Electronic nicotine delivery systems (ENDS), such as e-cigarettes and tank systems, continue to gain popularity nationwide despite unknown health effects and lack of regulation. In 2014, 7.6% of Oklahoma adults said they used e-cigarettes. Liquid nicotine is the highly toxic substance used to produce vapor in electronic cigarettes. If ingested or absorbed through the skin, liquid nicotine can be fatal to adults and children. The Child Nicotine Poisoning Prevention Act of 2015 now requires liquid nicotine containers to have special packaging to prevent children from possible poisoning.

**E-LIQUID**

- E-liquid, also known as e-juice, is the liquid used to produce the vapor in electronic cigarettes.
- The four main ingredients are propylene glycol, vegetable glycerin, flavoring and nicotine.
- There are few studies on the human effects of long-term exposure to inhalation of propylene glycol vapor.
- E-liquid is often colorful, scented and flavored.
- According to a study* in the Academic Pediatrics Journal, 36% of e-cigarette users did not lock up bottles of liquid nicotine and did not use childproof caps.

*Research published in 2015

**TOUCHING & SWALLOWING**

- Adults and children can be poisoned by touching or swallowing liquid nicotine.
- Nicotine concentration in liquid nicotine may not be accurate and varies from 0 mg/mL to 36 mg/mL.
- It is common to find liquid nicotine containing upwards of 36 mg of nicotine per milliliter of liquid.
- At this concentration, a small 15 mL dropper bottle of liquid nicotine could be enough to kill four toddlers.
- If swallowed, one teaspoonful of 36 mg/mL e-juice can equal the absorption of up to 180 mg of nicotine or smoking 90 cigarettes.

*The law went into effect July 26, 2016 - 180 days after the President’s authorization.*
**Symptoms**

- Red Hot Skin
- Drooling
- Dizziness
- Nausea
- Respiratory Depression
- Headaches
- Vomiting
- Shortness of Breath
- Low Blood Pressure
- Seizures

**Prevention**

- Open counters, shelves, unlocked drawers, purses and bags aren’t safe storage places for e-liquid.
- Place poisons out of sight and reach. Use child safety locks on cabinets in all areas of your home.
- Child-resistant does not mean completely child proof, and may only slow children down.
- Rinse empty containers before disposal, they may still contain small amounts of liquids.

Liquid nicotine is manufactured for use in electronic cigarettes (e-cigarettes), sold in a highly concentrated form, and can be fatal if swallowed or absorbed in the skin. In 2015, there were 131 nicotine-related poisonings were reported to the Oklahoma Center for Poison and Drug Information.

For more information about the dangers of liquid nicotine use, visit the Oklahoma Center for Poison and Drug Information website at [Oklahomapoison.org](http://Oklahomapoison.org) or call the OSDH Center for the Advancement of Wellness at 405-271-3619.