

## University-Community Partnership in Cuyahoga County: The Youth Risk Behavior Survey

Behavior patterns that develop in childhood and adolescence can have implications for health, quality of life and longevity.<sup>1</sup> Tobacco use, alcohol consumption, unhealthy diet and lack of physical exercise are examples of 'risk behaviors' that may have negative health consequences in the short and long term. Understanding the prevalence of these risk behaviors among youth is a crucial first step towards promoting behaviors and environments that are conducive to health.

The Youth Risk Behavior Surveillance System monitors priority health risk behaviors as well as the prevalence of obesity and asthma among youth and young adults.<sup>2</sup> It includes a national school-based survey conducted by the Centers for Disease Control and Prevention (CDC) as well as state and local surveys conducted by education and health agencies. Six key areas of priority are addressed in the Youth Risk Behavior Survey (YRBS)—tobacco use; alcohol and other drug use; behaviors that contribute to unintentional injury and violence; sexual behaviors that contribute to STDs and unintended pregnancies; unhealthy dietary behaviors and physical

### WHAT IS THE PURPOSE OF THE YRBS?\*

- To monitor the prevalence of health risk behaviors among teens
- To assess changes in health risk behaviors over time
- To understand the co-occurrence of health risk behaviors
- To provide data that can be compared at the local, state and national levels; and among subpopulations of youth
- To monitor progress toward health indicators such as *Healthy People 2010*

inactivity. These priority areas have been associated with leading causes of morbidity and mortality.

The information provided by the YRBS is used at the national, state and local levels to track trends in health risk behaviors; to set goals and document progress; to provide evidence for changes in curricula and policy; and to seek support for new initiatives and legislation that promote adolescent health. It allows for the comparison of health indicators across geographic areas and over time.

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## Focus on Research at Case Western Reserve University



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Mona Shediak Rizkallah, Ph.D and Jean Frank, M.P.H. are part of a team at the Center for Adolescent Health in the Department of Family Medicine at Case Western Reserve University that spearheads local administration of the Youth Risk Behavior Survey (YRBS). The Center has been actively involved in the administration of the YRBS since 1996. In that time, the Center has conducted the YRBS in Cleveland, the first ring suburbs, and Cuyahoga County as a whole. In addition, the Center has expanded the YRBS into middle schools to capture valuable local data about health risk behaviors among younger children. YRBS reports are available from the Center's website at <http://www.case.edu/med/adolescenthealth/yrbs.html>.

### HOW YRBS DATA ARE COLLECTED

Both the national and Ohio surveys are conducted every two years and include representative data from students in 9-12th grade. At the national level, the YRBS began in 1991 and Ohio has participated in the survey since 1993.\* For the national survey, students at all participating schools complete identically-worded, anonymous, self-administered questionnaires.

At the local level, all YRBS surveys administered by the Center for Adolescent Health consist of a shared group of 66 questions taken from the national YRBS. This "Core 66" has been chosen in collaboration with a Surveillance Partnership composed of key local stakeholders in adolescent health. The inclusion of these core questions allows for comparison of local data, greater data sharing between organizations, and ultimately strengthens local surveillance efforts. Individual surveys can include more questions as necessary to improve, customize or modify surveillance efforts.

The YRBS is administered in local schools. Student participation is anonymous and voluntary. Within participating schools, classes are randomly selected to participate. In Cuyahoga County, 25 public and private high schools and nearly 5000 students participated in the most recent YRBS (2006-2007 school

year). In the City of Cleveland, the 2007 YRBS was conducted in 15 high schools with a total of 949 student participants.

Due to a high response rate (73%), the data from the Cleveland YRBS were weighted and are representative of all students from grades 9-12 in the Cleveland Metropolitan School District (CMSD). A lower participation rate (52%) in the larger Cuyahoga County YRBS limits the generalizability of the findings. Despite this, the Cuyahoga County YRBS provides insight into key trends.

### SURVEY RESULTS FOR THE CITY OF CLEVELAND<sup>3</sup>

In 2007, the Center for Adolescent Health conducted the YRBS in the Cleveland Metropolitan School District (CMSD) in partnership with Steps to a Healthier Cleveland and the Cleveland Department of Public Health. The results from this study have been weighted and can be generalized to all CMSD students in grades 9-12. They can also be compared to state and national level data. In addition, the results have been compared to the *Healthy People 2010* recommendations of the Centers for Disease Control and Prevention.

\* In Ohio, the survey is administered by the Ohio Department of Health and jointly sponsored by the Ohio Department of Alcohol and Drug Addiction Services and the Ohio Department of Mental Health.

**Key findings by priority area include<sup>5</sup>:****Tobacco Use**

CMSD high school students met the *Healthy People 2010* goal of less than 16% reporting current cigarette use. Fewer than 11% reported having smoked a cigarette during the 30 days before completing the survey.

**Alcohol and Other Drug Use**

About 34% of students had drunk alcohol during the 30 days before the survey, while just over 15% reported engaging in binge drinking within 30 days prior to the survey. Marijuana was the most commonly used illicit drug, with almost half of CMSD students using the drug at some point in their life.

**Behaviors that Contribute to Unintentional Injury and Violence**

Safety and violence were concerns of the CMSD students, with only 25% agreeing with the statement that Cleveland is a safe place to live. About 35% felt that their neighborhoods were safe. Nearly half of CMSD

students reported being in a physical fight once in the past year, which is higher than the *Healthy People 2010* goal of 32%. Almost 22 percent of students reported carrying a weapon to school in the past year, with male students more than twice as likely (30%) than female students (13%) to carry a weapon.

**Unhealthy Dietary Behaviors**

Only 19% of students reported eating fruits or vegetables five times or more per day during the seven days prior to the survey. However, a majority of the students (65%) reported having ready access to fruits and vegetables. Most students (64%) had a body mass index (BMI) within the normal range (36% reported BMIs that were either obese or overweight).

**Physical Inactivity**

Just over 15% of students had physical education classes daily, and about 25% had one class per week. This is significantly below the *Healthy People 2010* objective that 50% of students attend physical education classes daily.

**KEY YRBS INDICATORS:**COMPARISON OF LOCAL, STATE AND NATIONAL FINDINGS, *HEALTHY PEOPLE 2010* RECOMMENDATIONS AND TRENDS OVER TIME

INDICATOR	HEALTHY PEOPLE 2010 GOAL <sup>5</sup>	CLEVELAND <sup>3</sup>	OHIO <sup>2</sup>	NATIONAL <sup>2</sup>	NATIONAL TRENDS 1991-2007 <sup>2</sup>
Use of safety belts	92.0%	71.0%	85.7%	88.9%	↑
Physical fighting	32.0%	48.6%	30.4%	35.5%	↓
Weapon carrying on school property	4.9%	8.0%	4.1%	5.9%	↓
Suicide attempts in last 12 months	1.0%	3.0%	2.3%	2.0%	↓
Overweight or obese	5.0%	16.3%	12.4%	13.0%	↑
Never had sexual intercourse	56.0%	*	55.5%	52.2%	↑
Use condoms if currently sexually active	65.0%	*	60.1%	61.5%	↑
Rode with a driver who had been drinking alcohol in past 30 days	30.0%	28.7%	22.8%	29.1%	↓
Use of marijuana in the past 30 days	0.7%	24.0%	17.7%	19.7%	↑
Binge drinking alcoholic beverages in the past 30 days	3.1%	15.4%	28.8%	26.0%	↓
Cigarette use in the past 30 days	16.0%	10.8%	21.6%	20.0%	↓

\*DATA FOR THE PRIORITY AREA 'SEXUAL BEHAVIORS THAT CONTRIBUTE TO STDs AND UNINTENDED PREGNANCIES' ARE NOT CURRENTLY AVAILABLE.

## Highlights from the Cuyahoga County YRBS<sup>4</sup>

The 2006-2007 Cuyahoga County YRBS results demonstrate important between group variation in health risk behaviors and protective behaviors. For example:

Compared to male students, female students were significantly more likely to report: using alcohol, symptoms of depression and behaviors related to suicide, and being overweight (despite a higher prevalence of normal weight among girls than boys in the sample).

