Depressive Symptoms in Cuyahoga County

Emotional health is essential to overall health and is associated with risk behaviors such as alcohol and drug use, academic achievement, overweight and obesity, school connectedness, and neighborhood safety. The Youth Risk Behavior Survey (YRBS) includes the question: “During the past 12 months, did you ever feel so sad or hopeless for two or more weeks in a row that you stopped doing some usual activities?” This one survey item assesses three indicators of a major depressive episode: experience of (1) extended (2) sadness and hopelessness, resulting in (3) interruptions of usual activities. Therefore, for the purpose of this brief, an affirmative response to this item will be referred to as “depressive symptoms.”

This brief looks at reported rates of depressive symptoms from the 2013 YRBS (n=16,855) survey of Cuyahoga County public high school students (grades 9-12) and the 2014 YRBS (n=12,607) survey of Cuyahoga County public middle school students (grades 7 and 8). Through collaboration with CWRU’s Schubert Center for Child Studies, this brief also includes information about awareness, action recommendations, and local resources.

Which Students Experience the Highest Levels of Depressive Symptoms?
Overall, 25.6% of Cuyahoga County high school students reported experiencing depressive symptoms. This is similar to the rates reported for the state of Ohio (25.8%) but significantly lower than the national rate of 33.3%. The prevalence of depressive symptoms among middle school students has rested at 20 - 21% overall since 2010 and, since 2009, at 25.5% overall among high school students.

By Region
The highest prevalence of depressive symptoms for high school students in Cuyahoga County was within the Cleveland Metropolitan School District (CMSD) West (35.3%) followed by Inner Ring-East (28.2%). The lowest prevalence for high school students in Cuyahoga County was in the Outer Ring-West (21.8%) and Outer Ring-East (21.6%) regions. (see Fig. 1)

By Gender
Among Cuyahoga County secondary school students, females were significantly more likely than males to report having experienced depressive symptoms at every grade. For females, depressive symptoms increased from 7th to 8th grade, peaked in 9th grade, and decreased through 12th grade. For males, depressive symptoms increased gradually from 7th to 12th grade. (see Fig. 2)
By Race
Students of different races/ethnicities reported differing rates of depressive symptoms. Minority students overall reported higher rates of depressive symptoms than non-minority students and higher rates than the county overall. Hispanic students reported the highest prevalence of depressive symptoms at 38.1% in high school and 31.1% in middle school. Black students and other/multiple race students reported the next highest prevalence of depressive symptoms with very similar rates. (see Fig. 3)

A much higher percentage of Hispanic female students reported depressive symptoms than white female students. At the high school level, reporting levels were 49.7% of Hispanic females vs. 29.9% of white females. At the middle school level, reporting levels were 44% of Hispanic females vs. 29.1% of white females.

What to Look For:
Parents and educators should be aware of signs of adolescent depression. The American Medical Association recommends that pediatricians screen for depression annually beginning at age 11. While all adolescents may exhibit some of these behaviors some of the time, consider seeking professional help if a child (1) shows several signs at the same time, (2) has symptoms over a long period of time, and (3) is having difficulty functioning due to these symptoms. Adolescent girls may be more likely to exhibit depression as guilt, body image issues, self-blame, feelings of failure, sleep difficulties, fatigue, and physical ailments. Adolescent boys may show greater morning tiredness and sadness and inability to find pleasure in typical activities. 3,4 The National Alliance on Mental Illness (NAMI) has some resources specifically related to minority students. Some common signs for all students include:

Behavioral Problems
- A sudden or unusual change in behavior or mood
- Moodiness throughout the day: sulking, irritability, inappropriate and frequent anger or rage, frequent whining or crying
- Withdrawal or isolation from others, extreme fear of rejection
- Over-activity, increased physical agitation
- Unusual interest or pleasure in violence, threats, or bullying
- Self-destructive behaviors; recklessness, substance abuse, self-injury, eating disorders
- Running away, acting out in school, skipping school

Thinking Difficulties
- A sudden drop in grades or in the quality of schoolwork, difficulty concentrating or making decisions
- Forgetfulness, confusion, doing the wrong assignments, missing parts of tests

Physical Problems
- Significant weight gain or loss, changes in appetite
- Excessive fatigue or sleepiness and/or inability to fall asleep or stay asleep
- Multiple, vague physical complaints without obvious causes: headaches, stomach aches, fainting, nausea

Troubled Feelings
- Prolonged periods of sadness, worrying, fear, feeling empty, hopelessness
- Loss of interest or pleasure in most activities
- Unnecessary anxiety, tension, high stress, low tolerance for frustration, inappropriate feelings of guilt

Suicide Risk
- Prolonged or repeated interest in death, morbidity, or suicide

Roughly 12,000 high school students in Cuyahoga County experienced depressive symptoms

more than 4,500 purposely hurt themselves
more than 2,700 attempted suicide*

*based on weighted data from the 2013 YRBS
What Are Students Who Reported Depressive Symptoms Also Experiencing?

