

Preventing Pediatric Exposure to Buprenorphine

The Problem

Buprenorphine¹ is an effective treatment for opioid dependence. With the increase in prescribed buprenorphine in Utah, there has also been an alarming increase in pediatric buprenorphine exposure in children less than six years of age. Although pediatric deaths are rare, pediatric exposure to buprenorphine can be life-threatening and result in serious injury due to severe respiratory depression.

Risks of Exposure

Pediatric exposures are particularly dangerous due to the high risk of oral exploration in early childhood development. There is a danger from the residue of the medication that remains in the packaging that can still be absorbed when placed in a child's mouth.

- If a child "mouths" or sucks on the tablet, the absorption increases dramatically compared to if a child immediately swallows a tablet.
- Buprenorphine has the potential to cause delayed and persistent respiratory depression for more than 24 hours following ingestion. Even if the majority of the tablet or film packaging was removed from a child's mouth, the risk for respiratory depression remains.
- In children less than six years, clinical effects, in addition to respiratory depression, include drowsiness, vomiting, miosis, agitation, and tachycardia.

Children can be harmed by:

- Licking*
- Sucking*
- Tasting*
- Swallowing

*These methods of exposure can be more harmful than swallowing buprenorphine.



What to do if a child is exposed:

- Call the Utah Poison Control Center at 1-800-222-1222. DO NOT WAIT FOR SYMPTOMS TO APPEAR!
- If buprenorphine is visible in the child's mouth, remove it. Then swipe his or her mouth for any remaining medication, rinse out the mouth, and have the child spit. (Remember: remove, swipe, rinse, and spit)
- Wash any medication residue from the child's hands and face.
- If the child is having a hard time breathing, call 9-1-1 immediately or bring the child to the nearest emergency department.
- Bring the remainder of the medication with you to the emergency department.
- Stay with the child while you wait for emergency help to arrive.

Prevention

Providers should counsel patients on safe use, storage, and disposal of medication. Follow these tips:

- Keep buprenorphine out of sight and reach of children.
- Keep buprenorphine in a locked box, bag, or cabinet.
- Keep buprenorphine in its original, labeled prescription container with child-resistant closure.
- Do not place buprenorphine tablets or films on counters, sinks, dressers, or nightstands for later use.
- Discard film wrapping immediately after use by folding the package and disposing of it in the trash.
- Do not store buprenorphine in pockets, bags, purses, backpacks, or other carrying cases.
- Avoid leaving buprenorphine in the bathroom, car, or any publicly accessible space.

Resources

- Utah Poison Control Center <http://uuhsc.utah.edu/poison/> 1-800-222-1222
- Use Only As Directed campaign www.useonlyasdirected.org
- Violence and Injury Prevention Program <http://health.utah.gov/vipp>

References

- 1 Formulations include subuts and suboxone <http://buprenorphine.samhsa.gov/about.html> (accessed 8/8/12).

Our Mission

VIPP is a trusted and comprehensive resource for data and technical assistance related to violence and injury. This information helps promote partnerships and programs to prevent injuries and improve public health.

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