Up in Smoke: Deconstructing the Health Claims of E-Cigarettes

Electronic cigarettes, or e-cigarettes, have been growing in popularity in recent years. As traditional smoking has declined, use of e-cigarettes has increased among teenagers, surpassing traditional cigarettes. While touted as the “healthier” cousin of the traditional cigarette, e-cigarettes still pose great risk to users. No long-term studies exist on the risks of e-cigarette smoking, nor does the industry currently possess a regulated manufacturing process—addictive nicotine and an unregulated mix of chemicals plague e-cigarettes just as they do traditional cigarettes. The infographic seen below is meant to shed some light on the adverse events and risks e-cigarette users face.

Nicotine content in e-cigarettes is highly variable, regardless of the advertised content, because of the market’s lack of standard manufacturing processes.

After only 5 minutes of use, e-cigarette smokers show signs of airway constriction and inflammation.

Infections may be harder to kill among e-cigarette users. E-cig vapors help protect the antibiotic-resistant bacteria linked to pneumonia.

Higher voltage batteries in e-cigarettes deliver high levels of nanoparticles, which can trigger inflammation and are linked to asthma, stroke, heart disease, and diabetes.

Propylene glycol and glycerin are the main ingredients of e-liquid. These compounds are known to be eye and respiratory irritants when heated and vaporized, and may also create carcinogenic compounds. If the e-liquid is substituted with unregulated synthetic drugs the potential for harm is amplified.

The liquid stimulant used, known as e-liquid, can cause vomiting, seizures, or death when ingested or absorbed through the skin.

An atomizer heats liquid in the cartridge which can thermally breakdown into carcinogenic compounds such as formaldehyde and acetaldehyde.

References: