme activity, and body composition (e.g., amount of muscle tissue present in the body) can also affect alcohol absorption rates.
- **Caregivers:** Informal caregivers provide unpaid care. They assist others with activities of daily living (ADLs), including health and medical tasks. Informal caregivers may be spouses, partners, family members, friends, neighbors, or others who have a significant personal relationship with the person who needs care. Formal caregivers are paid providers who offer care in one's home or in a facility.⁹⁵⁸ Most older adults do not need caregivers and are as able to address their own needs as younger adults, whether or not substance misuse is a factor in their lives.
- **Cognitive disorders:** Problems in cognition that are not a normal part of aging. These problems include difficulties with memory, attention, using and understanding language, thinking and reacting quickly, solving difficult problems, or a combination of these. Dementia and MCI are examples of cognitive disorders.
- **Delirium tremens:** A temporary state of confusion that can occur during alcohol withdrawal. If untreated, some symptoms, such as unstable heart rate and seizures, can be life threatening.
- **Dementia:** A brain disorder in which problems with cognition get worse over time. Problems with cognition are serious enough that people need help with activities of everyday living (e.g., bathing, getting dressed, and feeding themselves). In DSM-5, dementia is known as major neurocognitive disorder.
- **Drug–drug interaction:** The interaction of one substance (e.g., alcohol, medication, an illicit drug) with another substance. Drug–drug interactions may change the effectiveness of medications, introduce or alter the intensity of side effects, and increase a substance's toxicity or the concentration of that substance in a person's blood. Potentially serious interactions can also occur with certain foods, beverages, and dietary supplements.⁹⁵⁹
- **Hazardous drinking:** Alcohol use that increases the risk of future harm.⁹⁶⁰
- **Heavy drinking:** Consuming five or more drinks for men and four or more drinks for women in one period on each of 5 or more days in the past 30 days.⁹⁶¹
- **Illicit substances:** Illicit substances include cocaine, heroin, hallucinogens, inhalants, methamphetamine, and prescription medications that are taken other than as prescribed (e.g., pain relievers, tranquilizers, stimulants, sedatives).
- **MCI:** A mild brain disorder that is similar to dementia. With MCI, problems with thinking are present but are not severe enough for people to need help with their everyday activities. In DSM-5, MCI is known as mild neurocognitive disorder.
- **Moderate drinking:** According to the 2015–2020 *Dietary Guidelines for Americans*, moderate drinking is defined as up to two drinks per day for men and up to one drink per day for women.^{962,963} However, the

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Centers for Disease Control and Prevention (CDC) notes that these numbers apply to any given day and are not meant as an average over several days.⁹⁶⁴ Additionally, individuals who don't metabolize alcohol well may need to consume even lower quantities. Some people, particularly those with certain alcohol-related illnesses or engaging in tasks requiring concentration, should not consume alcohol at all. The *Dietary Guidelines* stipulate that those who don't drink should not begin drinking for any reason.⁹⁶⁵

- **Mutual-help groups:** Groups of people who work together on obtaining and maintaining recovery. Unlike peer support (e.g., the use of recovery coaches or peer recovery support specialists), mutual-help groups consist entirely of people who volunteer their time and typically have no official connection to treatment programs. Most are self-supporting. Although 12-Step groups such as Alcoholics Anonymous and Narcotics Anonymous are the most widespread and well researched type of mutual-help groups, other groups may be available in some areas. They range from groups affiliated with a religion or church (e.g., Celebrate Recovery, Millati Islami) to purely secular groups (e.g., SMART [Self-Management and Recovery Training] Recovery, Women for Sobriety).
- **Peer support:** The use of peer recovery support specialists (e.g., someone in recovery who has lived experience in addiction plus skills learned in formal training) to provide nonclinical (i.e., not requiring training in diagnosis or treatment) recovery support services to individuals in recovery from addiction and to their families.
- **Psychoactive substances:** Substances that can alter mental processes (e.g., cognition or affect; in other words, the way one thinks or feels). Also called psychotropic drugs, such substances will not necessarily produce dependence, but they have the potential for misuse or abuse.⁹⁶⁶
- **Recovery*:** A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Even individuals with severe and chronic SUDs can, with help, overcome them and regain health and social function. This is called remission. When those positive changes and values become part of a voluntarily adopted lifestyle, that is called being in recovery. Although abstinence from all substance misuse is a cardinal feature of a recovery lifestyle, it is not the only healthy, prosocial feature.
- **Relapse*:** A return to substance use after a significant period of abstinence.
- **Remission:** A medical term meaning a disappearance of signs and symptoms of the disease or disorder. DSM-5 defines remission as present in people who previously met SUD criteria but no longer meet any SUD criteria (with the possible exception of craving).⁹⁶⁷ Remission is an essential element of recovery.
- **Substance misuse*:** The use of any substance in a manner, situation, amount, or frequency that can cause harm to users or to those around them. For some substances or individuals, any use would constitute misuse (e.g., underage drinking, injection drug use).
- **Substance use disorder*:** A medical illness caused by repeated misuse of a substance or substances. According to DSM-5,⁹⁶⁸ SUDs are characterized by clinically significant impairments in health and social function and impaired control over substance use. They are diagnosed through assessing cognitive, behavioral, and psychological symptoms. SUDs range from mild to severe and from temporary to chronic. They typically develop gradually over time with repeated misuse, leading to changes in brain circuits governing incentive salience (the ability of substance-associated cues to trigger substance seeking), reward, stress, and executive functions like decision making and self-control. Multiple factors influence whether and how rapidly a person will develop an SUD. These factors include the substance itself; the genetic vulnerability of the user; and the amount, frequency, and duration of the misuse. Note: A severe SUD is commonly called an addiction. A mild SUD is generally equivalent to what previous editions of DSM called substance abuse; a moderate or severe SUD is generally equivalent to what was formerly called substance dependence.

* The definitions of all terms marked with an asterisk correspond closely to those given in *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. This resource provides a great deal of useful information about substance misuse and its impact on U.S. public health. The report is available online (<https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf>).

Substance Misuse in Older Adults

Substance misuse in older people is increasing, yet it is often overlooked and underaddressed by providers.^{969,970,971} Older clients may not feel comfortable telling you about their substance misuse or asking for help. This is problematic, as older people are more likely than younger or middle-aged people to experience negative effects from alcohol, drugs, and prescription medications.^{972,973}

Healthcare, behavioral health service, and social service providers can have difficulty noticing substance misuse in older clients. This is partly because most older adults who misuse substances do not meet all DSM-5 criteria for an SUD. For example, tolerance is a key diagnostic criterion of an SUD. But because of the aging process, older adults have a lower tolerance for alcohol and other substances than younger people. Thus, although tolerance in an older person is still a sign of substance dependence, it looks different in older adults than in younger individuals.

Chapter 1 of this TIP provides information and statistics about overall substance misuse, misuse of specific substances, and effects of substance misuse among older adults. The following sections in this chapter of the TIP provide a brief summary of this information.

