Youth Smoking In Cuyahoga County

For adolescents in Cuyahoga County, smoking isn’t just about cigarettes. Hookah and cigar products (cigars, cigarillos, little cigars, and flavored cigars) are smoked by more high school youth than cigarettes in Cuyahoga County.

These estimates are based on new data from the Cuyahoga County Youth Risk Behavior Survey (YRBS) conducted from 2009 to 2017 by the Prevention Research Center for Healthy Neighborhoods at CWRU. The YRBS is a cross-sectional survey developed by the Centers for Disease Control and Prevention to track adolescent risk behavior over time. This data brief reports on past 30 day (i.e., current) use of cigarettes, cigars, and hookah among high school youth in Cuyahoga County. In 2017, 15.7% of high school students reported current use of any tobacco product, a significant decrease from 2013 (22.3%). Overall, fewer students reported current cigar use (13.1%), followed by tobacco in a hookah use (7.4%) and cigarette use (6.2%; see Fig. 1).

The current use of any tobacco product has decreased from 2013 to 2017, and choice of product has continued to vary. Cigarette, cigar, and hookah use have decreased (10.4% to 6.2%, 15.1% to 13.1%, and 10.6 to 7.4%, respectively). Of note, in 2017 “current hookah use” was revised to “current use of tobacco in a water pipe.”

More than 1 in 6 high school youth smoked tobacco in the past 30 days.

![Figure 1. Tobacco Use: 2013–2017](image)

### Implications for Adolescent Health

More than 15% of high school youth in Cuyahoga County currently smoke tobacco based on local YRBS data; cigarette smoking accounts for less than 10% of youth tobacco use. Youth in Cuyahoga County are smoking at a lower rate than adults in Cuyahoga County (18.7% in 2015), although youth are choosing products that are less regulated, and potentially more accessible, than cigarettes.

**What are cigars, cigarillos, little cigars, and flavored cigars?**

The picture to the left helps to show the difference between cigarettes and cigar products. The main difference between a cigarette and cigar product is the wrapper; any product that includes tobacco in the wrapper is considered a cigar. A law passed on August 8, 2016, authorized the U.S. Food and Drug Administration (FDA) to regulate all tobacco products, including e-cigarettes, cigars, and hookah. It requires health warnings on all products, bans samples, and restricts youth access by not allowing products to be sold to those younger than 18 years of age. This law goes into effect once the FDA approves new tobacco product applications in 2018.

**What is a hookah?**

The picture to the right shows a hookah, or waterpipe tobacco. *Shisha*, a damp tobacco that comes in flavors such as apple, cherry, or chocolate, is placed in the head of the pipe where it is heated. Tobacco smoke travels through the body of the pipe and is inhaled through the hose. Hookah smoking is typically a social activity in which smokers pass the hookah from person to person over a substantial period of time, increasing the amount of nicotine and highly toxic smoke inhaled by the user. The smoke contains carbon monoxide, heavy metals, and toxins known to cause cancer. Charcoal used to heat the tobacco produces toxic substances that may be inhaled by both hookah smokers and non-smokers. There are more than 15 hookah bars in Cuyahoga County; these bars are exempt from Ohio’s Clean Indoor Air Act.
Significant differences in product choice are seen across race/ethnicity. Black/African American students predominantly report cigar product only use (8.4%) and very little cigarette-only and hookah-only use (0.1% and 1.0%, respectively); whereas Hispanic/Latino students report more multiple product use (10.2%; see Fig. 2).

**Six Regions of Cuyahoga County**

Cuyahoga County can be divided into six regions to better understand risk behaviors geographically. In 2017, data were able to be weighted to five of six regions (excluding Outer Ring West). Regions are designated by the location of the participating school and/or district, defined as:

* Cleveland East and West: within Cleveland city limits, east/west of Cuyahoga River;
* Inner Ring East and West: share border with Cleveland, east/west of Cuyahoga River;
* Outer Ring East and West: in Cuyahoga County but do not share border with Cleveland, east/west of Cuyahoga River.

**Regional Use of Tobacco in Cuyahoga County**

Current use of any tobacco and individual products vary across county regions (see Fig. 3). Students from Inner Ring West reported higher rates of current cigarette use (10.6%) than other regions. Rates of current cigar use were similar across all regions. The rate of current use of tobacco in a water pipe (i.e., hookah use) was lowest among students in Cleveland East.

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**Methods:** The Prevention Research Center for Healthy Neighborhoods (PRCHN) regularly uses a two-stage cluster sample design that mimics the sampling method of the Centers for Disease Control and Prevention (CDC) and its national Youth Risk Behavior Survey (YRBS). In 2017, 45 of 58 high schools (77.6%) and 13,907 of 18,098 students (76.8%) participated in the survey. An overall response rate of 60% (76.8 x 77.6) allowed the data to be weighted to the entire population of 9th-12th grade students in Cuyahoga County. Analyses were conducted using SPSS statistical software survey procedures to account for the sampling design.

**Contributors:** The information in this report was obtained from the 2017 Youth Risk Behavior Survey. This survey was modeled after the CDC state-based system of health surveys administered every other year by each state department of health. This data brief was prepared by the PRCHN and authored by Jean Frank, MPH; Audrey Kinsella, MPH; Yuchi Chiu; Isabelle Tung and Erika Trapl, PhD. For more information contact Jean Frank (jean.frank@case.edu).

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