Health Profile Chartbook

Region 2N

(Macomb, Oakland, St. Clair)

2011

Michigan Department
of Community Health
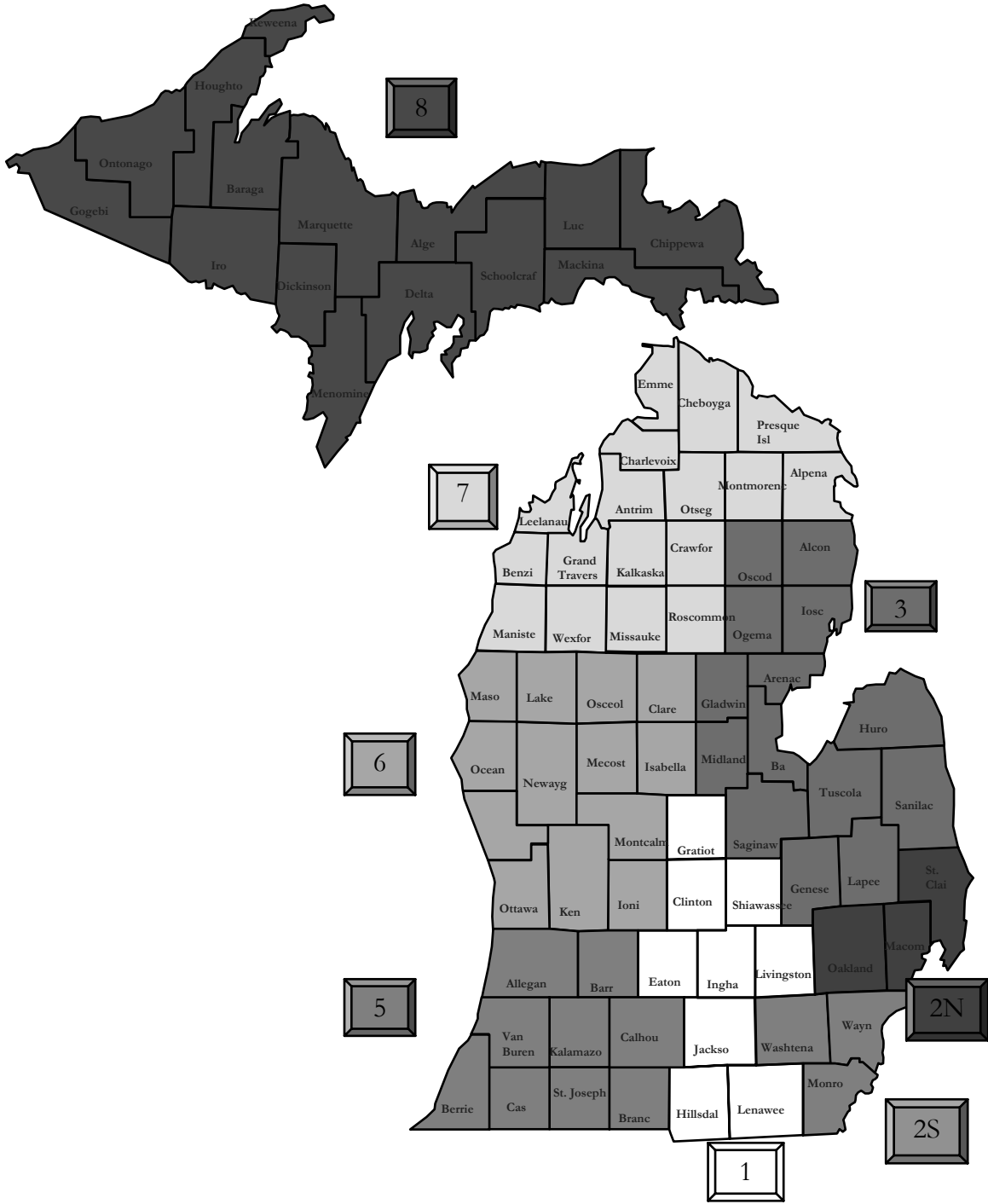
MDCH

Rick Snyder, Governor
Olga Dazzo, Director

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Introduction

State Health Assessment Regions

Demographics: Population Distribution by Age

Indicator Definition/Overview:
- The average age of the population of Region 2N has increased from 1990 to 2009.
- In 1990, there were more people aged 30-39 than any other age group in Region 2N. In 2009, there were more people aged 40-49 than any other age group in Region 2N.
- The overall need for healthcare services is increasing with Michigan's aging population because the oldest age groups (which have increased in size) tend to be the greatest consumers of health care resources.

Region 2N Population Distribution by Age, 1990 and 2009
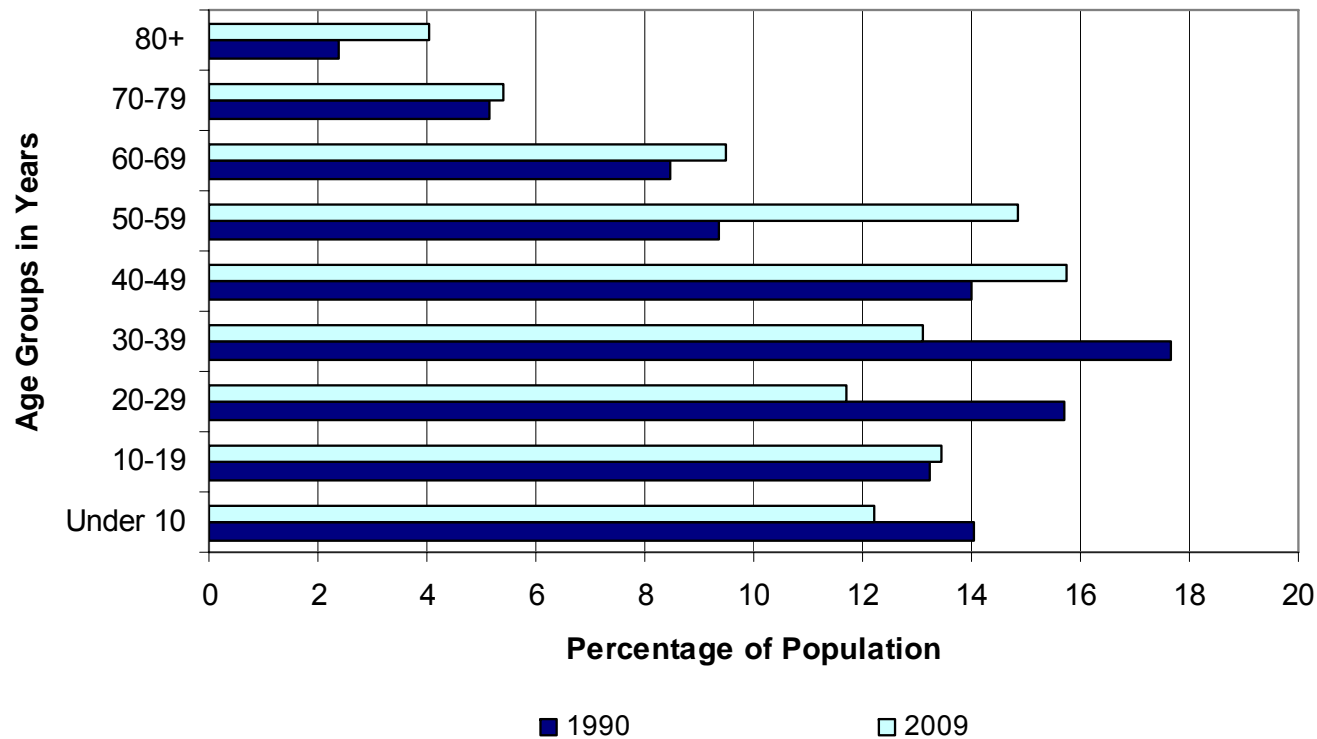
Healthy People 2020 Target:
n/a

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.

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Demographics: Population Distribution by Gender

Indicator Definition/Overview:

- From 1990 to 2009, the portion of Region 2N's population that is female has steadily decreased by one-half percent, whereas the portion of the population that is male has steadily increased by one-half percent.
- In both 1990 and 2009, there was a higher percentage of females than males in Region 2N, which is the same overall pattern in Michigan as a whole.