Alcohol Misuse

Older adults use alcohol more than any other substance.^{974,975} In 2019, 52.8 percent of people ages 60 to 64 years and 43.9 percent of people 65 and older were estimated to have used alcohol in the past month,⁹⁷⁶ and **3.4 percent of adults 50 and older had AUD.**⁹⁷⁷

Alcohol misuse differs between older men and older women. For example, women tend to feel the negative effects of alcohol after having fewer drinks than is the case for men.⁹⁷⁸ They may be more vulnerable to the effects of alcohol misuse—a concerning fact, given that drinking rates (including for binge drinking) are increasing more rapidly among older women than older men.⁹⁷⁹

Misuse of Other Substances

Although most older adults do not use illicit substances, some do. For example, according to data from 2019,⁹⁸⁰ SUDs involving illegal drugs

occurred in approximately 390,000 adults ages 50 to 54; 271,000 adults ages 55 to 59; 282,000 adults ages 60 to 64; and 227,000 adults ages 65 and older.

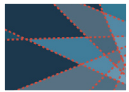
Prescription medications are some of the most commonly misused substances among older adults in the United States. Prescription medication misuse involves taking a medication other than as prescribed, whether accidentally or on purpose. Some older adults use prescription medications to “get high,” but many misuse prescription medications by mistake to address sleep problems, chronic pain, or anxiety. **Pain relievers are the most commonly misused prescription medication among older adults.**⁹⁸¹

Exhibit 6.2 describes classes of prescription medication.

EXHIBIT 6.2. Understanding Classes of Medications

Most of your older clients will be taking at least one prescription medication. Many clients take more than one. Be sure you are familiar with the different types of medication classes. This will help you better understand the potential cognitive effects and drug–drug interactions related to the medications your clients are taking. Common medication classes include:⁹⁸²

- **Sedative-hypnotics**, which are often prescribed for sleep problems or anxiety. They include barbiturates (e.g., amobarbital, secobarbital) and benzodiazepines (e.g., lorazepam, alprazolam). Sometimes the term “tranquilizer” is used to describe antianxiety medications such as benzodiazepines.
- **Opioid analgesics**, which are prescribed to treat pain. Opioid analgesics work by attaching on opioid receptors in the brain. Examples include oxycodone and hydrocodone/acetaminophen.
- **Nonopioid analgesics**, which people take to control pain. But these pain medications do not act on opioid receptors in the brain. Examples include aspirin and acetaminophen.
- **Stimulants**, which help people feel alert or full of energy. Examples include amphetamine/dextroamphetamine and methylphenidate.



Between 11 and 18 percent of older adults, depending on age range, report using tobacco in the past month.⁹⁸³ These numbers are troubling because, in adults ages 65 and older, smoking is associated with more than double the chances of binge drinking and triple the chances of illicit drug use or prescription medication misuse.⁹⁸⁴

The true population rate for benzodiazepine misuse by older adults is unknown. The American Geriatrics Society notes that although at times prescribing benzodiazepines to older adults may be appropriate, these medications may be potentially inappropriate for some older individuals. These medications increase the risk of falls and fractures, car accidents, problems with cognition, substance misuse and dependence, and death.^{985,986}

It is unclear how many older adults use cannabis with a prescription, how many use it recreationally in areas where doing so is legal, and how many misuse it (whether through using recreationally in areas where it is illegal or by misusing prescription cannabis). Cannabis may seem harmless, but in some older adults it may be linked to memory and thinking problems, AUD and nicotine use disorder, and co-occurring mental disorders like depression, anxiety, bipolar disorder, and PTSD.^{987,988}

Effects of Substance Misuse

Older adults are more likely than younger and middle-aged adults to feel the negative physical effects of medications, illicit drugs, and alcohol. In older people:⁹⁸⁹

- It takes longer for organs (e.g., liver, kidneys) to remove the alcohol and drugs from the body.
- With less lean body mass and total body water, older people can become intoxicated on even small amounts of a substance.
- The central nervous system is more sensitive to the effects of drugs and alcohol.

- Harmful drug–medication interactions are more likely. (See, for example, “Resource Alert: Preventing Dangerous Alcohol–Medication Interactions.”) Older adults often take more than one medication. Harmful drug–medication interactions are associated with negative events such as:^{990,991,992}
 - Injury (e.g., falls).
 - Breathing problems.
 - Sleeping problems.
 - Cognitive changes.
 - Seizures.
 - Internal bleeding.
 - Dangerous changes in blood pressure.
 - High or low blood sugar levels.
 - Overdose, which can be fatal.
 - Suicide and self-harm.
- Alcohol misuse can increase an older person’s risk of injury, including those from:^{993,994,995,996}
 - Falls.
 - Traumatic brain injury.
 - Car accidents.
 - Experiencing violence or abuse firsthand.
 - Suicide and nonsuicidal self-injury.
- Binge drinking on 5 or more days in the past month can increase the risk of certain physical conditions and mental disorders or make them worse. Such conditions include:^{997,998,999,1000}
 - Depression.
 - Cancer.
 - Diabetes.
 - High blood pressure.
 - Heart failure.
 - Sleep difficulties.

RESOURCE ALERT: PREVENTING DANGEROUS ALCOHOL–MEDICATION INTERACTIONS

Older adults are at high risk for dangerous alcohol–medication interactions. Learn more about commonly used prescription and over-the-counter medications and how they interact with alcohol in the National Institute on Alcohol Abuse and Alcoholism's (NIAAA) publication *Harmful Interactions* (www.niaaa.nih.gov/publications/brochures-and-fact-sheets/harmful-interactions-mixing-alcohol-with-medicines).

Additionally, the Substance Abuse and Mental Health Services Administration (SAMHSA) publication *Get Connected: Linking Older Adults with Resources on Medication, Alcohol, and Mental Health* discusses the dangers of older adults misusing alcohol and prescription and over-the-counter drugs. It describes the signs of misuse and steps that older adults can take to prevent problems (<https://store.samhsa.gov/product/SMA03-3824>).

Links Between Substance Misuse and Cognitive Disorders

You will note that this section addresses the cognitive effects of alcohol misuse in far greater depth than it does the cognitive effects of other substance misuse. This is because most research

on substance misuse and cognitive disorders focuses on alcohol. Research on the relationship between cognitive disorders and other substances, such as cocaine and cannabis, is still new, somewhat mixed, and inconclusive. This section does address benzodiazepines and tobacco, but in less detail.

The brain undergoes certain changes with age, like the shrinkage of white and gray matter tissue and decreased blood flow.^{1001,1002} Because of these alterations, people sometimes experience changes in thinking as they age. Examples of normal age-related changes in thinking include:¹⁰⁰³

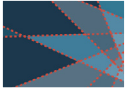
- Having trouble recalling information without cues or reminders, such as not remembering what was on a shopping list when the list is not in front of the individual.
- Being unable to remember where a piece of information was heard or learned. Was it in the newspaper? Did someone mention it? Was it on television?
- Forgetting to perform activities, such as not remembering to turn off the kitchen light before going to bed.
- Having problems remembering the names of common objects.

Remember that aging differs across individuals, and whether someone experiences age-related changes in cognition depends on many factors.

Alcohol and Cognition

The link between alcohol use and problems with cognition in later life is complex. The effects of alcohol on a person's health are influenced by many factors, including how much and how often a person drinks, as well as by genetic and family-related factors. Social, cultural, and environmental factors can also affect a person's misuse of alcohol. These include such factors as:¹⁰⁰⁴

- Exposure to alcohol consumption through television, movies, magazines, and social media.
- Experience of hardships related to immigration and cultural adjustment to life in the United States.
- Cultural norms related to drinking.
- Community environment, including level of violence, neighborhood housing conditions, and number of liquor stores in the community.



