

HEALTHY YOUTH: AGE 7-17

KEY ISSUES

- Nearly half of all households with children in Manchester have only one parent. A growing number of households with children are struggling financially and are seeking forms of assistance.
- Area youth face an array of challenges related to drug use, neighborhood violence, and educational achievement.
- Community support to improve youth behaviors associated with healthy living including healthy eating, increased exercise, and decreased screen time should be enhanced.
- Risky behaviors put area youth at risk for teen pregnancy and sexually transmitted diseases; for example, the rate of chlamydia infection among Manchester teens is more than twice that of the rest of the state.
- Access to oral health care has improved for youth in Manchester, but some youth still do not have a dentist or dental insurance.
- Mental health issues are a concern for Manchester youth. For example, 7.5% of Manchester teens reported they attempted suicide within the last year (2007).

OVERVIEW

Today's youth are tomorrow's leaders. They are also our future parents, consumers and workforce and are a vital component of our community. The current health of school age children has effects that reach far into adulthood, and is an important determinant of individual opportunity and social equity.³²

The journey from childhood through adolescence is filled with opportunities and challenges. Youth are bombarded with choices that affect their health on a daily basis. Adolescents are particularly prone toward risk-taking behaviors and may not always have family-based role models to guide them. Since many health behaviors are learned and established during the critical time of childhood and adolescence, community support (funding and programmatic) for education, program development, and environmental security should be heavily weighted to support this young population.

Manchester's School Nurses described "Healthy Youth" as a scenario in which youth have good nutrition, exercise, hygiene, sleep, access to health care, a family support system, a home, opportunity to play, safety, good education, and self esteem. They would also not experience violence or abuse, and would avoid risky behaviors.

DEMOGRAPHICS

In 2000 (the most recent year for which Census data exist for the surrounding Manchester HSA towns) 20% of the population of these towns was made up of 5 to 17 years old (12,500 children) compared to 17% of the Manchester City population. In 2007, 14,478 children ages 6 to 17 make up more than 13% of the total City population (2007).⁸

POPULATION OF 5-17 YEAR OLDS, 2000		
TOWNS	NUMBER IN 2000	% OF TOWN POPULATION
Manchester	18,196	17.0%
Auburn	1,028	22.0%
Bedford	3,892	21.3%
Candia	777	19.9%
Deerfield	834	22.7%
Goffstown	2,942	17.4%
Hooksett	2,085	17.8%
New Boston	942	22.8%

Source: United States Census Bureau, 2000

POPULATION OF 6-17 YEAR OLDS, 2007			
IN MANCHESTER	NUMBER IN 2007	PERCENT OF MANCHESTER POPULATION, 2007	ACROSS NEW HAMPSHIRE, PERCENT OF POPULATION, 2007
6 to 8 years	3,751	3.4%	3.8%
9 to 11 years	2,685	2.5%	3.6%
12 to 14 years	4,306	4.0%	4.1%
15 to 17 years	3,737	3.4%	4.4%
Total 6 to 17	14,478	13.3%	15.8%

Source: American Community Survey, 2007

CURRENT HEALTH

The most common causes of death among youth ages 5 to 17 in New Hampshire are as follows;³³

- Accidents
- Malignant neoplasms
- Perinatal conditions
- Intentional self-harm
- Congenital malformations, deformations and chromosomal abnormalities

For the most part, the rate of death from each of these causes does not differ significantly between Manchester, the HSA or the state. Death among youth ages 5 to 17 years is rare. Accidents or unintentional injury, which may result from an unsafe physical environment, are the leading cause of death among Manchester children ages 5 to 17. The tragedy of these deaths is that in many instances they are preventable. In the HSA, 8.6% of youth ages 5 to 17 were seen in emergency rooms for unintentional injuries, not counting motor vehicle accidents, while in the rest of New Hampshire, approximately 12% of youth were seen.³⁴ Males are seen more often than females.¹⁵ Nationally, the most common cause of nonfatal unintentional injuries among children is falls followed by being struck by or against an object.

The most common reasons children ages 5 to 17 in Manchester, the HSA, and the state are hospitalized are for:³⁴