Healthy People 2020 Target:
n/a

Data Source:
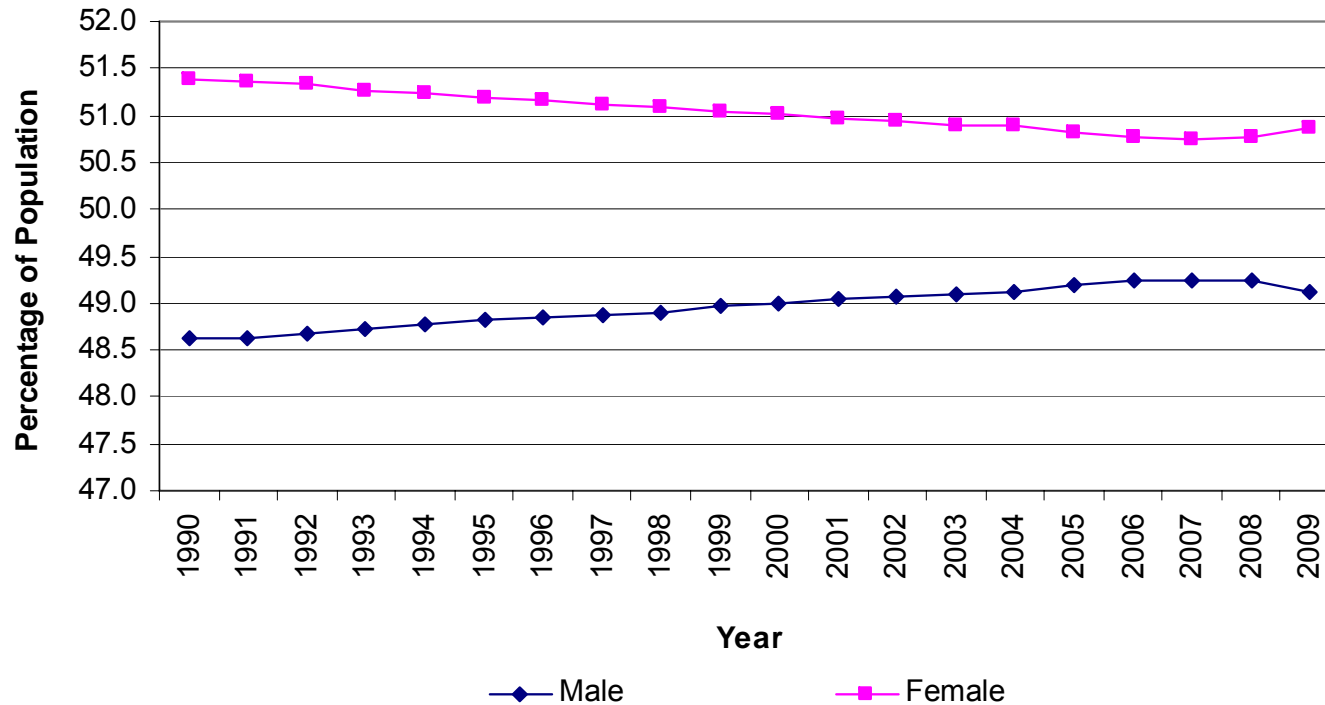Michigan Department of Community Health, Division of Vital Records and Health Statistics.

Region 2N Population Distribution by Gender, 1990-2009

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Racial and Ethnic Distribution

Indicator Definition/Overview:
- Region 2N has a higher percentage of White and Asian & Pacific Islander individuals than the state as a whole.
- Region 2N has a lower percentage of Black, American Indian, and Hispanic individuals than the state as a whole.
- Note: Hispanic is not a mutually exclusive ethnic category, and could include individuals from any race category.

Healthy People 2020 Target:
n/a

Population Distribution by Race and Ethnicity, Region 2N and Michigan, 2009
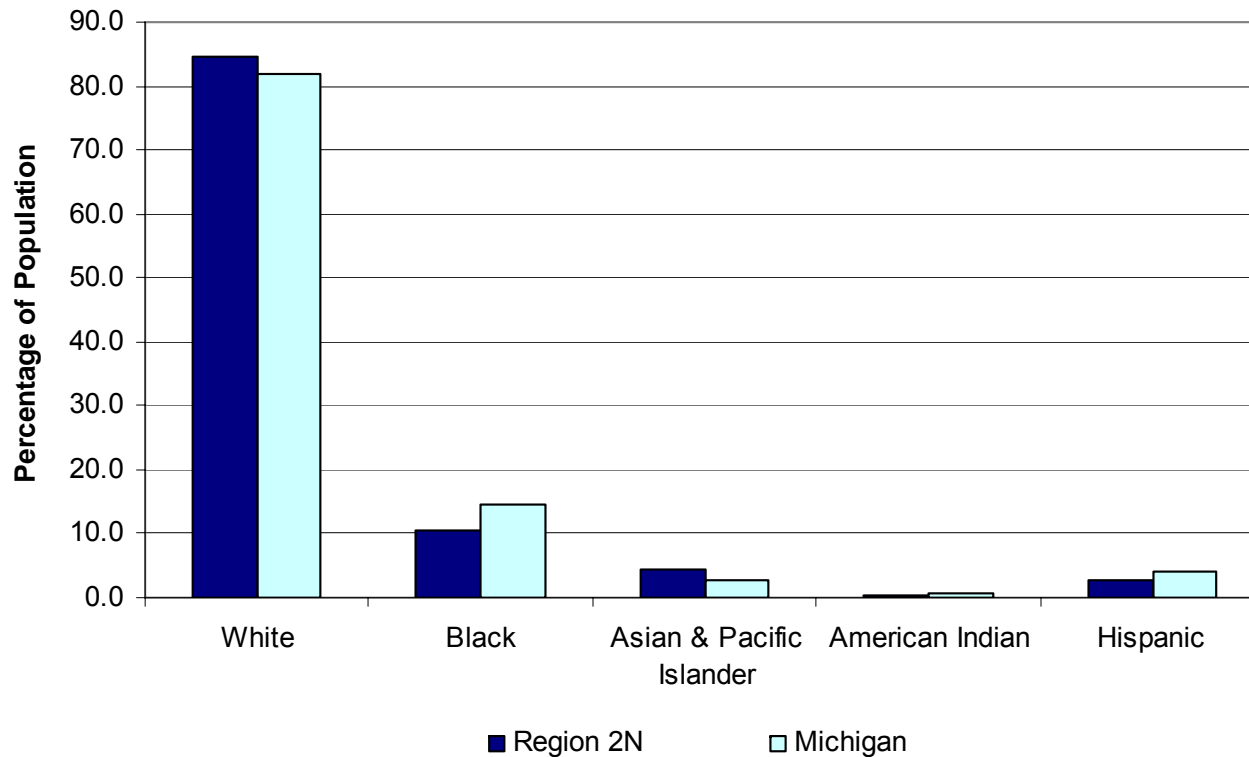
Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.

Workforce – Primary Care Physicians
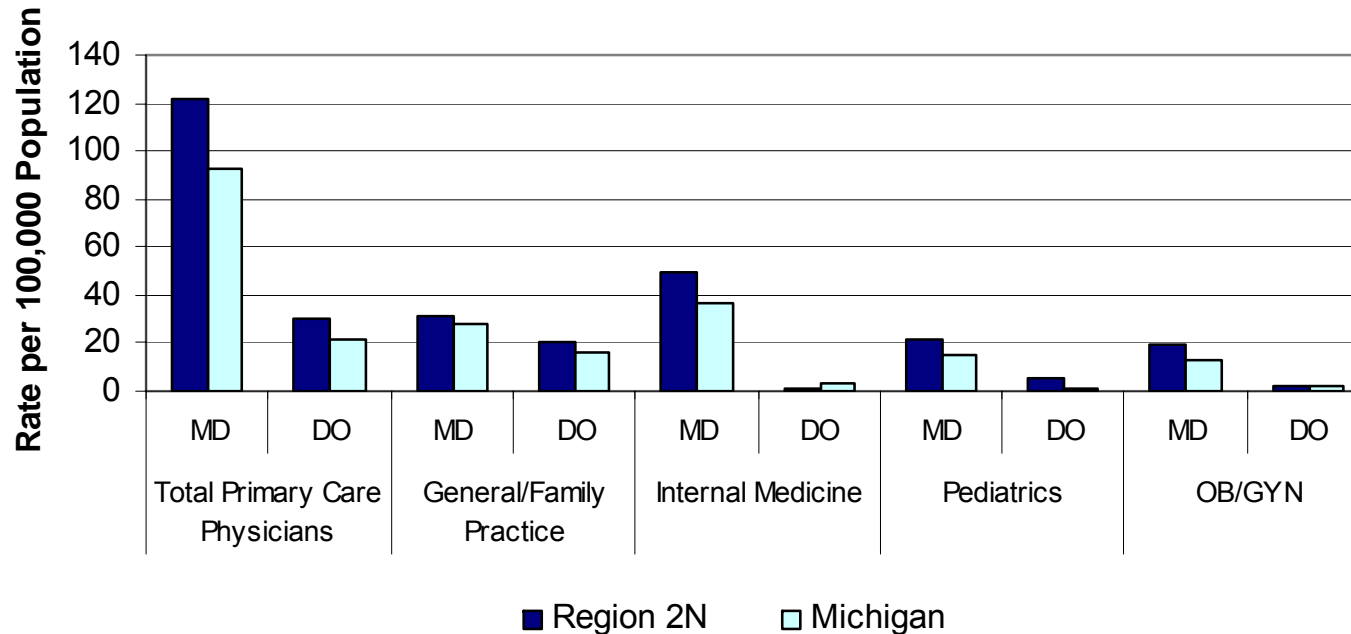
Indicator Definition/Overview:

- Michigan and the U.S. will soon be presented with serious shortages of primary care physicians as an increased number of medical students are choosing non-primary care specialties as opposed to primary care, and existing primary care physicians are leaving the workforce.
- Nearly one in five Americans lacks sufficient access to primary care due to physician shortages.
- Physicians employed by the federal government are not included in the rates presented below. A federal physician is defined as full-time employment by the federal government, including the Army, Navy, Air Force, Veteran's Administration, the Public Health Service and other federally funded agencies.

Healthy People 2020 Target:
An increased primary care workforce is included in the Access to Health Services section of the Healthy People 2020 objectives. However, no target has as yet been identified.

Data Source:
Area Resource File (ARF). 2009-2010. United States Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Rockville, MD.

Primary Care Physicians (MD - 2008, DO - 2007) and Their Specialties in Region 2N and Michigan

■ Region 2N   □ Michigan

Unemployment Rate

Indicator Definition/Overview:
- Unemployment Rate, or Jobless Rate, is an indicator of the health of the economy. With a larger percentage of people out of work, fewer may have employer based health insurance or income to be able to afford access to preventive and maintenance health services and/or prescriptions.
- Higher unemployment rates also mean a larger portion of the labor force may be seeking assistance through Medicaid.
- Unemployment data is collected through Michigan's Department of Licensing and Regulatory Affairs (LARA) and housed at the Labor Market Information (LMI) site. Nationally, the U.S. Department of Labor oversees the data.

