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Highlights from the 2009 New Mexico High School Youth Risk and Resiliency Survey

The New Mexico Youth Risk and Resiliency Survey (YRRS) is a survey of risk behaviors* and resiliency (protective) factors among public middle and high school students in New Mexico. The NM YRRS is a part of the national Youth Risk Behavior Survey (YRBS) designed by the Centers for Disease Control and Prevention (CDC). The YRBS is conducted nationally by the CDC and at the state level by participating education and health departments. The YRRS has been conducted by the NM Department of Health and the Public Education Department in the fall semester of odd numbered years since 2001 in high schools (grades 9 – 12) and since 2007 in middle schools (grades 6 – 8). Results from the 2009 YRRS, the most recent survey, are presented here.

Major Findings

Recent results demonstrate downward trends in the rates of the following key measures among high school students:

- Past-year suicide attempts (2009=9.7%; 2003=14.5%)
- Current cigarette smoking (2009=24.0%; 2003=30.2%) (Figure on last page)
- Binge drinking (2009=25.0%; 2003=35.4%)
- Current cocaine use (2009=5.6%; 2003=8.9%)
- Current methamphetamine use (2009=3.9%; 2003=7.3%)
- Teen dating violence (2009=9.8%; 2007=12.6%).

There was an upward trend in the prevalence of obesity (2009=13.5%; 2003=10.2%).

For many risk behaviors, especially alcohol, tobacco, and other drug use, the increase in prevalence by grade level was much higher during the middle school years than the high school years.

Students with high levels of caring and supportive relationships with parents, teachers, adults in the commu-

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nity, or peers were far less likely than other students to engage in most measures of alcohol, tobacco, or drug use; violence; suicide attempts; or to be overweight or obese. They were also more likely to engage in recommended levels of physical activity. They were neither more nor less likely to be sexually active or to use condoms when they had sexual intercourse. Caring and supportive relationships with parents or teachers tended to be more closely associated with less risky behavior than similar relationships with other adults or peers.

Overview of Selected Risk Behaviors

Suicide Attempts – The rate of past year suicide attempts among high school students decreased to 9.7%, from highs of 14.5% (2003) and 14.3% (2007). The difference in prevalence between girls (11.7%) and boys (7.6%) was not statistically significant. The difference by grade level was not statistically significant (9th=11.7%; 10th=9.6; 11th=8.3%; 12th=7.9%). The NM rate (9.7%) was higher than the US rate** (6.3%). Among middle school students, 6.8% reported ever trying to kill themselves. This was more common among girls (9.0%) than among boys (4.7%). The difference by grade level was not statistically significant (6th=5.4%; 7th=6.8%; 8th=7.9%).

Obesity – Among high school students, the rate of obesity increased to 13.5%, from a low of 10.2% in 2003. Boys (18.3%) were more than two times as likely to be obese than girls (8.5%). There was no statistically significant variation for obesity by grade level (9th=12.5%; 10th=13.7%; 11th=13.3%; 12th 14.8=%). The US rate (12.0%) was similar to the NM rate (13.5%).

Cigarette Smoking – The prevalence of current ciga-

rette smoking among high school students decreased to 24.0%, from a high of 30.2% in 2003. The rate among girls (23.2%) was similar to that among boys (24.6%). The NM rate was 24.0% and the US rate was 19.5%. Among middle school students, the prevalence of current cigarette smoking was 6.8%. The difference between girls (7.4%) and boys (6.2%) was not statistically significant. From grades 6 – 8, the rate of current cigarette smoking increased by 258% ($6^{\text{th}}=3.3\%$; $7^{\text{th}}=5.1\%$; $8^{\text{th}}=11.8\%$), while from grades 9 – 12, the rate increased by 53% ($9^{\text{th}}=19.8\%$; $10^{\text{th}}=22.9\%$; $11^{\text{th}}=24.6\%$; $12^{\text{th}}=30.3\%$).

Binge Drinking – Binge drinking was reported by 25.0% of high school students, down from a high of 35.4% (2003). The rate for girls (25.4%) was similar to that for boys (24.5%). There was no statistically significant difference between NM (25.0%) and the US (24.2%). Among middle school students, 8.6% were binge drinkers. The rates for girls (8.8%) and boys (8.5%) were similar. From grades 6 – 8, the rate of binge drinking increased by 286% ($6^{\text{th}}=3.6\%$; $7^{\text{th}}=8.1\%$; $8^{\text{th}}=13.9\%$), while from grades 9 – 12, the rate increased by 45% ($9^{\text{th}}=20.1\%$; $10^{\text{th}}=25.4\%$; $11^{\text{th}}=26.6\%$; $12^{\text{th}}=29.2\%$).

