

# TEST YOUR KNOWLEDGE ON DRUGS AND DRUG ABUSE BY TAKING THE:

## 2017 National Drug & Alcohol IQ Challenge



LIGHT & UNITE RED.

Go to [teens.drugabuse.gov/2017IQChallenge](https://teens.drugabuse.gov/2017IQChallenge)  
for an online interactive version.

**1** What percentage of teens who use e-cigarettes are likely to start smoking traditional cigarettes within 6 months?

- A. 7 percent
- B. 31 percent
- C. 52 percent
- D. 79 percent

**2** The chemical in the marijuana plant that causes the “high” is:

- A. Delta-9-tetrahydrocannabinol (THC)
- B. Dronabinol
- C. Cannabidiol (CBD)
- D. *Cannabis sativa*

**3** How do inhalants affect the brain?  
Check all that apply:

- A. They protect you from nausea and vomiting.
- B. Most of them depress the central nervous system.
- C. They send oxygen to the brain, resulting in a happy, stimulant effect.
- D. They can damage the protective sheath around certain nerve fibers in the brain.

**4** Among kids ages 12 to 17, how many drank alcohol in the past month? On average:

- A. Very few: About 1 out of 10
- B. Half: 5 out of 10
- C. Most: 8 out of 10
- D. All: 10 out of 10

**5** About how many people in the United States die every year from overdosing on prescription pain relievers (called “opioids”)?

- A. 750
- B. 2,300
- C. 9,500
- D. 19,000

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For more questions and to find out the correct answers, go to the next page.

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**6** Synthetic cannabinoids are also called what? Check all that apply:

- A. Bath salts
- B. Medical marijuana
- C. K2
- D. Cannabis

**7** How does alcohol affect the teenage brain? Choose all that are correct:

- A. It interferes with normal brain development.
- B. It acts to increase attention and focus.
- C. It compromises decision-making and the ability to recognize danger.
- D. It improves vision when consumed in small amounts.

**8** Drugs like PCP, ketamine, dextromethorphan, and salvia are called dissociative drugs. What does that mean?

- A. You want to be associated with them.
- B. They make a user feel out of control and disconnected from their body and environment.
- C. They make you think more carefully about everything.
- D. They are associated with better performance in dancing or athletics.

**9** About how many nonsmokers die each year from secondhand exposure to smoke from cigarettes, cigars, hookahs, and other tobacco products?

- A. 1,200
- B. 7,800
- C. 41,000
- D. 130,000

**10** Which of these is a symptom of alcohol overdose?

- A. Irregular breathing
- B. Confusion
- C. Vomiting
- D. All of the above

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**2017**  
National Drug  
& Alcohol  
IQ Challenge

# BRAINIAC

## BONUS QUESTIONS

**1** Marijuana use affects your memory because it alters how information is processed in what part of the brain?

- A. Parietal lobe
- B. Corpus callosum
- C. Pituitary gland
- D. Hippocampus

**2** Methamphetamine use can have negative effects on brain cells called microglia. Why are healthy microglia important?

- A. They defend your brain against infections.
- B. They protect your teeth against cavities.
- C. They elevate your mood, protecting against depression.
- D. They are important in motor function—your ability to move your body.

[TEENS.DRUGABUSE.GOV/2017IQCHALLENGE](http://TEENS.DRUGABUSE.GOV/2017IQCHALLENGE)

For the correct answers, go to the last page.

# ANSWERS TO THE:

## 2017 National Drug & Alcohol IQ Challenge

**1 B.** About 31 percent of teens who use e-cigarettes will start smoking within 6 months, compared to only 8 percent of teens who do not use e-cigarettes. You can learn more about e-cigarette use by teens at [drugabuse.gov/related-topics/trends-statistics/infographics/teens-e-cigarettes](http://drugabuse.gov/related-topics/trends-statistics/infographics/teens-e-cigarettes).

**2 A.** THC is the ingredient that causes the “high.” On average, THC levels in marijuana are greater than they used to be. Very high-potency forms of marijuana, such as *hash oils* and *resins* as well as some *edibles*, can cause bad reactions—leading some people to end up in the emergency room with uncomfortable side effects. You can learn more about marijuana at [drugabuse.gov/publications/drugfacts/marijuana](http://drugabuse.gov/publications/drugfacts/marijuana).

**3 B and D.** Most inhalants depress the central nervous system and affect the brain in a similar way as alcohol, including slurred speech, lack of coordination, euphoria, and dizziness. Chronic abuse of volatile solvents, such as toluene or naphthalene (used in mothballs), damages the protective sheath around certain nerve fibers in the brain, causing nerve damage similar to the disease multiple sclerosis. You can learn more about inhalants at [drugabuse.gov/publications/drugfacts/inhalants](http://drugabuse.gov/publications/drugfacts/inhalants).