- Involvement with family, friends, or peers who misuse alcohol, raising the potential for misuse as a “learned behavior” adopted through attempts to imitate the drinking patterns of others.

Alcohol misuse is harmful to overall health¹⁰⁰⁵ and can increase the risk of dementia.¹⁰⁰⁶ It can also negatively affect certain areas of cognition, like memory.^{1007,1008} **Drinking too much alcohol can damage the brain** (as well as the liver, heart, and other organs).^{1009,1010} Older adults may be more likely than younger adults to experience harm to the brain and body caused by heavy drinking:^{1011,1012}

- Heavy alcohol use can damage older adults’ ability to:^{1013,1014}
 - Learn new information.
 - Recall information.
 - Speak and understand language.
 - Solve problems.
 - Think and react quickly.
- Heavy alcohol use can lead to negative physical changes in the brain. For instance, too much alcohol can cause brain cells and tissues to shrink or no longer work as they should.¹⁰¹⁵
- Even lower levels of alcohol use can sometimes harm the brain of middle-aged and older adults,¹⁰¹⁶ including areas of the brain that control memory.¹⁰¹⁷

What amount of alcohol harms a person’s thinking? There is no one right answer. The amount that is harmful can differ from person to person. Alcohol can affect a person’s cognition, no matter how little they drink. Clients need not have a problem with alcohol for it to have significant effects on their thinking. Do not make the mistake of thinking only people with AUD are at risk for cognitive problems like dementia and MCI.

Dementia and MCI

Does alcohol misuse cause or increase the risk of dementia or MCI? The answer is unclear, especially for Alzheimer’s disease.¹⁰¹⁸ Part of the

problem is that different studies define terms such as “alcohol consumption,” “light to moderate drinking,” and “heavy or excessive drinking” differently.

Some studies have found a negative link between alcohol and cognitive disorders. For instance, research has found that:

- Heavy drinking can increase the risk of Alzheimer’s disease.¹⁰¹⁹
- Heavy drinking, especially binge drinking, can increase risk of cognitive problems in later life.^{1020,1021}
- Light-to-moderate drinking can increase the risk of MCI turning into dementia.¹⁰²²
- Heavy drinking as a young adult can increase the risk of certain types of dementia later in life.¹⁰²³
- Middle-aged adults who drink often (i.e., several times per month) may be more than twice as likely to have MCI in older adulthood as people who do not drink often (i.e., less than once per month). This risk appears to be even higher in people who have genes that increase their chances of developing Alzheimer’s dementia (e.g., the APOE e4 gene).¹⁰²⁴

What happens when people who already have dementia, MCI, or other problems with cognition drink alcohol? It depends on how much they drink and other individual factors. For instance, which if any medications are they taking? Are they at risk for dementia because of their genetic background? Consider the following:

- Heavy alcohol use can be toxic to the brain. People with dementia or MCI are already struggling with their thinking. Adding alcohol to the situation can potentially worsen their cognitive problems.
- Alcohol use can worsen dementia symptoms (e.g., lack of interest in people or activities).¹⁰²⁵
- Clients with cognitive problems may forget how much they drank, raising risk for drinking too much.

What should you as a provider tell your older clients about alcohol misuse and their risk of cognitive problems? First, remember that definitions, methods, and research questions differ

among studies. This makes it difficult to know the true relationship between alcohol and risk of dementia or MCI. However, that does not mean that you should take this risk lightly.

Here are some important points you can make when discussing with older clients their risk of developing cognitive problems because of alcohol misuse:

- Heavy alcohol use damages the brain, heart, liver, and other organs.^{1026,1027}
- Older people are more likely than younger people to feel alcohol's negative effects.^{1028,1029}

So even light or moderate drinking can be more harmful to the brain.

- Drinking habits and biological factors differ from person to person. For instance, people who drink wine may be at less risk from light-to-moderate drinking than people drinking other alcoholic beverages. People who do not have genes that elevate their risk for dementia (such as the e4 allele of the APOE gene) may be at less risk from light-to-moderate drinking than others who are at high genetic risk for dementia.¹⁰³⁰

HOW MUCH ALCOHOL IS “HEALTHY”?

How “safe” or “healthy” is alcohol truly? A 2018 systematic analysis tried to answer this question by estimating the risk of alcohol consumption levels to health among people in 195 countries.¹⁰³¹ The study authors found that alcohol contributed greatly to disability and deaths, owing to its connection to conditions such as:

- Tuberculosis.
- Cancer.
- Cardiovascular disease.
- Stroke.
- Diabetes.
- Accidental injuries.
- Self-harm.
- Interpersonal violence.

The study authors state that, based on their findings, any amount of alcohol use, even minimal, can lead to loss of health. Although they found some beneficial effects of alcohol consumption for heart disease and diabetes among women, these benefits were outweighed by the health risks, especially those of cancer, infectious diseases, and injuries.

“The widely held view of the health benefits of alcohol needs revising,” the authors write. “Our results show that the safest level of drinking is none” (p. 1026).

The TIP consensus panel recommends that you counsel older clients on the possible dangers of alcohol misuse, especially heavy alcohol use and possible alcohol–medication interactions. If you screen a client for alcohol misuse, you should also screen him or her for cognitive impairment.

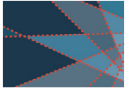
Delirium Tremens

People who drink heavily are at risk for a life-threatening condition called delirium tremens (or alcohol withdrawal delirium). Delirium tremens is different from delirium. **Delirium** is a cognitive disturbance in which people become confused and disoriented. Delirium can occur in older

people who have recently undergone surgery or are taking multiple prescription medications, or who are experiencing common but serious medical conditions such as infections or dehydration.^{1032,1033,1034}

Delirium tremens is a serious and potentially deadly consequence of alcohol withdrawal. In fact, it is the most serious adverse effect of alcohol withdrawal. **Symptoms of delirium tremens could be mistaken for signs of dementia.** Dangerous symptoms can include.^{1035,1036}

- Hallucinations.
- Confusion (or disorientation).



- Rapid heart rate or high blood pressure.
- Sweating.
- Nausea or vomiting.
- Seizures and tremors.

Behavioral health service and healthcare providers should stay alert for symptoms of delirium tremens when treating older clients with alcohol withdrawal. About 3 to 5 percent of people hospitalized for alcohol withdrawal have delirium tremens.¹⁰³⁷ Without treatment, delirium tremens can be deadly because of serious complications like heart arrhythmias.¹⁰³⁸ Thus, it often requires treatment in intensive care.

Alcohol-Related Dementia

Long-term heavy drinking can directly cause alcohol-related dementia (ARD).¹⁰³⁹ ARD occurs in up to a quarter of older people with AUD and is more likely to be diagnosed in men.¹⁰⁴⁰ Little scientific evidence exists on the amount, length, and severity of alcohol use that leads to ARD.¹⁰⁴¹ Some researchers believe that ARD develops because of a lack of vitamin B1 (thiamine)¹⁰⁴² and the direct neurotoxic effects of ethanol.¹⁰⁴³ To confirm a diagnosis of ARD, refer the client to a neuropsychologist or neuropsychiatrist for indepth cognitive testing.