Healthy People 2020 Target:
Access to job opportunities may be included in the new Social Determinants of Health section of the Healthy People 2020 objectives. However, no target has as yet been identified.

The Jobless Rate in Region 2N and Michigan

Data Sources:
United States Bureau of Labor Statistics.

Michigan Department of Licensing and Regulatory Affairs: Labor Market Information.

Access to Care

Indicator Definition/Overview:
- Unmet healthcare need is an indicator commonly used to portray problems in access to health care services, including lack of health insurance and limited availability of providers.
- Unmet healthcare need is also associated with greater emergency room use and disadvantaged individuals delay in seeking care for conditions that are associated with longer hospital stays and poorer health outcomes.

Percentage of Adults Who Did Not Receive Needed Healthcare Due to Cost, Region 2N and Michigan
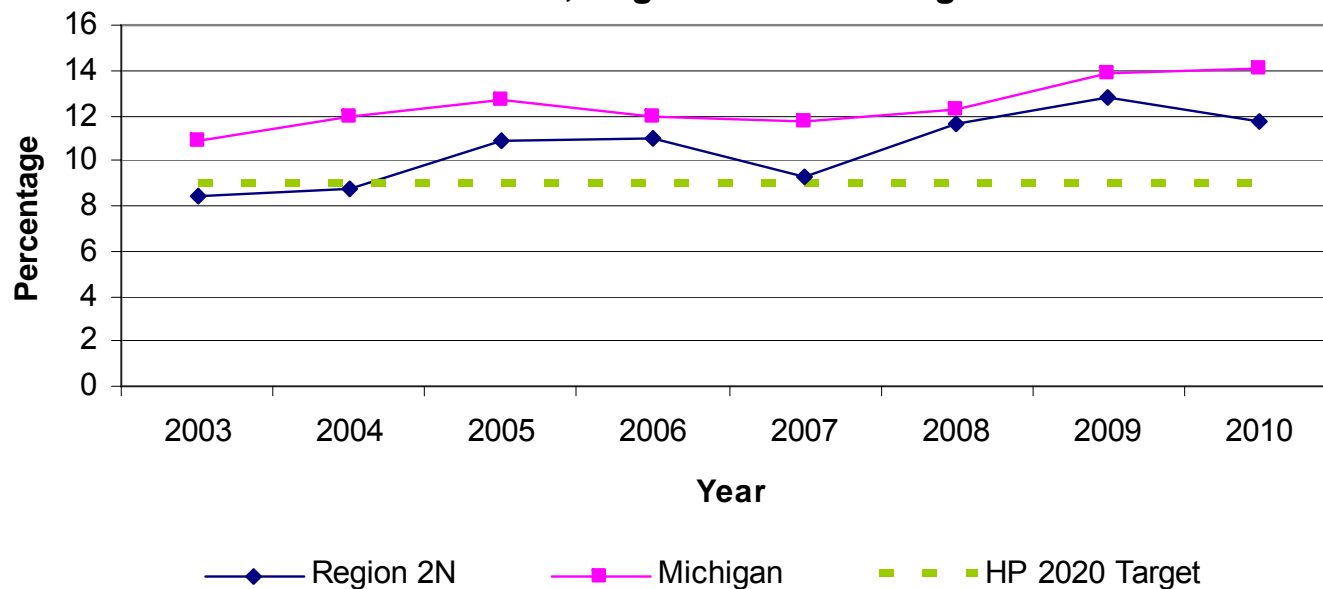
Healthy People 2020 Target:
The HP 2020 target for individuals who were unable to obtain or delayed in obtaining necessary medical care, dental care, or prescription medicines – for any reason – is 9.0 percent.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2003 ‐ 2010.

Leading Causes of Death

Indicator Definition/Overview:
- Heart disease is the leading cause of death, and cancer is the second leading cause of death, in both Region 2N and Michigan.
- Region 2N has slightly higher age-adjusted death rates for kidney disease and suicide than Michigan.
- Michigan has slightly higher age-adjusted death rates for heart disease, cancer, stroke, diabetes, and Alzheimer's disease than Region 2N.

Healthy People 2020 Target:
n/a

Age-adjusted Death Rates for the Ten Leading Causes of Death, Region 2N and Michigan
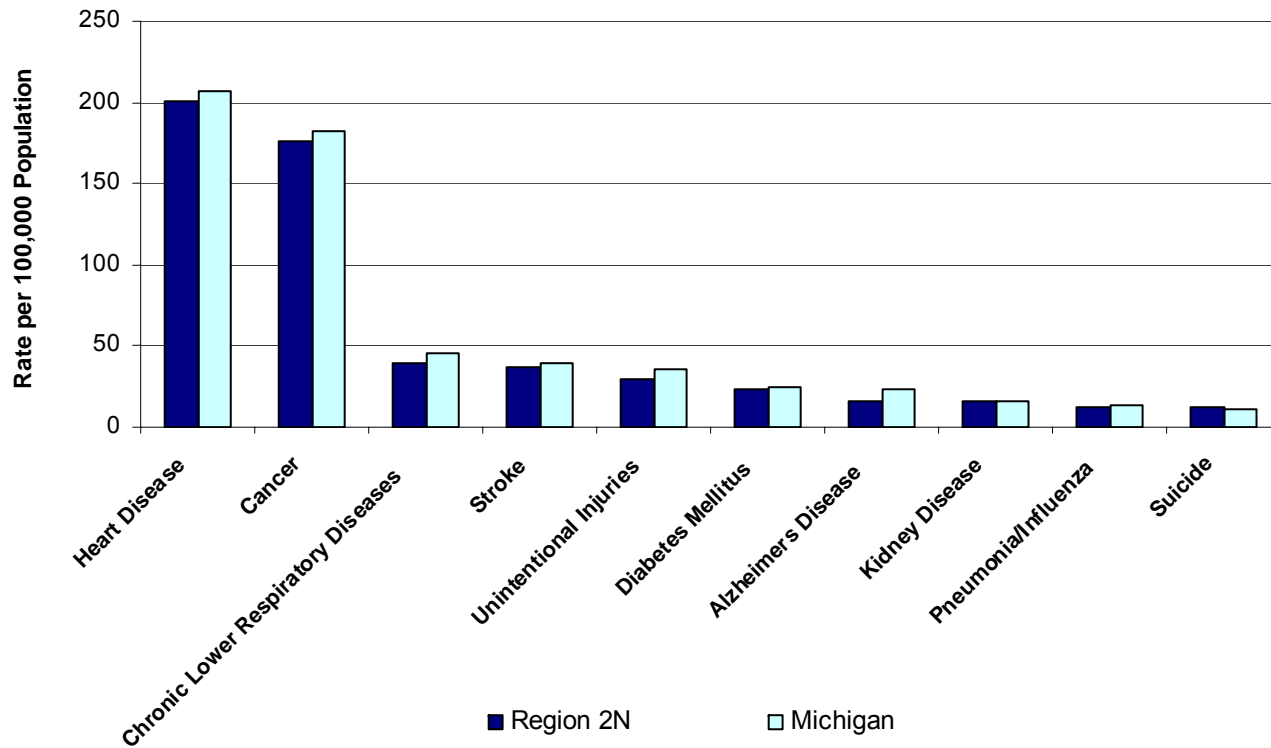
Legend: ■ Region 2N   □ Michigan

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.

Years of Potential Life Lost

Indicator Definition/Overview:

- Years of potential life lost is a measure of mortality that emphasizes the causes of death that are most prevalent among persons under age 75.
- The number of years of potential life lost is calculated as the number of years between the age at death and 75 years of age for persons dying before their 75th year.
- Cancer and heart disease are the leading conditions that have caused years of potential life lost before age 75 in Region 2N.

Rates of Years of Potential Life Lost Below Age 75 Due to Selected Causes of Death, Region 2N and Michigan, 2009

Legend: ■ Region 2N □ Michigan

Healthy People 2020 Target:
n/a

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.
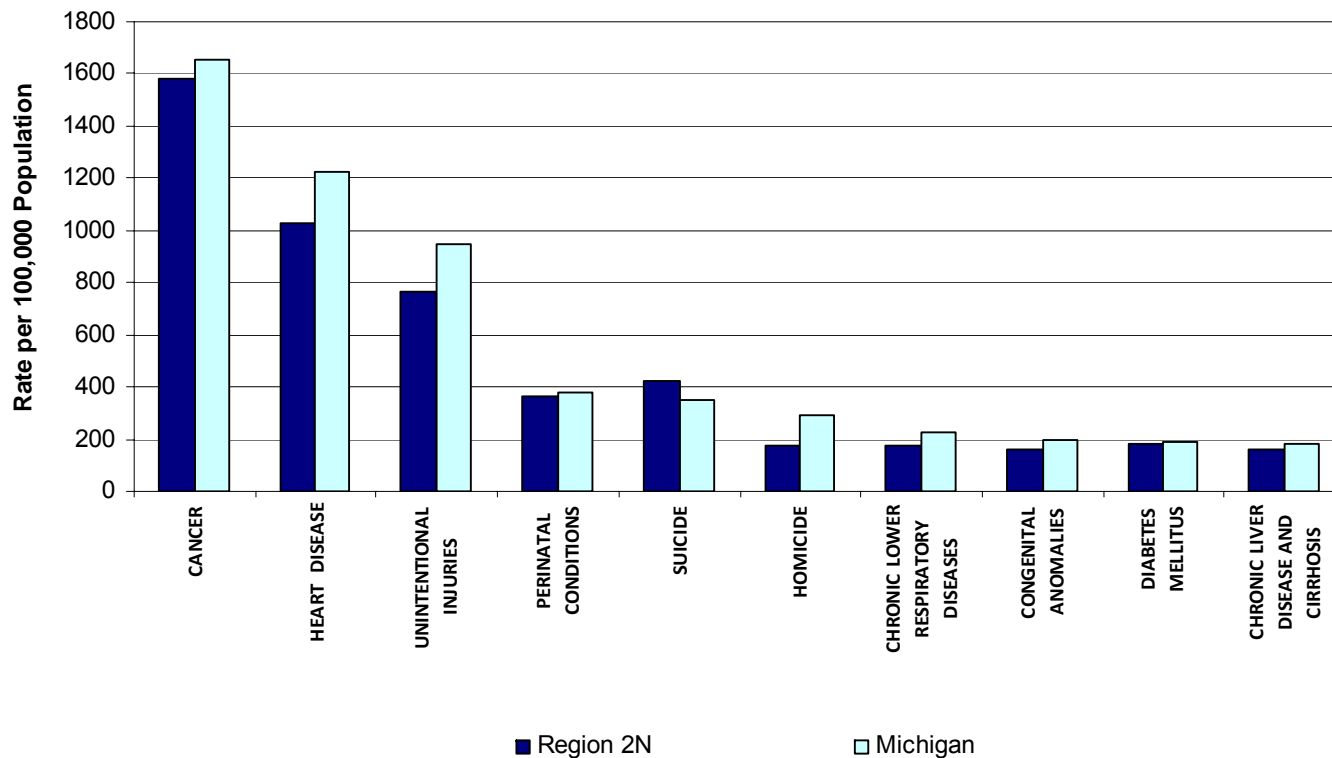
Cancer Mortality