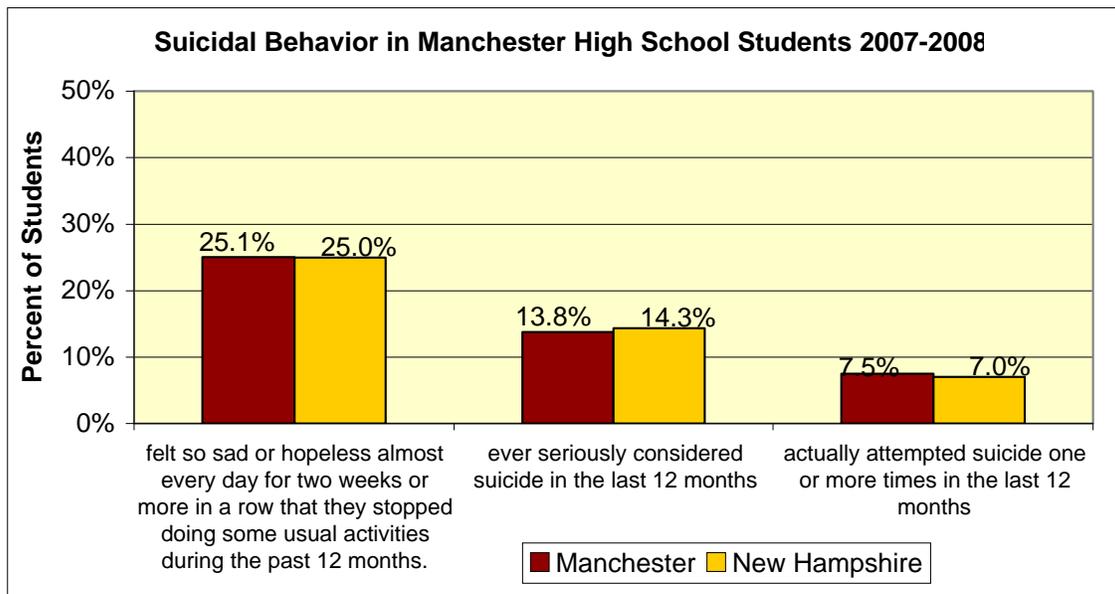
- Acute appendicitis
- Asthma
- Diabetes
- Mood disorders
- Pneumonia

Of the 15,807 students in the Manchester school system in the 2008-2009 school year, 8.5% were listed on school medical alerts lists for asthma.³⁵ Youth age 5 to 17 years are hospitalized for asthma at a rate of less than 1 per 1,000 in Manchester, the HSA, and the rest of the state. More boys are hospitalized for asthma than girls.³⁶

Historically, Type II Diabetes (often a preventable condition) was not a childhood problem and was seen very rarely in children and adolescents. The current higher prevalence of diabetic rates among youth are thought to be associated with increased overweight and obesity and decreased physical activity as shown below:³⁵

- Of all first grade children screened at schools in Manchester in 2009, 13.4% of them were identified as meeting the definition of “obese”.³⁵ The Healthy People 2010 goal is 5%.³⁵
- More than half (54.5%) of Manchester’s high school students reported not getting the recommended amount of physical activity.³⁷

Mental health is a significant component of our youths’ overall health status. The chart below describes several aspects of mental health in the youth population in Manchester and the state that are concerning to health and public health officials.



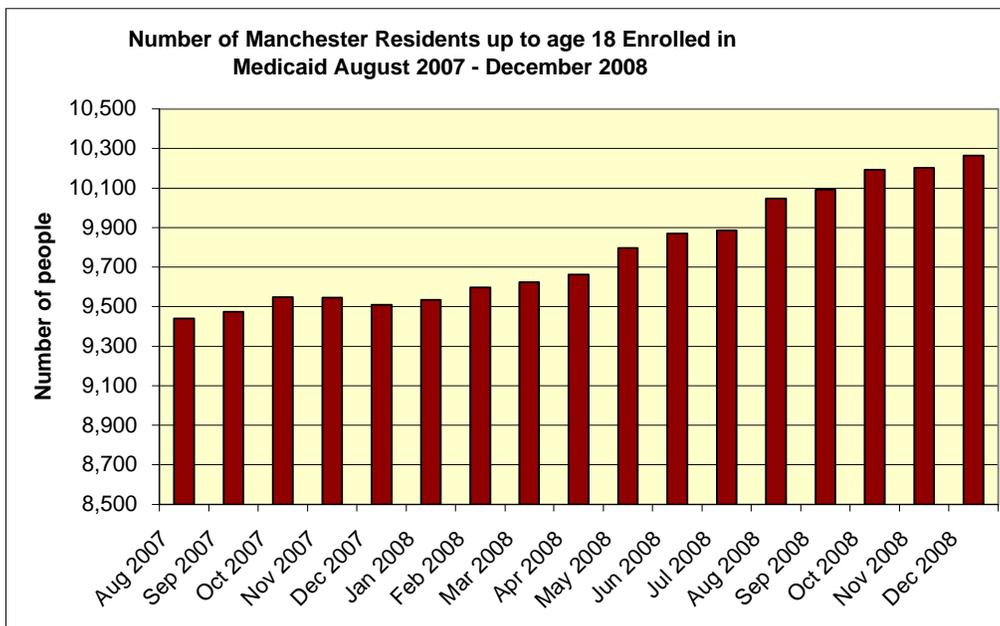
Source: NH Youth Risk Behavior Surveillance System, 2007

In the 2007–2008 Youth Risk Behavior Surveillance System Survey over 25% of Manchester high school students reported that during the past twelve months they had (almost every day for two weeks or more) felt so sad or hopeless that it affected their everyday activities. Also concerning is that approximately 7.5% of Manchester students reported attempting suicide one or more times in the past year. This is much higher than the national Healthy People 2010 benchmark of 1.0%.³⁷ Data for these measures are unavailable for the other HSA towns.

