

Naloxone Belongs in Every Emergency Kit

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Drug overdose deaths among teens and young adults have doubled since 2019. This staggering increase was driven by the prevalence of more dangerous drugs, not increased use. Young people looking to improve their focus with Adderall, improve sleep with Xanax, or party with Percocet are unwittingly purchasing counterfeit pills and other unregulated fentanyl products through social media apps like Facebook and Snapchat.¹ DEA Laboratory testing shows that that six out of ten pills on the street now contain a lethal dose of fentanyl.² In their paper, *Trends in Drug Overdose Deaths Among US Adolescents*, January 2010 to June 2021, researchers from UCLA found that in 2021, 1,146 teens died of a drug overdose, a rate of 5.49 per 100,000.³ Given the astronomical amounts of fentanyl found in these drugs, experts increasingly refer to overdose deaths as poisonings. When viewed from that perspective it's not just teens and adults who are at risk. In the last 20 years, illicit and prescription opioids contributed to 42 percent of all fatal poisonings. This makes them the most common cause of fatal poisonings in children; greater than over-the-counter drugs, toxins, and other substances.⁴ Each day pediatric dentists interact with the parents and children who are at highest risk for overdose, and we can use our position to save lives.

Naloxone is an antagonist that reverses and blocks the effects of opioids, including synthetics like fentanyl. It comes in injectable liquid and pre-packaged nasal spray. Naloxone nasal spray (Narcan, 4mg) was first approved by the FDA in 2015 as a prescription drug, and in April 2021 the FDA approved higher dosage nasal spray (Kloxxado, 8mg) due to increasing

potency of street drugs.⁵ While it will not have adverse effects on individuals without opioids in their system, people with opioid dependence may have withdrawal symptoms after they are given naloxone: headaches, changes in blood pressure, rapid heart rate, sweating, nausea, vomiting, and tremors. This is uncomfortable, but not life threatening. The prepackaged nasal spray requires no assembly and is sprayed into one nostril while the person lays on their back. Naloxone can restore breathing within two to three minutes and it will reverse opioid overdose for 30-90 minutes. Some individuals have taken stronger or greater quantities of opioids, so they may require multiple doses of naloxone. Patients should be monitored for two hours after the last dose of naloxone is administered, and a 911 call is indicated whenever an opioid overdose is suspected.⁶

Adding naloxone nasal spray to the pediatric dental emergency kit is incredibly easy to do. For years, it has been available to anyone with a DEA license or through many public health programs. In March 2023 the 4mg nasal spray was cleared for over-the-counter distribution, after being approved by unanimous vote of the FDA advisory committee.⁷ Experts suggest that every family with a teenager should talk about opioid use and naloxone.⁸ We as pediatric dental providers should also consider our role in educating teens and caregivers about the dangers of opioids and ways to procure naloxone free of charge through community-based distribution programs.⁹

Over 350,000 out-of-hospital cardiac arrests occur annually in the U.S., so automated external defibrillators have become commonplace.¹⁰ Every office emergency kit contains epinephrine, because tens of thousands of anaphylactic reactions result in nearly 1000 deaths each year.¹¹ One hundred thousand people died last year in America from opioid overdose.¹² Shouldn't naloxone be available in every plane, school, arena...and dental office?

Note: Author Dr. Travis Nelson has no financial interest in the brand name pharmaceuticals noted above.

Resources

CDC: Lifesaving Naloxone

CDC Fact Sheet: Family and Caregivers, How and When to Use Naloxone for an Opioid Overdose

References

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Safety Committee Updates

- A residency safety curriculum for pediatric dentistry advanced education programs was announced at Joint Academic Day. The curriculum is in development by Drs. Paul Casamassimo, Joe Castellano, Jean Calvo, Jessica Lee, Timothy Followell, and Charles Czerepak.
- Dr. Reza Ardalan interviewed pediatric dentists, Dr. Robert Delarosa and Dr. Courtney Brashier of Associates in Pediatric Dentistry and Dr. Rehab Zaki of Children's Dental Care of Detroit, both QUAD A-accredited practices at Annual Session.
- The Exhibitor Spotlight at Annual Session featured QUAD A's Jeanne Henry and Whitney Smith for a discussion with Dr. Robert Delarosa and Dr. Courtney Brashier about their decision to become accredited.
- Safety Committee chair, Dr. Joe Castellano of Laredo, Texas, presented "Achieving Safety Culture in Dentistry and Why it Matters" at the OSAP Annual Conference in Tucson, Ariz., on June 2.
- Safety webpages continue to evolve, retiring the pandemic-focused "Beyond Re-emergence: Pediatric Dentistry Practice Checklist," and advancing this theme to capture contemporary issues in safety in dentistry with new page, "Current & Emerging Issues in Pediatric Dentistry Safety".
- Recent safety spotlights in AAPD media included Pediatric Dentistry Today articles: "Don't Let This Happen to You: Preventable Errors in Dental Practice" by Dr. Jacob Lee, "Thinking About In-Office GA? 10 Things to Think About Before You Start In-Office General Anesthesia and Deep Sedation" by Dr. Jade Miller and Dr. Christine Quinn, and "The Case for Checklists in the Dentistry" by Dr. Travis Nelson and Tonya Martino. Podcasts included "Is there really a shortage of drugs we need most often?" with pharmacist, Dr. Amy Dunleavy, and "Why you should look into OSAP, ASAP!" with Ms. Michelle Lee.
- Safety & Quality Improvement SIG, led by Dr. Charles Czerepak and Dr. Jacob Lee, recently joined the Little Teeth Chat discussion forum.