WERNICKE–KORSAKOFF SYNDROME

Wernicke–Korsakoff syndrome (WKS) includes both Wernicke’s encephalopathy and Korsakoff syndrome—two brain disorders linked to lack of vitamin B1 (thiamine). Heavy alcohol use is often the cause of WKS, but physical conditions, such as cancer, can also cause it.¹⁰⁴⁴

WKS is sometimes called **alcohol-induced persisting amnesic disorder**. Three main symptoms occur in WKS: problems with eye movement, confusion, and an inability to control muscle movements (also called ataxia), such as when walking. WKS is rare, occurring in about 1 percent of the general population. WKS is much more common in people with AUD, but prevalence rates vary widely.¹⁰⁴⁵

In some ways, WKS is similar to ARD. Both appear to be caused in part by a lack of vitamin B1. Both conditions can improve after clients stop using alcohol, start taking vitamin B1, or both. People with WKS can have such behavioral symptoms as loss of interest in all activities (called apathy) and restlessness, mood symptoms (e.g., depression, anxiety), and psychotic symptoms (e.g., hallucinations, delusions).¹⁰⁴⁶ To confirm a diagnosis of WKS, you will need to refer the client to a neuropsychologist or neuropsychiatrist for cognitive testing.

Benzodiazepines and Cognition

Compared with older people who have never used benzodiazepines, older adults who have used them¹⁰⁴⁷ (ever, recently, previously, or for long periods of time) appear to have a higher risk of dementia. Older people with long-term use (i.e., greater than 3 months) of benzodiazepines may be 1.5 to 2 times more likely to develop dementia as people who have not used them long term.¹⁰⁴⁸ The risk of dementia with benzodiazepine use appears to grow as the dose of benzodiazepine increases.¹⁰⁴⁹

Offer older clients who have taken benzodiazepines for a long time or have taken a high dose of these medications cognitive screening to assess problems in their thinking. (See Chapter 3 for cognitive screening measures.) **Assessment of memory and cognitive functioning should be part of the annual exam of all older adults.** High-dose or long-term use of benzodiazepines is an appropriate reason to perform cognitive screening, whether or not the older client asks for it, because older clients, especially those with cognitive impairment, may not realize that they need this screening.

The American Geriatrics Society cautions that benzodiazepines are potentially inappropriate in most older clients, but also notes that their use may be appropriate in certain limited circumstances, such as for seizure disorders.¹⁰⁵⁰ (See text box on the American Geriatrics Society 2019 Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults.) **Consider whether older clients who take benzodiazepines need referral for a medication switch.** Cognition may improve following the switch to alternative medications or with a gradual reduction in dosage of these medications.

In addition to understanding the problems related to benzodiazepines, **determine whether there have been any changes or additions to the client's medications.**

Medications contraindicated or causing adverse reactions and complications may temporarily impair cognition or exacerbate existing MCI.

The American Geriatrics Society Beers Criteria® list medications that are potentially inappropriate for older adults because the risks often outweigh the benefits. At the time of this publication, the 2019 Beers Criteria® are the most recent.¹⁰⁵¹ Clients taking medications in the brief list that follows (which is drawn from the full Beers Criteria®) should be referred to a healthcare provider to discuss possibly switching medications:

- Certain antidepressants (e.g., amitriptyline, nortriptyline)
- First-generation (older) and second-generation (atypical) antipsychotics
- Barbiturates (e.g., phenobarbital, secobarbital)
- Short-, intermediate-, and long-acting benzodiazepines (e.g., alprazolam, clonazepam)
- Certain pain medications (e.g., ibuprofen, naproxen)

The 2019 Beers Criteria® also newly recommend avoiding concurrent use of benzodiazepines and prescription opioids, while stating that concerns about interactions should be weighed against the need to treat chronic pain.

Note that the Beers Criteria® list medications that are **potentially** but not **definitely** inappropriate. For more on how to properly apply the recommendations, see this editorial in the *Journal of the American Geriatrics Society*: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/jgs.15766>.

Tobacco and Cognition

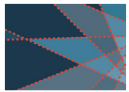
A recent study found that people who currently smoke cigarettes were much more likely to have dementia (any type) than people who had never smoked.¹⁰⁵² Interestingly, people who formerly smoked had the same risk of dementia as people who never smoked. **This means that stopping tobacco use could be powerful in reversing the risk of dementia.** Research findings from four large studies appear to confirm the harmful relationship between smoking and increased risk of dementia.^{1053,1054,1055,1056} However, more research is needed to explore this relationship. That said,

tobacco use is known to cause many serious negative health problems. You should counsel all clients who use tobacco to quit.

RESOURCE ALERT: GOING SMOKE FREE

For free support in helping your clients quit tobacco, call 1-800-QUIT-NOW (1-800-784-8669) and visit <https://smokefree.gov>.

For tips on quitting tobacco use from former smokers, direct your clients to this CDC webpage: www.cdc.gov/tobacco/campaign/tips/index.html.



Substance Misuse and Co-Occurring Mental Disorders That Affect Cognition

Some older adults who have mental disorders also misuse substances.¹⁰⁵⁷ For instance, in older adults, alcohol misuse often co-occurs with depression.^{1058,1059} In older people, depression is associated with problems with reported memory, attention, problem-solving, and the ability to think and react quickly.¹⁰⁶⁰ According to data from the National Survey on Drug Use and Health, an estimated 1.7 million older adults (ages 50 and above) in the United States had a co-occurring mental disorder and SUD in 2019.¹⁰⁶¹

Treatment rates for older people with co-occurring conditions are low. Estimates from 2019 showed that just 9.6 percent of people 50 and older with any mental illness and a past-year SUD received substance misuse services at an SUD treatment facility as well as mental health services.¹⁰⁶² One reason for the undertreatment of co-occurring disorders (CODs) in older adults is that **CODs tend to be overlooked and underdiagnosed.**¹⁰⁶³

Older adults with CODs tend to use more behavioral health services than do older adults without CODs. Even so, they are at risk for negative health and psychosocial outcomes, including:^{1064,1065}

- Thoughts of suicide and of death in general.
- Some medical issues (e.g., liver disease).
- Severe symptoms of depression.
- Being divorced, separated, or widowed.

Substance misuse often makes the symptoms of a co-occurring mental disorder worse and harder to treat. For example, substance misuse can worsen cognitive symptoms of co-occurring mental disorders. Just like substance misuse, mental disorders can lead to difficulties with cognition. Cognitive symptoms can make it harder for older adults to recognize their substance misuse,¹⁰⁶⁶ which could reduce likelihood of seeking SUD treatment.

Substance misuse, co-occurring mental disorders, and cognitive disorders are all related to one another. And they all have similar symptoms. If an older client has any one of these conditions,

screen for all three. (Screening measures for these conditions appear in Chapter 3 of this TIP.) Major depressive disorder (MDD) and generalized anxiety disorder (GAD) often co-occur with substance misuse in older adults and negatively affect the brain. PTSD is less common in older people than MDD and GAD, but it does occur, especially in older military veterans. Be alert for these disorders in older clients who misuse substances and have cognitive difficulties.

MDD and Depressive Symptoms

MDD and depressive symptoms are both risk factors for and outcomes of substance misuse in older adults. In fact, MDD is one of the most commonly co-occurring mental disorders of older clients who misuse substances.¹⁰⁶⁷ A recent meta-analysis found that one in four people with dementia had clinically significant depressive symptoms.¹⁰⁶⁸ In a large sample of older adults with alcohol misuse, 29.7 percent reported having symptoms of depression.¹⁰⁶⁹ In this same study, rates of depression were especially high among older adults with two or more chronic health conditions (such as heart disease or diabetes). In these adults, alcohol misuse was five times more common in those with depression than in those without depression.