Indicator Definition/Overview:
- Though survival rates for many types of cancer have increased recently, cancer remains the second leading cause of mortality in both Region 2N and Michigan.
- Preventive measures such as avoidance of tobacco, maintaining a healthy weight, and utilizing sun protection can result in fewer cancers.
- Medically underserved populations are at higher risk of being diagnosed at a later stage of cancer, thus decreasing the likelihood of survival.

Healthy People 2020 Target:
The HP 2020 target for cancer mortality is 160.6 deaths per 100,000 population.

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.

Cancer Mortality, All Sites, Age-adjusted Rates, Region 2N and Michigan

Legend:
- Total - Region 2N
- White - Region 2N
- Black - Region 2N
- Total - Michigan
- White - Michigan
- Black - Michigan
- HP 2020 Cancer Mortality Target

2N

Breast Cancer Screening

Indicator Definition/Overview:
- Screening mammograms are used to periodically check for breast cancer in women who have exhibited no signs of the disease. Mammograms may also be used as a diagnostic tool after a mass has been detected or other symptoms arise.
- Current National Cancer Institute guidelines state that women over 40 should have mammograms every one to two years.

Healthy People 2020 Target:
The HP 2020 target for individuals who receive a breast cancer screening based on the most recent guidelines is 81.1 percent.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2002 - 2010.

Had a Mammogram in the Past Two Years Among Women Aged 40 Years and Older, Region 2N and Michigan

Cervical Cancer Screening

Indicator Definition/Overview:
- Pap tests detect abnormalities in cervical cells that may lead to cancer.
- Women aged 21 to 30 years should be screened for cervical cancer every two years, while women 30 years and older who have had three consecutive normal test results may be screened once every three years.

Healthy People 2020 Target:
The HP 2020 target for individuals who receive a cervical cancer screening based on the most recent guidelines is 93 percent.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2002 - 2010.

Had a Pap Test in the Past Three Years Among Women Aged 18 Years and Older, Region 2N and Michigan

Colorectal Cancer Screening

Indicator Definition/Overview:
- Colorectal cancer is the third most common type of non-skin cancer in both men and women in the United States.
- In general, individuals should be tested for colorectal cancer beginning at age 50.
- Up to 60 percent of deaths from colorectal cancer could be prevented through regular screening.

Healthy People 2020 Target:
The HP 2020 target for individuals who receive a colorectal cancer screening based on the most recent guidelines is 70.5 percent.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
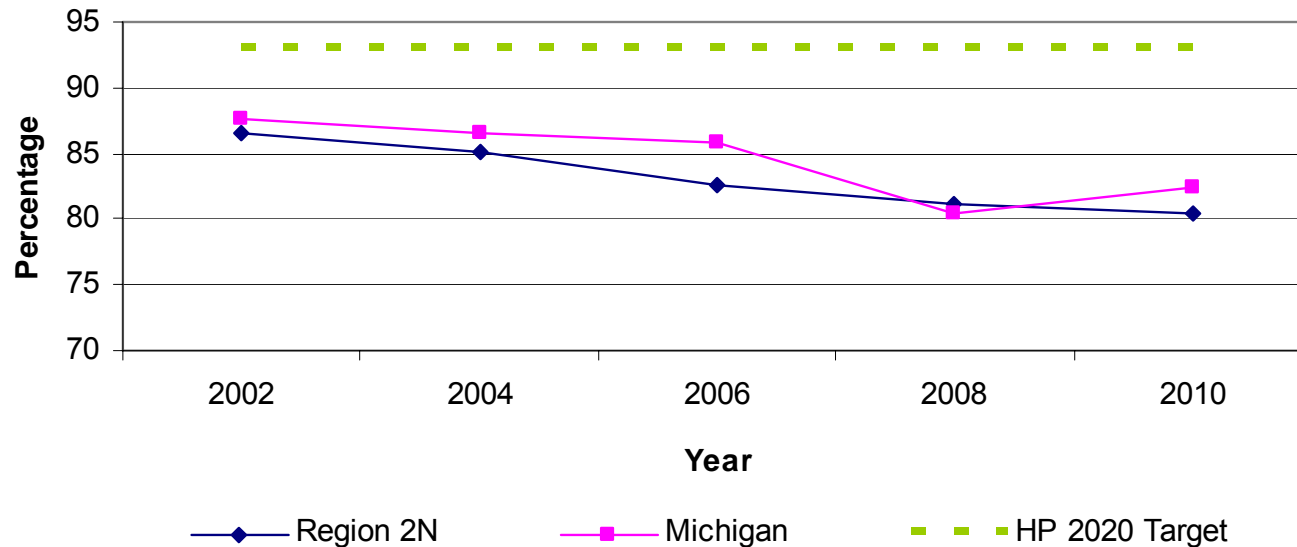Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2002 - 2010.

Colorectal Cancer Screening Among Adults Aged 50 Years and Older, Region 2N and Michigan

Legend:
- Had a Blood Stool Test in the Past Two Years - Region 2N
- Had a Blood Stool Test in the Past Two Years - Michigan
- Had a Sigmoidoscopy or Colonoscopy in the Past Five Years - Region 2N
- Had a Sigmoidoscopy or Colonoscopy in the Past Five Years - Michigan
- HP 2020 Target

Cardiovascular Disease - Prevalence

Indicator Definition/Overview:
- The term "cardiovascular disease" encompasses any irregular functioning of the heart or blood vessels, most commonly manifesting as a heart attack or stroke.
- Risk factors for cardiovascular disease include obesity, smoking, and physical inactivity, among others.

Cardiovascular Disease Among Adults, Region 2N and Michigan

Healthy People 2020 Target:
An HP 2020 target does not exist for cardiovascular disease prevalence. There are HP 2020 targets related to coronary heart disease and stroke mortality.

Data Source:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2005 – 2010.

