

# Why is it important to prevent exposure to e-cigarettes?

*It's about keeping indoor air clean*

## IT'S NOT JUST "HARMLESS WATER VAPOR"

E-cigarette aerosol contains at least **10 chemicals** on California's Prop 65 list of chemicals known to cause cancer, birth defects or other reproductive harm.

TOLUENE  
ACETALDEHYDE  
BENZENE  
CADMIUM  
FORMALDEHYDE  
ISOPRENE  
LEAD  
NICKEL  
NICOTINE  
N-NITROSONICOTINE



DOMENICHINI, M.L., ET AL., LEVELS OF SELECTED CARCINOGENS AND TOXICANTS IN VAPOR FROM ELECTRONIC CIGARETTES: THE CONTROL 2014-2021. P. 155-9. WILKINSON, T.M., ET AL., METAL AND SILICATE PARTICLES INCLUDING NANOPARTICLES ARE PRESENT IN ELECTRONIC CIGARETTE CARTOMIZER FLUID AND AEROSOL. PLOS ONE 2013, 8(3), P. E67987.  
CALIFORNIA OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT, SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1996. CURRENT POPULATION ASSESSMENT. SCHEFFERT, T., ET AL., DOES E-CIGARETTE CONSUMPTION CAUSE PASSIVE VAPING? INDUSTR. AIR. 2012, 23(1), P. 25-31.  
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- **Vaping and “JUULING” is increasing among youth** due to the variety e-juice flavors, like gummy bear and cotton candy.<sup>1,2</sup> Some e-juice flavorings contain diacetyl, which has been linked to “popcorn lung,” a severe and irreversible lung disease.<sup>3</sup>
- **Secondhand aerosol from e-cigarettes** can contain **nicotine, chromium, manganese, lead, and nickel** and may be toxic to lung tissue, decrease the body’s ability to fight respiratory infections, and can harm normal lung development.<sup>4,5</sup>
- **The Surgeon General and American Lung Association** recommend including e-cigarettes in smoke-free workplace laws.<sup>4,6</sup>
- **Three cities in Milwaukee County include e-cigarettes in their smoke-free workplace law** (West Allis, Greenfield, and South Milwaukee).

## FDA-approved methods to help people quit

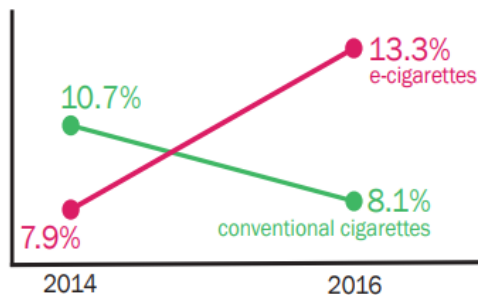
- |                      |  |
|----------------------|--|
| Nicotine patch       | Varenicline (Chantix)  |
| Nicotine gum         | Bupropion SR (Zyban)   |
| Nicotine lozenge     | <b>Note: E-cigarettes are NOT an approved cessation device</b> |
| Nicotine inhaler     |  |
| Nicotine nasal spray |  |

Source: <https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm198176.htm>

## WI High School Youth Tobacco Survey

### E-Cigarette Use is Surpassing Conventional Cigarette Use

Although the use of **conventional cigarettes** has been steadily declining, **e-cigarettes** have been gaining in popularity.

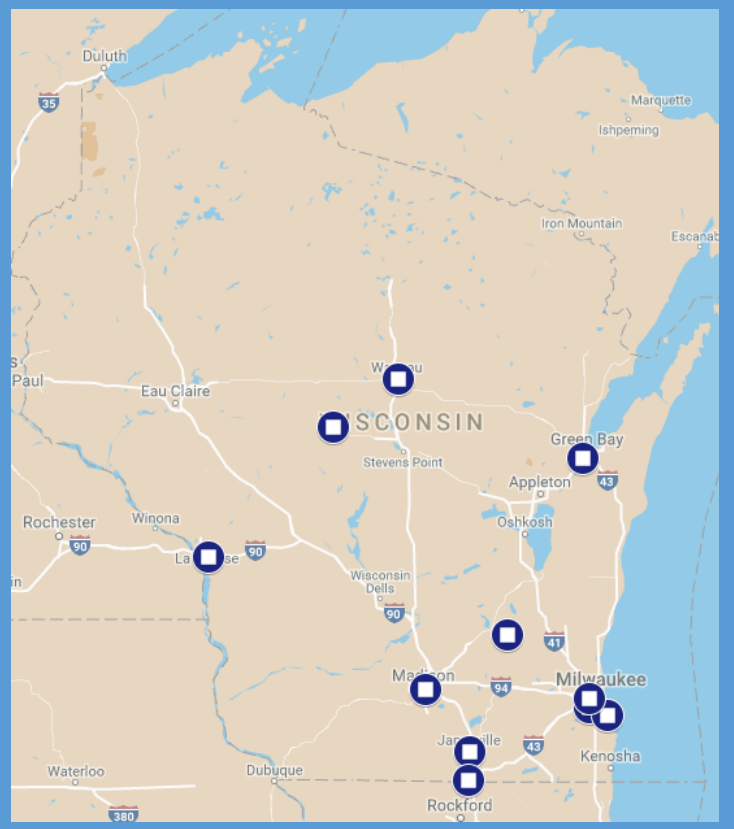


### The Appeal of Flavors

**87.9%** think they probably would not or definitely would not try an e-cigarette if it did not have any flavor such as mint, candy, fruit, or chocolate.

Source: 2016 Wisconsin Youth Tobacco Survey: High School Fact

## E-cigarette inclusion in smoke-free air laws in WI



- Madison
- Ashwaubenon
- Greenfield
- Janesville
- Juneau
- Marshfield
- Onalaska
- South Milwaukee
- Wausau
- West Allis
- Beloit Township

## Sources

- <sup>1</sup> Wisconsin Department of Health Services. 2016 Youth Tobacco Survey: High School Fact Sheet.
- <sup>2</sup> Hafner, J (2017). Juul e-cigs: The controversial vaping device popular on school campuses. *USA Today*.
- <sup>3</sup> Rutledge, R (2015). Gasping for action: A Watchdog Report. *Milwaukee Journal Sentinel*.
- <sup>4</sup> U.S. Department of Health and Human Services (2016). *E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General*.
- <sup>5</sup> Chun et al (2017). Pulmonary toxicity of e-cigarettes. *Am J Physiology Lung Cell Mol Physiol*.
- <sup>6</sup> American Lung Association. *E-Cigarettes and Lung Health*.