Whether MDD is a risk factor for dementia is unclear. It is also unknown whether having depression **and** substance misuse causes more cognitive problems than just having depression **or** substance misuse, but not both.¹⁰⁷⁰ Some research suggests that a relationship does exist between depression and cognitive disorders.¹⁰⁷¹ For example:

- Adults with depression that starts earlier in life are at double the risk for dementia than adults who do not have depression.¹⁰⁷²
- People with late-life depression are at a higher risk of certain types of dementia.¹⁰⁷³

Depression is not a normal part of aging. Do not ignore even mild symptoms of depression in older clients.

- In one study, 70 percent of women ages 85 and older with depressive symptoms were diagnosed with MCI within 5 years, and 65 percent had dementia.¹⁰⁷⁴
- Dementia risk seems higher in people with more frequent and severe depressive episodes.¹⁰⁷⁵

Anxiety Disorders

About 10 to 15 percent of older adults meet criteria for an anxiety disorder.^{1076,1077} Among the most common anxiety disorders in older people are GAD and specific phobias.¹⁰⁷⁸ In Wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), prevalence of any past-year anxiety disorder among adults ages 55 and older was 11.4 percent, that of GAD was 2.8 percent, and that of specific phobias was 5.8 percent.¹⁰⁷⁹

Older adults with anxiety may be at an increased risk of substance misuse.¹⁰⁸⁰ Older adults living in the community, as well as those in SUD treatment, have higher rates of comorbid mental disorders, including anxiety, than older adults without substance misuse.¹⁰⁸¹ In an analysis of data from Waves 1 and 2 of NESARC,¹⁰⁸² older adults with a past-year SUD had a significantly greater chance of also having persistent anxiety compared with older adults without an SUD. The risk of substance misuse in older people with anxiety may be even higher for older women.¹⁰⁸³

Anxiety symptoms in older adults can increase the risk of cognitive problems, especially with memory and learning.¹⁰⁸⁴ Anxiety disorders are also linked to other conditions that can affect cognition, including depression¹⁰⁸⁵ and substance misuse.¹⁰⁸⁶

In a 2018 meta-analysis, the overall prevalence of clinically significant anxiety among people with dementia was 14 percent.¹⁰⁸⁷ Compared with depression, less is known about anxiety as a risk factor for dementia. Even so, the evidence shows:

- Among individuals newly diagnosed with dementia, about 31 percent previously had an anxiety diagnosis, compared with only 14 percent of older adults without dementia.¹⁰⁸⁸
- An anxiety disorder almost triples the risk of dementia.¹⁰⁸⁹
- People who have anxiety and depression are about 2.85 times more likely to have dementia.¹⁰⁹⁰
- Anxiety appears to be a major predictor of cognitive problems in general and of dementia specifically.¹⁰⁹¹ This may be especially true for many older adults (ages 80 and older).
- When older adults with anxiety have cognitive problems, these problems are often with memory, attention, and problem-solving abilities.¹⁰⁹²

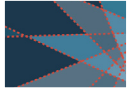
PTSD and Trauma

Older people are at risk for PTSD and substance misuse, although the rate of PTSD in older people is low. For instance, in Wave 2 of NESARC, 3.5 percent of adults ages 55 and older were reported to have past-year PTSD.¹⁰⁹³ In another study that also looked at Wave 2 data from the same survey, about 22 percent of adults ages 60 and older who met some but not all criteria for PTSD had an SUD, and 27 percent of older adults who met full criteria for PTSD had an SUD.¹⁰⁹⁴ Older adults who met at least some criteria for PTSD had 1.6 times greater chances of having an SUD than older adults who met no PTSD criteria.

It is unclear how common PTSD is in people with dementia. A meta-analysis examining rates of mental disorders among people with dementia noted a lack of research on PTSD specifically.¹⁰⁹⁵ Based on very limited studies, the authors estimated the overall prevalence of PTSD in dementia to be 4.4 percent.

Older adults who are military veterans also may be at risk for co-occurring PTSD and substance misuse. In a systematic literature review of studies about older veterans with PTSD, the prevalence of co-occurring SUDs ranged from about 1 percent to 11 percent.¹⁰⁹⁶

Take the time to learn whether older clients who misuse substances also have a history of trauma or abuse. (Please refer to “Screening for PTSD, Trauma Symptoms, and Abuse” in Chapter 3 of this TIP for additional information.) **Also determine whether PTSD is present.** A trauma-informed approach to the screening, assessment, and care of older clients who misuse substances can help



put clients at ease. It will create a setting in which clients are more likely to open up and share with you the details of their trauma. You can take a trauma-informed approach by:^{1097,1098}

- Making sure clients feel safe in your program—both physically and mentally.
- Using a gentle and warm attitude.
- Staying open and nonjudgmental. This builds trust among providers, staff members, clients, and family members.
- Working with your clients in a cooperative, shared way to make treatment decisions together. This helps empower clients and reminds them that they have a voice in the care process.
- Letting clients know that it is normal and healthy to express emotions, whether positive or negative. This is especially useful with older clients because older adults may be more likely to shy away from discussing negative feelings or traumas. They may be more likely to talk about physical symptoms rather than emotional ones or to dismiss traumas as “normal” parts of life.¹⁰⁹⁹
- Being responsive to racial, ethnic, and gender disparities that may affect your clients’ health. Realize that clients may have specific needs in these areas that can be addressed in the healing process.
- Offering peer support and referral to mutual-help programs. Working with someone who understands the lived experience of trauma and PTSD can be powerful for clients.
- Remembering to screen and assess clients for mental disorders and other conditions that co-occur with PTSD or trauma, such as depression and substance misuse.

How Providers Can Help

To help older adults with cognitive or co-occurring mental disorders related to substance misuse:

- **Educate older clients and their caregivers about the definitions and facts** on co-occurring mental disorders and cognitive problems related to substance misuse. This includes making sure clients and caregivers understand that the “safest” level of alcohol use is none at all. No

amount of alcohol will be safe for older clients who take certain medications, have certain health conditions, or engage in certain activities (see Chapter 4).

- Screen older clients who misuse substances for co-occurring mental health conditions such as depression, anxiety, and PTSD.
- **Screen older clients who misuse substances (especially alcohol) for co-occurring cognitive impairment.** Older clients who take high doses of benzodiazepines or have been taking benzodiazepines long term also should be screened for cognitive problems.
- **Interview clients, caregivers, and practitioners** (with clients’ permission) to determine whether changes in medications are leading to, or worsening, cognitive impairment.
- **Offer clients drug and alcohol counseling, mental health services, or both, as appropriate.** If your program does not offer these services, refer clients to a local program that does—and, if possible, to one that is experienced in working with older clients who misuse substances.
- **For clients who screen positive for cognitive problems, give referrals** for full cognitive assessments, which should include in-depth cognitive testing. Only behavioral health service providers with specific training and experience can give these tests (a neuropsychologist or neuropsychiatrist).
- Offer resources and mental health services (or referrals for services) as needed to older clients who misuse substances, have cognitive disorders, or both; make such offers to their caregivers as well, if needed.

