# E-cigarettes and Youth: What Educators and Coaches Need to Know

#### WHAT ARE E-CIGARETTES?

Electronic cigarettes (e-cigarettes) are battery-powered devices that deliver nicotine, flavorings, and other ingredients to the user. Using e-cigarettes is sometimes called "vaping." E-cigarettes do not create harmless "water vapor" – they create an aerosol that can contain harmful chemicals.

#### HOW MANY YOUTH ARE USING E-CIGARETTES?

- E-cigarettes have been the most commonly used tobacco product among U.S. youth since 2014.
- In 2018, CDC and FDA data showed that more than 3.6 million U.S. youth, including 1 in 5 high school students and 1 in 20 middle school students, were past-month e-cigarette users.
- During 2017 and 2018, e-cigarette use skyrocketed among youth, leading the U.S. Surgeon General to call the use of these products among youth an epidemic in the United States.

#### WHAT ARE THE RISKS FOR YOUTH?

- Most e-cigarettes contain nicotine, which is highly addictive. Nicotine exposure during adolescence can:
  - » Harm brain development, which continues until about age 25.
  - » Impact learning, memory, and attention.
  - » Increase risk for future addiction to other drugs.
- Young people who use e-cigarettes may be more likely to go on to use regular cigarettes.
- Many e-cigarettes come in kid-friendly flavors including mango, fruit, and crème which make e-cigarettes more appealing to young people.
- E-cigarette aerosol is not harmless. It can contain harmful substances, including:
  - » Nicotine

- » Ultrafine particles
- » Cancer-causing chemicals » Flavorings that have been linked to lung disease
- » Volatile organic compounds » Heavy metals such as nickel, tin, and lead



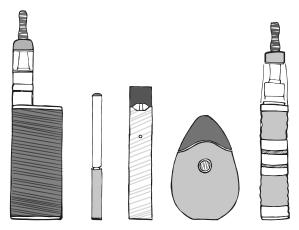
U.S. Department of Health and Human Services Centers for Disease Control and Prevention

www.CDC.gov/e-cigarettes



# WHAT DO E-CIGARETTES LOOK LIKE?

- E-cigarettes come in many shapes and sizes. Some look like regular cigarettes, cigars, or pipes. Larger e-cigarettes such as tank systems or "mods" do not look like other tobacco products.
- Some e-cigarettes look like other items commonly used by youth, such as pens and other everyday items. New e-cigarettes shaped like USB flash drives are popular among youth, including JUUL and the PAX Era, which looks like JUUL and delivers marijuana.



## WHAT CAN YOU DO AS AN EDUCATOR OR COACH?

As an educator or coach, you have an important role in protecting students from e-cigarettes.

- Engage your students in discussions about the dangers of e-cigarette use.
- Take advantage of free resources.
  - » CDC offers educators and coaches a free downloadable presentation about the risks of using e-cigarettes among youth at **www.CDC.gov/e-cigarettes**.
  - » FDA provides high school teachers lesson plans and classroom activities at www.scholastic.com/ youthvapingrisks.
- Develop, implement, and enforce tobacco-free school policies and prevention programs that are free from tobacco industry influence, and that address all types of tobacco products, including e-cigarettes.
- Learn about the different shapes and types of e-cigarettes and the risks of e-cigarette use for young people at **www.CDC.gov/e-cigarettes**.

# ABOUT USB FLASH DRIVE-SHAPED E-CIGARETTES

As an educator or coach, you may have heard about the use of USB flash drive-shaped e-cigarettes, including JUUL (pronounced "jewel").

JUUL is the top-selling e-cigarette brand in the United States.

JUUL is being used by students in schools, including in classrooms and bathrooms. JUUL's nicotine liquid refills are called "pods." According to the manufacturer, a single JUUL pod can contain as much nicotine as a pack of 20 regular cigarettes.

JUUL delivers nicotine in a new form called "nicotine salts," which can make it less harsh on the throat and easier to use by youth. JUUL also comes in flavors that can appeal to youth.





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#### www.CDC.gov/e-cigarettes