

Opioids and Children and Adolescents: Information for Oral Health Professionals

The United States is facing a severe opioid addiction epidemic. Nearly 25 percent of first opioid prescriptions for children and adolescents come from dentists.¹



Background

Pain management is necessary for some dental procedures. When pain medication is needed, it is usually required for a short time for acute or episodic conditions. Acetaminophen used alone to treat pain in children and adolescents is associated with fewer side effects and contraindications than any other analgesic or drug combination.² Using acetaminophen in combination with nonopioid nonsteroidal anti-inflammatory drugs (NSAIDs) can be as effective as opioid combinations, with fewer side effects.³

Compared to adults, children and adolescents are at higher risk for opioid misuse or abuse. Most people who misuse drugs as adults start before their 18th birthday, and the risk of addiction to drugs increases when use begins in adolescence. Taking time to carefully plan pain management for children and adolescents is a key prevention strategy.⁴ Dentists prescribe 12 percent of

Using acetaminophen in combination with non-opioid nonsteroidal anti-inflammatory drugs (NSAIDs) can be as effective as opioid combinations, with fewer side effects.³

immediate-release (typically within 30 minutes) opioids in the United States. Therefore, they have an opportunity to minimize the potential for opioid misuse that begins during childhood or adolescence.⁵

Recent Research Findings

- Opioid prescriptions for children and adolescents increased from 100 to 166 per 1,000 dental patients from 2010 to 2015. This trend may be driven by dentists' tendency to prescribe opioids for third molar extractions.^{6,7}
- Less than one-half of opioids prescribed after surgical tooth extraction are used by the individuals to whom

they were prescribed. Dentists have an opportunity to reduce potential drug misuse by decreasing the quantity of opioids they prescribe.⁸

- According to a retrospective study, a substantial proportion of adolescents are exposed to opioids through prescriptions from dentists. Use of these prescriptions may be associated with an increased risk of subsequent opioid misuse.⁷

Best Practices for Care⁹

Assess Children and Adolescents

- As part of the assessment, do the following:
 - Conduct a detailed pain assessment, and document findings in the child’s or adolescent’s dental record. This helps determine the analgesics the child or adolescent may need.¹⁰
 - Keep in mind that effective pain management depends on the individual child or adolescent, the extent of treatment, the duration of the procedure, psychological factors, and the child’s or adolescent’s medical history.¹⁰
 - Learn what medications, including over-the-counter (OTC) medications, the child or adolescent is taking.⁵ Consult a pharmacist if you are concerned about interactions between medications.
 - Ensure that your medical history questionnaire or form has questions about current use of medications.
 - If your state has a Prescription Drug Monitoring Program (PDMP), check it to determine whether the child or adolescent has frequently been prescribed opioids, which may indicate a substance misuse problem or disorder.⁵ (See “Prescription Drug Monitoring Programs” on page 5 for more information.)
 - If you suspect that a child or adolescent may have a substance misuse problem or disorder, encourage the parents or the adolescent to contact their primary care health professional to seek an assessment.¹¹ See the video *ACD Ethical Dilemma—Who Decides?* for information about ethical issues to consider in this situation.¹²



- For a child or adolescent who is taking opioids on a regular basis or who has a history of a substance misuse problem or disorder, coordinate pain therapy with their primary care health professional before the procedure, whenever possible. If a child or adolescent has a substance misuse treatment specialist or a pain management specialist, they could also provide assistance.¹¹
- If a parent or adolescent calls the dental office or clinic indicating pain following a dental procedure, conduct an assessment of the child or adolescent in the dental office or clinic (rather than over the phone) to determine medication for pain management.



Learn what medications, including over-the-counter (OTC) medications, the child or adolescent is taking.⁵



If opioids are prescribed, write a prescription only for the quantity needed. Prescribe refills only if needed.¹¹

Recommend Non-Opioid Analgesics First

- Emphasize the effectiveness of acetaminophen, NSAIDs, or a combination of acetaminophen and NSAIDs for pain relief.
- When recommending acetaminophen, counsel the child or adolescent and their parents that taking more than the recommended daily dose or long-term use can cause liver damage.
- Be aware that NSAIDs may cause bleeding from surgical sites; therefore, recommend them with caution after surgery.
- Do not recommend NSAIDs for individuals with decreased kidney function or stomach ulcers.



Prescribe Opioids with Caution

- If opioids are prescribed, it should be for a short duration and for conditions associated with acute pain that acetaminophen, NSAIDs, or a combination of both cannot control.
 - When opioids are indicated, choose the lowest-potency opioid necessary to relieve pain.
- If you have received a referral from another dentist, be aware that the child or adolescent may have been prescribed an analgesic.
- Unless you have training and experience in the use of opioids for the treatment of chronic facial pain, do not prescribe long-acting or extended-release opioids.