The U.S. Preventive Services Task Force recommends that healthcare providers screen for unhealthy alcohol use in adults ages 18 years or older and provide those who show risky or hazardous drinking with “brief behavioral counseling interventions” to reduce unhealthy alcohol use (www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryDraft/unhealthy-alcohol-use-in-adolescents-and-adults-screening-and-behavioral-counseling-interventions).

Screening for CODs and Cognitive Disorders

Older clients in need of treatment or already in treatment for SUDs should be screened for disorders that co-occur with SUDs, such as depression, anxiety, and PTSD, as well as cognitive disorders.

Screening Instruments

This section discusses several screening measures for depression, anxiety, PTSD, trauma/abuse, and cognitive problems. Some age-appropriate measures appear in the Chapter 6 Appendix and the Chapter 3 Appendix.

Consider your scope of practice before delivering these instruments. You may need training before you can give certain ones to clients. This is especially true for cognitive measures. Make sure you understand how to administer each instrument properly, how to interpret the score, and what follow-up is needed based on the score. If no one in your program can help you get the training you need, refer the client to another behavioral health service or healthcare provider who can perform the screening.

Screening instrument for cognitive disorders

For a client who may have cognitive impairment, use the Mini-Cog®. See Chapter 3 for a description of and link to this instrument.

Screening instruments for depression

Screen older clients who misuse substances, have cognitive disorders, or both for depression. Depression commonly co-occurs in older people who misuse substances.^{1100,1101} This TIP discusses two well-researched depression screeners approved for use in older clients:

- The Geriatric Depression Scale–Short Form (15 item).
- The nine-item Patient Health Questionnaire.

Screening instruments for anxiety

Older adults with anxiety are at increased risk for substance misuse, especially alcohol misuse and tobacco use.¹¹⁰² You can screen for anxiety using the:

- Geriatric Anxiety Scale.
- Penn State Worry Questionnaire.

These measures have been approved for use with older adults.^{1103,1104}

Screening instruments for PTSD, trauma, and abuse

PTSD or a history of trauma or abuse can increase the odds that an older person will misuse substances.¹¹⁰⁵ **In addition to asking older clients about their current and past history of trauma and abuse, use brief screening measures to further explore this area.** For instance, you can use the:

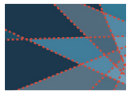
- PTSD Checklist for DSM-5.
- Primary Care PTSD Screen for DSM-5.

To screen for possible abuse, give the Elder Abuse Suspicion Index®.

Interventions for Substance Misuse and Co-Occurring Mental/Cognitive Disorders

Healthcare and behavioral health service providers have several options for helping older clients who misuse substances and have depression, anxiety, PTSD, or cognitive problems:

- **Educate clients about substance misuse,** its effects on older people, and what “safe” or “nonrisky” use means. For some older clients, education alone helps them end their substance misuse.
- **Provide drug and alcohol counseling to help clients reduce or stop their use of substances.** If your program cannot offer specialized addiction services, make a referral to another local program that can. (Learn more about AUD treatment and drug use disorder treatment for older adults in Chapters 4 and 5 of this TIP, respectively.)
- **Brief counseling approaches,** such as motivational interviewing, can help older adults reduce substance use.¹¹⁰⁶ Brief approaches can be adapted to clients’ level of cognitive impairment.¹¹⁰⁷



- Find out whether your client has an interest in **other nonmedication treatments, such as therapy that involves art, music, or animals.** Some research suggests that these “alternative” therapies can help people with dementia reduce their anxiety, restlessness, and apathy.^{1108,1109,1110}
- **Help your clients live healthier lives.** A healthy lifestyle may help slow the rate at which cognitive problems get worse over time. For instance, you can:^{1111,1112}
 - Encourage clients to **stay physically active** through light exercise (e.g., walking, yoga, stretching programs).
 - Remind clients that mental activity is just as important as physical activity. Offer them ways to **stay mentally active** through reading, using computers/the Internet, or doing crossword puzzles and other “brain games.”
 - Offer behavioral techniques to help clients who are not getting enough **quality sleep** each night (like teaching good sleep hygiene and providing advice on reducing nighttime stimuli).¹¹¹³
 - Encourage clients to **spend time socializing** with family, friends, and close others as well as develop social networks (for clients who do not already have or use them).
 - Teach clients the importance of a **healthy diet** that meets their nutritional needs. A healthy diet can improve other physical problems affecting cognition (e.g., high blood pressure, obesity).
 - Support clients’ efforts to **reduce or stop substance use**; give information and interventions related to tobacco cessation.
 - Find out whether clients have **hobbies or interests** that remain enjoyable. If not, help them identify pleasant activities to try to improve their quality of life and lift their spirits.
- **Make referrals to healthcare providers** who can work with clients and their caregivers to decide whether medication treatment is needed. Medication treatment may be useful for certain types of SUDs, such as AUD, tobacco use disorder, and opioid use disorder. (See Chapters 4 and 5 for more information.) Medications may also be useful for cognitive problems. They cannot cure dementia, but they may be able to help reduce some of its symptoms.¹¹¹⁴
- Be supportive and positive for your clients. One way to do this is by referring them to **peer recovery or mutual-help groups**, such as Seniors in Sobriety. (See “Chapter 6 Resources.”) These groups can increase clients’ chances of achieving long-term abstinence, plus help keep clients socially active. Keep on hand a list of local peer recovery support programs to present to clients.
- Supply informational materials in your program’s waiting room and meeting rooms (e.g., bulletin board or display case flyers, brochures, handouts) and offer these resources to your clients.

Addressing Caregiver Concerns

Many people provide unpaid care to older adults with whom they have a personal relationship. These caregivers, typically significant others like family members, friends, and neighbors, provide a wide range of services and supports to older adults, including:^{1115,1116}

- Help with ADLs, such as bathing, dressing, eating, toileting, and transferring (in and out of a wheelchair, for instance).
- Help with instrumental ADLs, such as transportation, housework, food preparation, shopping, using communication devices, and managing finances.
- Emotional and spiritual support.
- Financial help.
- Shared housing.
- Help with communication and advocacy with service providers.
- Help with navigating service systems.
- Help with decision making related to healthcare and financial matters.
- Monitoring of health problems.
- Medication administration and monitoring.
- Medical/nursing tasks, like injections, tube feeding, and care of catheters, colostomies, and wounds.

Caregivers may carry out these activities intermittently, part time, or full time, including from a distance.

The physical, mental, emotional, and financial challenges of these caregiving responsibilities can result in “caregiver burden.”¹¹¹⁷ Caregiving for older adults who misuse substances, have cognitive disorders, or both can be very stressful. This stress can make it hard for caregivers to function well at work, maintain social relationships, and take care of themselves.¹¹¹⁸

Behavioral health service, healthcare, and social service providers need to be alert for caregiver stress. Stress can negatively affect the quality of attention the caregiver gives to your client. For instance, caregiver stress has been linked to a higher risk of elder abuse.¹¹¹⁹ Also, caregiver stress is associated with higher mortality.¹¹²⁰ And caregivers may themselves be at risk for developing chronic health conditions such as high blood pressure, heart disease, and back pain.¹¹²¹ Caregiver stress may even lead to caregiver substance misuse. Caregivers who feel high levels of stress may need behavioral health services to build better coping skills, access resources, address their concerns, and improve their mood.