ACCESS TO HEALTHCARE SERVICES

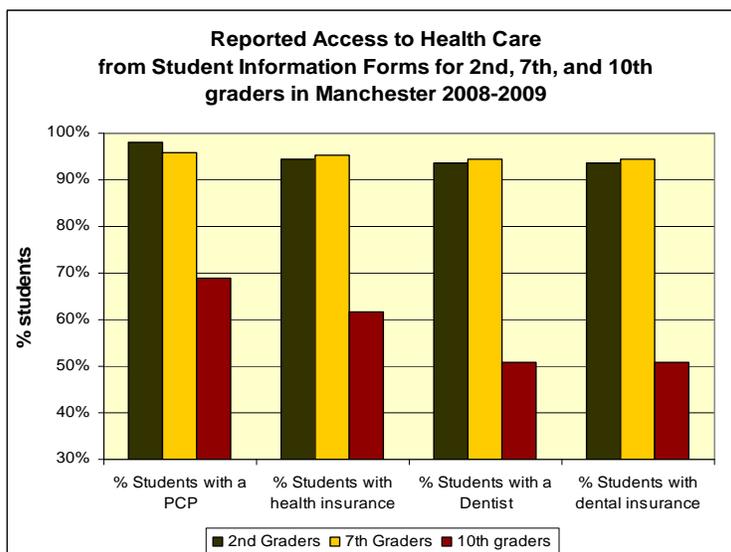
Access to health care is an important predictor of a child's overall health status. Youth need regular contact with a primary care provider in order to get appropriate health information, regular preventive check-ups, and for management of any health conditions.

The state has made it affordable for families to purchase health insurance for their children through its Medicaid program. The number of Manchester youth who are enrolled in Medicaid health insurance has increased over the last two years.³⁸ However, the lower provider reimbursement rate of New Hampshire Medicaid is an increasingly common barrier to becoming a patient of a defined medical practice and obtaining a regular source of health care.



Source: NHDHHS Medicaid Office

Most of Manchester's second and seventh grade school children (98% and 96%) reported having a primary care provider (PCP) on school health information forms; however this number dropped to 69% among tenth graders.



Source: Manchester Health Department

Fewer children in each of these three grades reported having a dentist.³⁵ However, since the beginning of the 2008-2009 school year Manchester children have had increased access to oral health services. Dental staff from the Manchester Health Department and Easter Seals New Hampshire provided full dental care (diagnostic, preventive and limited restorative care) to 414 elementary and middle school students (2008-09) and will continue to expand these services. Students are referred to dental services at Catholic Medical Center Poisson Dental Facility or Easter Seals Dental Center.³⁹ *

Insurance status among students differs by race and ethnicity. Latino first graders were the most likely to be uninsured (29.6%) or not have a primary care provider (29.5%), and White, non-Hispanic first graders were the least likely to be uninsured (9.7%) or have no primary care provider (6.5%) as evidenced by 2004 local school data. Both Black and Latino children surveyed indicated higher percentages having no primary care physician compared to White, non-Hispanic children.⁴⁰

RISKS TO FUTURE HEALTH

HEALTH BEHAVIORS

Behavior is linked to health at all points in the lifespan, but nowhere is the relationship more profound than during childhood and adolescence. Many health behaviors are adopted at young ages, and these behaviors often persist through adulthood. For example, it is well-established that early smoking initiation predicts longer duration of smoking, heavier daily consumption, and increased chances of nicotine dependence.⁴¹⁻⁴⁵ Approximately 80% of adults who currently use tobacco started smoking before age 18. Youth make behavioral choices that affect their health on a daily basis, from the nature of their relationships, to what they consume, to how much they use a computer or cell phone. The table below describes the changes in health risk behaviors from 2005-2007 as reported by the Youth Risk Behavioral Survey (YRBS).