Drinking and Driving – 9.7% of high school students drove when they had been drinking in the past 30 days, down from 19.1% in 2003. The rates for girls (9.6%) and boys (9.8%) were similar. There were no statistically significant differences by grade level ($9^{\text{th}}=7.9\%$; $10^{\text{th}}=9.4\%$; $11^{\text{th}}=10.2\%$; $12^{\text{th}}=11.9\%$). There was no difference between the US rate (9.7%) and the NM rate (9.7%).

Drug Use – The prevalence of current marijuana use among high school students was 28.0%. There was no statistically significant trend by year since 2003 (29.0%). The difference between the rate for girls (28.2%) and boys (27.8%) was not statistically significant. The NM rate (28.0%) was higher than the US rate (20.8%), and was the highest rate among the 42 states participating in the YRBS. Among middle school students, 9.4% were current marijuana users. There was no statistically significant difference between girls (9.0%) and boys (9.9%). From grades 6 – 8, the rate of current marijuana use increased by 266% ($6^{\text{th}}=4.4\%$; $7^{\text{th}}=7.2\%$; $8^{\text{th}}=16.1\%$), while from grades 9 – 12, the rate increased by 24% ($9^{\text{th}}=23.8\%$; $10^{\text{th}}=30.4\%$; $11^{\text{th}}=28.7\%$; $12^{\text{th}}=29.5\%$).

Sexual Intercourse – 48.0% of high school students ever had sexual intercourse. There was no trend by year compared to previous years. There was no statistically significant difference between girls (46.2%) and boys (49.8%). 10.8% of middle school students ever had sexual intercourse. This was more common among boys (14.0%) than girls (7.8%). From grades 6 – 8, the rate of ever had sexual intercourse increased by 233% ($6^{\text{th}}=5.2\%$; $7^{\text{th}}=9.3\%$; $8^{\text{th}}=17.3\%$), while from grades 9 – 12, the rate increased by 105% ($9^{\text{th}}=31.2\%$; $10^{\text{th}}=47.2\%$; $11^{\text{th}}=54.1\%$; $12^{\text{th}}=64.1\%$).

Physical Activity – Among high school students, 23.4% met recommended levels of physical activity. The rate among boys (29.4%) was higher than among girls (17.5%). NM (23.4%) had a higher rate of meeting recommended levels of physical activity than the US (18.4%). Among middle school students, 30.2% met recommended levels of physical activity. The rate among boys (35.9%) was higher than among girls (24.6%). While the rate of meeting recommended levels of physical activity was higher among middle school students than high school students, there were no statistically significant differences by grade level in either middle school ($6^{\text{th}}=27.3\%$; $7^{\text{th}}=32.7\%$; $8^{\text{th}}=30.7\%$) or high school ($9^{\text{th}}=26.3\%$; $10^{\text{th}}=22.8\%$; $11^{\text{th}}=22.0\%$; $12^{\text{th}}=21.8\%$).

Bullying – For the first time in 2009, a question about bullying was included in the NM YRRS. Among high school students, 19.5% had been bullied on school property. There was not a statistically significant difference between girls (21.2%) and boys (17.7%). The NM rate (19.5%) was similar to the US rate (19.9%). Among middle school students, 31.2% had been bullied at school. Girls (31.6%) had a similar rate to that of boys (31.1%). From grades 6 – 8, the rate of bullying decreased by 18% ($6^{\text{th}}=34.5\%$; $7^{\text{th}}=31.0\%$; $8^{\text{th}}=28.3\%$). Over grades 9 – 12, the rate of bullying decreased by 38% ($9^{\text{th}}=23.5\%$; $10^{\text{th}}=21.7\%$; $11^{\text{th}}=15.7\%$; $12^{\text{th}}=14.6\%$).

