ABOUT SUBSTANCE USE DISORDERS

According to the Centers for Disease Control and Prevention (CDC), SUDs are a leading cause of death in the United States. Excessive alcohol use alone leads to about 88,000 premature deaths each year, and more than 480,000 deaths each year are caused by cigarette smoking.

SUDs can develop in individuals who use alcohol or other addicting drugs in harmful quantities. According to the VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders, about 9 percent of Americans over age 18 have a non-tobacco SUD, and about 1 in 4 Americans will develop a non-tobacco SUD over the course of a lifetime.

In service members and Veterans, SUD commonly co-occurs with and complicates other conditions or issues. These conditions or issues may be health-related, such as other mental health conditions. They may also be societal, such as homelessness, criminal justice involvement, or unemployment.

SUDs have substantial negative consequences on Veterans’ mental and physical health, work performance, housing status, and social function. The department offers treatments for substance use problems throughout its health care system.

VA RESEARCH ON SUBSTANCE USE DISORDERS: OVERVIEW

VA supports a broad portfolio of research looking at substance abuse prevention, screening, and treatment. Some researchers are looking at treatment-seeking patterns: why and when Veterans ask for help—and why many don’t. Treatment strategies, including cognitive behavioral strategies and Web-based approaches, are also being studied.

Other researchers are working to identify the most effective therapies for co-morbid disorders, such as depression and PTSD, and attempting to determine if early intervention improves outcomes. Still others are focusing on how readjustment issues relate to substance abuse.

A Collaborative Research to Enhance and Advance Transformation and Excellence (CREATE) group is working to promote value and access in VA’s SUD services. The group is doing so by validating and refining quality metrics; evaluating and disseminating low-cost, high impact innovations; and promoting patient and provider knowledge about evidence-based treatment for SUDs.

SELECTED MILESTONES AND MAJOR EVENTS

1956 – Linked cigarette smoking with precancerous lesions
1976 – Completed a comparison trial of two different types of methadone
1984 – Developed the nicotine transdermal patch and other therapies to help smokers quit
1992 – Published a study in which the drug Naltrexone was shown to be effective in keeping alcoholics from relapsing into heavy drinking and reduced cravings for alcohol
2013 – Successfully tested a vaccine to treat methamphetamine addiction on mice
2016 – Developed, and tested on rats, a painkiller as strong as morphine that is unlikely to be addictive and has fewer side effects

RECENT STUDIES: SELECTED HIGHLIGHTS

For treating alcohol dependence, a 26-week primary care intervention is just as effective as specialty outpatient treatment, according to VA researchers in Philadelphia. The study enrolled 163 Veterans and randomly assigned them to primary care treatment or specialty treatment groups. Those receiving primary care treatment were offered medicine and psychosocial support, delivered in person and by phone. The researchers found that Veterans in the primary care treatment group were more than five times as likely to be abstinent from heavy drinking as those in the specialty treatment group.
times as likely to complete all 26 weeks. Overall abstinence rates were the same between groups, and the primary care group had a smaller percentage of days with heavy drinking. (Journal of General Internal Medicine, January 2014)

- Smoking marijuana is not as bad as smoking cigarettes when it comes to lung disease, according to researchers from the Central Arkansas Veterans Healthcare System in Little Rock and the University of Arkansas. They found a clear linkage between marijuana use and chronic bronchitis and large airway inflammation, conditions that make breathing difficult. However, they found no links to emphysema, a chronic disease in which the air sacs in the lungs are gradually damaged, and only weak, if any, links to lung cancer. The researchers concluded, however, that there is unequivocal evidence that habitual or regular marijuana use is not harmless, and that doctors should caution patients about possible lung damage from regular heavy marijuana use. (Current Opinion in Pulmonary Medicine, March 2014)

- Lung cancer screening can actually lower smokers’ motivation to quit smoking, according to investigators with the VA Puget Sound Health Care System and the University of Seattle. The team interviewed smokers who had just undergone lung cancer screening. Nearly half found some reason to believe that just being screened meant that they did not need to stop smoking.

This assumption is false, as is the assumption many study participants had that lung cancer was the only potential lethal effect of smoking. (JAMA Internal Medicine, September 2015)

- Most prescriptions for opioid painkillers are made by the broad swath of U.S. general practitioners, not by a limited group of specialists, according to a study by researchers at the Palo Alto VA Health Care System and Stanford University School of Medicine. The research team examined Medicare prescription drug claim data, and found that while the top 10 percent of opioid prescribers account for 57 percent of all opioid prescriptions, this prescribing pattern is comparable to that found in the Medicare data for prescribers of all drugs. (JAMA Internal Medicine, February 2016)

- Scientists know that alcohol itself can directly damage liver cells. A 2016 study by researchers at the VA San Diego Healthcare System and the University of California yielded evidence that alcohol is harmful to the liver for a second reason—it allows gut bacteria to migrate to the liver promoting alcohol-induced liver disease. According to the research team, alcohol appears to impair the body’s ability to keep microbes in check. When barriers break down, bacteria that don’t normally colonize the liver end up there—and this bacterial migration promotes alcohol liver disease. (Cell Host and Microbe, Feb. 10, 2016)

- Specialized counseling delivered by telephone may be more effective than state quit lines to help smokers in mental health care kick the habit. A team of researchers from the VA New York Harbor Health Care system and New York University found that specialized counseling yielded a quit rate of 26 percent at six months, versus 18 percent for the state quit lines. (American Journal of Preventive Medicine, April 2016)

- Veterans receiving the highest doses of opioid painkillers are more than twice as likely to die by suicide, compared with those receiving the lowest doses. Investigators with the VA Ann Arbor Healthcare System and the University of Michigan looked at nearly 124,000 Veterans who had non-cancer chronic pain and received prescriptions for opioids. They found that the suicide risk rose as dose increased. The researchers could not tell, however, whether there was a direct causal link between the pain medications and suicide risk. Instead, the high doses may be a marker for other factors that drive suicide, including unresolved severe chronic pain. (Pain, May 2016)

For more information on VA studies on substance use disorders and other key topics relating to Veterans’ health, please visit www.research.va.gov/topics