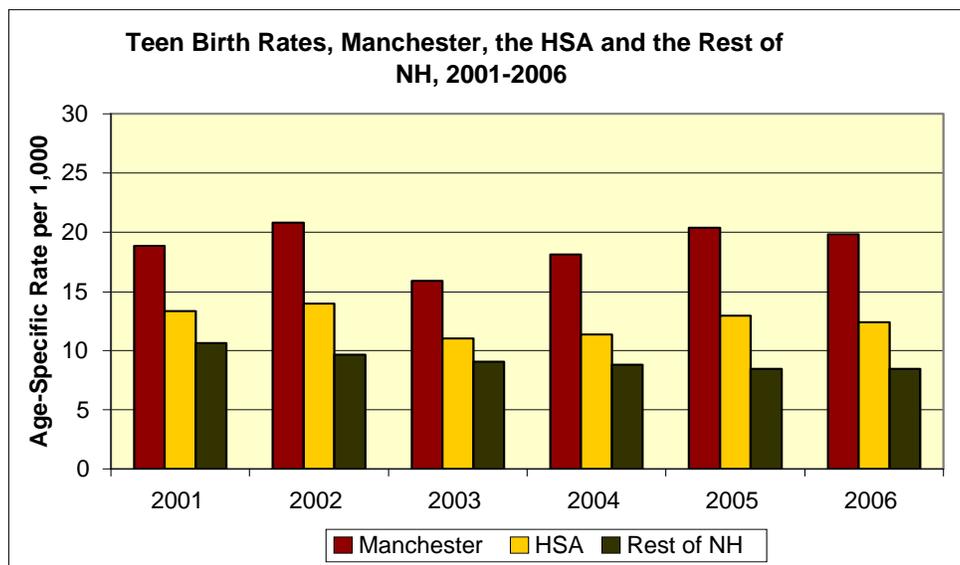
HEALTH RISK BEHAVIORS			
	MANCHESTER 2005	MANCHESTER 2007	CHANGE
Physical Activity. Percentage of students who were physically active for a total of 60 minutes or more per day on five or more of the past seven days.	32.3	45.5	↑
Binge Drinking. Percentage of students who had 5 or more drinks of alcohol in a row, that is, within a couple of hours on one or more of the past 30 days.	25.8	26.7	□
Drug use. Percentage of students who used marijuana one or more times during the past 30 days.	23.1	23.3	□
Smoking. Percentage of students who smoked cigarettes on one or more of the past 30 days.	19.8	16.6	↓
Sexual Activity. Percentage of students who have ever had sexual intercourse.	41.6	44.5	↑
Safety Devices. Percentage of students who never or rarely wore a seat belt when riding in a car driven by someone else.	14.2	13.5	□
◆=health-encouraging change in behavior; ◆=risky change in behavior; □ =no significance change in behavior Source: Manchester Youth Risk Behavior Surveillance System (YRBSS), 2007			

* Made possible by the donation by the Kivans of a mobile dental van (1999), on-going funding from the NH School-Based Oral Health Program and recent funding from The Manchester Sustainable Access Project.

Children and adolescents are more likely to engage in high-risk behaviors, such as unprotected sex, when they are under the influence of drugs or alcohol.

- Approximately 27% of Manchester high school students surveyed reported binge drinking (having five or more drinks of alcohol in a row, within a couple of hours) in the last month, a markedly higher percentage than the Healthy People 2010 goal of 2%.
- Manchester’s students are engaging in sexual activity and are at risk for teenage pregnancy and sexually transmitted diseases.
- Almost half of Manchester’s high school students reported having had sexual intercourse and 38% of those who had sex in the past three months did not use a condom.³⁷
- 135 babies (about 9% of all births in the City) were born to teen mothers in 2006.¹⁵
- 1,628 per 100,000 Manchester teens (more than one in a hundred) were infected with Chlamydia in 2008. In the HSA, 1,027 per 100,000 teens; and in the rest of New Hampshire 583 per 100,000 teens; were infected with Chlamydia. Manchester City and Manchester HSA rates are significantly higher than the rest of New Hampshire.⁴⁶

In Manchester City, the rate of teen births remained significantly higher compared to Manchester HSA and the state (2001-2006). It is important to note, that within the higher City rate of teen births, there is a great disparity in rates across Census Tracts. Cumulative birth data from 1999 to 2003 showed that in Census Tracts 15 and 13 (located in Manchester’s Center City) 21.1% and 17.3% of births were to teens; while in the rest of the City 8.6% of births were to teens.⁴⁷



Source: NHDHHS

PHYSICAL ENVIRONMENT/SAFETY

Risks to youth health and well-being may be connected to violence. Youth who exhibit consistent violent behavior are more likely than their nonviolent peers to have other problems such as substance use, early pregnancy, academic problems, and poor mental health.⁴⁸ Frequent violent television viewing by children has been associated with aggressive behavior in longitudinal research.¹⁸ Hitting, kicking, stabbing and shooting are seen daily as ways to deal with anger and frustration. “Screen time”

also reduces time spent engaging in family activities, interacting with peers and engaging in physical activity.

