# Gloucester 2007: Community Health Needs Assessment
# *Executive Summary*

***Overview:*** *The City of Gloucester and the Health Department in June 2005 commissioned a Community Health Needs Assessment for the purpose of describing the physical and behavioral health of both children and adults in Gloucester. Thanks in part to the funding of the City and Northeast Health System, data was collected and processed by Social Science Research & Evaluation Inc using two extensive questionnaires: one completed by a sampling of 348 adults and the other obtained from 1754 middle and high school students. Further insights were obtained from interviews with key individuals particularly knowledgeable about health issues and/or the health of special populations. The data highlights four health issues, especially for Gloucester's youth: poor nutrition; alcohol use; violence and mental health problems. At least for some, these youth issues probably reflect a web of similar health concerns for some Gloucester families and thus adults also. Additionally, some adult cardiovascular and cancer concerns are noted which may relate to the same set of issues.*

*Certainly not all of the data were negative. The caring attitude that characterizes Gloucester- exemplified by the variety of support and advocacy groups- has produced a number of positive health trends and better outcomes than the MA state average. These include: fewer numbers of current smokers, adults with asthma, hospitalizations for strokes and deaths due to motor vehicle accidents; less mortality due to heart disease and cancers and lower incidence of prostate, colorectal cancers and melanomas. Also, our female population is getting better prenatal care than the state average. Lastly, most people were happy with the access to and quality of care available to Gloucester residents- a situation that will likely only improve with the opening of the Community Health Center.*

**Background: The Data**- Health assessments were made using two separate questionnaires sent to a sampling of 500 adults across the city and to all students in grades 6 through 12. Response to the questionnaires was good- approximately 80% for both. State and federal databases were also used to derive comparative data; in addition, in some instances, the adult data could be compared to the prior (1997) health assessment. Lastly, the survey data was rounded out by interviews with 20 individuals especially knowledgeable about health issues.

**Background: Data Limitations-** As with any survey there are limitations to the data that can confound interpretation. Among the potential sources of error are:

- Much of the data in both of the surveys is self-reported, reflecting self-image and perception.
- Some of the comparative data, particularly that from state and federal databases, are dated; for instance, median income data are derived from the 2000 US Census.
- The numbers in the survey are relatively small- increasing the likelihood of statistical errors. Further, some of the neediest adult groups are potentially the least likely to have responded to the questionaire.

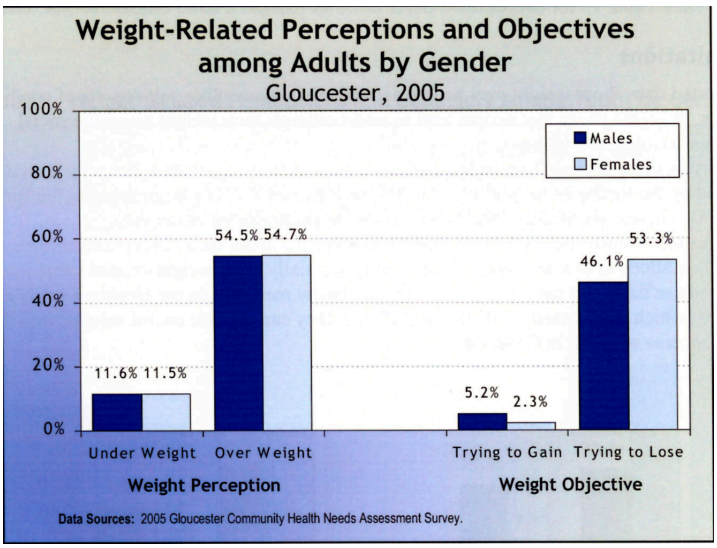
**Interpretation of the Data-** This study has the greatest utility if it leads to action; therefore some interpretation is needed. Clearly, any attempt to summarize this complex dataset requires selection of some data to highlight and some data to be given less voice. The interpretation presented will not be the only one possible, nor will it define everything that should be done. However, importantly, this and any other interpretation is and should be based on the data.

