Slide 4



The DSM 5 recognizes substance-related disorders resulting from the use of 10 separate classes of drugs: alcohol; caffeine; cannabis; hallucinogens; inhalants; opioids; sedatives, hypnotics; stimulants; tobacco; and other or unknown substances.

The pharmacological mechanisms for each class of drug are different. But the activation of the <u>reward system</u> is similar across substances in producing feelings of pleasure or euphoria, which is often referred to as a "high."

The DSM 5 recognizes that people are not all automatically or equally vulnerable to developing <u>substance-related disorders</u>. Some people have lower levels of self-control that predispose them to develop problems if they're exposed to drugs.

There are two groups of substance-related disorders: substance-use disorders and substance-induced disorders.

Substance-use disorders are patterns of symptoms resulting from the use of a substance that you continue to take, despite experiencing problems as a result.

Substance-induced disorders, including intoxication, withdrawal, and other substance/medication-induced mental disorders, are detailed alongside substance use disorders.

# Severity of Substance Use Disorders

The DSM 5 allows clinicians to specify how severe or how much of a problem the <u>substance use disorder</u> is, depending on how many symptoms are identified. Two or three symptoms indicate a mild substance use disorder;<sup>1</sup> four or five symptoms indicate a moderate substance use disorder, and six or more symptoms indicate a severe substance use disorder.

Slide 5

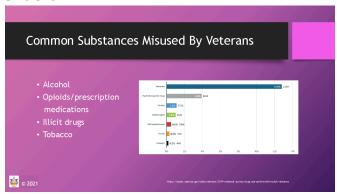


The DSM 5 recognizes substance-related disorders resulting from the use of 10 separate classes of drugs: alcohol; caffeine; cannabis;

Some of the drugs represent classes of drugs such as:

Hallucinogens (i.e., phencyclidine or LSD) Stimulants (i.e., amphetamine-type substances and cocaine)

Slide 6



#### **Alcoholism**

Alcohol is the most abused drug by veterans. In fact, veterans report more frequent alcohol use and heavier use of alcohol in a 1-month period than civilians do.<sup>2</sup>

There is also a positive correlation between alcohol use and combat exposure: Higher levels of combat exposure are present in veterans with problematic alcohol use. Alcoholism in veterans may, in some case, lead to domestic violence, declining physical and mental health, and even death.<sup>2</sup>

# **Prescription Drugs**

Opioid pain medication is being prescribed to veterans at alarming rates to treat physical injuries and illnesses, like migraines and chronic pain.

In 2009, 24% of veterans were being prescribed opiates. The presence of a co-occurring mental health condition like PTSD (a mental health disorder that can result from witnessing or experiencing a traumatic event<sup>5</sup>) increases the likelihood of veterans receiving an opioid prescription.<sup>2</sup> The number of veterans addicted to painkillers, unfortunately, does not come as a surprise, as with opioids are one of the most addicting prescription drug available.<sup>2</sup>

## **Illicit Drugs**

Marijuana is the primary illicit drug used by veterans, although rates of marijuana use have decreased over the years.<sup>2</sup> In fact, studies show that veterans have lower rates of illicit drug use overall, compared to non-veterans.<sup>6</sup>Despite these lower rates, it is still important to recognize veterans and substance use disorders, especially those that may be progressing. Studies have found a connection between veteran opioid use and subsequent heroin use. Specifically, researchers found a strong association between veterans using prescription opioids for non-medical purposes (such as prescriptions not in the veteran's name or the use of opioids for the sole purpose of the feelings it causes in the body) and later heroin use.<sup>7</sup>

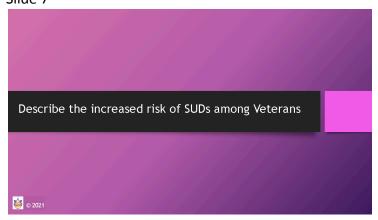
## **Branches of the Military**

No one branch of the military is immune to substance use disorders—the Navy, Army, Marine Corps, Air Force, and Coast Guard all experience varying degrees of substance abuse. Research from the RAND Corporation in 2015 looked at substance abuse across all branches of the military and found:<sup>4</sup>

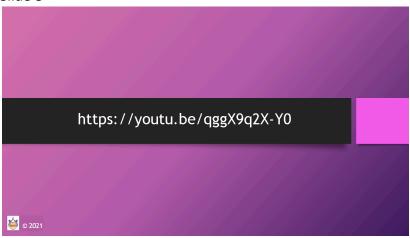
The Marine Corps has the highest rates of binge drinking, heavy drinking, and hazardous drinking among all other military branches. The Navy followed second.

