

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

2019

## National Drug & Alcohol IQ Challenge

Go to <https://teens.drugabuse.gov/2019IQChallenge>  
for an online interactive version.

**1** True or False: The percentage of underage drinkers (ages 12-20) who drink has increased over the last 10 years.

- A. True
- B. False

**2** Fentanyl is an especially dangerous drug because: (choose one)

- A. Many people are allergic to it.
- B. Only a tiny bit can cause an overdose.
- C. There is no way to reverse a fentanyl overdose.
- D. It was developed for large animals.

**3** What is "dabbing?"

- A. The practice of dabbing LSD onto your skin to get high.
- B. Smoking oils (extracts) taken from the marijuana plant.
- C. Taking pills and crushing them to prepare for smoking.
- D. Borrowing someone else's prescription.

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

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

**5** Drugs called "Spice" or "K2" are sometimes called "fake weed," but in reality, they are different from marijuana. Scientists call these drugs "synthetic cannabinoids." They can be dangerous, because you never know what they contain. How many different types of synthetic cannabinoids were reported by law enforcement in 2014?

- A. 17
- B. 88
- C. 106
- D. 177

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

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**6** Having a drug problem and another mental health issue at the same time (like anxiety or depression) is called a co-occurring condition. All co-occurring conditions should be treated, but it is best to:

- A. Treat the anxiety or depression first.
- B. Treat the drug use disorder first.
- C. Treat them both at the same time.
- D. Treat them by yourself without a doctor's help.

**7** The brain is particularly vulnerable to damage from alcohol while it is still developing. Until about what age does the brain continue to develop?

- A. Until around age 18
- B. Well into the 20s
- C. Around age 35
- D. Until around age 1

**8** What fraction of teens report that they intentionally misused opioid prescription drugs (pain relievers) in 2017?

- A. One in 5
- B. One in 25
- C. One in 50
- D. One in 100

**9** True or False: Electronic vaping devices like e-cigarettes can help keep teens away from real cigarettes.

- A. True
- B. False

**10** Marijuana has many chemical ingredients called cannabinoids. Which is the main ingredient that makes you high?

- A. CBD
- B. QRX
- C. TNT
- D. THC

**11** MDMA, also called Ecstasy or Molly, can be dangerous for which reasons? (check all that apply)

- A. It can result in blurred vision.
- B. It can make your muscles cramp.
- C. You won't always know what ingredients have been added to it.
- D. It can make it hard for your body to control its temperature, which can result in heart failure.
- E. All of the above.

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For the correct answers, go to the last page.

**2019**  
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& Alcohol  
IQ Challenge

# BRAINIAC QUESTIONS

Test yourself with these difficult questions about the brain:

**12** Yes or No: Cocaine and methamphetamine are both in a class of drugs called stimulants. Does this mean they achieve their effects in the same way?

- A. Yes
- B. No

**13** Fill in the Blank: Using drugs as a teen can actually alter the brain, because the brain is still developing and growing. One brain area that can be altered by drugs plays a role in feeling motivation and pleasure, and is called the \_\_\_\_\_.

- A. Basal ganglia
- B. Medulla oblongata
- C. Occipital lobe
- D. Motor cortex

[HTTPS://TEENS.DRUGABUSE.GOV/2019IQCHALLENGE](https://teens.drugabuse.gov/2019iqchallenge)

For the correct answers, go to the last page.

# ANSWERS TO THE:

# 2019 National Drug & Alcohol IQ Challenge

**1 B. False.** The percentage of underage drinkers (ages 12-20) who drink has actually decreased by one third over the last 10 years. And given all the potential consequences of underage drinking, efforts are still needed to reduce the number of teens who drink or initiate alcohol use. For more information see: <https://www.samhsa.gov/data/report/2017-nsduh-detailed-tables>.

**2 B. Only a tiny bit can cause an overdose.** Fentanyl is a powerful synthetic opioid pain reliever that is similar to the opioid morphine but is 50 to 100 times more potent. This means it is cheap for drug dealers to add it to other drugs and sell on the street. Many people who use street drugs do not realize that fentanyl has been added to their drugs, and they take too much, leading to overdoses. In many cases, an opioid overdose can be reversed with the medication naloxone, if given quickly enough. You can read more about fentanyl here: <https://www.drugabuse.gov/publications/drugfacts/fentanyl>.

