### Many teens have

### dangerous misperceptions

that lead them to believe that vaping is harmless.

### Important facts to share with youth

### Vape aerosol can contain harmful chemicals

Vaping can expose the user's lungs to harmful chemicals like formaldehyde, acrolein, and acetaldehyde, which are known to cause irreversible lung damage. 4.5

## There can be danger behind the flavor

Vapes get their flavors from chemicals. While these flavorings are safe to eat in food, they're not safe to inhale. Inhaling flavor chemicals can harm your lungs.

Want an example? Some buttery-flavored vapes like caramel contain diacetyl and acetoin. Inhaling diacetyl has been linked to popcorn lung, a lung disease that doesn't have a cure.

# Most vapes contain nicotine, which is highly addictive

Vaping delivers nicotine to the brain in as little as 10 seconds. A teen's brain is still developing, making it more vulnerable to nicotine addiction. Alicotine exposure during the teen years can disrupt normal brain development. Lit may have long-lasting effects, like increased impulsivity and mood disorders.

### Vapers could be inhaling metal particles into their lungs

Vape aerosol could be delivering metal particles like chromium, nickel, lead, tin and aluminum right into your lungs. Some of these metals are toxic.<sup>10,11</sup>



### FDA's Efforts to Curb Youth E-Cigarette Use

FDA is committed to protecting youth from the dangers of e-cigarettes, including working to remove certain flavored e-cigarettes from the market and cracking down on illegal sales to anyone under 18.

Also, in addition to our national peer-to-peer public education campaign called "The Real Cost" FDA has joined forces with Scholastic to provide teachers and school administrators with the resources they need to educate their students about e-cigarettes.

Together, we've created a **free lesson plan**and research activity for teachers to
educate their students on the health risks of
e-cigarette use. Please visit the <u>Scholastic youth-vaping-risks site</u> to access these resources.

### **Quitting Help Is Available**

There is an urgent need to share resources with teens who are addicted to e-cigarettes to help them quit.

Together with the National Cancer Institute, the FDA has launched a series of web pages to help.

» Smokefree Teen — If you identify teens using e-cigarettes at school, it is critical to share the resources at Smokefree Teen to help them quit.

#### Other Resources

If you know a student who has experienced unexpected health or safety problems related to e-cigarettes, we encourage you to report this incident to FDA through the online <u>Safety Reporting Portal</u>. These reports are confidential and help the FDA identify trends and causes.

To follow recent information on outbreaks linked to e-cigarette use, visit the <u>FDA</u> and <u>CDC</u> websites.