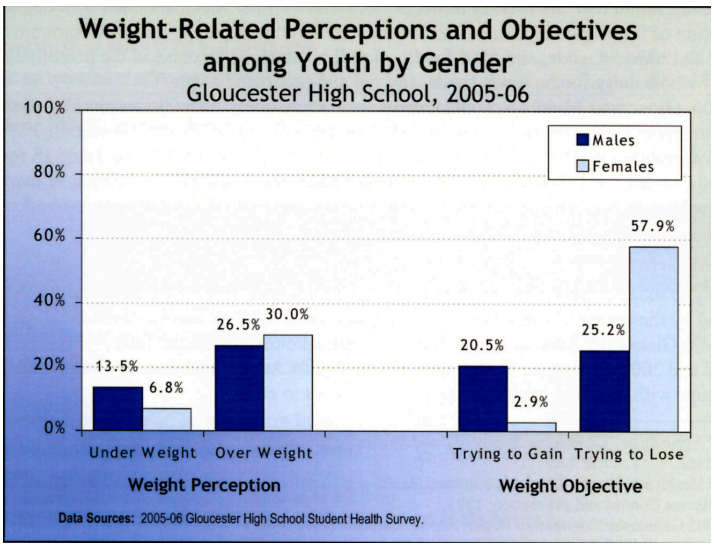
**The Data-** Data covered many broad health areas:

- *§ Physical Activity, Weight Status, Nutrition & Cardiovascular Disease*
- *§ Mental Health, Sexual Behavior & Violence and Safety*
- *§ General Health & Access to Health Care*
- *§ Smoking, Alcohol & Substance Abuse*
- *§ Communicable Diseases*
- *§ Cancers*

The results from each of these areas is briefly summarized below. The complete *2007 Community Health Needs Assessment* dataset is available for review at the Gloucester Health Department, 3 Pond Rd. and at the Sawyer Free Library, 2 Dale Ave., Gloucester.

**Physical Activity, Weight, Nutrition & Cardiovascular Disease:** Insufficient physical activity- sitting in front of a TV or computer- is a nationwide problem, especially among youth, and Gloucester is no exception. This is evident in the self-reported perceptions of weight and the frequency of dieting efforts for both adults and high school students:




Not surprisingly, self-image pressures among female high school students leads more than half to report 'trying to lose weight'. This then leads to significant levels of risky behavior (15% of females fasted; 7% took diet pills; 5% vomited or took laxatives). All of this is further exasperated by less than ideal eating habits and food choices: only 27% of high school (GHS) students report routinely eating breakfast while generally having sweetened drinks and junk food and not eating many fruits and vegetables. Similar data are not available for adults. However, the health consequences for both youths and adults who are obese or overweight are significant- including hypertension, diabetes and heart disease and possibly some cancers.

Cardiovascular disease is especially tied to a lack of exercise, being overweight and eating a diet high in calories and unhealthy fats. Males are affected more than females and the problems typically worsen with age. However, in Gloucester, it is the age group 20-54 that compares unfavorably with MA in general regarding both coronary heart disease and heart attacks:

**For Ages 20-54, 2001-03**

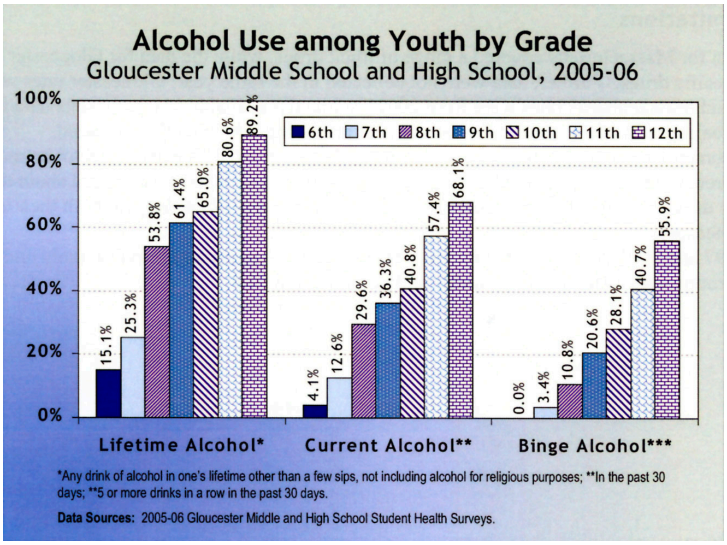
| DISEASE | Hospitalization Rate per 100,000 | | Mortality Rate per 100,000 | |
|---|---|---|---|---|
| | Gloucester | MA | Gloucester | MA |
| All Circulatory Diseases | 577 | 525 | 35 | 34 |
| Coronary Heart Disease | 279 | 208 | 22 | 18 |
| Acute Myocardial Infarction- Heart Attack | 157 | 88 | 15 | 7 |

External studies strongly suggest that increased frequency of family dinners leads to healthy habits and food choices. For middle school students, 78% eat family meals at least 3 times per week; the number falls to 61% for GHS students. However, interviews with experts suggest that for some adults (between 3.5 and 8.6% is the best estimate) dinners of any sort may not be so wholesome since they may not have enough money for food or have consistent access to adequate nutrition. This *food insecurity* may also be part of a web of health issues for some Gloucester residents, occurring at times in conjunction with mental health issues, substance abuse, infectious diseases (HIV and hepatitis C) and domestic violence and abuse.