**Risk Behaviors**
At both the middle school and high school levels, students who reported depressive symptoms participated in risk behaviors at much higher levels than did students not reporting depressive symptoms. These students were more likely to have ever tried cigarettes, cigars, alcohol, marijuana, or illicit drugs than students who did not report depressive symptoms (see Fig. 4). The rates of self-harm and suicidal behaviors were also much higher among high school students reporting depressive symptoms in the past 12 months. (Purposely hurt themselves 38.4% vs. 9.3%, seriously considered suicide 38.1% vs. 5.5%, and ever attempted suicide 22.2% vs. 6%). See “What to Look For” section for signs of adolescent depression.

**Bullying and Violence**
High school students who reported depressive symptoms also reported higher rates of external factors, such as bullying and violence (see Fig. 5). Of those reporting depressive sadness, 33.4% had been bullied on school property during the past 12 months and 27.8% had been bullied through email, text, the Internet, etc. (cyber-bullying). These rates compare to 14.6% and 9.9 percent, respectively, for those students not reporting depressive symptoms. A much larger proportion of high school students reported being in a physical fight in the last year if they reported depressive symptoms (36% of students compared to 23%). Just over 20% of those who reported depressive symptoms had been physically hurt (on purpose) by someone they were dating, while 6.2% of those not reporting depressive symptoms had been physically hurt by a dating partner.

**Sense of Community**
High school students reporting depressive symptoms were also less sure of their place in and importance to the larger community, with a total of 76% stating they were “not sure” or “disagree” that they matter in the community compared to 57.3% for high school students not reporting depressive symptoms.

**School Performance**
Depressive symptoms are not clearly associated with poor academic achievement. The converse is also true: high academic achievement does not insulate students from reporting depressive symptoms. Of those students reporting depressive symptoms, 63.8% reported earning A’s and B’s and 36.2% reported earning C’s or lower. Among high school students not reporting depressive symptoms, 75% reported A’s and B’s, and 25% reported earning C’s or lower.
Conclusions and Recommendations
The rates of secondary school students who reported depressive symptoms have remained fairly constant (21%—Middle School and 26%—High School) since 2009 when the PRCHN began reporting YRBS data for each of Cuyahoga County’s six regions. Awareness regarding this prevalence needs to be addressed among educators, administrators, parents, and mental health providers in Cuyahoga County. The Cuyahoga County YRBS Advisory Committee has noted the lack of decline in the rates of depressive symptoms and made recommendations regarding identification of adolescents with depression and mental health issues, enhancing access to mental health services, and prevention through evidence-based curricula.

In order to increase identification, the advisory committee recommends promoting universal depression screening through an easily administered screening tool in schools, pediatric offices, and clinics. Enhancing access to mental health services would involve developing a referral form for providers, a network of culturally sensitive mental health providers who will respond within 72 hours of a referral, and offering the necessary training for screening, identification, and referral. In addition to identification and treatment of these adolescents, the advisory committee encourages the promotion of evidence-based behavioral (mental health and substance abuse) prevention curricula for community and school-based implementation.

Resources

General:
- www.adamhscc.org or 216-241-3400 (ADAMHS Board of Cuyahoga County supports several providers of school-based mental health services throughout the county and can refer caregivers to children’s providers in their specific area.)
- www.nami.org (National Alliance on Mental Illness)
- www.mentalhealthamerica.net/conditions/childrens-depression-checklist
- www.mentalhealthfirstaid.org (training course)
- www.crpn.net (Cleveland Regional Perinatal Network, addressing maternal, adolescent and child mental health from a public health perspective)

For Parents and Teachers:
- www.units.miamioh.edu/csbmhp/network/toolkit.pdf (School-based mental health toolkit developed for Cuyahoga County schools in 2008)
- www.redflags.org (Framework and toolkit for school-based mental health)

Culturally competent mental health care:
- www.nami.org (Diverse Communities program)
- www.psychiatry.org/mental-health/people/hispanics-latino (American Psychiatric Association Hispanic/Latino resources)
- MetroHealth (Cleveland): Latina Clinic 216-778-2222
- Neighborhood Family Practice (Cleveland): Works with immigrant populations
- Cleveland Catholic Charities: Works with immigrant populations
- Cleveland Clinic: Pediatric psychiatry fellows program


Full data modules from the YRBS are available online at: http://www.prchn.org/yrbsresults.aspx

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 Cuyahoga County high schools (79.6%) and 16,855 of 22,458 county students (75.1%) participated in the survey. In 2014, 97 of 109 selected schools (89%) and 12,607 of 14,682 students (85.9%) participated in the survey. Each year, overall response rates of at least 60% (60% in 2013 and 76.5% in 2014) allowed the data to be weighted to the entire population of 7th–12th grade students in Cuyahoga County. Analyses were conducted using SAS/SPSS Statistical software survey procedures to account for the sampling design.

Contributors: The information in this report was obtained from the 2013 and 2014 Youth Risk Behavior Survey. These surveys were modeled after the CDC state-based system of health surveys administered by each state. This data brief was prepared and authored by the PRCHN (Jean Frank, MPH; Audrey Kinsella, MPH; Shelby Barnes, BS; Susan Petrone, MA; Maris Howell, and Erika Trapl, PhD), with additional content from the Schubert Center for Child Studies (Gabriella Celeste, JD; and Sarah Miller-Fellows). For more information contact Jean Frank (Jean.Frank@case.edu) or Dr. Erika Trapl (Erika.Trapl@case.edu).