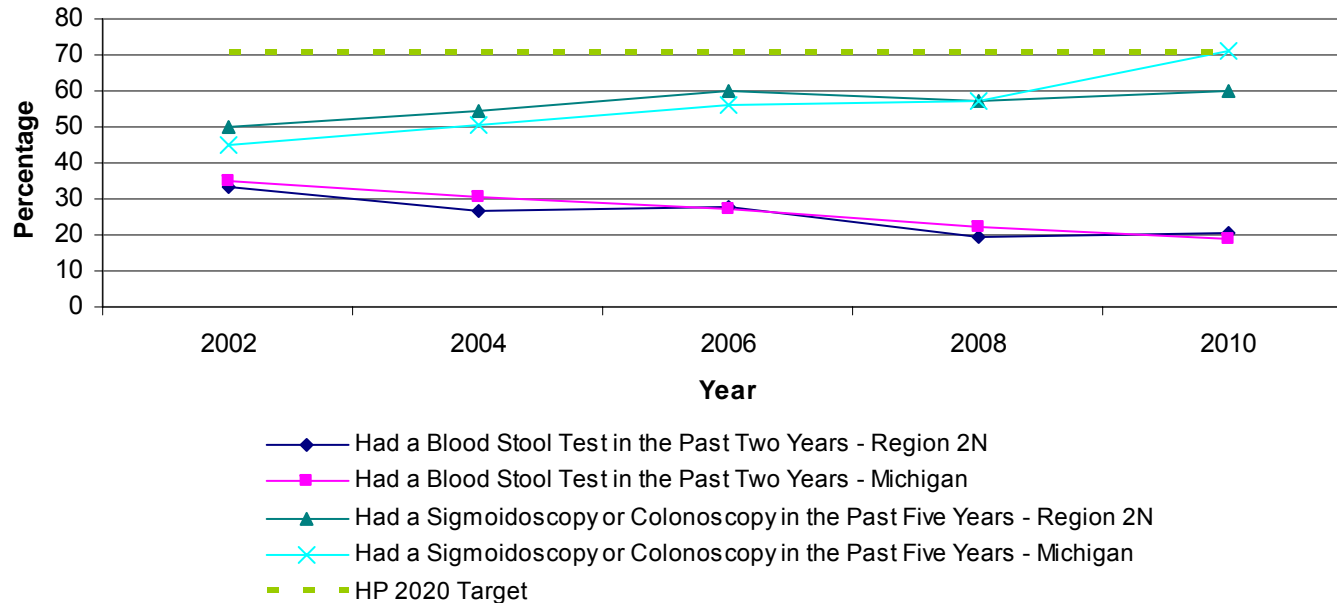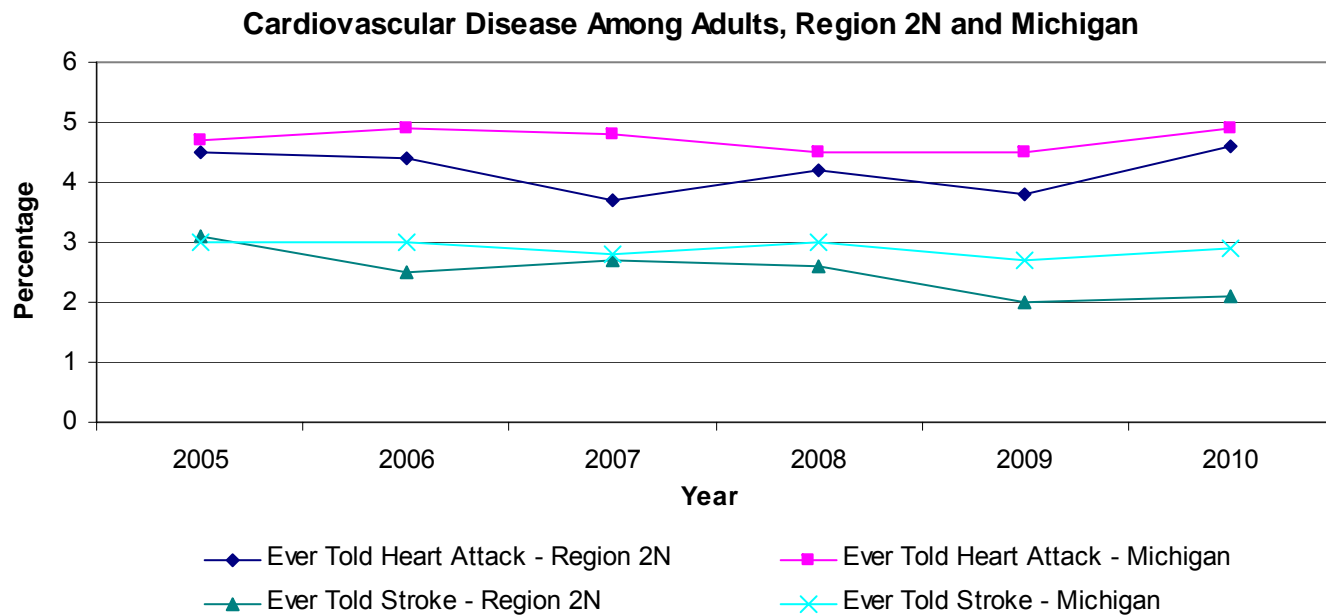# Cardiovascular Disease - Mortality

Indicator Definition/Overview:
- Cardiovascular disease accounts for over one-third of deaths in the United States, surpassing all other causes of death in terms of mortality rate.
- Stroke is the third leading cause of death for both men and women.
- Heart disease is the leading cause of death for both men and women.

Age-adjusted Heart Disease and Stroke Mortality Rates, Region 2N and Michigan

Legend:
- Heart Disease - Region 2N
- Heart Disease - Michigan
- HP 2020 Stroke Mortality Target
- Stroke - Region 2N
- Stroke - Michigan
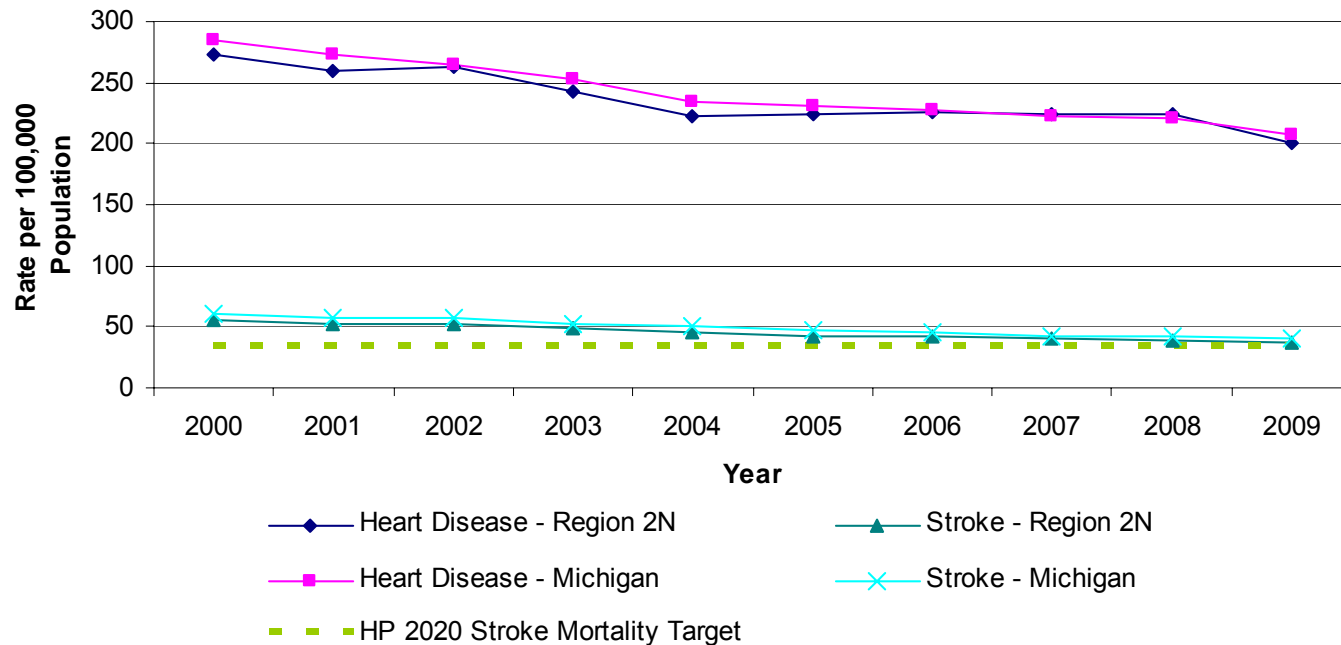
Healthy People 2020 Target:
An HP 2020 target does not exist for overall heart disease mortality, only for coronary heart disease mortality. The HP 2020 target for stroke mortality is a rate of 33.8 per 100,000 population.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.

Cardiovascular Disease - Hospitalizations

Indicator Definition/Overview:
- The cost of cardiovascular disease in the United States was estimated to be more than $503 billion in 2010, a figure that is expected to increase as the population ages.
- Hospitalization for heart disease is classified under the International Classification of Diseases 9 (ICD-9), codes 391-392, 393-398, 402, 404, 410-416, 420-429. Hospitalization for stroke is classified as codes 430-438.

Heart Disease and Stroke Hospitalization Rates, Region 2N and Michigan
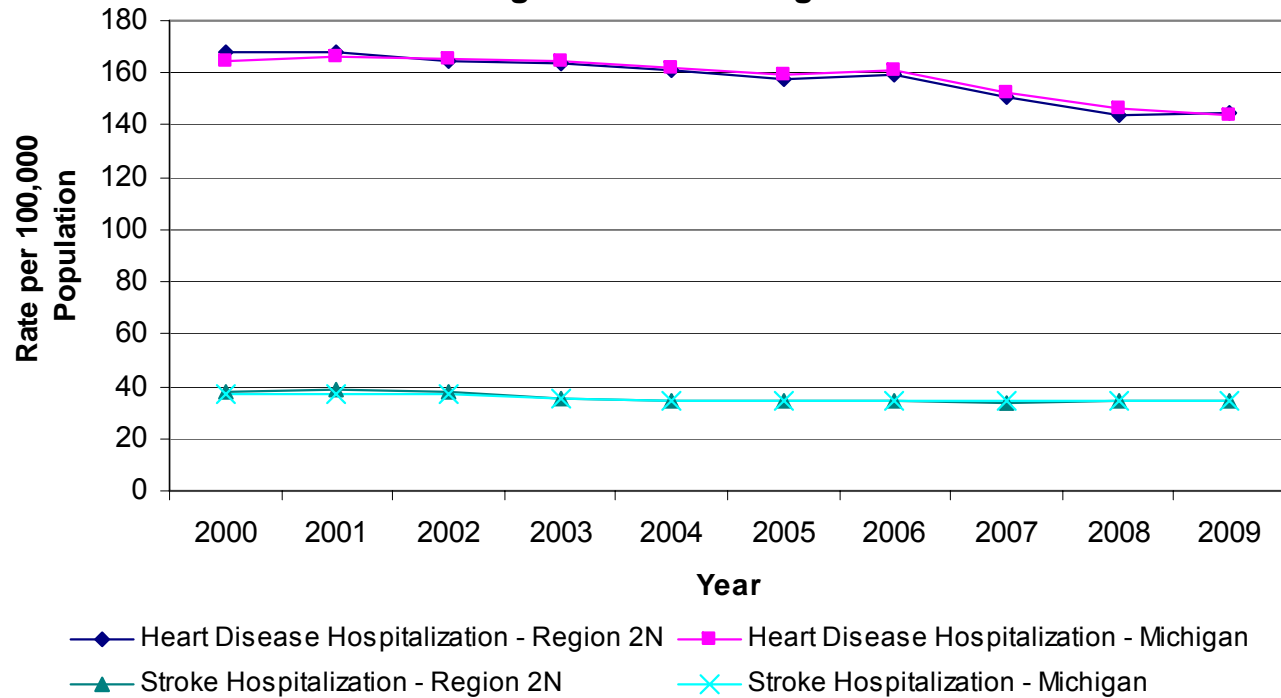
Healthy People 2020 Target:
An HP 2020 target does not exist for overall heart disease hospitalization, nor for stroke hospitalization.

