


### The Impacts of High-THC Marijuana Use on Adolescents

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1

### Marijuana's Acute Effects – Intoxication Stage

- Euphoria
- Appetite stimulation
- Altered perception of time
- Heightened sensation
- Impaired coordination and balance
- Increased heart rate: 20 - 100%
  - Some evidence for increased risk of heart attack, strokes
- Increased risk of accidents (~2 fold), higher when combined with alcohol

- Cognition
  - Impaired short-term memory
  - Difficulty with complex tasks
  - Difficulty learning
- Executive Function
  - Impaired decision-making
  - Increased risky behavior
- Mood (especially after high doses or edibles)
  - Anxiety – panic attacks
  - Psychosis – paranoia

Dr. Susan Weiss presentation to Johnny's Ambassadors 8-6-21

2

### Risks of Marijuana Use

- Risks during intoxication:
  - Psychosis/paranoia
  - Cardiovascular events/Postural hypotension
  - Driving Accidents: slowed reaction time/attention deficits (worse combined with alcohol)
- High Potency Products:
  - Risk of adverse reactions, especially in naive users; or those exposed accidentally
- Risks of Chronic Use (especially in those exposed prenatally or in adolescence)
  - Cannabis Use Disorder
  - Other Substance Use Disorders
  - Mental illness, especially psychotic disorders; suicidal ideation
  - Poorer academic achievement, financial success, and life satisfaction
  - Hyperemesis Syndrome
  - Prenatal exposure: low birthweight, modest effects on brain development and behavioral outcomes through early adulthood.

3

"Marijuana use among youth and young adults is a major public health concern. Early youth marijuana use is associated with:

- Neuropsychological and neurodevelopmental decline
- Poor school performance
- Increased school drop-out rates
- Increased risk for psychotic disorders in adulthood
- Increased risk for later depression
- Suicidal ideation or behavior"

SAMHSA "Preventing Marijuana Use Among Youth" Oct. 2021

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4

### 1 MARIJUANA DEPENDENCE

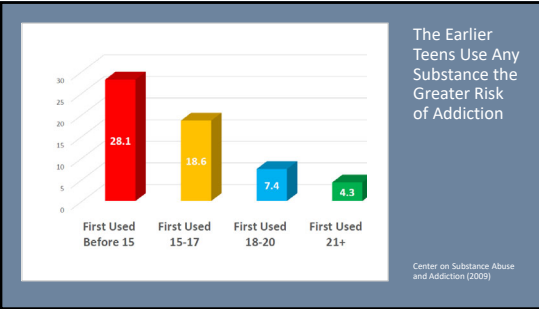


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First Used	Percentage
Before 15	28.1
15-17	18.6
18-20	7.4
21+	4.3

The Earlier Teens Use Any Substance The Greater Risk of Addiction

Center on Substance Abuse and Addiction (2009)

6

### Addiction is a Childhood Onset Disease

90% of Americans who meet the clinical criteria for addiction started using substances before the age of 18.

Substance use before age 14 is associated with the greatest risk of developing a substance use disorder (SUD) or dependence later in life

Study by the National Center on Addiction and Substance Abuse at Columbia University (CASA) – Now the Partnership to End Addiction [www.drugfree.org](http://www.drugfree.org)

7

High potency marijuana, on average, increases the risk of CUD symptom onset within 1 year

Risk for cannabis use disorder symptom onset within one year (odds ratio)

1.88  
4.9%  
Δ-9 THC  
1994

4.85  
12.3%  
Δ-9 THC  
2012

Antkowiak, B.J. et al., Drug and Alcohol Dependence 195 (2019) 186-192.

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### Cannabis Use Disorder Criterion from DSM-5

- Taking marijuana in larger amounts or for longer than you intended to.
- Wanting to cut down or quit using marijuana but unable to do so.
- Spending a lot of time getting, using, or recovering from use of marijuana.
- Cravings and urges to use marijuana.
- Not managing to do what you should at work, home, or school because of marijuana use.
- Continuing to use marijuana, even when it causes problems in relationships.
- Giving up important social, occupational, or recreational activities to use marijuana.
- Using marijuana even when it puts you in danger (such as driving).
- Continuing to use marijuana, even when you know it's making you worse physically/psychologically.
- Needing more marijuana to get the effect you want (tolerance).
- Development of withdrawal symptoms, which can be relieved by taking more marijuana.

Criteria #1 to #4 above fall into the category of Impaired Control; #5 to #7 fall into the category of Social Impairment; #8 and #9 fall under Risk Use; and #10 and #11 are Pharmacological Indicators of Tolerance and Withdrawal.

MILD = 2-3 Symptoms, MODERATE = 4-5 Symptoms, SEVERE = 6+ Symptoms

9

### Cannabis Withdrawal

If you use weed everyday and try to stop, your anxiety will climb.

When you start using again, and the anxiety decreases, it's not helping your anxiety – it's helping your withdrawal symptoms stop.