Physical Fighting – 37.3% of high school students were in a physical fight in the past 12 months. There was no statistically significant trend by year since 2003. The rate among boys (44.5%) was higher than among girls (29.8%). The NM rate (37.3%) was higher than the US rate (31.5%), and was the highest rate among the 42 YRBS states. Among middle school students, 50.4% had ever been in a physical fight. The

rate among boys (64.8%) was higher than among girls (35.8%). While the rate of ever being in a physical fight increased by 32% over grades 6 – 8 (6th=43.8%; 7th=49.7%; 8th=57.6%), the rate of being in a physical fight in the past 12 months decreased by 21% over grades 9 – 12 (9th=41.6%; 10th=37.3%; 11th=35.2%; 12th=32.8%).

Risk and Resiliency Factors

High school students were asked a series of questions about their relationships with others, and were classified as having either low, medium, or high levels of caring and supportive relationships with parents or other adults in the home, teachers or other adults in the school, adults in the community (outside of the home or school), and peers. Students with high levels of these relationships were compared to those with low levels with reference to selected risk behaviors.

Students with low levels of caring and supportive relationships with parents were more likely than those with high levels to: be current cigarette smokers (34.8% vs. 18.3%), be binge drinkers (34.3% vs. 19.7%), be current marijuana users (40.5% vs. 21.4%), be current cocaine users (10.9% vs. 3.5%), attempt suicide in the past 12 months (24.3% vs. 4.9%), be in a physical fight in the past 12 months (53.4% vs. 30.7%), or be overweight or obese (36.6% vs. 25.3%).

Students with low levels of caring and supportive relationships with teachers were more likely to: be current cigarette smokers (33.2% vs. 18.6%), be binge drinkers (33.7% vs. 21.0%), be current marijuana users (38.8% vs. 21.8%), be current cocaine users (9.3% vs. 3.7%), attempt suicide in the past 12 months (21.9% vs. 5.9%), be in a physical fight in the past 12 months (48.6% vs. 31.3%), or be overweight or obese (35.7% vs. 23.8%).

Students with low levels of caring and supportive relationships with adults in the community were more likely to: be current cigarette smokers (28.6% vs. 21.5%), be current marijuana users (34.0% vs. 23.2%), be current cocaine users (8.7% vs. 3.8%), attempt suicide in the past 12 months (18.3% vs. 7.0%), be in a physical fight in the past 12 months (45.3% vs. 33.7%), or be overweight or obese (37.0% vs. 24.4%).

Students with low levels of caring and supportive relationships with peers were more likely to: be current

cocaine users (10.7% vs. 4.1%), attempt suicide in the past 12 months (18.2% vs. 7.9%), be in a physical fight in the past 12 months (44.7% vs. 33.4%), or be overweight or obese (38.9% vs. 24.1%).

Discussion

While New Mexico has seen improvement in the rate of several key risk behaviors over recent years, serious concerns remain, especially in the areas of drug use, alcohol use at an early age, suicide attempts, and violence. YRRS results have clear implications for the development and implementation of prevention programs throughout New Mexico. Participation in this important surveillance effort should be supported and encouraged at the state and local level.

* Descriptions of Risk Behaviors

- *Current use of alcohol, tobacco, or other drugs* - use within the past 30 days.
- *Binge drinking* - at least five alcoholic drinks in a row, or within a couple of hours, at least once in the past 30 days.
- *Teen dating violence* - Hit, slapped, or physically hurt on purpose by boyfriend/girlfriend in the past 12 months.
- *Obese* - ≥95th percentile for body mass index (BMI), by age and sex, based on reference data. BMI calculated from self reported height and weight. BMI was not assessed in the MS survey.
- *Carrying a weapon* – such as a gun, knife, or club, in the past 12 months.
- *Cigar use* – cigars, cigarillos, or little cigars.
- *Met recommended levels of physical activity* – on at least of 7 of the last 7 days, engaged at least 60 minutes of physical activity that caused an increased heart rate or caused the student to breathe hard some of the time.
- *Persistent feelings of sadness or hopelessness* – felt so sad or hopeless almost every day for at least 2 weeks within the past 12 months that they stopped some usual activities.
- *Sexually active* – had sexual intercourse with at least one person in the past 3 months.
- *Ever had sexual intercourse* – MS: Answered “Yes” to the question, “Have you ever had sexual intercourse?”; HS: Gave an age as a response to the question, “How old were you had you had sexual intercourse for the first time?”
- *Bullying* – bullied on school property in the past 12 months (HS) or ever in lifetime (MS).

** US rates are from Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance — United States, 2009. Surveillance Summaries, June 4, 2010. MMWR 2010;59(No. SS-5).

The New Mexico Epidemiology Report

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