**Tobacco and Smoking:** The self-reported rates of smoking among Gloucester adults have decreased dramatically from 19.5% in 1997 to 12% in 2005. The 2005 rate is significantly less than the MA average of 18%. The decrease in Gloucester smoking is also evident in the number of self-identified former smokers (43%) compared to 27.5% in MA overall. However, more work remains. In 2004, 12.5% of births in Gloucester were to mothers who smoked compared to 7.4% of births in MA as a whole. Among youth, 7.5% of grade 6-8 students and 26% of GHS students report smoking cigarettes. Fortunately, virtually all students smoke less than a pack a day and

most smoke less than ten a day. Smoking cessation efforts should work well for such students.

**Alcohol and Substance Abuse:** Youth drinking is very prevalent. Even in the middle school 16% report current alcohol use and 5% binge drink. In GHS, 50% drink and 35% report binge drinking with little or no difference between males and females. Alcohol use steadily increases with age/grade; it is already evident by grade 6. Adult binge drinking is also significant, though equal to the overall level in the state (16%).




Between 2.4% and 3.9% of adults reported current use of illicit drugs (marijuana, heroin or pain killers) though this may be a low estimate due to the self-reporting nature of the survey. The number of admissions to treatment programs has gone from twice the state average in 2000 to roughly the same rate in 2004, though this may be due to a substantial decrease in the availability or access to treatment. The data from Gloucester's youth was much more complete and extensive:

**Youth Drug Use**

| DRUG | Grades 6-8 | Grades 9-12 | DRUG | Grades 6-8 | Grades 9-12 |
|---|---|---|---|---|---|
| Marijuana | 4.7% | 29.9% | Steroids (no prescription) | NA | 1.6% |
| Cocaine | 0.9% | 3.7% | Other illegal drugs | 2.4% | 5.7% |
| Ecstasy | 1.1% | 2.2% | Oxycontin | 1.3% | 2.0% |
| Heroin | 0.8% | 0.8% | Inhalants | 6.9% | 3.2% |
| Methamphetamines | NA | 1.1% | Someone else's medication | 1.2% | 8.4% |

The prevalence of tobacco, alcohol and drug use is also reflected in the perceived ease of access to these substances and in the exposure to substance use in their own household:

| Perceived 'Easy' Access To: | Grades 6-8 | Grades 9-12 | Exposure to Substance in Household | Grades 6-8 | Grades 9-12 |
|---|---|---|---|---|---|
| Some Cigarettes | 43% | 82% | Cigarettes | 47% | 43% |
| Some beer, wine or hard liquor | 46% | 80% | "too much" Alcohol | 15% | 18% |
| Some Marijuana | 19% | 68% | Marijuana | 8% | 18% |
| Oxycontin, Ritalin, Valium- to get high | 17% | 29% | Other illegal drugs | 3% | 4% |

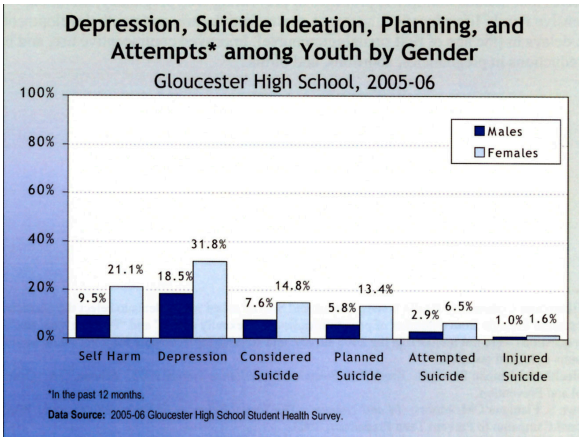
**Sexual Behavior:** In 2005-06, 46% of GHS students and 13.5% of Middle School students reported ever having had sexual intercourse; almost 5% of female high school students reported they had ever been pregnant. Condom use averaged 70% for grades 9-11 but dropped to 51% in grade 12. No data was collected on adults.