- In 2007, 28% of Manchester’s high school students reported being in one or more physical fights.³⁷
- 113 simple assaults and two aggravated assaults among school age youth in Manchester were recorded by police.⁴⁹
- Police recorded six counts of forcible rape, 18 counts of weapons possession, and 31 counts of disorderly conduct committed by youth age 11 to 17 in Manchester in 2008.⁴⁹

FAMILY AND SOCIAL ENVIRONMENT

As youth grow and develop, they are very susceptible to the influences of their family and social surroundings. Their families and relationships with other adults and peers are important aspects of determining health outcomes, both immediate and long term.

Some research has shown that social belonging or social “connectedness” is a vital concept that relates to children’s health, both in prevention and treatment. It has been suggested that if a child has a strong feeling of connection to family and school, it is a protective factor against certain risk behaviors, such as promiscuity or substance abuse.⁵⁰⁻⁵² About one-third of Manchester’s high school students spend time in extra-curricular (non-sports) activities. Even more impressive is that 40% of high school students feel that they “matter” to their community.³⁷

COMMUNITY CONNECTIONS		
	MANCHESTER 2007	NH 2007
Students who during an average week spend 1+ hours in clubs or organizations (non-sports) outside of school.	27.7%	27.4%
Students who agree or strongly agree that they feel like they matter to people in their community.	39.5%	39.1%
Students who performed any kind of community service as a volunteer in the last 30 days.	38.0%	40.6%
<i>Source: NH Youth Risk Behavior Surveillance System, 2007</i>		

Other aspects of the family and social environment that are a part of the health-determining context surrounding the youth population in Manchester include:

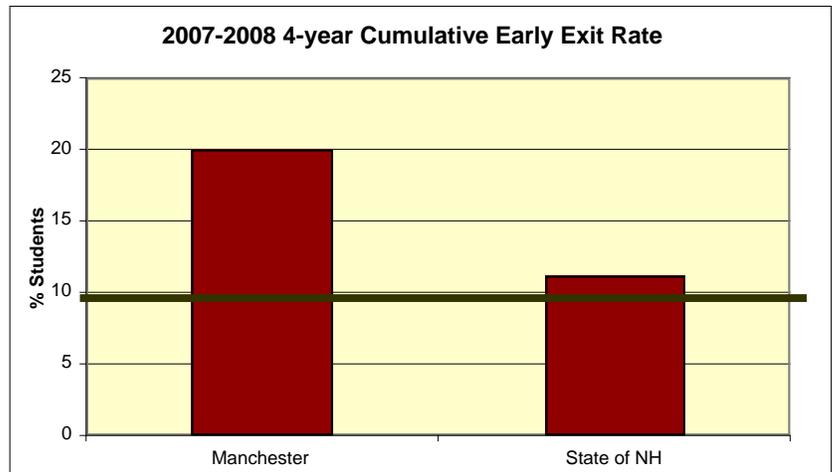
- household makeup - forty-five percent of the 13,332 households with children under 18 in Manchester were single-parent households; 53% were two-parent households (2007);⁸
- child maltreatment - sixty-one founded cases of child abuse or neglect were identified in Manchester (2008);⁵³ and
- foster care - in Manchester, the number of children needing foster care placement has been declining as a proportion of reported cases. For example, foster care placement declined from 164 in 2007 to 138 in 2008.⁵³

EDUCATION

For youth, academics and health are closely related—a child’s health status can directly affect his or her academic success.

