



Liquid Nicotine Poisoning

OVERVIEW

Vaping, a term used to describe inhaling heated liquid nicotine vapor via electronic nicotine delivery systems (ENDS), is one of the fastest growing unregulated industries in the US. Liquid nicotine is typically sold in small vials and are available in fruit and candy flavors to entice adolescents and nonsmokers.

Liquid nicotine is particularly poisonous to young children. It is toxic when absorbed through the skin. Symptoms of liquid nicotine poisoning including dizziness, rapid heart beat, vomiting, and seizures.

In January 2016, President Obama signed the Child Nicotine Poisoning Prevention Act, which requires that all liquid nicotine is sold in containers that comply with the Consumer Product Safety Commission (CPSC) child-resistant packaging standards. The law became effective July 28, 2016.

AAP POSITION

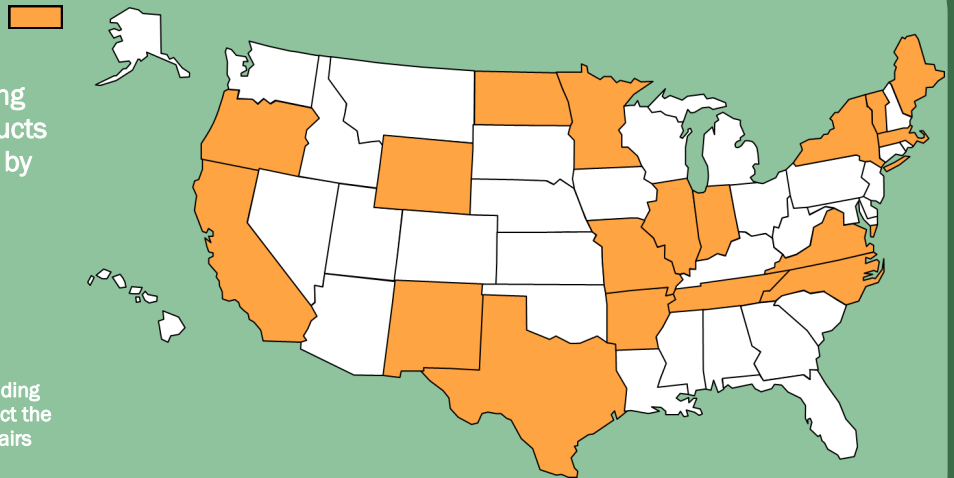
- To prevent poisoning, all liquid nicotine products should be required to be sold in child-resistant packaging. Flow-restrictors, or adapters added to the necks of liquid nicotine vials, may also reduce child poisonings due to liquid nicotine poisoning.
- Candy and fruit flavored liquid nicotine products, which can entice children to open and taste liquid nicotine, should be banned.
- The size of concentrated nicotine solution prefilled cartridges and containers should be limited to amounts that would not be lethal to a young child if ingested.

FACTS

- One small vial of liquid nicotine contains enough toxin to kill 4 toddlers.
- The American Association of Poison Control Centers reports that the number of child poisonings due to e-liquids jumped to 3,353 in 2014, from 659 reported in 2012.
- Because liquid nicotine toxicity is based on weight, a tiny amount of concentrated liquid nicotine can cause severe side effects, and potentially, death, in a small child. Children younger than 5 years are at significant risk for injury and death from poisoning.
- Concentrations of liquid nicotine are unregulated and contain large amounts of nicotine in a small bottle.
- Child-resistant packaging is effective in reducing poisonings. Since its passage in 1970, the federal Poison Prevention Packaging Act requiring child resistant packaging on household chemicals and most medicines, has reduced the number of deaths of children younger than 5 due to poisoning from 500 to 30 per year.

PROGRESS

- 18 states— laws requiring child-resistant packaging for liquid nicotine products (all states now covered by federal law)



For information on current law or pending legislation in your state, please contact the AAP Division of State Government Affairs at stgov@aap.org

MORE

- [AAP Policy—Electronic Nicotine Delivery Systems—](http://pediatrics.aappublications.org/content/early/2015/10/21/peds.2015-3222.full.pdf+html)
<http://pediatrics.aappublications.org/content/early/2015/10/21/peds.2015-3222.full.pdf+html>
- [AAP Policy—Public Policy to Protect Children from Tobacco, Nicotine, and Tobacco Smoke](http://pediatrics.aappublications.org/content/early/2015/10/21/peds.2015-3109.full.pdf+html)
<http://pediatrics.aappublications.org/content/early/2015/10/21/peds.2015-3109.full.pdf+html>
- [AAP Julius B. Richmond Center of Excellence—](http://www.aap.org/richmondcenter)
www.aap.org/richmondcenter
- [American Association of Poison Control Centers—](http://www.aapcc.org/alerts/e-cigarettes)
www.aapcc.org/alerts/e-cigarettes
- [National Conference of State Legislatures \(NCSL\) Alternative Nicotine Products | Electronic Cigarettes—](http://www.ncsl.org/research/health/alternative-nicotine-products-e-cigarettes.aspx)
www.ncsl.org/research/health/alternative-nicotine-products-e-cigarettes.aspx