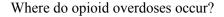


Overcoming the Opioid Epidemic

(Family Features) America is in the midst of an ongoing opioid epidemic affecting families across the country. Reports show that there are almost 80 opioid-related overdoses a day, amounting to more than 28,000 deaths annually.

This figure continues to climb as over 2.1 million people in the United States suffer from substance use disorders related to prescription opioid pain relievers, according to the National Institute on Drug Abuse. Additionally, the rise of synthetic opioids like fentanyl, W-18 and carfentanil are threats to those already using opiates as the epidemic worsens.



Data from the Centers for Disease Control shows that 77 percent of opioid overdose related deaths occur outside of a medical setting and 56 percent occur in private homes, meaning family or friends must often be the first to take action in an emergency situation. Accordingly, it is increasingly important that responders understand how to prevent death from overdose, including knowing how to use naloxone, the opioid overdose reversal medication.

What does naloxone do?

Naloxone, the antidote that reverses an opioid overdose, works by neutralizing the opioid receptors in the brain, allowing an overdosed person to breathe again moments after it is administered. It's been used in ambulances and hospital settings for decades and is now available for people to use in their homes or other remote areas.

According to the Centers for Disease Control and Prevention, more than 10,000 reversals of overdoses with naloxone are conducted by non-medical bystanders. Without having a solution in the hands of those closest to opioid-related overdoses, lives are left hanging in the balance while waiting for emergency medical services. However, there is an FDA-approved naloxone nasal spray designed for use by laypeople, like friends and family, who are not medically trained. It's needle-free and requires no training or assembly to use while providing a strong enough dose to help reverse opioid-related overdoses. Naloxone is only effective in opioid-related overdoses and does not affect a person without opioids in their body.

What can you do?

A majority of states have issued standing orders for FDA-approved naloxone products, which permit pharmacies to dispense the nasal spray without a physician's prescription. If you or someone you know is susceptible to an opioid-related overdose, whether caused by illicit drugs, like heroin, or prescription painkillers, it is important to prepare for an emergency overdose situation. By having naloxone on hand, you can save a life when every second matters.

Learn more about naloxone at getnaloxonenow.org.

Photo courtesy of Getty Images

IN THE NEWS

Electronic cigarettes (also called e-cigarettes or electronic nicotine delivery systems) are battery-operated devices designed to deliver nicotine with flavorings and other chemicals to users in vapor instead of smoke. They can be manufactured to resemble traditional tobacco cigarettes, cigars or pipes, or even everyday items like pens or USB memory sticks; newer devices, such as those with fillable tanks, may look different. More than 250 different e-cigarette brands are currently on the market.

While e-cigarettes are often promoted as safer alternatives to traditional cigarettes, which deliver nicotine by burning tobacco, little is actually known yet about the health risks of using these devices.

How do e-cigarettes work?

Most e-cigarettes consist of three different components, including:

a cartridge, which holds a liquid solution containing varying amounts of nicotine, flavorings, and other chemicals a heating device (vaporizer) a power source (usually a battery)

In many e-cigarettes, puffing activates the battery-powered heating device, which vaporizes the liquid in the cartridge. The resulting aerosol or vapor is then inhaled (called "vaping").

Are e-cigarettes safer than conventional cigarettes?

Unfortunately, this question is difficult to answer because insufficient information is available on these new products.

Cigarette smoking remains the leading preventable cause of sickness and mortality, responsible for over 400,000 deaths in the United States each year. The worst health consequences associated with smoking (e.g., cancer and heart disease) are linked to inhalation of tar and other chemicals produced by tobacco combustion; the pleasurable, reinforcing, and addictive properties of smoking are produced mostly by the nicotine contained in tobacco.

E-cigarettes are designed to simulate the act of tobacco smoking by producing an appealingly flavored aerosol that looks and feels like tobacco smoke and delivers nicotine but with less of the toxic chemicals produced by burning tobacco leaves. Because they deliver nicotine without burning tobacco, e-cigarettes appear as if they may be a safer, less toxic alternative to conventional cigarettes.

Although they do not produce tobacco smoke, e-cigarettes still contain nicotine and other potentially harmful chemicals. Nicotine is a highly addictive drug, and recent research suggests nicotine exposure may also prime the brain to become addicted to other substances. Also, testing of some e-cigarette products found the vapor to contain known carcinogens and toxic chemicals (such as formaldehyde and acetaldehyde), as well as potentially toxic metal nanoparticles from the vaporizing mechanism. The health consequences of repeated exposure to these chemicals are not yet clear.

Another worry is the refillable cartridges used by some e-cigarettes. Users may expose themselves to potentially toxic levels of nicotine when refilling them. Cartridges could also be filled with substances other than nicotine, thus possibly serving as a new and potentially dangerous way to deliver other drugs.

Government Regulation of e-Cigarettes

In an effort to help protect the public from the dangers of tobacco use, the U.S. Food and Drug Administration (FDA) has established a new rule for e-cigarettes and their liquid solutions. Because e-cigarettes contain nicotine derived from tobacco, they are now subject to government regulation as tobacco products, including the requirement that both in-store and online purchasers be at least 18 years of age (see "e-Cigarette Use by Youth"). For more information about this FDA ruling, visit www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm499234.htm.

Can e-cigarettes help a person quit smoking?

Some people believe e-cigarette products may help smokers lower nicotine cravings while they are trying to discontinue their tobacco use. However, at this point it is unclear whether e-cigarettes may be effective as smoking-cessation aids. There is also the possibility that they could perpetuate the nicotine addiction and thus interfere with quitting.