The Army has the highest rates of prescription pain reliever misuse. The Marine Corps has the largest percentage of cigarette smokers.

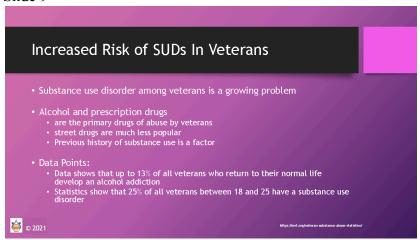
# Slide 7



## Slide 8



## Slide 9





# What are The Common Risk Factors of Opioid Addiction in Veterans?

While all <u>veterans may be at an increased risk for addiction</u>, there are specific experiences that will increase their likelihood of substance abuse. <sup>2</sup>

- Multiple Deployments: Adjusting from deployment to civilian life can cause significant stress on veterans. As a result, those who experience multiple deployments are more at risk for substance abuse.
- Combat Exposure: Experiencing combat can result in stress and trauma. Alcohol is commonly used as a coping mechanism during deployment.
- Related Injuries: The misuse of painkillers such as Vicodin and Oxycontin has been on the rise in the veteran community as these drugs are commonly prescribed for injuries incurred during combat and chronic pain after service. The wide availability of opioids poses a great risk for addiction in veterans who have been prescribed medication for combat-related injuries.

# **Pre-Trauma Risk Factors**

There is nothing that can predict with 100% certainty who will and who will not develop PTSD as a result of combat. However, there are certain pre-trauma risk factors that can predispose someone to develop the disorder when placed in war-time situations. Those include:<sup>5,6</sup>

- Being female. The overall number of females serving in the military has increased, and reports indicate that they tend to experience more injuries and have less military preparedness, less unit cohesion, and higher rates of depression, all of which can impact the development of PTSD.
- Being non-white. It is not entirely clear why minorities experience higher rates of PTSD, but this may be because minorities are more often assigned to high combat roles or have more pre-existing trauma risk factors.

- **Having a low level of education**. Service members with higher educational levels may have developed better coping mechanisms than their less-educated counterparts.
- **Being non-officers.** These service members are more likely to be exposed to combat.
- Branch of service. Studies indicate that people who serve in the <u>Marines</u>, Air
   Force, <u>Navy</u>, or Coast Guard have a lower risk of PTSD than those who serve in the Army.
- Experiencing adverse life events. Early childhood traumas, such as sexual abuse, appear
  to increase the risk of PTSD, but only small studies have examined this correlation to
  date.

#### Slide 11



#### Alcoholism in Veterans

https://www.alcoholrehabguide.org/resources/alcoholism-in-veterans/

## **Identifying Alcohol Abuse in Veterans**

Alcohol use can affect veterans of any age, gender or military ranking.

Certain psychiatric disorders, including major depression, bipolar disorder, anxiety disorders, and anti-social personality disorder are commonly associated with alcoholism, although whether or not these <u>co-occurring disorders</u> are a result of alcoholism or contributed to the development of an alcohol use disorder is unclear and may differ per individual. Some studies suggest that schizophrenia, depression, and personality disorders are also predisposing factors for AUDs. This means that if a person has one or more of these psychiatric conditions, they may have an increased risk of alcoholism.<sup>5</sup>

Several signs of dangerous drinking behaviors in veterans are:

Exhibiting physical symptoms of alcohol withdrawal (characterized by insomnia, nausea and shakiness)

Showing aggression, irritability and hostility towards others Hiding alcoholic beverages and bottles, and drinking in private Losing interest in hobbies, personal and professional goals

Slide 12



Veterans are more susceptible to opioid addiction as they are more likely to suffer from chronic pain. In addition, many veterans suffer from mental health problems like Post-Traumatic Stress Disorder (PTSD), making them more likely to abuse drugs and alcohol in an attempt to self-medicate.

## Opioids in Veterans - Opioid abuse crisis takes heavy toll on U.S. veterans

Veterans are twice as likely as non-veterans to die from accidental overdoses of the highly addictive painkillers, a rate that reflects high levels of chronic pain among vets, particularly those who served in the wars in Iraq and Afghanistan, according to federal data.

U.S. government and healthcare officials have been struggling to stem the epidemic of overdoses, which killed more than 64,000 Americans in the 12 months ending last January, 2017 alone, a 21 percent increase over the previous year, according to the Centers for Disease Control. About 65,000 Americans died in Vietnam, Iraq and Afghanistan.

The VA system has stepped up its efforts to address the crisis, having treated some 68,000 veterans for opioid addiction since March, said Department of Veterans Affairs spokesman Curtis Cashour.