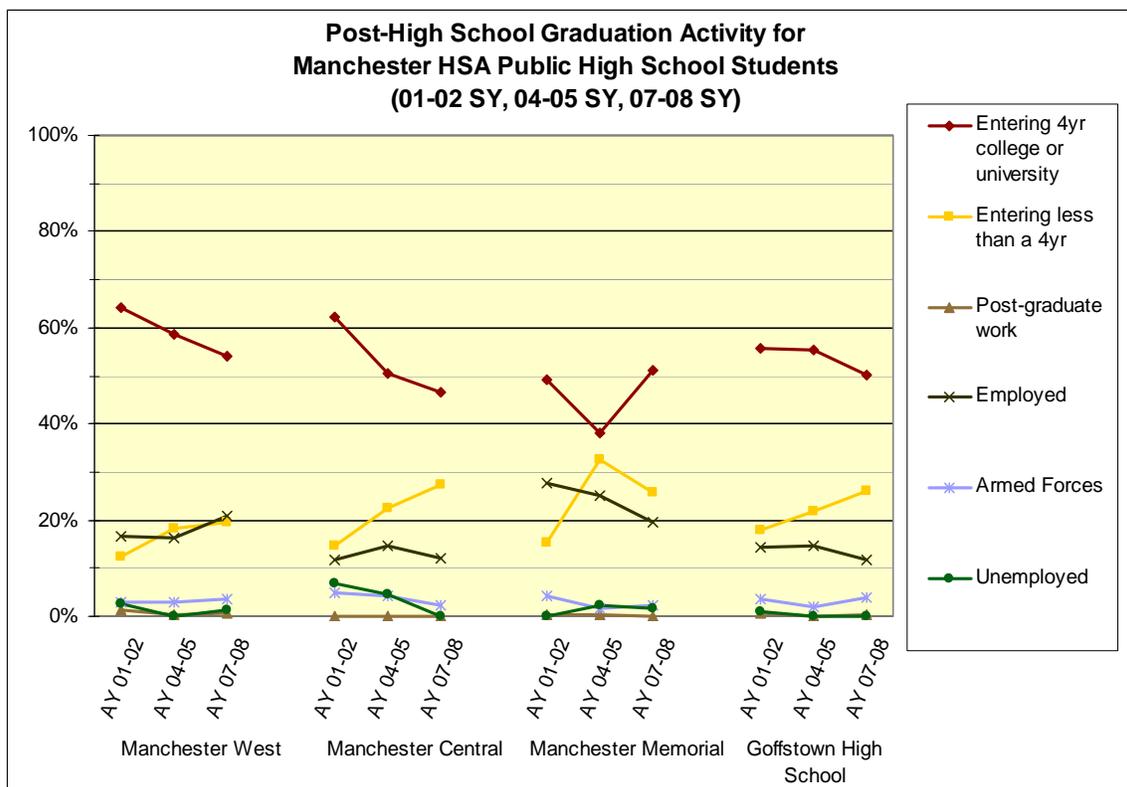
Concurrently, educational achievement and the school environment can influence a child’s health. Data from the 2003 National Youth Risk Behavior Survey (YRBS) demonstrate “a negative association between health-risk behaviors and academic achievement among high school students after accounting for the effects of sex, race and ethnicity and grade level. This means that as risky behaviors increase, academic achievement goes down.”⁵⁴

Manchester’s youth have had a noticeably higher high school dropout rate when compared to their counterparts in the rest of New Hampshire (20% Manchester vs. 11% state, 2007-2008).⁵⁵ Because of the important link between education and health status, the Centers for Disease Control (CDC) have outlined a goal to increase high school completion to at least 90%.



Source: Manchester School District

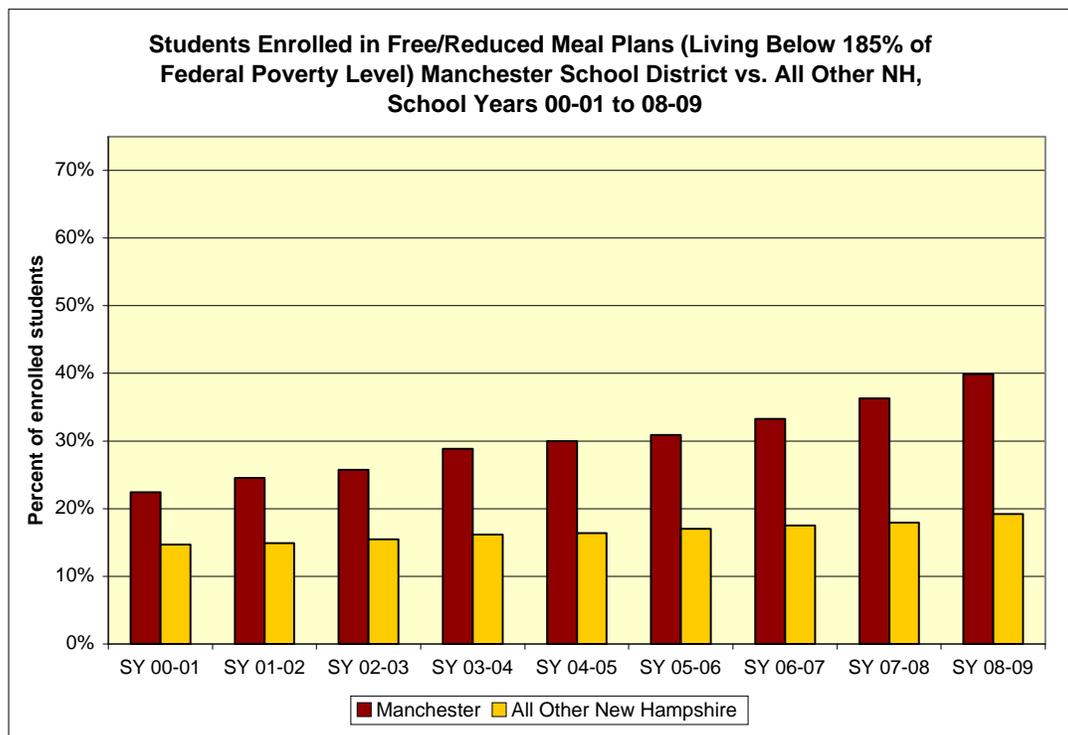
School absenteeism is also associated with participation in a variety of risk behaviors, including alcohol use, tobacco use, other drug use and risky sexual behaviors.⁵⁶ Manchester’s absenteeism rate (approximately 8%) was similar to the national average (9%) for the 2007-2008 school year.