**3 B. Smoking marijuana extracts** is sometimes called “dabbing,” and it has some doctors concerned. Marijuana extracts—concentrated oils from the marijuana plant (sometimes called “hash oil”)—are a lot stronger than dried marijuana. Read more from our teen blog: <https://teens.drugabuse.gov/blog/post/dabbing-dangerous>.

**4 D. All of the above.** 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 with 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. Left untreated, alcohol overdose can lead to permanent brain damage or death. You can read more about alcohol overdose here: <https://pubs.niaaa.nih.gov/publications/AlcoholOverdoseFactsheet/Overdosefact.htm>.

**5 D. 177** different kinds of synthetic cannabinoids were reported in 2014. It might look like marijuana, but it actually contains different, potentially toxic, chemicals that have been sprayed onto plant-like material. The health effects can be unpredictable and dangerous. See our infographic at <https://www.drugabuse.gov/related-topics/trends-statistics/infographics/synthetic-cannabinoids-k2spice-unpredictable-danger>.

**6 C. Treat them both at the same time.** All mental health illnesses should be treated at the same time. Research suggests that other mental health illnesses can make it more difficult to treat drug use disorder, and drug use disorder can make it more difficult to treat other mental health illnesses. The high rate of co-occurrence and the interaction between drug use and other mental health illnesses makes it important to identify and evaluate both and treat them in ways that take the bigger picture into account. You can read more about co-occurrence (called “comorbidity”) here: <https://www.drugabuse.gov/publications/drugfacts/comorbidity-addiction-other-mental-disorders>.

**7 B. Well into the 20s.** Research shows that young people’s brains keep developing well into their 20s. 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 later in life. This is especially a risk when people start drinking young and drink heavily. You can read more about young people and drinking here: [https://pubs.niaaa.nih.gov/publications/MakeADiff\\_HTML/makediff.htm](https://pubs.niaaa.nih.gov/publications/MakeADiff_HTML/makediff.htm).

**8 B. One in 25.** The 2017 Monitoring the Future survey shows that only about 4 percent of 12th graders report they have misused a prescription pain reliever in the past year, down from about 8 percent reported 5 years earlier. That’s about one in every 25 kids. See our Monitoring the Future infographic: <https://www.drugabuse.gov/related-topics/trends-statistics/infographics/monitoring-future-2017-survey-results>.

**9 B. False.** There are studies showing that teens are very likely to start smoking real cigarettes after being introduced to the nicotine in electronic devices. Check out our information on nicotine on our teen site: <https://teens.drugabuse.gov/drug-facts/tobacco-nicotine-e-cigarettes>.

**10 D. THC.** The main psychotropic (mind-altering) chemical in marijuana, responsible for most of the intoxicating effects that people seek, is *delta-9-tetrahydrocannabinol* (THC). The chemical is found in resin produced by the leaves and buds primarily of the female cannabis plant. The plant also contains more than 500 other chemicals, including more than 100 compounds that are chemically related to THC, called cannabinoids. For more information see: <https://www.drugabuse.gov/publications/research-reports/marijuana/what-marijuana>.

**11 E. All of the above.** High doses of MDMA can affect the body’s ability to regulate temperature. This can lead to a spike in body temperature that can occasionally result in liver, kidney, or heart failure, or even death. It can also cause nausea, blurred vision, muscle cramping, involuntary teeth clenching...and more. For more information see: <https://www.drugabuse.gov/publications/drugfacts/mdma-ecstasy>.

## BRAINIAC ANSWERS

**12 B. No.** Although these stimulants have similar effects on the brain and body (like extreme energy and decreased appetite), there are some major differences in the basic mechanisms of how they work. The methamphetamine molecule directly causes the release of dopamine, a brain chemical that plays an important role in feeling rewarded, but it is structurally quite different from cocaine, which stops your brain’s ability to clear away excess dopamine. Although both methamphetamine and cocaine increase levels of dopamine, the brain’s nerve cells respond differently to the two drugs. You can learn more about the differences here: <https://www.drugabuse.gov/publications/research-reports/methamphetamine/how-methamphetamine-different-other-stimulants-such-cocaine>.

**13 A. Basal ganglia.** The basal ganglia play an important role in positive forms of motivation, including the pleasurable effects of healthy activities like eating, socializing, and sex. They are also involved in the formation of habits and routines. However, it is important to remember that the brain is made up of many parts with interconnected circuits that all work together as a team, and just because one area is a key player doesn’t mean it’s the only one. To learn more about drug use and the brain, see: <https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/drugs-brain>.



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