These products have not been thoroughly evaluated in scientific studies. This may change in the near future, but for now, very little data exists on the safety of e-cigarettes, and consumers have no way of knowing whether there are any therapeutic benefits or how the health effects compare to conventional cigarettes.

e-Cigarette Use by Youth

e-Cigarettes are increasingly popular among teens. Some states have banned sale of e-cigarettes to minors, but teens have been ordering them online. Their easy availability (online or via mall kiosks), in addition to their wide array of cartridge flavors (such as coffee, mint, candy, and fruit flavors), have helped make them particularly appealing to this age group. As a part of the FDA's new regulation to protect the health of our youth, minors will no longer be able to buy e-cigarettes in person or online.

In addition to the unknown health effects, early evidence suggests that e-cigarette use may serve as an introductory product for youth who then go on to use other tobacco products, including conventional cigarettes, which are known to cause disease and lead to premature death. A recent study showed that students who have used e-cigarettes by the time they start 9th grade are more likely than others to start smoking traditional cigarettes and other smokable tobacco products within the next year (Rigotti, 2015).

For more information about e-cigarettes, visit: www.fda.gov/tobaccoproducts/labeling/productsingredientscomponents/ucm456610.htm

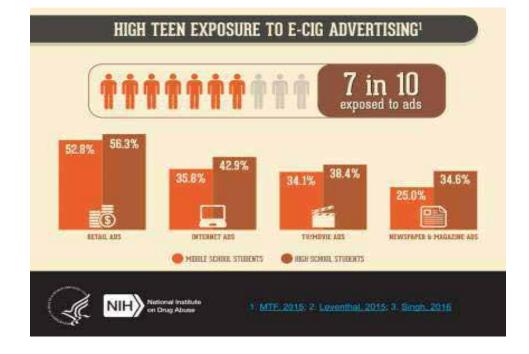
For more information about the FDA's ruling on e-cigarettes, visit: www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm499234.htm

Also see our NIDA TV Spotlight: www.youtube.com/watch?v=Iz67IqkLwYs&feature=youtu.be

References

Rigotti NA. e-Cigarette use and subsequent tobacco use by adolescents: new evidence about a potential risk of e-cigarettes. JAMA. 2015;314(7):673-674.

Source: National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services.



IN THE NEWS



Prescribing positive impact for your workplace.



Prescription Drug Abuse: Be a Part of the Solution

Prescription medications are being abused at a rate second only to marijuana. In fact, excluding marijuana, the rate of prescription drug abuse is higher than all other drugs of abuse *combined* including cocaine, heroin and methamphetamine. It is because of this high rate of abuse that the Center for Disease Control and Prevention (CDC) has classified prescription drug abuse as an epidemic.

Almost 70% of Americans take at least one prescription medication; 20% take five or more. When drugs such as Percocet, OxyContin and Adderall are used as directed, people can enjoy a better quality of life due to the positive effects these and other prescribed medications have on their overall health. But when used incorrectly, these same drugs can cause a multitude of health and social problems – including addiction and accidental overdose death.

Unfortunately, the incorrect use of a prescription medication is more common than you might think:

- 50% of prescription drugs are misused
- 33% of U.S. citizens have used prescription drugs non-medically at least once in their life

Problems associated with the misuse and abuse of prescription medications can happen to *anyone* and impact all layers of our country – from individuals, to their friends and family members, and even their workplaces. The abuse of prescription painkillers alone costs employers \$42 billion annually in lost productivity. And that's not even counting its impact on insurance and workers' compensation claims. These costs are generally passed to you – the employee and taxpayer – through higher insurance premiums and tax rates.

The good news is that prescription drug misuse and abuse is preventable. There are five steps everyone can take to become safer consumers of prescription drugs:

- 1. **Talk to your doctor**: You have a right and a responsibility to ask questions about your health care, especially as it relates to prescription medications. While the doctor is the medical expert, you are the expert on your body and overall health.
- 2. **Talk to your pharmacist**: Pharmacists are highly trained and the most qualified professionals to answer questions about medications and their interactions including over-the-counter drugs and supplements. They are trained to educate you about your medications and help monitor how they are working.
- 3. **Use medications as directed**: Approximately 125,000 people in the U.S. die each year because they don't take their mediation as directed. This number doesn't include those who suffer from other consequences of misusing or abusing a medication such as addiction and death caused by accidental overdose.
- 4. **Avoid sharing medications**: There are both health and legal consequences to sharing medication. Not being a doctor, you don't know *exactly* how that medication will impact others. Also, sharing any type of prescription medication with another person is a class E-federal offense, punishable by prison time and/or substantial fines. Carefully store your medication to avoid accidentally "sharing."
- 5. **Dispose of medication properly**: Over 50% of people who abuse drugs get them from a friend or family member *for free*. It is good practice to dispose of any expired and/or unused prescription medications at a pharmaceutical take-back location. Visit www.fda.gov for information on how to dispose of unused medications.

Just as anyone can become addicted to prescription drugs, anyone can also take positive steps to prevent prescription drug abuse. Visit the <u>GenerationRxWorkplace.com</u> to learn more about your relationship with Rx drugs and take advantage of free resources including an online course, fact sheets, lists of helping resources and other downloadable materials.

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IN THE NEWS

Principles of Substance Abuse Prevention for Early Childhood

- Intervening early in childhood can alter the life course trajectory in a positive direction.
- Intervening early in childhood can both increase protective factors and reduce risk factors.
- Intervening early in childhood can have positive long-term effects.
- Intervening in early childhood can have effects on a wide array of behaviors, even behaviors not specifically targeted by the intervention.
- Early childhood interventions can positively affect children's biological functioning.
- Early childhood prevention interventions should target the proximal environments of the child.
- Positively affecting a child's behavior through early intervention can elicit positive behaviors in adult caregivers and in other children, improving the overall social environment.



For more information visit: www.drugabuse.gov/earlychildhood

