### Youth Smoking In Cuyahoga County

For adolescents in Cuyahoga County, smoking isn’t just about cigarettes any longer. Hookah and cigar products (cigars, cigarillos, and little cigars) are now 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 in 2011 and 2013 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.

**More than one in five high school youth smoked tobacco in the past 30 days.**

In 2013, over 22%, or more than one in five high school students, reported recent use of any tobacco product, similar to what was reported in 2011 (see Fig. 2). Overall, more students reported current cigar use (15.1%) followed by hookah use (10.6%) and cigarette use (10.4%). Over 8% reported using at least 2 tobacco products. A similar trend of significant cigar and hookah use is seen in four of five regions of Cuyahoga County examined; inner ring-west suburbs continue to smoke cigarettes more than other products (Fig. 1). Also of note is the high rate of hookah use (10.6%), which exceeded cigarette use (10.4%) for the first time in 2013.

### Figure 1. Tobacco Use by Region

![Figure 1. Tobacco Use by Region](image)

### What are cigars, cigarillos, and little cigars?

The picture to the left helps to show the differences 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. Cigarettes are regulated by the US Food and Drug Administration (FDA), which sets standards on cigarette components, requires sales in packs of twenty, and has banned flavorings. Cigar products are currently not regulated by the FDA.

### What is a hookah?

The picture to the right shows a hookah, or water pipe. *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, where 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 over 15 hookah bars in Cuyahoga County; these bars are exempt from Ohio’s Clean Indoor Air Act.
Figure 2. Tobacco Use: 2011-2013

Figure 3. Tobacco Use: by Demographic Characteristics

Tobacco Trends

While current use of any tobacco product has remained constant from 2011 to 2013 (Fig. 2), choice of product has varied slightly. Cigarette and cigar product use have decreased (11.4% to 10.4% and 16.9% to 15.1%, respectively) and hookah use has increased (9.1% to 10.6%) from 2011 to 2013, although these changes are not statistically significant.

What are kids smoking these days?

Of particular concern is the overall high rate of multiple product use among Cuyahoga County adolescents. Overall, 8.4% of students reported using at least two tobacco products in 2013 (Fig. 3). While this pattern of multiple product use holds for Cuyahoga County overall, it is important to note that tobacco product choice varies greatly across gender, race/ethnicity, and socioeconomic status (SES). Males are more likely than females to be current tobacco users but product choices are similar. Significant differences in product choice are seen across race/ethnicity. Black/African American students predominantly report cigar product only use (13.6%) and very little cigarette only and hookah only use (1.5% and 2.9%, respectively); whereas White and Hispanic students report more multiple product use (9.9% and 10.5%, respectively) than any single product use. Overall, low SES youth are more likely to use tobacco (27.2%) compared to medium (23.1%) and high (19.0%) SES groups. Rates of multiple product use, hookah smoking and cigarette smoking are similar across SES groups. Cigar use is highest among low SES youth.

Implications for Adolescent Health

Over 22% of high school youth in Cuyahoga County currently smoke tobacco based on local YRBS data; cigarette smoking accounts for less than half of youth tobacco use. Youth in Cuyahoga County are smoking at nearly the same rate as Cuyahoga County adults (23.2% in 2012), although youth are choosing products that are less regulated, and potentially more accessible, than cigarettes.

Six Regions of Cuyahoga County

Cuyahoga County can be divided into six regions to better understand risk behaviors geographically. In 2013, data were able to be weighted to 5 of 6 regions (excluding Outer Ring—West). Region was designated by the location of the participating school and/or district, defined as:

* City 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.

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 2013, 43 of 54 high schools (79.6%) and 16,855 of 22,458 students (75.1%) participated in the survey. An overall response rate of 60% (79.6x75.1) allowed the data to be weighted to the entire population of 9th-12th grade students in Cuyahoga County. Analyses were conducted using SAS statistical software survey procedures to account for the sampling design.

Contributors:
The information in this report was obtained from the 2013 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 Erika Trapl, PhD; Jean Frank, MPH; Laura Yoder, MPH; Jeri Jewett-Tennant, MPH; and Elaine A. Borawski, PhD. For more information contact Dr. Erika Trapl (Erika.trapl@case.edu) or Dr. Elaine Borawski (Elaine.borawski@case.edu).

Suggested citation:

This data brief was supported by Cooperative Agreement Number 1-U48-FO-00390 from the Centers for Disease Control and Prevention. This work is funded either in whole or in part by a grant awarded by the Ohio Department of Health, Bureau of Child and Family Health Services, Child and Family Health Services Program as a sub-award of a grant issued by the Health Resources and Services Administration (HRSA) under the Maternal and Child Health Block Grant, grant award number 80MCU05008, and CDCA number 100594 and Am. Sub. 93.59. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or other funders.