PEDIATRICS PERSPECTIVES

Anticipatory Guidance to Prevent Adolescent Overdoses

Scott E. Hadland, MD, MPH, MS, a,b Deb M. Schmill, BS, c Sarah M. Bagley, MD, MSd,e,f

Drug overdoses and poisonings are now the third leading cause of death among American children and adolescents younger than age 19 years. In 2022, overdoses claimed the lives of >1100 adolescents aged 14 to 18^2 —approximately the equivalent of a high school classroom every week. From 2019 to 2021 alone, adolescent overdose mortality doubled, driven by the widespread infiltration into the US drug supply of highly potent, illicitly manufactured fentanyl, which now causes >3 of every 4 adolescent overdose deaths. 2,3

Pediatricians routinely provide anticipatory guidance to patients and families regarding the top 2 causes of death in children—firearm injuries and motor vehicle crashes. As 2 pediatric addiction medicine specialists and a parent who lost her 18-year-old daughter to fentanyl poisoning, we believe there is now an urgent need for pediatricians to counsel adolescents and families on potentially lifesaving overdose prevention strategies. Pediatricians typically offer all patients and families anticipatory guidance regardless of risk status, and because many fentanyl-related deaths occur in adolescents without previously identifiable risk factors, pediatricians should apply a universal approach to discussing overdose prevention.

To inform this anticipatory guidance, it is critical that pediatricians first understand the current context of adolescent overdoses. In many cases, adolescents overdose after using a counterfeit prescription pill that contains fentanyl and was illicitly manufactured to mimic opioid painkillers (eg, oxycodone) or benzodiazepines (eg, alprazolam). The US Drug Enforcement Administration reports that at least 6 of every 10 counterfeit prescription pills seized contain a dose of fentanyl that is potentially lethal (ie, ≥ 2 mg),⁴ especially for adolescents who have little to no previous exposure to opioids. Pills are often available for purchase on social media platforms that adolescents commonly use, including Snapchat and TikTok.⁵ Other drugs are also increasingly contaminated with fentanyl, including stimulants such as cocaine and methamphetamine, which also places adolescents who do not intend to use an opioid at risk.

Adolescents may seek out what they believe to be a real prescription opioid or benzodiazepine to provide relief from depression, anxiety, or other mental health symptoms; in 2021, 41% of adolescent decedents had

^aMass General for Children, Division of Adolescent and Young Adult Medicine, Boston, MA, ^bHarvard Medical School, Department of Pediatrics, Boston, MA, ^cGecca Schmill Foundation, Needham, MA; ^dDivision of Health Services Research, Department of Pediatrics, Boston University Chobanian & Avedisian SOM, Boston, MA; ^eSection of General Internal Medicine, Department of Medicine, Boston University Chobanian & Avedisian SOM, Boston, MA; and ^fGrayken Center for Addiction, Boston Medical Center, Boston, MA

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Address correspondence to Scott E. Hadland, MD, MPH, MS, Mass General for Children, Division of Adolescent and Young Adult Medicine, 175 Cambridge St, 5th Floor, Boston, MA 02114. E-mail: shadland@mgh.harvard.edu

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a known mental health problem. In other cases, adolescents may knowingly use fentanyl as part of an opioid use disorder. Nationwide, 1 in 100 adolescents aged 12 to 17 years has an opioid use disorder,⁶ and approximately 1 in 3 adolescents who overdosed in 2021 had a known history of opioid use.³

The most recently available data from the US Centers for Disease Control and Prevention (show that, from 2019 to 2021, most overdoses occurred in an adolescent's home. Tragically, two-thirds of the time, another person was in the home and could have intervened but may have been unaware the adolescent was using drugs. Naloxone—an easy-to-administer nasal spray that can reverse an overdose in minutes—was only administered in 1 of 3 deaths. Most commonly, by the time emergency respondents arrived, the adolescent was already pulseless, highlighting the need for family members to urgently intervene with naloxone in fentanyl overdoses, which unfold quickly.

These data highlight the need to involve families in anticipatory guidance to prevent overdoses. Although pediatricians commonly discuss drug and alcohol use privately with adolescents, we assert that conversations about overdose

prevention should begin by including both the adolescent and their family members to foster ongoing discussions at home.

After inviting adolescents and their family members into a conversation about overdose prevention, pediatricians should provide accurate information about fentanyl (Table 1). They should counsel adolescents and family members about its widespread infiltration into the illicit drug market, including in counterfeit pills. Pediatricians should avoid fear-based approaches, which are not effective and may decrease credibility. Instead, pediatricians should speak to adolescents' strengths and empower them to keep themselves and their peers safe.

