

Study: Drug to treat opioid dependence falling into children's hands

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People with opioid dependence are turning to buprenorphine for treatment, but the medication also is falling into the hands of children in their homes.

About 11,275 buprenorphine exposures among children and teens were reported to poison control centers over the span of a decade, a review of data from the National Poison Data System found. About 44% of the exposures resulted in admission to a health care facility, and 11 children died.

The rate of exposures per 1 million children from 2007-'16 has fluctuated from a low of 6.4 in 2007 to a high of 20.2 in 2010. Most recently, it was at 12.6, up from 11.6 in 2013, according to the study "Buprenorphine Exposures among Children and Adolescents Reported to U.S. Poison Control Centers" (Post S, et al. *Pediatrics*. June 25, 2018, <https://doi.org/10.1542/peds.2017-3652>).

The study also showed:

- Just over half of those exposed were males.
- About 66% of the children ingested tablets, while 21% were exposed to the medication in film form.
- Roughly 86% of children who were exposed were under 6 years of age, and 3% were 6-12 years old. Most of the exposures for these age groups were unintentional.
- About 11% of the exposures involved teenagers. Unlike the younger groups, 77% were intentional, including 12% of cases labeled suspected suicides. Females in this age group were more likely to have ingested buprenorphine to attempt suicide, while males had higher rates of abuse/misuse.

Exposed children most commonly experienced drowsiness, vomiting or miosis. More serious effects included respiratory depression, bradycardia and coma. Ingestion of one buprenorphine tablet can result in a 30-fold overdose for a small child, according to the study.

The exposure counts may underestimate the true numbers as not all are reported to poison control centers. Authors also noted "exposures do not necessarily represent a poisoning or overdose."

They recommend unit dose packaging to limit young children's access to the drug and more education on safe storage.

"Proper storage out of sight and reach of young children, preferably in a locked location (which limits access to adolescents as well), is important," they wrote.

Authors also said they support the Academy's [2016 recommendation](#) to increase adolescent access to medication to treat opioid dependence. However, they urged greater education about dangers of misusing

the drugs. In addition, they called for greater access to mental health care to address the rates of attempted suicides.

Resources

- [AAP policy "Substance Use Screening, Brief Intervention, and Referral to Treatment"](#)
- [Resources from the Centers for Disease Control and Prevention on prescription opioids](#)
- [Information for parents from HealthyChildren.org on protecting children from the opioid epidemic](#)
- [Information for parents from HealthyChildren.org on preventing poisoning](#)
- [HealthyChildren.org video on medication safety](#)

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