To manage your addiction, you must stop for 28 days minimum for the withdrawal symptoms to subside, the THC to clear your body, and your body to start making its own anandamide again.

A. Cessation of cannabis use that has been heavy and prolonged (i.e., usually daily or almost daily use over a period of at least a few months).

B. Three (or more) of the following signs and symptoms develop within approximately 1 week after Criterion A:

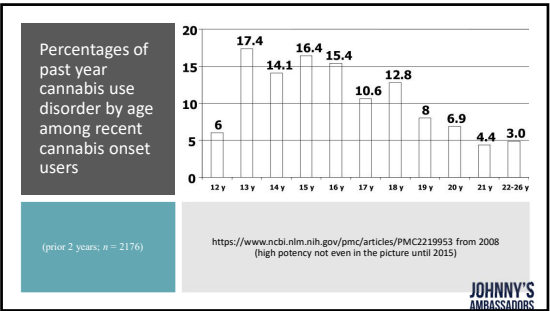
1. Irritability, anger, or aggression.
2. Nervousness **anxiety**.
3. **Sleep difficulty** (e.g., insomnia, disturbing dreams).
4. **Decreased appetite**, weight loss.
5. Restlessness.
6. **Depressed mood**.

7. At least one of the following physical symptoms causing significant discomfort: abdominal pain, shakiness/tremors, sweating, fever, chills, **Headache**.

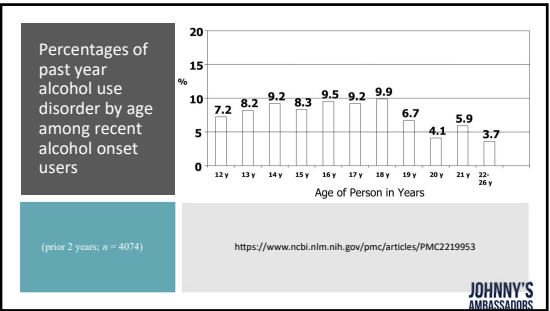
C. The signs or symptoms in Criterion B cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication or withdrawal from another substance.

10



11



12

## 2 A DECREASE IN IQ

UGHHHHHHHHHH

MAN... I KNOW THIS ONE!

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## 3 CAUSES INCREASED ANXIETY AND DEPRESSION

STUDIES FOUND THAT CANNABIS USE IN ADOLESCENCE LEADS TO A 37% INCREASED CHANCE OF DEPRESSION DIAGNOSIS AS A YOUNG ADULT.

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14

## 4 INCREASES THE ODDS YOU WILL USE OTHER DRUGS

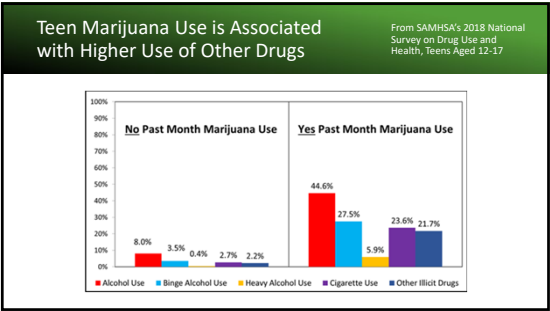
WELCOME TO THE PARTY

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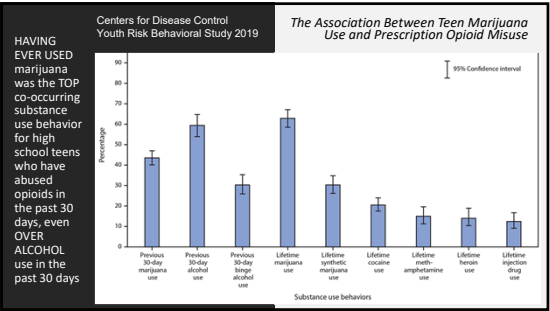
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15