Source: NH Department of Education

ECONOMIC CIRCUMSTANCES

Poverty is a significant determinant of health and can affect children's health throughout their development. Low socioeconomic status for youth is associated with higher hospital admission rates, lower utilization of preventive services, and higher rates of chronic disease.⁵⁷⁻⁵⁹ In 2007 approximately 35.6% of Manchester's school-aged children (ages 6 to 17) were living at or below 185% of Federal Poverty Level.



Source: Manchester School District

As of February 2009, approximately 50% (n=6,658) of Manchester's elementary school population was enrolled in the Free and Reduced Meal Program, which has income eligibility guidelines for children who live at certain income levels. The enrollment numbers for this program are steadily creeping upward, indicating a growing impoverished youth population.⁶⁰ Medicaid enrollment for children is also steadily increasing, with over 10,000 Manchester children enrolled in Medicaid as of August 2008.³⁸

FOCUS GROUP PARTICIPANTS WEIGH IN: HEALTHY YOUTH—AGE 7-17

Teens who participated in our focus group discussion were concerned about their own safety, the economy, and being able to afford healthy lifestyle choices.

- Most of the participants stated that they are concerned about drugs and crime in Manchester. Many of the teens interviewed live in older, multi-family apartments with vacant abutting properties due to foreclosures. The vacant housing attracts vandals and criminal activity.
- Since these teens don't have cars, their only mode of transportation is walking and they stated that they are often exposed to deviant behavior as they move from one location (example home) to the next (example school). *"I do not feel safe walking the streets so I pretend to be on my cell or sometimes I carry a knife."*
- Teen participants were concerned with the culture of their schools which they felt promoted drug use and promiscuity. They wished there were more programs to help kids avoid engaging in these behaviors.
- Of great concern to this age group is the economy. Many of the teens interviewed are supporting themselves and are having trouble finding jobs or other means of financial assistance.
- Healthy eating and exercise was not discussed at great length, but when asked, the teen participants stated that they are not satisfied with what the schools are doing to promote healthy eating and exercise as many of the options are too expensive.



DATA SNAPSHOT: HEALTHY YOUTH—AGE 7-17

HEALTHY YOUTH INDICATORS	MANCHESTER	MANCHESTER HSA	NH WITHOUT MANCHESTER
Family and Social			
Of all households with children under 18 years of age, the percent that have married couple parents, 2007, American Community Survey	53.0%* (n=7,060)	na	71.8% (n=119,488)
Number of children in founded assessments of child maltreatment managed by DCYF in 2008, Division of Children, Youth, and Families, NH DHHS	184	na	1,681
Percent of students who during an average week spend one or more hours in clubs or organizations (other than sports) outside of school, 2007, Youth Risk Behavior Surveillance System	27.7%	na	27.4% all NH
Percent of students who agree or strongly agree that they feel like they matter to people in their community, 2007, Youth Risk Behavior Surveillance System	39.5%	na	39.1% all NH
Cell phone and smart phone use among youth	developmental		
Participation in after school programs among youth	developmental		
Number of youth on probation	developmental		
Percent of youth age 16 to 19 who are not in school and unemployed	developmental		
Economic Circumstances			
Number and proportion of all youth in schools enrolled in free/reduced meals, 2008-2009, NH Dept of Education	39.9%* (n=5,900)	27.2%* (n=6,740)	19.2% (n=32,403)
Number of active homeless students attending school, 2007-2008 SY, Manchester School Dist, NH Dept of Education	411	na	1,676
Percent of youths under 18 years living at or below the poverty level in the last 12 months, 2007, American Community Survey	24.9%*	na	8.8% all NH
Percent of youth age 16 or older who are employed	developmental		
Education			
Rate of absenteeism	developmental		
Four year cumulative rate of students who were counted as early-exit non-graduates in high schools, 2007-2008, NH Dept of Education	20.0%*	na	11.3% all NH
Percent of graduates entering post-secondary study at 2- or 4-year colleges or universities, 2008, NH Dept of Education	74.7%	na	73% all NH
Physical Environment			
Percent of high school students who play video or computer games or use a computer for something that is not school work for 3 or more hours on an average school day. 2007, Youth Risk Behavior Surveillance System	25.6%	na	25.2% all NH
Policies related to food, nutrition, and vending in the school system.	developmental		
Percent of youth serving facilities that serve food and beverages which have a policy to provide healthy food options	developmental		
Percent of children ages 5-17 years whose parents say that they can easily get to a park, playground, or other safe place to play	developmental		
<i>* Significantly different from the rest of New Hampshire excluding Manchester</i>			