Caregivers may not tell you outright that they are feeling stressed or frustrated. Make a point to **ask caregivers directly about any difficulties they are having, including mental and physical symptoms. Here are some examples of questions you can ask** to help caregivers open up:

- “I know caring for your wife must be very difficult. How are you holding up?”
- “What do you do for fun or to ‘let off steam’?”
- “Who do you turn to when you need support?”
- “Have you spoken with other caregivers who care for someone with dementia? Many caregivers find it very helpful to talk to someone who really ‘gets it.’ May I give you some information about local caregiver support groups?”
- “Are you familiar with Al-Anon? Many adult children of people with alcohol addiction find their meetings useful. Would you like me to give you their contact information?”

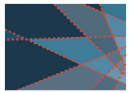
Helping Caregivers of Clients Who Misuse Substances

Caregivers may not always see the alcohol or drug use as a problem. They may feel guilty asking the person to stop using. Comments like the following are not unusual:

- “My George has had a beer after work every night for 40 years. I’m not telling him to stop now.”
- “It’s none of my business if she has a couple of glasses of wine. At her age, what’s the harm, really?”
- “I feel bad asking my brother to stop smoking. His cigars are his one last pleasure in life.”

Many caregivers may think that substance use is harmless. But for aging adults, that is not necessarily true. You can help caregivers by:

- **Sharing facts about alcohol or drug use in older adults** and the importance of avoiding illicit drugs, prescription medication misuse, and harmful drug–drug interactions.
- **Teaching them new coping skills** and offering interventions. This could include:
 - **Helping caregivers share their feelings of stress or concern with your older clients.** Talking to older adults about their substance misuse can be hard. You can help caregivers learn how to express their thoughts and feelings in a way that is healthy and helpful.
 - **Teaching caregivers better ways to handle your older clients’ upsetting behaviors.** Some older adults who misuse substances can “act out,” become angry, or behave in ways that are stressful to caregivers. Teach caregivers how to better manage these intense emotions and behaviors.
 - **Offering caregivers mental health services or referral to treatment.**
- **Helping them find peer recovery support groups** (e.g., caregiver support groups).
- **Encouraging them to join support groups.** Refer them to local mutual-help groups for family members of people who misuse substances, like Al-Anon and Adult Children of Alcoholics.



Helping Caregivers of Clients With Dementia

Caring for individuals with dementia can have negative psychosocial and physical effects. For example, such caregiving can negatively affect sleep, blood pressure, mood, and social functioning.¹¹²²

A caregiver may use alcohol or benzodiazepines to try to control an older adult's behavior. For instance, a caregiver may give alcohol to help the older adult sleep or to calm down the older adult when he or she is upset and angry. This is not recommended, is unsafe, and can worsen these behaviors. Tell caregivers not to use alcohol or benzodiazepines in this way.

Supports for people caring for older adults with dementia can include:^{1123,1124,1125}

- Education-based programs to help caregivers:
 - Learn about the disease.
 - See the importance of taking care of themselves and reducing their own stress.
 - Better handle the older adults' negative behaviors (e.g., acting "out of control").
- Psychosocial services that provide:
 - Stress management techniques.
 - Relaxation skills.
 - Positive thinking strategies.
 - Tips on proper self-care (e.g., healthy eating, sound sleeping).
 - Chances for caregivers to share frustration, fear, sadness, and other negative feelings.
 - Problem-solving and other coping techniques.
- Participation in caregiver support groups—especially ones that focus on caregiving for someone with dementia. These groups let caregivers share common experiences and learn from one another; for instance, the Alzheimer's Association offers caregiver support groups (www.alz.org/events/event_search?etid=2&cid=0).

Helping Caregivers of Clients With Both Substance Misuse and Dementia

Anecdotal reports give some indication of the needs and problems faced by people caring for older adults with both substance misuse and dementia. **These caregivers likely face significant stressors. Greater levels of caregiver burden are present in caregivers of older adults with alcohol misuse who also have certain behavioral symptoms common in dementia**—disinhibition (or "out of control" behavior) and irritability—compared with caregivers of older adults with those same behavioral symptoms but no alcohol misuse.¹¹²⁶

Research about the burden of caring for people with multiple, complex, chronic conditions is also telling. For instance, having more than one chronic illness is linked to:¹¹²⁷

- Being highly dependent on a caregiver.
- A higher risk of death.
- More time spent in the hospital.
- Poor quality of life.
- Greater healthcare costs.

A caregiver of an older adult with co-occurring substance use and mental disorders may have unique challenges and special needs beyond those of caregivers of people with mental disorders only, including:¹¹²⁸

- Feeling unable to leave the older adult alone.
- Being more likely to fear the older adult will hurt himself or herself or others.
- Feeling less close to the older adult.
- Having more problems getting the older adult to take medications.
- Having more problems finding treatment.
- Feeling a higher level of emotional stress related to caregiving.
- Feeling that caregiving threatens his or her health.
- Feeling lonely as a caregiver.
- Having trouble talking with others about the older adult's mental health needs.
- Wanting help from a care coordinator or care manager.
- Wanting legal assistance.

Because of these concerns, caregivers for clients such as these may be especially in need of your help and resources. Be sure to reach out to them!

Summary

Substance misuse in older adults can increase the chances of having cognitive problems. It also can increase the chances of having co-occurring mental disorders with symptoms similar to cognitive disorders or mental disorders that cause changes in cognition and could be mistaken for a cognitive disorder. These co-occurring mental disorders include depression, anxiety, and PTSD. Behavioral health service and healthcare providers need to be aware of these other conditions and use screening instruments wisely to ensure that all older adult clients receive the right diagnosis and timely treatment. Treatments can address clients' and caregivers' mood, cognition, and functioning. Positive changes through treatment are possible for older adults who are dealing with substance misuse, mental disorders, and cognitive decline.

Chapter 6 Resources

Behavioral Health Service Provider Resources

Alcohol Misuse

SAMHSA—A Guide to Preventing Older Adult Alcohol and Psychoactive Medication Misuse/Abuse: Screening and Brief Interventions (www.ncoa.org/wp-content/uploads/SBIRT-Older-Adult-Manual-Final.pdf): This manual is designed to help providers implement an early prevention intervention program for older adults who are at risk for misusing alcohol or psychoactive medication.

SAMHSA—Get Connected: Linking Older Adults With Resources on Medication, Alcohol, and Mental Health (<https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824>): This toolkit will help providers learn—and educate clients—about alcohol and prescription medication misuse and mental health issues among older adults.

Dementia

Alzheimer's Association—Dementia Care Practice Recommendations (www.alz.org/professionals/professional-providers/dementia_care_practice_recommendations): These recommendations provide guidance to healthcare and social service providers who work with individuals living with dementia in residential and community-based care settings.

Association for Frontotemporal Degeneration—For Health Professionals (www.theaftd.org/for-health-professionals/): This webpage provides resources on diagnosing and treating frontotemporal degeneration, as well as links to webinars and clinical presentations.

National Alzheimer's and Dementia Resource Center (<https://nadrc.acl.gov>): Visitors to this website can access reports, toolkits, assessment tools, and webinars and other training materials.

National Institute on Aging (NIA)—Alzheimer's and Dementia Resources for Professionals (www.nia.nih.gov/health/alzheimers-dementia-resources-for-professionals): This webpage offers clinical practice tools, training materials, and other resources for healthcare and behavioral health service providers.