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.

Diabetes Prevalence

Indicator Definition/Overview:
- The prevalence of diabetes in Region 2N and Michigan has seen an overall increase over the past ten years.
- Uncontrolled diabetes can lead to heart attack or stroke.
- This indicator is measured as a non-age-adjusted, three-year moving average with the middle of the three averaged years as the reported year for each data point in the graph below.

Healthy People 2020 Target:
An HP 2020 target does not exist for overall diabetes prevalence. There are HP 2020 targets related to new diabetes diagnoses only.

Adult Diabetes Prevalence, Region 2N and Michigan

Data Source:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2001 – 2010.

Diabetes-related Mortality

Indicator Definition/Overview:
- Diabetes is the sixth leading cause of death in both Region 2N and Michigan.
- Rates are per 100,000 population.
- Overall, the risk for death among people with diabetes is about double that of people in the same age group who do not have diabetes.

Healthy People 2020 Target:
The HP 2020 target for diabetes-related mortality is 65.8 deaths per 100,000 population.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.

Age-adjusted Diabetes-related Mortality Rates, Region 2N and Michigan

Legend:
- Total - Region 2N
- Black - Region 2N
- Total - Michigan
- Black - Michigan
- HP 2020 Diabetes-related Target
- White - Region 2N
- Hispanic - Region 2N
- White - Michigan
- Hispanic - Michigan

Overweight and Obesity

Indicator Definition/Overview:
- Overweight is defined as having a body mass index between 25.0 and 29.9, and obesity is defined having a body mass index of ≥ 30.
- Obesity is one of today's most pressing public health issues. The rates of obesity have risen dramatically over the past 30 years. Nationwide, obesity prevalence doubled among adults between 1980 and 2004, from 15 percent to 32.2 percent.
- Obesity has been shown to be associated with several poor health outcomes, including: hypertension, osteoarthritis, dyslipidemia, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, sleep apnea and respiratory problems, and some cancers (i.e., endometrial, breast, and colon).

Prevalence of Overweight and Obesity Among Adults 20 Years and Older, Region 2N and Michigan

Healthy People 2020 Target:
There is no HP 2020 target for a combined measure of overweight and obesity as displayed in this chart. However, the HP 2020 target for obesity is 30.6 percent of adults aged 20 and older.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2001‑2010.

Nutrition

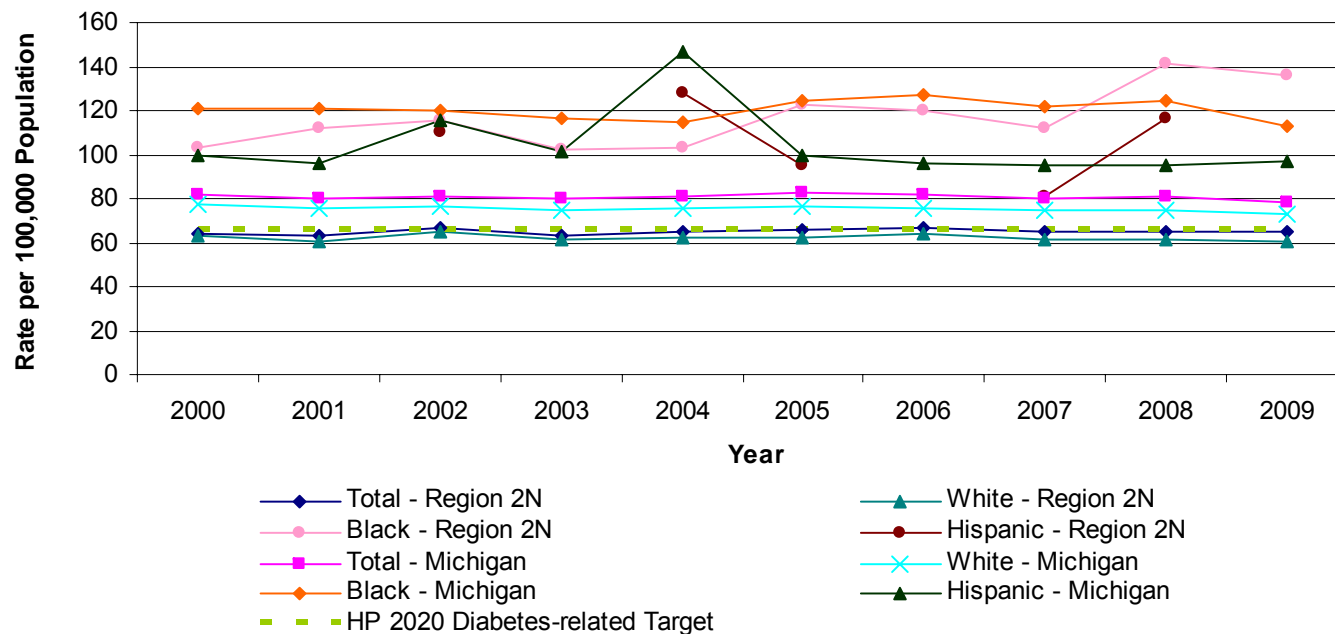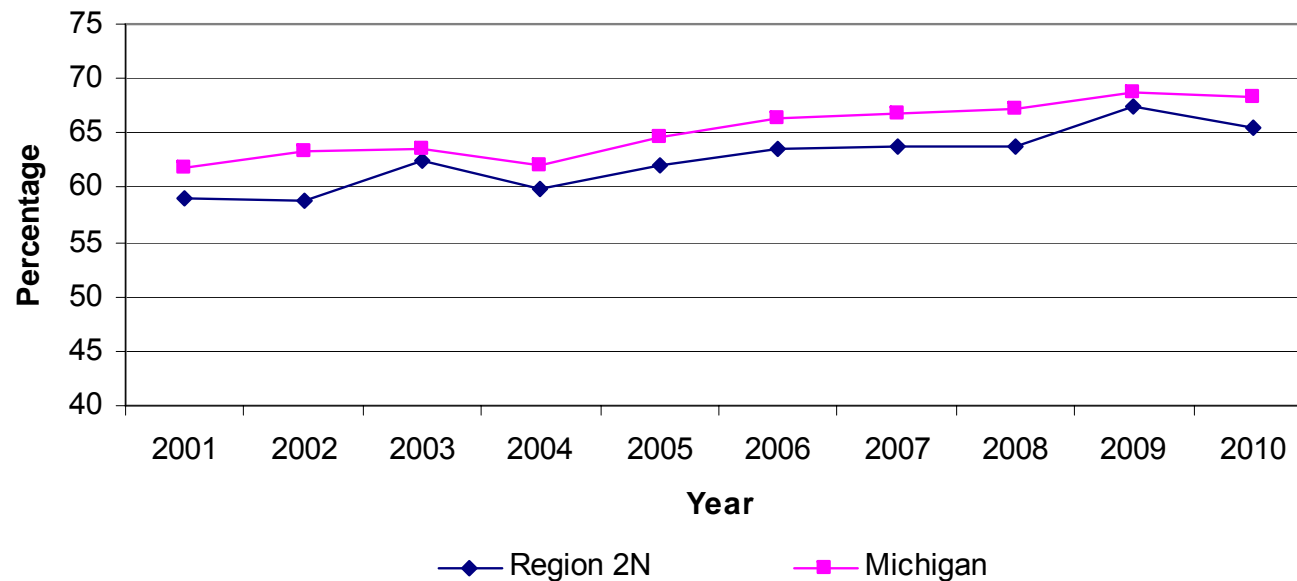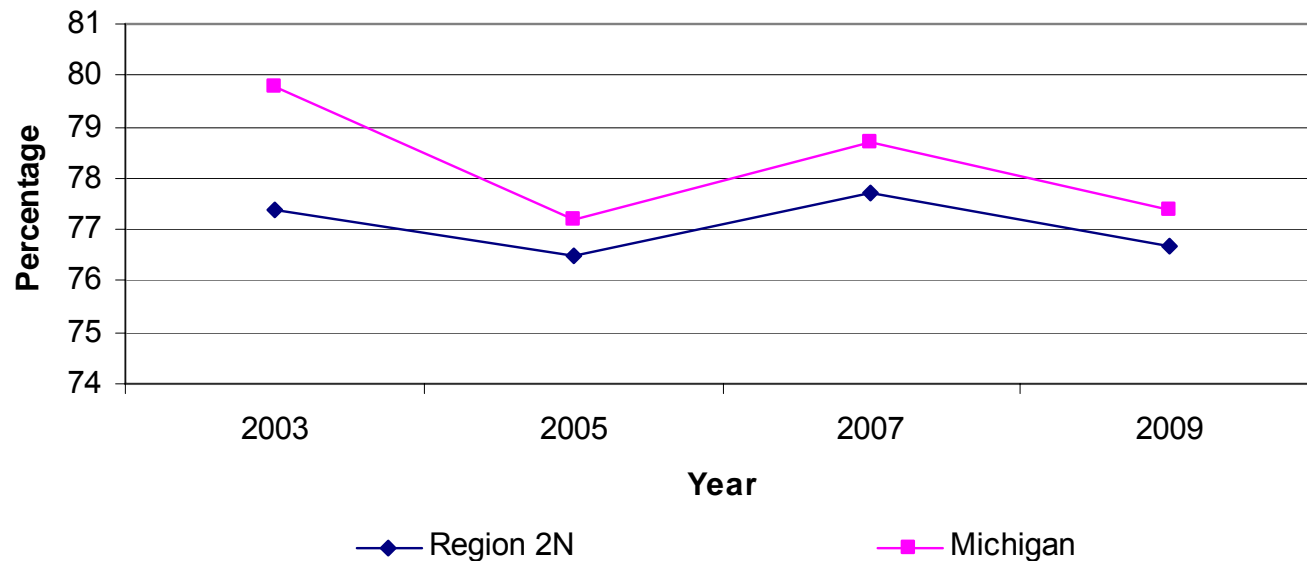**Indicator Definition/Overview:**
- Dietary factors are associated with cardiovascular disease, stroke, cancer and diabetes, which are estimated to cost society billions of dollars each year in healthcare and lost productivity.
- Good nutrition is especially important in early childhood development.
- State-level monitoring of the nutrition status of Michigan residents includes program analysis, such as the Women, Infants and Children (WIC) Program, and evaluating statewide data from the Michigan Behavioral Risk Factor Survey (MiBRFS) focusing on fruit and vegetable consumption.
- Inadequate fruit and vegetable consumption is defined as consuming fruits and vegetables, on average, fewer than five times per day over the past seven days.