Be Aware of the Potential for Opioid Misuse or Abuse

- For any child or adolescent reporting unexpectedly prolonged dental pain, conduct an assessment in the dental office or clinic for any underlying cause, and consider whether use of opioids is appropriate.
- If opioids are prescribed, write a prescription only for the quantity needed. Prescribe refills only if needed.¹¹
- Indicate the quantity of opioid doses on the prescription, and note “no refills,” unless you are certain that the child or adolescent will require refills.¹¹



Be aware of and understand federal and state laws, regulatory guidelines, policy statements, and evidence-based recommendations that govern prescribing legal opioids.

Understand Laws, Policies, and Recommendations

- Be aware of and understand federal and state laws, regulatory guidelines, policy statements, and evidence-based recommendations that govern prescribing legal opioids.

For Surgical Procedures, Provide Pre- and Post-Operative Instructions

- Provide instructions verbally and in writing.
- Include the following information in instructions:
 - Take acetaminophen, NSAIDs, or a combination of both before numbness wears off rather than waiting until the child or adolescent is in pain.
 - Slight swelling may occur in the first 2 days. If swelling occurs, ice packs may be used for the first 24 hours (10 minutes on, then 10 minutes off). If swelling persists after 24 hours, warm/moist compresses (10 minutes on, then 10 minutes off) may help. If the swelling persists after 48 hours, call the dental office or clinic.¹³ (See *Post-Operative Instructions for Extractions/Oral Surgery* for more information.¹³)
- The instructions should also include a phone number that parents or the adolescent can call after hours (e.g., evenings, weekends) if they have questions or concerns.

Create a Safe, Friendly Environment

- Reduce distress-producing stimulation, provide a calm environment, and ensure emotional support for children and adolescents before and during procedures, which can improve pain management.^{14,15}
- Allow parents to be present during procedures to the extent possible to provide emotional support. This may decrease the child's or adolescent's anxiety and distress.¹⁶
- Encourage parents to remain calm when with their child or adolescent. Parental behavior that signals threat to and evokes fear in their child or adolescent has been associated with poor pain-management outcomes.¹⁷

Use Distraction and Imagery Techniques As a Method of Pain Management

- Distraction techniques may include having a child or adolescent play video games; listen to music; or watch videos, television, or movies.¹⁸
- Imagery techniques utilize imagination and storytelling. For example, a child or adolescent may be asked to imagine themselves in a pleasant place (such as at the beach) and to focus on the physical sensations they may experience in this place (such as the warmth of the sun).¹⁹

Prescription Drug Monitoring Programs

PDMPs are statewide electronic databases that collect data on substances dispensed in the state. PDMPs distribute data about individuals' controlled-substance prescription histories to those who are authorized under state law to receive the information for purposes of their profession. PDMPs can be used to improve the safety of individuals who may have substance misuse problems or disorders by providing context for prescribing, dispensing, and treatment decisions.^{20,21}

Learn about PDMPs

https://www.deadiversion.usdoj.gov/faq/rx_monitor.htm#4

Register for your state's PDMP

https://searchandrescueusa.org/monitoryourpatients/?utm_source=google&utm_medium=ppc&utm_campaign=2018_PFDK_Nonbrand_PDMP&utm_term=prescription%20drug%20monitoring%20program

Tips for Oral Health Professionals to Share with Parents²²

- Learn about the effectiveness of non-opioid medication to manage oral pain.
- Know your child's or adolescent's pain medications.
- Keep track of your child's or adolescent's use of pain medications, and ensure that only the prescribed amount is used.
- Discard unused medications. Drop off any remaining medication at your local pharmacy or mix medicine (do not crush) with an unpalatable substance such as cat litter, dirt, or coffee grounds and place in the trash.
- Safely store medications in a locked cabinet in your home.
- Talk to your child or adolescent about the risks of opioid addiction, and let them know they can talk to you if they have experienced substance misuse. For information and resources, see the [National Institute on Drug Abuse for Teens](#) website.

Managing Acute Oral Pain

Refer to evidence-based resources for guidance, including *The ADA Practical Guide to Substance Use Disorders and Safe Prescribing*.²³

For More Information

For detailed information on prescribing analgesic medication to children and adolescents, refer to *Update on Analgesic Medication for Adult and Pediatric Dental Patients*.²



