Bibliography

E-cigarette Ingredients

Chemical structures


Health effects of base liquids propylene glycol and vegetable glycerin


Cinnamaldehyde and 2-methoxycinnamaldehyde have been identified in cherry-flavored e-liquids; are cytotoxic and associated with respiratory irritation


Diacetyl and acetyl propionyl have been identified in dairy, alcohol, and fruit-flavored e-liquids; are associated with lung disease and changes to central nervous system


Benzaldehyde has been identified in aerosols of cherry-flavored e-liquids; is associated with respiratory irritation

Toxins and carcinogens, including acetaldehyde, acrolein, formaldehyde, toluene, p,m-xylene, and butraldehyde, and heavy metals, including cadmium, chromium, lead, and nickel, have been identified in e-liquids, aerosols, and secondhand vapor.


Health effects of formaldehyde


Health effects of toluene


Health effects of xylene


Health effects of cadmium


Health effects of chromium

**Health effects of lead**


**Health effects of nickel**


**Nicotine content in e-liquids is inconsistently labeled; has been identified in e-liquids, aerosols, and secondhand vapor**


Salt Lake County Health Department. Analysis of nicotine content in e-liquid samples [fact sheet]. December 2014.

**Teens are particularly susceptible to nicotine addiction**


**Normalization**

**Health effects of tobacco use and tobacco marketing**


**Smoking prevalence**

E-cigarette use may renormalize smoking


Seeing e-cigarette use may trigger cigarette cravings


Teens are more likely to use tobacco products if their friends and family do


E-cigarette ads mirror traditional tobacco ads


E-cigarette advertising can trigger cigarette cravings


Youth Use

E-cigarette use among middle- and high-school students


Youth e-cigarette use in Allegheny County


E-cigarette use among college students


Youth knowledge about e-cigarettes and ingredients


Teens who use e-cigarettes are more likely to smoke


FDA regulation of e-cigarettes