Healthy People 2020 Target:
An HP 2020 target does not exist for inadequate fruit and vegetable consumption. However, targets do exist for the proportion of fruits and vegetables in relation to total diet.

Inadequate Fruit and Vegetable Consumption Among Adults, Region 2N and Michigan

Data Source:
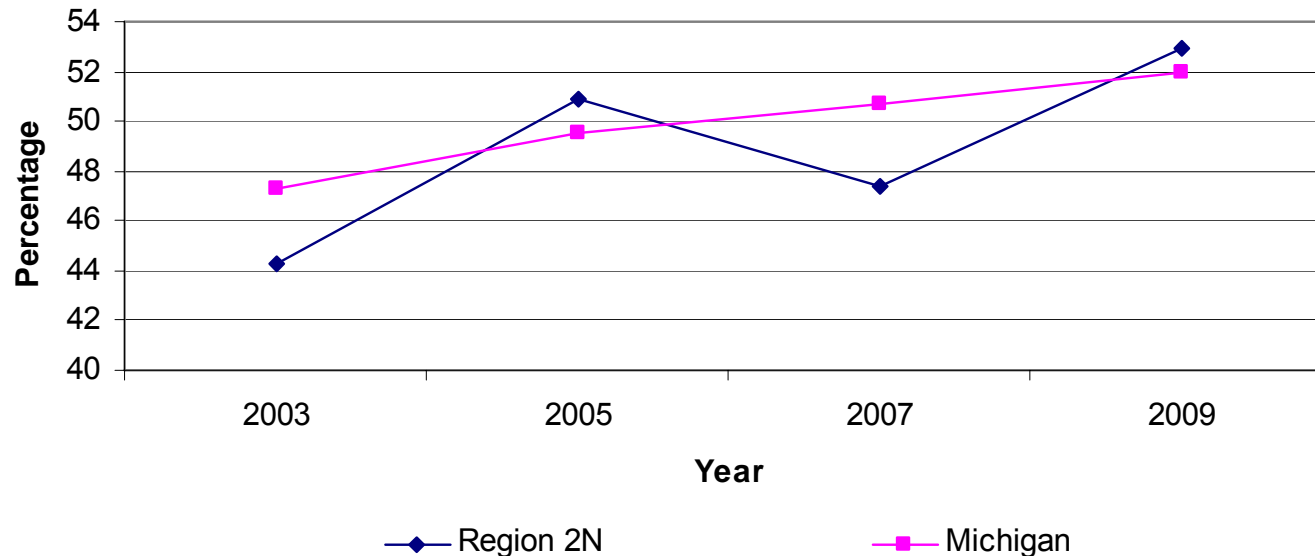Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2003 ‑ 2009.

Physical Activity

Indicator Definition/Overview:
- Moderate to higher levels of regular physical activity lower mortality rates for both older and younger adults.
- Regular physical activity is associated with decreased risk of developing conditions such as diabetes, colon cancer, and high blood pressure.
- Regular physical activity reduces feelings of depression and anxiety; helps control weight; helps build and maintain healthy bones, muscles, and joints; helps older adults become stronger and better able to move about; and promotes psychological wellbeing.
- This indicator is measured as the percentage of adults not meeting recommendations for physical activity as of the time of survey distribution.

Sufficient Physical Activity Among Adults, Region 2N and Michigan

Healthy People 2020 Target:
The HP 2020 target for adults meeting recommendations for aerobic and muscle strengthening activity is 20.1 percent.

Data Sources:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2003 ‑ 2009.
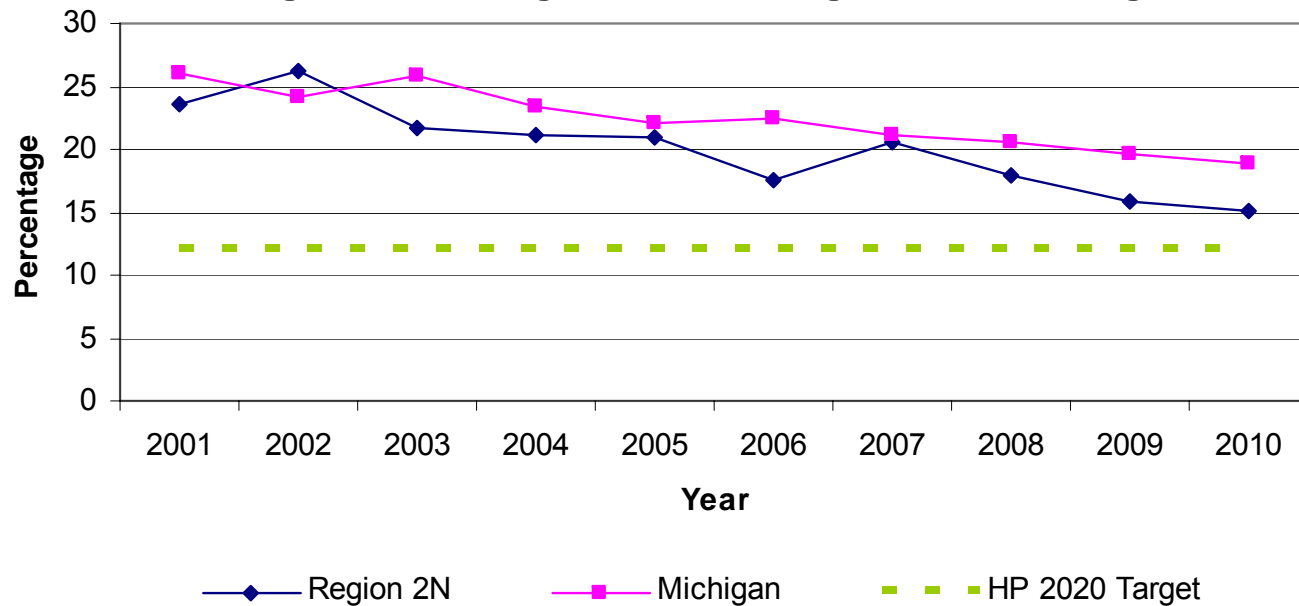
Smoking

Indicator Definition/Overview:
- Smoking is a leading cause of death and disability and is an important modifiable risk factor.
- Smoking contributes to the development of many kinds of chronic conditions including cancers, respiratory diseases, and cardiovascular diseases, and remains the leading preventable cause of premature death in the United States. It has been estimated that smoking costs the United States $193 billion in annual health-related economic losses and 5.1 million years of potential life lost each year.
- Smoking is also associated with cardiovascular disease. Risk of stroke doubles for those who smoke as compared to those who do not.
- The Dr. Ron Davis Smoke-Free Air Law, which went into effect on May 1, 2010, protects all Michigan residents and visitors from exposure to secondhand tobacco smoke in all restaurants, bars, and businesses.

Adult Cigarette Smoking Prevalence, Region 2N and Michigan

Healthy People 2020 Target:
The HP 2020 target for cigarette smoking is 12 percent.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2001 - 2010.

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Binge Drinking

Indicator Definition/Overview:
- Approximately 79,000 people die each year in the United States as a result of excessive alcohol use, making its use the third leading behavior-related cause of death for the nation.
- Excessive alcohol consumption has both immediate consequences: miscarriage, stillbirth, birth defects, unintentional injuries, and violence; and long-term consequences: neurological problems; cardiovascular problems; psychiatric problems; social problems including family problems, lost productivity, and unemployment; cirrhosis; and worsening of liver function for persons with hepatitis C virus.
- Binge drinking is defined as the consumption of five or more drinks per occasion (for men) or four or more drinks per occasion (for women) at least once in the previous month.