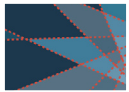
Registered Nurses' Association of Ontario—Delirium, Dementia, and Depression in Older Adults: Assessment and Care (https://rnao.ca/sites/rnao-ca/files/Delirium_dementia_and_depression_in_older_adults_LTC_case_study_and_discussion_guide.pdf): This publication contains a case study and a discussion guide to help providers learn the differences between depression, delirium, and dementia in older adults.

Client and Caregiver Resources

General Resources

Administration on Aging—Eldercare Locator (<https://eldercare.acl.gov/Public/Index.aspx>): This locator connects users to local services for older adults and their families.

ElderLawAnswers (www.elderlawanswers.com): This website maintains resources on financial and legal services related to caring for an older adult with healthcare and other needs.



Family Caregiver Alliance (www.caregiver.org): This organization offers an information line for caregivers of adults with chronic medical illnesses living at home, online caregiver support groups, and an online Family Care Navigator that provides a state-by-state list of services and assistance for caregivers.

mmLearn.org—Caregiver Training Videos (<https://training.mmlearn.org/caregiver-training-videos>): mmLearn has a library of free videos for healthcare, pastoral, and family member caregivers of older adults. Videos are available on specific topics, including caring for adults with dementia (<https://training.mmlearn.org/caregiver-training-videos/topic/dementia>).

National Alliance for Caregiving (www.caregiving.org): This organization conducts research and policy analysis, develops national best-practice programs, coordinates state and local caregiving coalitions, and provides a website offering educational resources for family caregivers.

Alcohol Misuse

Adult Children of Alcoholics (<https://adultchildren.org>): Adult children of people with AUD can use this website to find a listing of in-person and electronic meetings.

Al-Anon (<https://al-anon.org>): Al-Anon is a national mutual-help organization for people concerned about or affected by someone with alcohol misuse. The website offers information about the organization and how to find a local or electronic meeting.

NIA—Facts About Aging and Alcohol (www.nia.nih.gov/health/facts-about-aging-and-alcohol): NIA offers information about how alcohol can affect older adults' health and safety.

NIA—Older Adults and Alcohol (<https://order.nia.nih.gov/sites/default/files/2018-01/older-adults-and-alcohol.pdf>): Older adults can use this guide to learn about alcohol's harmful effects and ways to get help for alcohol misuse.

NIAAA—Harmful Interactions (www.niaaa.nih.gov/publications/brochures-and-fact-sheets/harmful-interactions-mixing-alcohol-with-medicines): Older adults and their caregivers can use this consumer guide to learn about harmful medication–medication and medication–alcohol interactions.

Seniors in Sobriety (www.seniorsinsobriety.com): This mutual-help organization for older adults with alcohol misuse has information about local meetings on its website.

Tobacco Use

CDC—Tips From Former Smokers (www.cdc.gov/tobacco/campaign/tips/index.html): Through this campaign, CDC offers videos of tips and stories from former smokers, plus other resources to help with tobacco cessation.

National Cancer Institute—Clear Horizons: A Quit-Smoking Guide for People 50 and Older (<https://smokefree.gov/sites/default/files/pdf/clear-horizons-accessible.pdf>): People ages 50 and older interested in tobacco cessation will find helpful information and strategies in this guide.

NIA—Quitting Smoking for Older Adults (www.nia.nih.gov/health/quitting-smoking-older-adults): This webpage provides information about nicotine and nicotine delivery devices (e.g., e-cigarettes, hookahs) and about strategies for stopping tobacco use.

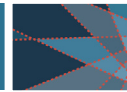
Dementia

Alzheimer's Association—Resources (www.alz.org/help-support/resources): This webpage has links to a collection of consumer resources on Alzheimer's disease and dementia, including online tools, locators for community services and Alzheimer's Association chapters, and a virtual library.

Alzheimer's Association—Support Groups (www.alz.org/care/alzheimers-dementia-support-groups.asp): Local and online support groups offered by the Alzheimer's Association for caregivers and individuals with Alzheimer's can be found through this webpage.

NIA—Alzheimer's Disease & Related Dementias (www.nia.nih.gov/health/alzheimers): This webpage provides information about Alzheimer's causes, symptoms, and treatments, and about living with the illness or providing caregiving to someone who does.

NIA—Vascular Dementia and Vascular Cognitive Impairment: A Resource List (www.nia.nih.gov/health/vascular-dementia-and-vascular-cognitive-impairment-resource-list): This webpage links to free resources about vascular dementia, CADASIL (a rare form of vascular dementia), and Binswanger's Disease.



Chapter 6 Appendix

Geriatric Depression Scale (GDS)—Short Form

Client Version

Client's Name:

Date:

Instructions: Circle the best answer for how you felt over the past week.

1. Are you basically satisfied with your life?	Yes	No
2. Have you dropped many of your activities and interests?	Yes	No
3. Do you feel that your life is empty?	Yes	No
4. Do you often get bored?	Yes	No
5. Are you in good spirits most of the time?	Yes	No
6. Are you afraid that something bad is going to happen to you?	Yes	No
7. Do you feel happy most of the time?	Yes	No
8. Do you often feel helpless?	Yes	No
9. Do you prefer staying at home, rather than to going out and doing new things?	Yes	No
10. Do you feel you have more problems with memory than most people?	Yes	No
11. Do you think it is wonderful to be alive now?	Yes	No
12. Do you feel pretty worthless the way you are now?	Yes	No
13. Do you feel full of energy?	Yes	No
14. Do you feel that your situation is hopeless?	Yes	No
15. Do you think that most people are better off than you are?	Yes	No

Scoring Version

Client's Name:

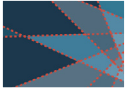
Date:

Scoring: Count boldface responses for a total score. A score of 0–5 is normal. A score of 6 or above suggests depression.

Instructions: Circle the best answer for how you felt over the past week.

1. Are you basically satisfied with your life?	Yes	No
2. Have you dropped many of your activities and interests?	Yes	No
3. Do you feel that your life is empty?	Yes	No
4. Do you often get bored?	Yes	No
5. Are you in good spirits most of the time?	Yes	No
6. Are you afraid that something bad is going to happen to you?	Yes	No
7. Do you feel happy most of the time?	Yes	No
8. Do you often feel helpless?	Yes	No

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9. Do you prefer staying at home, rather than going out and doing new things?	Yes	No
10. Do you feel you have more problems with memory than most people?	Yes	No
11. Do you think it is wonderful to be alive now?	Yes	No
12. Do you feel pretty worthless the way you are now?	Yes	No
13. Do you feel full of energy?	Yes	No
14. Do you feel that your situation is hopeless?	Yes	No
15. Do you think that most people are better off than you are?	Yes	No
<p><i>The Client Version and Scoring Version of the GDS–Short Form were both adapted from material in the public domain.¹¹²⁹</i></p> <p>Clients with a GDS score of 6 or higher need further assessment and may need treatment for MDD.¹¹³⁰ Clients with a GDS score below 6 should be screened again in 1 month if symptoms of depression are still present.¹¹³¹ If a client's depressive symptoms are no longer present in 1 month, give the depression screener again in 6 months.¹¹³²</p>		

PTSD Checklist for DSM-5 (PCL-5)

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem **in the past month**.

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	1	2	3	4
10. Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4

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Continued

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being “superalert” or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep?	0	1	2	3	4

Reprinted from material in the public domain.¹¹³³ A digital, fillable form is available online (www.ptsd.va.gov/professional/assessment/documents/PCL5_Standard_form.PDF).