Next, pediatricians should review the signs of an overdose (ie, somnolence, unconsciousness, paleness, slowed or stopped breathing, and cyanosis) and how to intervene. Adolescents and family members should immediately call 911 in the event of a suspected overdose, even if they plan to administer naloxone. Medical attention is critical because naloxone can wear off after 30 to 90 minutes, allowing a fentanyl overdose to resume, and because it is possible that an individual has overdosed on a nonopioid (naloxone is only effective for opioids)

Concept	Sample Statements to an Adolescent and/or Family Member
Initiate conversation	"It's important that we talk about safety. As you might know, the number of teen drug overdoses has been increasing. I now talk all my teen patients and their families about how to prevent and respond to an overdose."
Provide education about fentanyl	"What do you know about fentany!?" "Fentanyl is a potent opioid that is causing a record number of teen overdoses. Most of the prescription pills that people sell—including on social media—are fake and contain fentanyl, and can cause someone to overdose. If a medication isn't prescribed by a doctor and provided by a pharmacy, it's likely to be fake"
Review signs of overdose	"Do you know what an overdose looks like? Have you seen one?" "Someone who is having an overdose looks sleepy, or might even be unconscious. Their breathing is slow, or they might have stopped breathing altogether. They often look pale, and might be blue around their lips or fingertips."
Review how to respond to an overdose	"How would you respond if you thought someone was having an overdose?" "If you suspect someone has overdosed, immediately call 911. Then, if you have naloxone nasal spray, use it. If the person is not breathing and you know how to give rescue breaths, do so."
Discuss naloxone and how to find it	"What do you know about naloxone? Do you have any? "I recommend everyone carry naloxone with them and have it in their home. Naloxone can save someone's life. And it's safe to use even if someone isn't having an overdose. I can prescribe it to you today. You can also buy it over-the-counter—though it's more expensive this way—and it's often available at school or in the community."
Confidentially assess previous fentanyl use/exposure	Discussed confidentially with adolescent only: "In our practice, we ask every teen about their use of drugs and alcohol. Thanks for completing the screening questionnaire. To your knowledge, have you ever used fentanyl?" "Do you have any friends who use pills that might not have been prescribed by a doctor or filled by a real pharmacy? Have you ever used a pill that someone gave or sold you? Have you ever been approached in real life or on social media to buy one?"

or has another medical explanation for their change in mental status. Nearly all states have Good Samaritan Laws that protect individuals if they are in possession of illicit drugs at the time first responders arrive.⁷

Pediatricians should counsel adolescents and families about naloxone, how to use it, and how to obtain it. Naloxone is typically covered by most health insurers with little or no copay when prescribed, is commonly distributed for free by local health departments, and became available over the counter in late summer 2023. Unfortunately, the over-the-counter price for a kit of 2 naloxone nasal sprays is \$45, which is cost-prohibitive for many families. As another option, adolescents and families can obtain naloxone through a prescription, which can be billed to health insurance, minimizing out-of-pocket costs. The prescription can be written by a pediatrician, or alternatively, every US state has a "standing order" in which naloxone prescriptions can be dispensed by pharmacists (and billed to health insurance) without a physician having written for it first.

Pediatricians should also spend time alone with the adolescent and, through a confidential interview, seek to learn whether they use substances or pills. The American Academy of Pediatrics recommends screening all adolescents for substance use with a validated tool (eg, Screening to Brief Intervention or Car, Relax, Alone, Forget, Family/Friends, Trouble, both of which are freely available online for use in clinical practice). Screening can open a confidential conversation about an adolescent's experiences with fentanyl and overdose. For adolescents who might be uncomfortable

talking about their own behaviors, it may be helpful to frame the conversation around how to keep their peers safe.

When adolescents disclose that they are using pills or other drugs that place them at risk for overdose, pediatricians should support them in stopping or decreasing their substance use. Although there is no clear ethical standard for whether a pediatrician should break confidentiality and share this information with a parent, because of an adolescent's potential risk to self, some pediatricians may elect to do so but should partner with the adolescent to determine the best way to disclose this information. Although disclosure may be necessary to protect an adolescent's life, it may erode the adolescents' trust and willingness to disclose sensitive information again in the future.

In cases where an adolescent has a mental health concern, pediatricians can also prescribe evidence-based medications and support linkage to psychotherapy. For adolescents who continue to use opioids, pediatricians can offer advice to reduce risk. Strategies include starting with only a small amount of any substance to assess its potency, avoiding mixing drugs with other sedatives (eg, alcohol, benzodiazepines), and using fentanyl test strips to determine whether their drugs contain fentanyl.

The nation's focus on the overdose crisis has long centered on adults, but increasingly, deaths involve younger ages. By applying an already-familiar framework—anticipatory guidance—pediatricians have a critical opportunity to equip adolescents and families with the knowledge and skills to stem the tide of rising adolescent overdose mortality.

CONFLICT OF INTEREST DISCLOSURES: Dr Hadland is a member of the Editorial Board of Pediatrics

Disclaimer: The guidelines/recommendations in this article are not American Academy of Pediatrics policy, and publication herein does not imply endorsement.

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