The department's Louis Stokes VA Center in Cleveland has also begun testing alternative treatments, including acupuncture and yoga, to reduce use of and dependency on the drugs, the VA said.

# Trends among those who died

In 2010, half of the veterans who died of any opioid overdose had filled an opioid pain medicine prescription in the last three months before they died, and two-thirds had filled such a prescription in their last year of life.

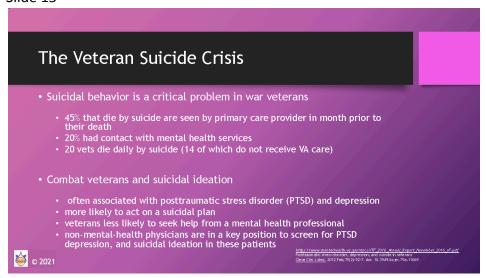
But by 2016, only a quarter of those who overdosed had filled an opioid pain medicine prescription in the last three months, and 41 percent had done so in the past year.

At the same time, the rate of opioid overdoses from all forms of opioids rose from 14.47 per 100,000 person-years in 2010, to 21.08 in 2016. The death rate from heroin or from taking multiple opioids nearly quintupled, and the death rate from synthetic opioids such as fentanyl rose more than five-fold.

"These data show it's important to refocus on those with a current risk of overdose from illicit opioids, including very potent synthetic drugs."

Allison Lin, M.D., M.Sc.

Slide 13



## Data:

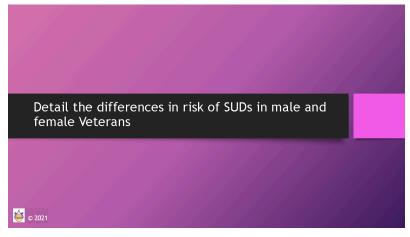
- 45% that die by suicide are seen by PCP in month prior to their death
- 20% had contact with mental health services
- 20 vets die daily by suicide (14 of which do not receive VA care)

Assessment and Treatment of Depression and Suicidal Behaviors in military service members and Veterans

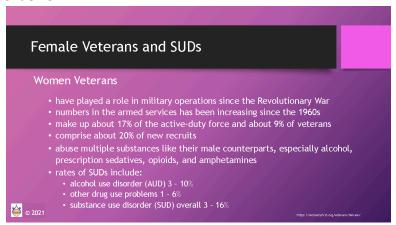
COMMENT: Spoken to as cross-reference to PTSD/TBI.

Not quite sure if some of the language used was directed toward "Assessment" and "Treatment," but did not appear so.

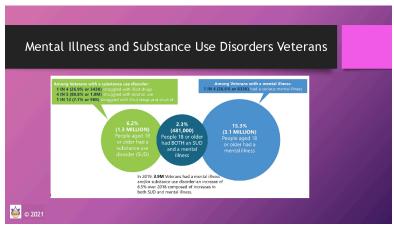
Slide 14



Slide 15



#### Slide16



The most prevalent types of substance use problems among male and female veterans include heavy episodic drinking and cigarette smoking.9

Among veterans presenting for first-time care within the VA health care system, ~11% meet criteria for a diagnosis of SUD. Consistent with the general population, alcohol and drug use disorder diagnoses are more common among male than female veterans (10.5% current alcohol

use disorders and 4.8% current drug use disorders among male veterans; 4.8% current alcohol use disorders and 2.4% current drug use disorders among female veterans) and are more common among non-married and younger veterans (i.e., <25 years old). Demographics associated with higher rates of SUDs (e.g., young, male) in the general civilian population make up a greater proportion of the military population, which could contribute to an increased risk of certain SUDs relative to civilians.2,3,10 A number of environmental stressors specific to military personnel have been linked to increased risk of the development of SUDs among military personnel and veterans, including deployment, combat exposure, and post-deployment civilian/reintegration challenges.3,11 Onset of SUDs can also emerge secondary to other mental health problems associated with these stressors, such as post-traumatic stress disorder (PTSD) and depression. 12,13 Additionally, interpersonal traumas (e.g., histories of child physical or sexual abuse) have been shown to mediate the risk of developing an SUD among military veterans, and some individuals join the military to escape adverse home environments. 14,15 Furthermore, age is an important predictor of SUD prevalence, with higher rates of SUDs associated with younger age. It is important to keep in mind that many estimates lump together all age groups despite significant variation by age. For example, a recent epidemiological study found that among male veterans, the overall prevalence of substance abuse was lower than

rates of civilian substance use when all ages were examined together. 9 However, when looking at the pattern for male veterans aged 18–25 years only, the rates of substance abuse were higher in veterans compared with civilians.

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