References

1. Gupta N, Vujicic M, Blatz A. 2018. Multiple opioid prescriptions among privately insured dental patients in the United States: Evidence from claims data. *Journal of the American Dental Association* 149(7):619–627.
2. Laskarides C. 2016. Update on analgesic medications for adult and pediatric dental patients. *Dental Clinics of North America* 60(2):347–366.
3. Moore PA, Hersh EV. 2013. Combining ibuprofen and acetaminophen for acute pain management after third-molar extractions. *Journal of the American Dental Association* 144(8):898–908.
4. Wilkinson A, Wilson A. 2018. *To Prevent Youth Opioid Misuse, Many States Are More Effectively Regulating Prescriptions* [webpage]. Bethesda, MD: Child Trends.
5. Deniso RC, Kenna GA, O’Neil MG, Kulich RJ, Moore PA, Kane WT, Mehta NR, Hersh EV, Katz NP. 2011. Prevention of prescription opioid abuse: The role of the dentist. *Journal of the American Dental Association* 142(7):800–810.
6. Gupta N, Vujicic M, Blatz A. 2018. Opioid prescribing practices from 2010 through 2015 among dentists in the United States: What do claims data tell us? *Journal of the American Dental Association* 149(4):237–245.e6.
7. Schroeder AR, Dehghan M, Newman TB, Bentley JP, Park KT. 2019. Association of opioid prescriptions from dental clinicians for US adolescents and young adults with subsequent opioid use and abuse. *JAMA Internal Medicine* 179(2):145–152.
8. Maughan BC, Hersh EV, Shofer FS, Waner KJ, Archer E, Carrasco LR, Rhodes KV. 2016. Unused opioid analgesics and drug disposal following outpatient dental surgery: A randomized controlled trial. *Drug and Alcohol Dependence* 168:328–334.
9. Oregon Health Authority. 2017. *Opioid Prescribing: Guidelines for Dentists*. Salem, OR: Oregon Health Authority.
10. American Academy of Pediatric Dentistry, Council on Clinical Affairs. 2017. *Policy on Acute Pediatric Dental Pain Management*.
11. American Academy of Pediatric Dentistry, Council on Clinical Affairs. 2016. *Policy on Substance Abuse in Adolescent Patients*.
12. American College of Dentists, American College of Dentists Foundation, Indiana School of Dentistry. 2018. *ACD Ethical Dilemma: Who Decides?* [video]. Indianapolis, IN: American College of Dentists, American College of Dentists Foundation, Indiana School of Dentistry.
13. American Academy of Pediatric Dentistry, Council on Clinical Affairs. 2018. *Post-Operative Instructions for Extractions/Oral Surgery*.
14. American Academy of Pediatrics, Committee on Psychosocial Aspects of Child and Family Health, Task Force on Pain in Infants, Children, and Adolescents. 2001. The assessment and management of acute pain in infants, children, and adolescents. *Pediatrics* 108(3):793–797.
15. Sinha M, Christopher NC, Fenn R, Reeves L. 2006. Evaluation of nonpharmacological methods of pain and anxiety management for laceration repair in the pediatric emergency department. *Pediatrics* 117(4):1162–1168.
16. Ruest S, Anderson A. 2016. Management of acute pediatric pain in the emergency department. *Current Opinions in Pediatrics* 28(3):298–304.
17. Rabbits JA, Fisher E, Rosenbloom BN, Palermo TM. 2017. Prevalence and predictors of chronic postsurgical pain in children: A systematic review and meta-analysis. *Journal of Pain* 18(6):605–614.
18. Davidson F, Snow S, Hayden JA, Chorney J. 2016. Psychological interventions in managing postoperative pain in children: A systematic review. *Pain* 157(9):1872–1866.
19. Landier W, Tse AM. 2010. Use of complementary and alternative medical interventions for the management of procedure-related pain, anxiety, and distress in pediatric oncology: An integrative review. *Journal of Pediatric Nursing* 25(6):566–579.
20. Centers for Disease Control and Prevention. 2017. *What States Need to Know About PDMPs* [webpage]. Atlanta, GA: Centers for Disease Control and Prevention.
21. PEW Charitable Trusts. 2018. *Improvements to Prescription Drug Monitoring Programs Can Inform Prescribing* [webpage]. Philadelphia, PA: PEW Charitable Trusts.
22. Delta Dental. 2018. *Teens and Dental Opioids: A Guide for Parents*. Sacramento, CA: Delta Dental.
23. O’Neil M, ed. 2015. *The ADA Practical Guide to Substance Use Disorders and Safe Prescribing*. Hoboken, NJ: Wiley-Blackwell.



Cite as

Barzel R, Holt K. 2019. *Opioids and Children and Adolescents: Information for Oral Health Professionals*. Washington, DC: National Maternal and Child Oral Health Resource Center.

Opioids and Children and Adolescents: Information for Oral Health Professionals © 2019 by National Maternal and Child Oral Health Resource Center, Georgetown University

This publication was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$1,000,000 with no funding from nongovernmental sources. This information or content and conclusions are those of the author(s) and should not be construed as the official policy of HRSA, HHS, or the U.S. government, nor should any endorsements be inferred.

Permission is given to photocopy this publication or to forward it, in its entirety, to others. Requests for permission to use all or part of the information contained in this publication in other ways should be sent to the address below.

National Maternal and Child Oral Health Resource Center
Georgetown University
Box 571272
Washington, DC 20057-1272
(202) 784-9771
E-mail: OHCInfo@georgetown.edu
Website: <http://www.mchoralhealth.org>



National Maternal and Child Oral Health Resource Center