

N.C. Tobacco Prevention & Control Branch

There is Growing Evidence That Exposure to E-cigarette Aerosol or “Vapor” May Be Hazardous and Should be Added to Existing Secondhand Smoke Policies

At least one study found that e-cigarette “vapor” contains ultrafine particles that can inflame the lungs of bystanders as well as users. This inflammation can trigger heart attacks.

One study found evidence of tobacco-specific carcinogens as well as aldehydes, such as formaldehyde, in e-cigarette “vapor.”

At least one study has found that some e-cigarette fluid (known as e-juice) was cytotoxic, meaning toxic to human cells.

In a human exposure study, exposure to e-cigarette vapor for one hour raised serum cotinine (nicotine) levels similar to that of those exposed to secondhand tobacco smoke.

E-cigarettes Currently Have No Scientific Evidence Pointing Towards Their Safety

At the moment, e-cigarettes are not regulated by the Food and Drug Administration, meaning there is no standard for safety for these products.

E-cigarettes vary by brand and manufacturer, meaning the chemical make-up of the “e-juice” changes from e-cigarette to e-cigarette. This means that some may be more toxic than others.

There is no conclusive evidence that e-cigarettes help with stopping traditional tobacco use, and in fact may reduce the likelihood of quitting.

Several Regulatory Organizations Have Come Out Against the Smoking of E-Cigarettes in the Work Place

The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) has included e-cigarettes in its definition of secondhand smoke and advised its elimination from the indoor environment.

The Journal of Occupational and Environmental Medicine argued against the use of e-cigarettes in smoke-free workplaces, citing that failing to eliminate the use of e-cigarettes in smoke-free areas could undo the work already done and could renormalize and encourage traditional smoking.

The Centers for Disease Control (CDC) also argued against electronic cigarette use in smoke-free areas, given the fact that aerosols from e-cigarette use could expose pregnant women and non-users to nicotine and other chemicals. They also state e-cigarette use in places where smoking is prohibited could complicate enforcement of the smoke-free policy.



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Given the lack of evidence guaranteeing the safety of e-cigarettes, the World Health Organization and the American Public Health Association have also advised against the use of e-cigarettes in the workplace.

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