

# Tobacco Use and Asthma

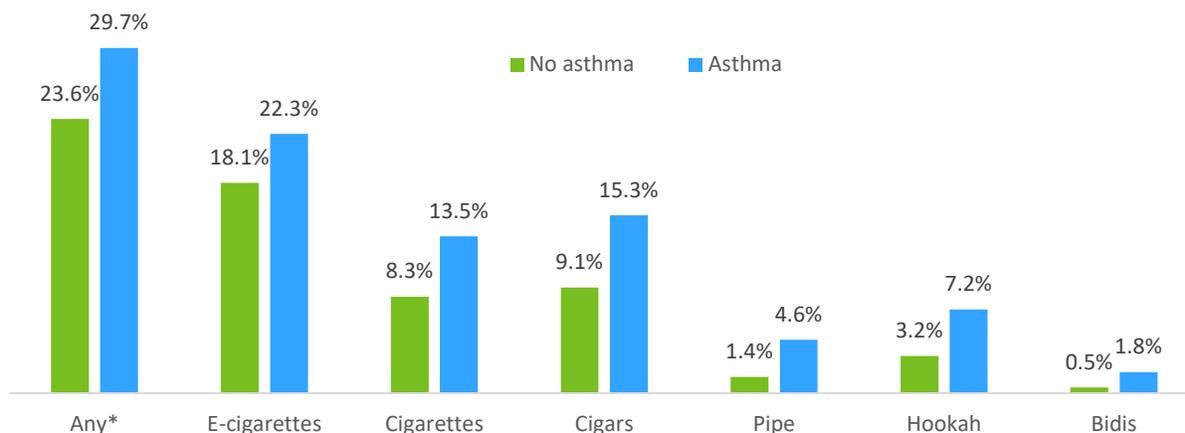
Asthma is one of the most common, serious chronic diseases in pediatric and young adult populations.<sup>1</sup> Asthma causes inflammation or swelling, and a narrowing of the airways making it difficult to breathe.<sup>2</sup> In 2016, there were 18,200 emergency department visits and 1,900 hospitalizations for asthma across Minnesota.<sup>3</sup> One in five students in grades 6-12 reported on the Minnesota Youth Tobacco Survey they have asthma.<sup>4</sup>

Learn more about asthma: [www.health.mn.gov/asthma](http://www.health.mn.gov/asthma)

## Minnesota youth with asthma are more likely than their peers to smoke or vape.

New data from the 2017 Minnesota Youth Tobacco Survey reveals that Minnesota high school students who have asthma were more likely than their peers who do not have asthma to vape or smoke conventional tobacco products (**Figure 1**).

*Figure 1. Current use of tobacco products by high school students who have and who do not have asthma*



Source: 2017 MYTS; all differences in prevalence between groups are statistically significant (e-cigarette prevalence is marginally significantly different at  $p = .06$ ); weighted data.

\* Includes any use of e-cigarettes, cigarettes, cigars, pipe, hookah, or bidis.

It is unknown why youth who have asthma are more likely than their peers to smoke or vape. However, reasons could include social influence by peers and family members who may also use these products. In Minnesota, a higher percentage of teens who have asthma than teens who do not have asthma reported that close friends smoke or vape (17.0% versus 10.1%) and they live with someone who uses tobacco (46.9% versus 37.7%).

### What is vaping?

Vaping is the use of devices called vapes or e-cigarettes to inhale nicotine aerosols that are often flavored. The most popular vaping device is JUUL, with 75% of dollar market share.<sup>5</sup>

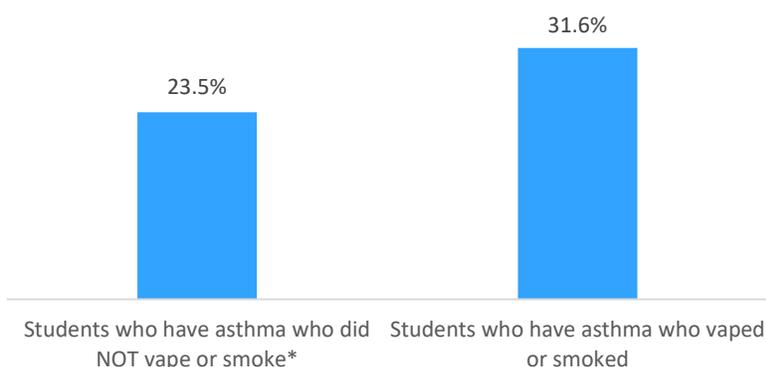
Nicotine is highly addictive and can harm brain development as teens grow. No amount of nicotine is safe for youth.

Besides nicotine, e-cigarette aerosol often contains cancer-causing chemicals and tiny particles that reach deep into the lungs.<sup>6</sup>

## Youth with asthma, who also vape, are at an even greater health risk.

Any use of tobacco products by youth is harmful, but youth who have asthma who smoke or vape are likely to experience worsening symptoms, poor asthma control, and an increased need for medical management.<sup>1</sup> In Minnesota, middle school and high school students who have asthma who vaped or smoked in the past 30 days reported experiencing more frequent symptoms of asthma than students who have asthma who had not vaped or smoked (Figure 2).

Figure 2. Percentage of students who have asthma who experienced frequent asthma symptoms (weekly or more often) in the past 30 days, by use of tobacco products in the past 30 days



Source: 2017 MYTS; difference is statistically significant at  $p < .05$ ; weighted data.

\* Vaped or smoked includes any use of e-cigarettes, cigarettes, cigars, pipe, hookah, or bidis.



## Community members can take action to protect youth.

### Parents

Know the risks of tobacco use and the different products kids are using. Talk to your kids about these risks and watch for signs of nicotine addiction and worsening asthma symptoms.

Learn more: [www.health.mn.gov/ecigarettes](http://www.health.mn.gov/ecigarettes) and [www.health.mn.gov/asthma](http://www.health.mn.gov/asthma)

### Health Care Professionals

Talk to your young patients about the risks of tobacco use and provide education about the harms to respiratory health and risks for addiction. Screen all patients, including parents, for use of any tobacco products, encourage them to quit, and refer patients to services for help quitting.

Learn more: [www.health.mn.gov/cessation](http://www.health.mn.gov/cessation)

## Community Leaders

Minnesota cities and counties can help reduce youth tobacco use by limiting access to flavored tobacco products and by raising the minimum tobacco sales age to 21, a policy known as Tobacco 21.

**Learn more:** [www.health.mn.gov/tobacco21](http://www.health.mn.gov/tobacco21)

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For questions or to request Minnesota Youth Tobacco Survey data, contact the Minnesota Center for Health Statistics.

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*To obtain this information in a different format, call: 651-201-3535.*

## References

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