**4 A.** Very few kids ages 12 to 17—about 1 out of 10—drank alcohol in the past month. So MOST—about 9 out of 10 kids—did not. You can find more statistics related to alcohol use at [samhsa.gov/data/sites/default/files/NSDUH-DetTabs2014/NSDUH-DetTabs2014.pdf](http://samhsa.gov/data/sites/default/files/NSDUH-DetTabs2014/NSDUH-DetTabs2014.pdf), Table 2.68B.

**5 D.** About 19,000 people died from a prescription pain reliever overdose in 2014, more than 3 times the number in 2001. You can learn more about overdose deaths at [drugabuse.gov/related-topics/trends-statistics/overdose-death-rates](http://drugabuse.gov/related-topics/trends-statistics/overdose-death-rates).

**6 C.** Synthetic cannabinoids, also called K2, spice, or sometimes herbal incense, refer to a growing number of man-made, mind-altering chemicals that are either sprayed on dried, shredded plant material so they can be smoked or sold as liquids to be vaporized and inhaled in e-cigarettes and other devices. Because they often act on the same brain cell receptors as marijuana, some people call synthetic cannabinoids “fake weed,” but they affect the brain more powerfully and differently than marijuana. You can learn more about synthetic cannabinoids at [drugabuse.gov/publications/drugfacts/synthetic-cannabinoids](http://drugabuse.gov/publications/drugfacts/synthetic-cannabinoids).

**7 A and C.** Research shows that young people’s brains keep developing well into their twenties. Alcohol can alter this development, potentially affecting both the brain’s structure and its function, meaning how well it processes information. This may cause cognitive or learning problems and/or make the brain more prone to alcohol dependence. This is especially a risk when people start drinking young and drink heavily. In the short term, when a person becomes intoxicated (drunk), they may make poor decisions that result in tragic consequences. You can learn more about alcohol’s effects on the teen brain at [pubs.niaaa.nih.gov/publications/UnderageDrinking/UnderageFact.htm](http://pubs.niaaa.nih.gov/publications/UnderageDrinking/UnderageFact.htm).

**8 B.** Dissociative drugs may make a user feel out of control and disconnected from their body and environment. In addition to their short-term effects on perception and mood, these drugs can cause long-term mental health problems, respiratory depression, heart rate abnormalities, and a withdrawal syndrome. You can learn more about dissociative drugs at [drugabuse.gov/publications/drugfacts/hallucinogens](http://drugabuse.gov/publications/drugfacts/hallucinogens).

**9 C.** The harmful effects of smoking extend far beyond the smoker. Each year, an estimated 88 million nonsmoking Americans are regularly exposed to secondhand smoke, and almost 41,000 nonsmokers die from diseases caused by secondhand smoke exposure. You can learn more about secondhand smoke exposure at [drugabuse.gov/publications/drugfacts/cigarettes-other-tobacco-products](http://drugabuse.gov/publications/drugfacts/cigarettes-other-tobacco-products).

**10 D.** Alcohol overdose occurs when there is so much alcohol in the bloodstream that areas of the brain controlling basic life-support functions—such as breathing, heart rate, and temperature control—begin to shut down. Symptoms of alcohol overdose include confusion; difficulty remaining conscious; vomiting; seizures; trouble breathing; slow heart rate; clammy skin; dulled responses, such as no gag reflex (which prevents choking); and extremely low body temperature. If you suspect someone is experiencing an alcohol overdose, get medical help immediately. Cold showers, hot coffee, or walking will not reverse the effects of alcohol overdose and could actually make things worse. Left untreated, alcohol overdose can lead to permanent brain damage or death. You can learn more about alcohol overdose at [pubs.niaaa.nih.gov/publications/AlcoholOverdoseFactsheet/Overdosefact.htm](http://pubs.niaaa.nih.gov/publications/AlcoholOverdoseFactsheet/Overdosefact.htm).

## BRAINIAC BONUS ANSWERS

**1 D.** Memory impairment from marijuana use occurs because THC, the ingredient in marijuana that can cause the “high,” alters how information is processed in the hippocampus, a brain area responsible for memory formation. You can learn more about the effects of marijuana on the brain at [drugabuse.gov/publications/research-reports/marijuana/how-does-marijuana-use-affect-your-brain-body](http://drugabuse.gov/publications/research-reports/marijuana/how-does-marijuana-use-affect-your-brain-body).

**2 A.** Microglia support brain health by defending the brain against infectious agents and removing damaged neurons. Too much activity of the microglial cells, however, can assault healthy neurons. A study using brain imaging found more than double the levels of microglial cells in former methamphetamine users compared to people with no history of use, which could explain some of the damaging effects of methamphetamine. You can learn more about the effects of methamphetamine on the brain at [drugabuse.gov/publications/research-reports/methamphetamine/what-are-long-term-effects-methamphetamine-abuse](http://drugabuse.gov/publications/research-reports/methamphetamine/what-are-long-term-effects-methamphetamine-abuse).



For more information about drugs and drug abuse, visit [drugabuse.gov](http://drugabuse.gov) or call 1-877-643-2644.  
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