**Violence and Safety:** The absence of violence and a sense of safety is clearly central to a healthy community; from the surveys and Gloucester Police Department data:

- 3% of middle school students and 5.5% high school students reported carrying a weapon (gun, knife or club) in school. The rates were 3 to 5 times higher when not in school.
- 13% of GHS females reported sexual harassment in school in the 12 months prior to the survey.
- 7.5% of GHS females reported ever having been forced to have sexual intercourse against their will.
- 40% of Middle and 22% GHS students reported being bullied in school in the past 12 months; approx equal numbers of males and females in both cases. Approx 4-5% of middle and GHS students stayed home from school out of fear for their safety in the past 30 days.
- 20% of GHS students (male and female) admitted to driving after drinking alcohol during the past 30 days.
- The number and reason for arrests in the community between 2000 and 2005 do not show any strong trend- **Infraction (range of arrests annually):** DUI (126-245); Possession of Illegal drugs (118-187); Larceny (29-68); Destruction of Property (38-48); Breaking and Entering (26-32); Trespassing (20-39); Drug Possession with Intent to Distribute (18-40); Of note, numbers of domestic assault and assault & battery arrests have steadily decreased from 154 in 2001 to 96 in 2005.

**Mental Health:** In the US, suicide is the third leading cause of death among youth (15-24 year olds); in MA, suicide is even more prevalent- being the second leading cause of death in that age group. Depression and suicide ideation is also manifest in Gloucester's youth, especially among females.

| In the past 12 months: | Middle Sch 2005-06 | High Sch 2005-06 |
|---|---|---|
| Hurt self on purpose | 13% | 16% |
| Experienced depression | 17% | 26% |
| Seriously considered suicide | 11% | 12% |
| Made a plan to commit suicide | 6% | 10% |
| Attempted suicide | 3% | 5% |
| Injured in suicide attempt | NA | 1% |




The rate of adult hospitalization for mental disorders is higher in Gloucester than MA in general (2000-02 data).

**Communicable Diseases:** Vaccines are a triumph of modern medicine; nothing else is as cost effective in preventing illness and death from infectious disease. Overall, Gloucester takes good advantage of immunizations- rates are equal to or better than the state for adult (over age 65) flu, and kindergarten and 7th grade chickenpox/varicella; measles/mumps/rubella; polio and hepatitis B immunizations. Only the most recent (2004-05) 7th-grade booster for tetanus & diphtheria was low (41% vs 83% in MA) .

The prevalence of HIV/AIDS in Gloucester is similar to the state (approx 2 per 1000). However, the proportion exposed through injectable drug use is significantly higher in Gloucester (49% vs 30% in MA). This may account for the unusual persistance of hepatitis C in Gloucester.

**Cancers:** Data from US and MA databases show the 2005 mortality rate due to all cancers to be slightly higher in Gloucester compared to the rest of MA (220 vs 184 per 100,000). For specific cancers, the available incidence and mortality data is older- 2001-03. For males, the incidence rate was highest for prostate cancer (170/100,000), followed by lung (91) and colorectal (62). For females, breast cancer had the greatest incidence (150), followed by lung (62) and colorectal (51). The patterns seen for males and females in Gloucester are also seen in MA overall.

**General Health & Access to Health Care:** While 67% of responding adults rated their overall health 'excellent or very good' (59% in MA), 39% report being diagnosed by a health professional as having high blood pressure; 43% as having high cholesterol; and 9% diabetes. The MA rates (2005) are 25%, 36% and 6% respectively. In 2002, the rate of hospitalization for asthma among children younger than five was higher in Gloucester (455 per 100,000) than in MA (325).

The overwhelming majority (98%) of respondents expressed some level of satisfaction with their usual doctor or place used for health care. However, experts interviewed were concerned about the care available to the underinsured in Gloucester. Regional clinics are currently located some distance away- requiring transportation. Perhaps related to this concern- in 2005, 35% of respondents reported that they or someone in their household had visited the Emergency Room in the past 12 months.

Overall, Gloucester is a healthy place to live. If we apply our community resources to the issues highlighted, we can make Gloucester even better for ourselves and our children.

Jack Vondras, Director, Health Department

Joseph J. Rosa, Chair, Board of Health