

## UPDATE: Vaping an emerging crises

Serious concerns about vaping have grabbed the news headlines of late as more information becomes available about the harmful effects and impact of this recent fad which has become widely popular among young people. In the past few years we have seen a rapid escalation in vaping (the inhalation of a combination of vaporized chemicals) or the use of electronic cigarettes especially by young people.

Back in the spring of 2018 a report citing the Centers for Disease Control (CDC) indicated the number of never before smoking youths who tried e-cigarettes more than tripled over a recent 3 year period. More recently research shows that nearly 40% of high school seniors and 27% of New York high school students overall vape according to the state health department.

Just a couple of years ago there were scattered reports of a few serious respiratory illness cases attributed to vaping nationwide and today public health officials are closely examining 1300 cases of acute lung disease associated with vaping as of October 8, 2019 according to the CDC. This is an astonishing escalation with more than 40% of these being young people 21 or under.

A group of Harvard researchers found that common flavoring substances found in vape liquid caused permanent, and sometimes fatal scar buildup in the lungs. These flavoring chemicals systematically destroys the lungs' smallest airways, resulting in a lung condition known as bronchiolitis obliterans, or "popcorn lung. These reports further conclude that regardless of whether you are purchasing cheap disposable electronic cigarettes in convenience stores or expensive cartridges found in smoke shops, you are at equal risk for exposure to popcorn lung and its dangerous implications. Dr. Panagis Galiatsatos at Johns Hopkins in Baltimore states 'Vaping is not safe, it poses an absolute risk to every user'.

Researchers at the University of California, San Diego found a strong association between individuals with anxiety, depression, and other mental health issues, and using e-cigarettes. Findings indicate that people who experience these conditions are three times as likely to be current users of vaping devices compared to individuals with no mental health conditions.

Researchers have measured the makeup of what they refer to as the "aerosols," or chemical composition of the vape smoke. They found that metals (tin, nickel, silver, iron, aluminum, silicate, and chromium) were present in this vape smoke in levels equal to, or greater than the concentrations found in traditional cigarette smoke. These nanoparticles are known for penetrating deep into the respiratory system and reaching vulnerable sacks in the lungs, often causing irreversible damage and permanent scarring.

Local, state and national leaders have moved recently to ban flavors which are undoubtedly directed at and attracting our young people while contributing to the ongoing increase of vape users. Just this week here on Long Island the Town of Babylon, shut down 7 separate vape shops. Newsday recently reported Senator Charles Schumer has released a plan for a nationwide ban on flavored e-cigarette liquids and called for a national education campaign on the dangers of teen vaping

Recently the Three Village School District in Suffolk County became the third district across the country to sue "Juul" claiming that the colossal e-cigarette maker is addicting students to nicotine forcing schools to pour times and resources into fighting the emerging epidemic.

Clearly vaping is an alarming concern and additional pro-active measures must be taken to continue to address and prevent the serious medial implications. Be sure to talk to your children about the associated dangers of vaping or using e-cigarettes