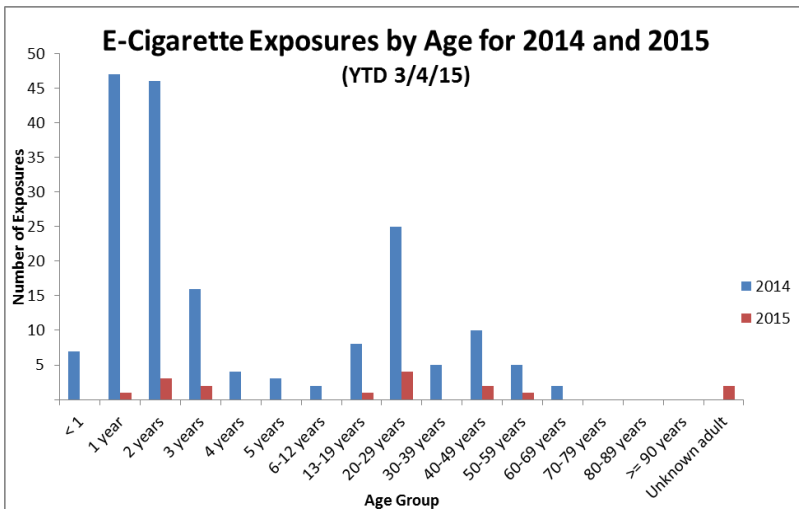
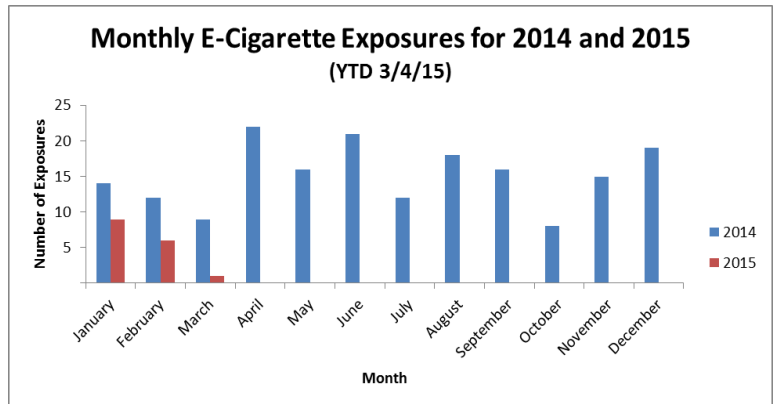


While e-cigarette exposures called into the Washington Poison Center may be off to a slower start this year compared to 2014, the data shows that the age distribution is still consistent with years past. “Children are still getting exposed to these products, and I believe that the lack of child-resistant packaging and appropriate warning labels plays a key part in this crisis,” says Dr. Alexander Garrard, Clinical Managing Director of the Washington Poison Center. New research out of Portland also shows that e-cigarettes may not be as safe as proponents think.



In an article released January 22, 2015 in *The New England Journal of Medicine*¹, researchers at Portland State University discovered that e-cigarettes release higher concentrations of formaldehyde-releasing agents than nicotine. Propylene glycol and glycerol, both components of concentrated liquid nicotine, are converted to formaldehyde when heated in the presence of oxygen. The authors state that while they don't know the effects in the lungs of formaldehyde-releasing agents, formaldehyde itself is classified as a group I carcinogen according to the International Agency for Research on Cancer (IARC). Other chemicals that are classified as IARC group I carcinogen include arsenic, asbestos, and benzene.

Current pending legislation seeks to address lack of standardized warning and information labels along with the lack of industry wide child-resistant packaging. Please call the poison center if you have any questions regarding e-cigarettes or think that you or someone else has been exposed or poisoned by an e-cigarette.

***Disclaimer: Reporting of exposures to the Poison Center is voluntary and not mandated by law. As such, WAPC data describes the number of calls called into the Poison Center and most likely is an underrepresentation of the true occurrence of any one substance. All calls to the Washington Poison Center are free and confidential.**

How Do E-Cigarettes Measure Up?



15 mL bottle at 36 mg/mL of nicotine = 540 mg nicotine



42 cigarettes at 13 mg of nicotine/cigarette

For further information, contact Dr. Garrard at AGarrard@wapc.org or 206-517-2356.

1) Jensen RP, Luo W, Pankow JF, Strongin RM, Peyton DH. Hidden formaldehyde in e-cigarette aerosols. *N Engl J Med* 2015;372:392-4.