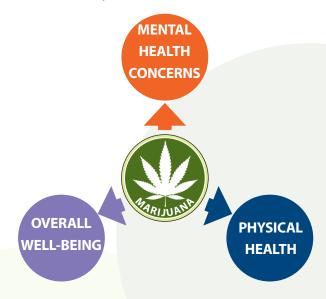


## **U.S. Department of Veterans Affairs**

Veterans Health Administration PBM Academic Detailing Service

# **Marijuana: Natural = Safe, Right?**

Marijuana is readily available to use in many states in the USA. Understanding the possible risks of use is important to ensure the safety of our Veterans.



No matter how you use marijuana (smoke it, eat it, or apply to your skin), it may cause problems with both short term and long term use

## How marijuana affects your BRAIN:

Potential effects from Short Term Use

- Poor focus, memory and reaction time
- •Difficulty with problem solving
- Hallucinations, paranoia, anxiety

Potential effects from Long Term Use

- Memory problems and trouble learning new things
- Depression, hallucinations, paranoia, anxiety, worsening PTSD symptoms
- Addiction



**Brain** 

- → It is not safe to drive while on marijuana. It makes it hard to judge distance, concentrate, react quickly to signals and sounds, be alert and coordinated. If alcohol is combined, this risk is even higher!
- → In regular users, some of the effects from long term use may last for days or even weeks after stopping marijuana.

Created September 2016 IB 10-927, P96809

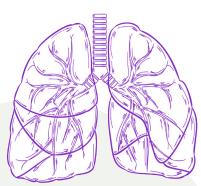
# How inhaling marijuana affects your LUNGS:

Inhaling harmful chemicals

- Gases
- •Small particles
- Carcinogens (toxins linked to cancer)

Breathing problems similar to tobacco smokers

- •Daily cough with mucus
- Difficulty breathing
- •Lung infections (bronchitis, pneumonia)



Lungs

# **How marijuana affects your HEART:**

Increases risk of heart attack

•Within the first hour of smoking

Increases heart rate

- •20–100% increase after smoking
- •Increase lasts up to three hours

Changes in heart rhythm

 Feels like your heart skips a beat, or is fluttering, or beating too fast or too slow



**Heart** 

## Is it SAFE to use marijuana with other medications?

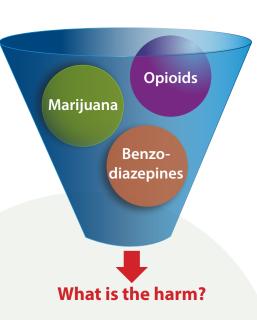
A combination that can be concerning is the use of opioids and/or benzodiazepines with marijuana.

## **Opioids + Benzodiazepines + Marijuana:**

Drowsiness: All three can cause drowsiness.

Reaction time: All three can reduce reaction time. Do not drive or operate machinery.

Overdose: Opioids and Benzodiazepines can cause reduced breathing and in some cases, breathing can stop and a person can die. Marijuana containing higher levels of THC may cause difficulty with thinking and memory and this could result in medication errors where extra doses of opioids, benzodiazepines, or other medications may be taken.



# **Example of Opioids**

- •Morphine (MS Contin®, Kadian®)
- Oxycodone (Percocet®, OxyContin®)
- Hydrocodone (Vicodin®, Norco®)
- Fentanyl (Duragesic®)
- Methadone
- Heroin

# **Example of Benzodiazepines**

- •Lorazepam (Ativan®)
- •Diazepam (Valium®)
- Alprazolam (Xanax®)
- Clonazepam (Klonopin®)

If you have specific questions about the safety of using marijuana with other medications, please contact your provider or pharmacist.

# Some marijuana users can become addicted!

30% of daily users can develop problematic use

People that start using marijuana before the age of 18 are 4 to 7 times more likely to develop problematic use

Problematic use can lead to DEPENDENCE

Dependence can lead to ADDICTION when a person cannot stop using marijuana despite negative consequences

You can have problems with marijuana withdrawal.



You may have withdrawal symptoms the day after you stop using. These can get worse 2 to 3 days after using and can take 1 to 2 weeks or longer to go away.

## **Recovery and Treatment**

Contact your VA provider or health care team if you are having concerns about your marijuana use or to learn more about available treatment services.

## The marijuana plant is not an FDA-approved medicine:

The U.S. Food and Drug Administration (FDA) has not approved the marijuana plant as a medication due to lack of studies on the risks and benefits. Marijuana contains over 100 chemical substances known as cannabinoids. Some of these, like tetrahydrocannabinol (THC), have mind altering effects and can be intoxicating. Cannabidiol (CBD), another cannabinoid, does not cause the same "high" users of THC experience. THC has been studied for the treatment of several conditions, including nausea and increasing appetite. CBD is similarly being studied for a number of conditions, including childhood epilepsy and inflammation.

What is different between the marijuana product I get from the marijuana shop and a prescription from the pharmacy?

## **Quality Control**

Is an edible from one shop the same as another shop? Was the product tested for contaminants? (e.g. molds, pesticides)

# No Warnings or Reported Side Effects

Will I get an information sheet from the shop like I do from the pharmacy?

#### **Product Form**

What is the difference if I smoke it, eat it or use a cream on my skin? Will they all work?

## No Established Dose to Treat a Condition

If I am taking this for pain, how much should I use?

The right dose of any medicine is important. A specific dose of THC is approved to treat nausea, but high doses of THC may cause vomiting. The ingredients in a medicine must be measured and stay the same from one dose to the next. The marijuana plant contains unknown ingredients that change from plant to plant. This makes it hard to control the "dose" of marijuana needed to treat a condition and use it in the same way we use other medicines.

Future studies are ongoing to establish the role of the marijuana plant and the cannabinoids found in the plant for treatment of medical conditions. If you have questions about using a marijuana product for a medical condition, please discuss this with your medical provider to determine the most appropriate treatment for you. VA Providers are not able to prescribe marijuana products.

Information in this document was compiled by the Center of Excellence in Substance Abuse treatment and Education (CESTE). It contains information from factsheets by the National Institute on Drug Abuse (**www.drugabuse.gov**) and presentation by Gold, J., Trafton, J., & Bonn-Miller, M. (2010) entitled "What providers need to know about cannabis use in Veterans with mental health conditions: Research, policy, practice," and an additional reference: Nora D. Volkow, M.D., Ruben D. Baler, Ph.D., Wilson M. Compton, M.D., and Susan R.B. Weiss, Ph.D: Adverse Effects of Marijuana. N Engl J Med 2014; 370:2219-2227, June 5, 2014 DOI: 10.1056/NEJMra1402309.