Male students, on the other hand, were significantly more likely to report: adequate levels of physical activity, tobacco use, and higher rates of engagement in violent behaviors such as carrying a weapon or engaging in physical fights. They were also less likely than girls to have a trusted adult to whom they could turn for help with important issues in their lives.

Girls and boys reported similar levels of engagement in sexual behaviors and contraceptive use.

Black students were at higher risk of violence, obesity and sexual activity, while white students were more likely to engage in alcohol or other drug use.

In almost every case in which a difference in risk was associated with socioeconomic status, those with lower socio-economic status were at higher risk. This includes risk behaviors related to alcohol use, tobacco, illegal drug use, violence and injuries, sexual activity and obesity. Students of low socio-economic status were also less likely to report factors that are seen as protective for health, including participating in extracurricular activities, seeing a doctor, and having a trusted adult with whom they could talk.

The results presented above provide a selection of the important information on health risk behaviors that are gained from the CMSD and Cuyahoga County YRBS surveys. Such data are invaluable for monitoring the health risks of teens and for creating programs to address demonstrated needs. Local data are particularly useful for uncovering between group differences, such as those demonstrated in the Cuyahoga County YRBS. Community-University Partnerships are instrumental both for the collection of YRBS data, and for the implementation of policies and programs that respond to the needs identified by the YRBS.

## IMPLICATIONS FOR POLICY AND PRACTICE University-Community Partnerships and the Value of Local Data

The YRBS is made possible through the collaboration of researchers, communities, schools, students and parents. These collaborations have been integral to the collection of data at the local level. While national and state level YRBS data provide a clear, useful picture of health risk behaviors among adolescents, they do not capture important local differences. Local social, economic and demographic factors can vary significantly. Local data provide opportunity for targeted programming within communities.

Here in Northeast Ohio, as the value of local surveillance data is increasingly recognized, school-based health and risk behavior data has been included as an integral component of local grants sponsored by the CDC Steps to a Healthier US, Child and Family Health Services Program, Cuyahoga County Wellness Initiative, Cuyahoga County Board of Health, Cuyahoga County Comprehensive Partnership for Tobacco Reduction, Cuyahoga County Commissioners Office and the Drug-Free Communities

Support Program through the Office of Juvenile Justice and Delinquency Prevention. These grants have been used for a number of purposes. For example, in 2004, the Cleveland Department of Public Health sought and received a Steps to a Healthier US award dedicated to reaching every member of the City of Cleveland in order to reduce high local rates of asthma, diabetes and obesity by improving nutrition and physical activity and reducing tobacco use and exposure.

Together with the Center for Adolescent Health, local partners have formed an adolescent surveillance planning committee to pool resources and help to create a sustainable survey process throughout Cuyahoga County. This will allow the county to continue to track changes in behavior over time and provide a consistent source of data for schools, community organizations and local government who work to improve the health of adolescents in Cuyahoga County.

<sup>1</sup> US Department of Health and Human Services. Tobacco use; 27-2: reduce tobacco use by adolescents. In: *Healthy people 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: US Department of Health and Human Services; 2000. Available at <http://www.healthypeople.gov/document/pdf/volume2/27tobacco.pdf>.

<sup>2</sup> Centers for Disease Control and Prevention. *2007 Youth Risk Behavior Survey*. Available at [www.cdc.gov/yrbss](http://www.cdc.gov/yrbss). Retrieved on September 25, 2008.

<sup>3</sup> Center for Adolescent Health, Case Western Reserve University, Department of Family Medicine. *2007 Steps to a Healthier Cleveland Youth Risk Behavior Survey*. Available at [http://www.case.edu/med/adolescenthealth/2007\\_HS\\_Steps\\_YRBS.pdf](http://www.case.edu/med/adolescenthealth/2007_HS_Steps_YRBS.pdf). Retrieved on September 25, 2008.

<sup>4</sup> Center for Adolescent Health, Case Western Reserve University, Department of Family Medicine. *2007-2008 Cuyahoga County Youth Risk Behavior Survey*. Available at <http://www.case.edu/med/adolescenthealth/2006-07%20CC%20YRBS%20Report.pdf>. Retrieved on September 25, 2008.

<sup>5</sup> Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. *Healthy People 2010*. Available at <http://www.healthypeople.gov>. Retrieved on September 25, 2008.