16



17

## 5 CAN KILL YOU FROM THROWING UP

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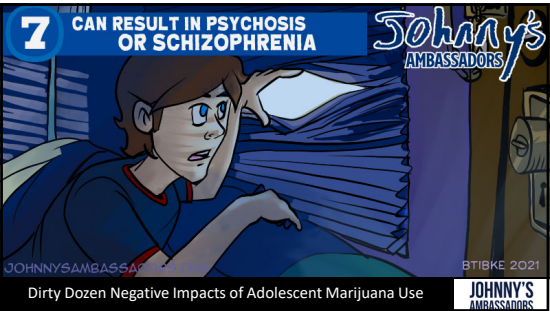
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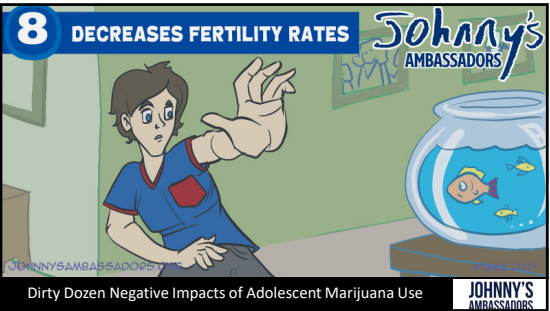
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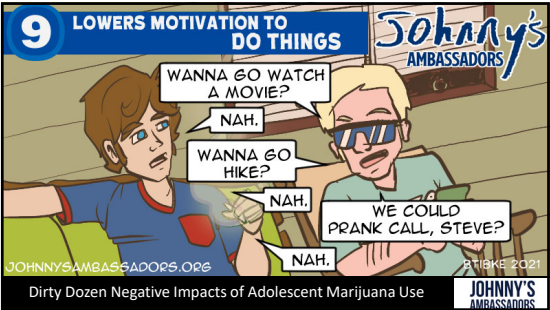
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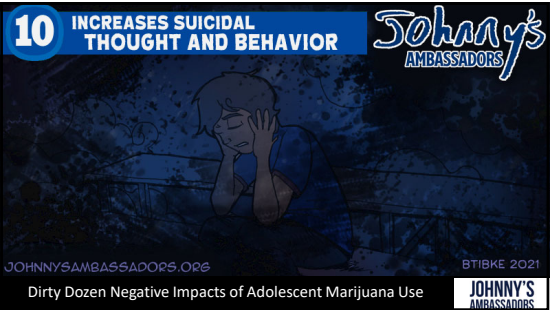
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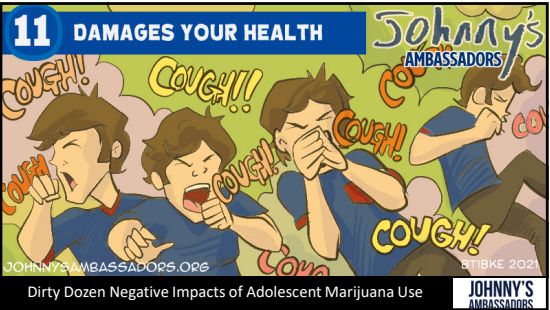
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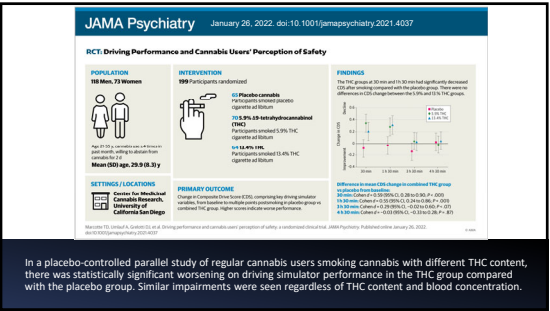
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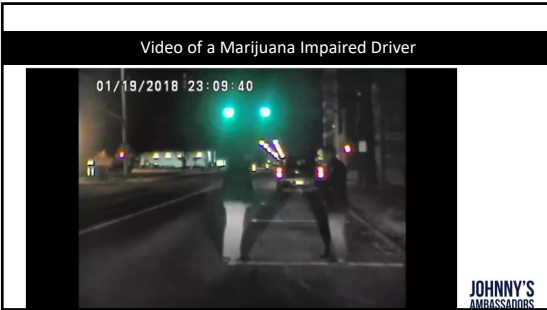


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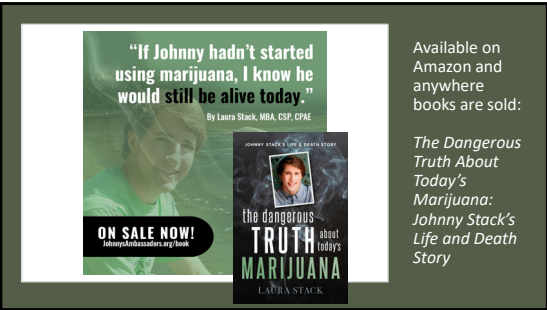
28

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Sign Up	Become a Certified Johnny's Ambassadors Trainer: <a href="http://www.JohnnysAmbassadors.org/trainers">http://www.JohnnysAmbassadors.org/trainers</a>
Share	Join our online marijuana prevention community at <a href="https://community.johnnysambassadors.org">https://community.johnnysambassadors.org</a>
Show Up	Join us for the 2nd Annual #StopDabbing Walk on Sunday, September 18, 2022: <a href="https://stopdabbingwalk.com">StopDabbingWalk.com</a>
Speak Out	Bring education to your community: <a href="https://johnnysambassadors.org/education">https://johnnysambassadors.org/education</a>
Support	We gratefully accept donations: <a href="https://johnnysambassadors.org/donate">johnnysambassadors.org/donate</a>

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29



Available on Amazon and anywhere books are sold:

*The Dangerous Truth About Today's Marijuana: Johnny Stack's Life and Death Story*

30

Scan This QR Code To Go To Our LinkTree For a Complete List of Free Educational Resources!



Questions? Email me at [Laura@JohnnysAmbassadors.org](mailto:Laura@JohnnysAmbassadors.org)

31