

AAP News Parent Plus

INFORMATION FROM YOUR PEDIATRICIAN

Liquid nicotine used in e-cigarettes can kill children

Parents who “vape” should be aware that one swallow of the liquid nicotine used to refill their e-cigarettes can kill a child. The liquid also can be poisonous within a matter of minutes if spilled on the skin.

A 1-year-old child died from liquid nicotine poisoning in December — the first such death in the United States. The number of calls to poison control centers about liquid nicotine shot up significantly in 2014. There were 3,638 calls about exposures as of Nov. 30, more than double the 1,543 in 2013.

“These (refills) are being sold in hundreds of different flavors, including flavors and colors that would be absolutely appealing to kids,” said Kyran Quinlan, M.D., M.P.H., FAAP, chair of the American Academy of Pediatrics (AAP) Council on Injury, Violence and Poison Prevention. “It’s such a small quantity and yet it’s so toxic and so deadly. I don’t think (people) realize what a deadly toxin they have in their house when they have liquid nicotine.”

Children ages 1-2 years are at the greatest risk of getting into the product, but parents of children under age 5 should be especially cautious, Dr. Quinlan added.

Only a handful of states require childproof packaging for liquid nicotine refills, so many bottles do not have childproof caps. The AAP urges parents who use e-cigarettes to purchase products that use childproof packaging. They also should store all liquid nicotine refills out of children’s reach and make sure to keep children away from discarded bottles.

“There are three routes of exposure that (are toxic to) children. If they put it in their mouth even without swallowing it will be absorbed into the mucous membranes, just like nicotine gum. If they swallow, it will be absorbed in the intestinal tract. If they spill it on their skin, it’s absorbed through the skin just like a nicotine patch,” said Dr. Quinlan.

The bottles are sold in various sizes, from 10 milliliters (about 2 teaspoons) to more than 30 milliliters (about 6 teaspoons) and come in a variety of nicotine strengths. A teaspoon of concentrated liquid nicotine can be fatal for a 1-year-old child.

Symptoms experienced by children with liquid nicotine poisoning include vomiting, a fast heartbeat, jittery and unsteady appearance, and difficulty breathing. If you suspect your child was exposed to liquid nicotine that was spilled on the skin or swallowed, call the Poison Center hotline: 800-222-1222 immediately.

For information about health concerns about older children and teens who use e-cigarettes, visit <http://bit.ly/1qSC6qG>.

— Trisha Koriath