HEALTHY YOUTH INDICATORS	MANCHESTER	MANCHESTER HSA	NH WITHOUT MANCHESTER	HP 2010
Behavior				
Percent of high school students who were physically active for a total of 60 minutes or more per day on five or more of the past seven days, 2007, Youth Risk Behavior Surveillance System	45.5%	na	47.4% all NH	
Proportions of children who eat five or more fruits and vegetables daily	developmental			
Percent of high school students who had 5 or more drinks of alcohol in a row, that is, within a couple of hours on one or more of the past 30 days, 2007, Youth Risk Behavior Surveillance System	26.7%	na	29.3% all NH	2%
Percentage of high school students who used marijuana one or more times during the past 30 days. 2007, Youth Risk Behavior Surveillance System	23.3%	na	25.1% all NH	0.7%
Percent of high school students who smoked cigarettes on one or more of the past 30 days, 2007, Youth Risk Behavior Surveillance System	16.6%	na	19.6% all NH	16%
Percent of high school students who have ever had sexual intercourse, 2007, Youth Risk Behavior Surveillance System	44.5%	na	43.9% all NH	25%
Among students who had sexual intercourse during the past 3 months, the percentage who used a condom, 2007, Youth Risk Behavior Surveillance System	62.2%*	na	36.5% all NH	
Percent of high school students who were in one or more physical fight during the past 12 months. 2007, Youth Risk Behavior Surveillance System	28.1%	na	29.6% all NH	32%
Youth under age 18 who were convicted of Part 1 crimes in 2008, Manchester Police Department	167	na	missing	
Juvenile violent crime arrest rate per 100,000 youth age 10-17	developmental			
Health				
Teen birth rate per 1,000 females ages 15-19, 2006, NH DHHS Birth Data	19.8* (n=135)	12.4 (n=154)	8.5 (n=725)	42 (for 15-17 yr olds)
Rate of Chlamydia infection per 100,000 teens age 15-19, 2008, NH DHHS, Communicable Disease Surveillance	1628.3* (n=118)	1027.3* (n=140)	582.6 (n=537)	3000 (for 15-24 yr olds)
Percent of population 5-15 years of age with a disability (sensory, mental, physical, self care), 2007, American Community Survey	9.6%	na	7.2%	
Proportion of children in 1st, 3rd, 5th, and 9th grades who are overweight or obese	developmental			
Number of students in the public school system with diabetes (Type I and II), 2008-2009 SY, Manchester Health Dept	67	na		
Rate of self inflicted injury discharges from emergency department per 1000 for children 5-17, 2005, NH DHHS	2.1 (n=39)	1.7 (n=52)	1.6 (n=333)	
Percent of students who actually attempted suicide one or more times during the past 12 months, 2007, Youth Risk Behavior Surveillance System	7.45%	na	7.00%	1%
Percent of youth age 5-17 years who were discharged from the emergency department for unintentional injury, excluding motor vehicle accidents, 2005, NH DHHS	9.3% (n=1,700)	8.6% (n=2,708)	12.2% (n=25,885)	
Leading causes of hospitalization for youth ages 5-17, 2001-2006, NH DHHS Hospitalization Data	Acute appendicitis; Asthma; Episodic mood disorders; Pneumonia; Diabetes			
Leading causes of death for youth ages 5-17, 2001-2006, NH DHHS Death Data	Accidents; Malignant Neoplasms; Perinatal conditions; Suicide; Congenital malformations, deformations and chromosomal abnormalities			

HEALTHY YOUTH INDICATORS	MANCHESTER	MANCHESTER HSA	NH WITHOUT MANCHESTER	HP 2010
Access				
Rate per 10,000 of hospitalization for asthma for children 5-17, 2006, NH DHHS Hospitalization Data	6 (n=11)	4.8 (n=15)	4.7 (n=99)	7.7
Second grade students recorded as having no health insurance on Student Information Form, 2008-2009 SY, Manchester Health Dept	5% (+/- 0.5%)	na	na	
Second grade students recorded as having a primary care provider on Student Information Form, 2008-2009 SY, Manchester Health Dept	98% (+/- 0.2%)	na	na	
Second grade students recorded as having a dentist on Student Information Form, 2008-2009 SY, Manchester Health Dept	93.6% (+/- 0.9%)	na	na	
Proportion of all youth who are uninsured	developmental			
Proportion of 8th graders who do not have a primary care provider	developmental			
Number of children with special health care needs	developmental			
<i>* Significantly different from the rest of New Hampshire excluding Manchester</i>				