Percentage of Adults Reporting Binge Drinking in Past Month, Region 2N and Michigan

Healthy People 2020 Target:
The HP 2020 target for binge drinking is 24.3 percent.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2001 ‐ 2010.
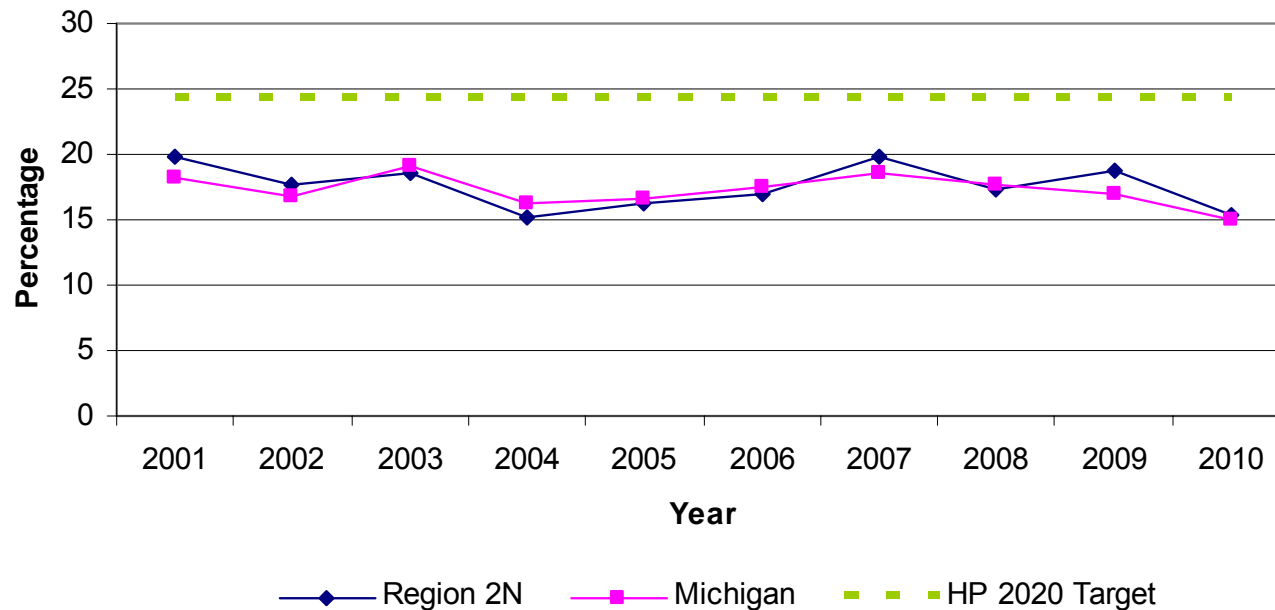
Controlled Blood Pressure

Indicator Definition/Overview:
- Approximately one of three adults in the United States has high blood pressure – also known as hypertension – which is a risk factor for heart disease and stroke.
- During the past ten years, more people with high blood pressure have become aware of the disease and received treatment.
- This indicator is measured as the percentage of adults who were ever told they had high blood pressure, and are currently taking medication to control it.

Percentage of Adults with Controlled Hypertension, Region 2N and Michigan

Healthy People 2020 Target:
The HP 2020 target for adults with controlled hypertension is 77.4 percent.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
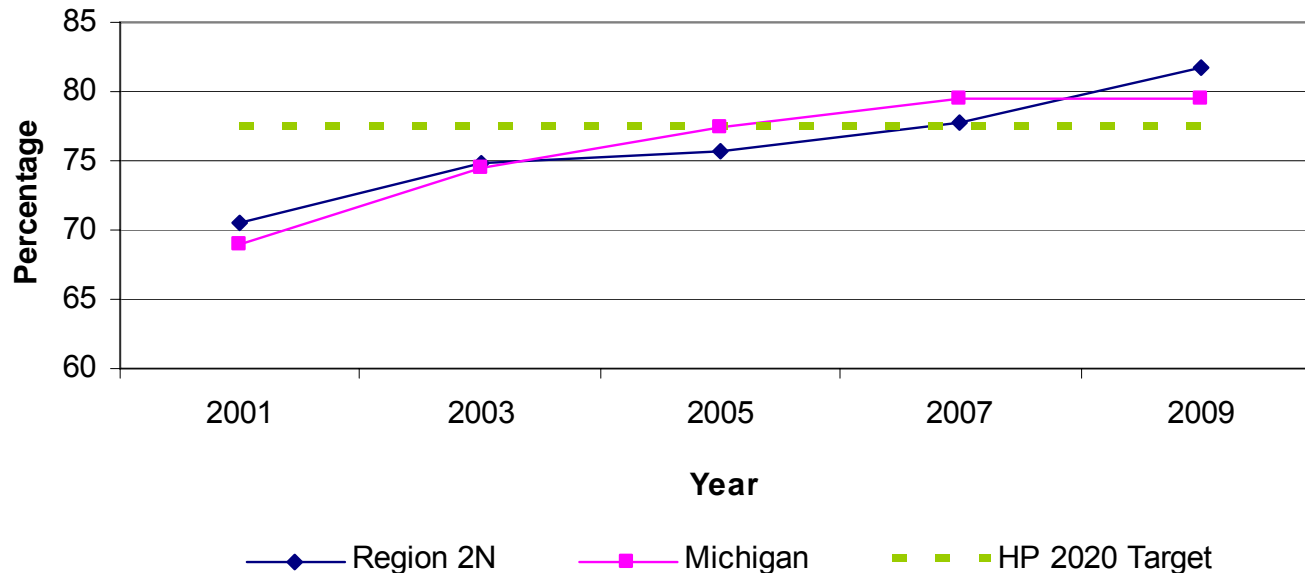Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2001 ‑ 2009.

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Infant Mortality Rate

Indicator Definition/Overview:
- Infant mortality is used as an indicator of the level of child health and overall development and is often used to identify disparities among populations within a specific county.
- Rate is calculated as number of deaths per 1,000 live births.

Healthy People 2020 Target:
The HP 2020 target for infant mortality is 6.0 deaths per 1,000 live births.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.

Infant Mortality Rates by Race/Ethnicity, Region 2N

Teen Pregnancy

Indicator Definition/Overview:
- Nearly two-thirds of births to women younger than age 18 are the result of unintended pregnancy.
- The children of teenage mothers are less likely to graduate from high school, more likely to suffer health problems, and more likely to encounter problems with the law.
- Only about 50 percent of teenage mothers earn a high school diploma by age 22, in contrast with nearly 90 percent of their peers who had not given birth during their teenage years.
- Teen pregnancy rates include live births, abortions, and estimated number of miscarriages.

Teen Pregnancy Rates, Region 2N and Michigan

Legend:
- Ages 15-17, Region 2N
- Ages 18-19, Region 2N
- Ages 15-17, Michigan
- Ages 18-19, Michigan
- HP 2020 Target, Ages 15-17
- HP 2020 Target, Ages 18-19

Healthy People 2020 Target:
The HP 2020 target for teen pregnancies among 15 – 17 year olds is 36.2 per 1,000 females. The HP 2020 target for teen pregnancies among 18 – 19 year olds is 105.9 per 1,000 females.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.
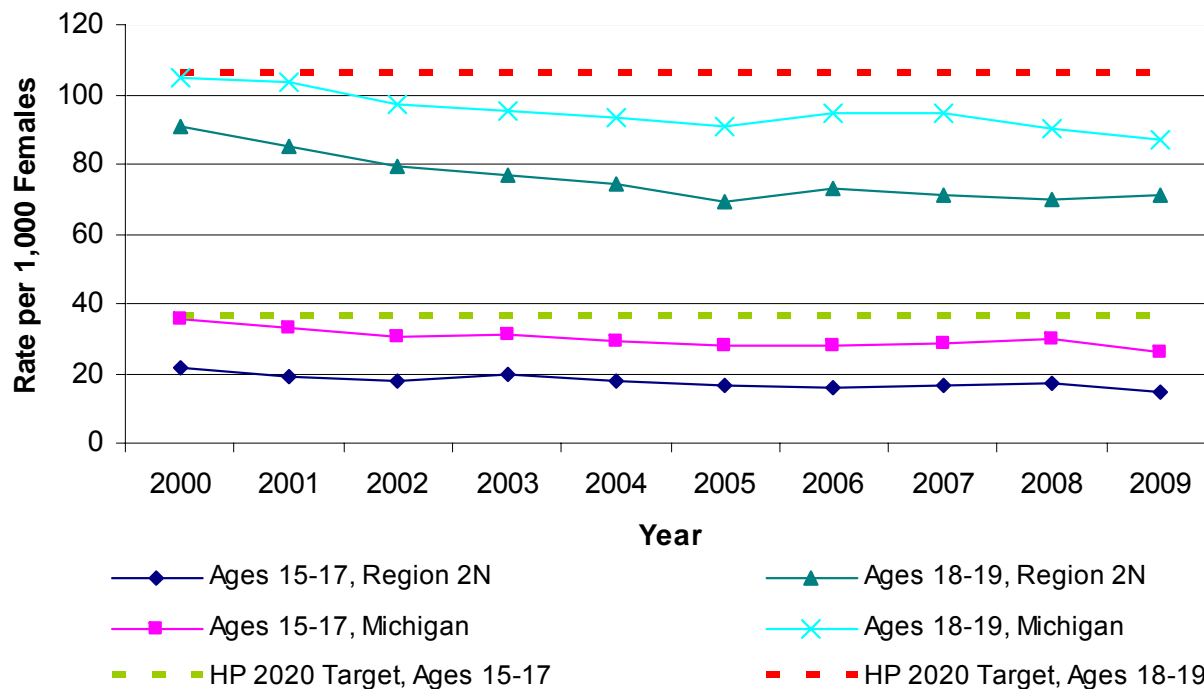
Low Birth Weight

Indicator Definition/Overview:
- Low birth weight is defined as fewer than 2,500 grams, or a maximum of approximately 5 pounds, 8 ounces.
- Low birth weight is a major cause of neonatal mortality (death before 28 days of age).
- Data are reported as three-year moving averages due to small sample sizes in some groups.

Healthy People 2020 Target:
The HP 2020 target for low birth weight is 7.8 percent of live births.

Low Birth Weight by Race/Ethnicity, Region 2N

Legend:
- White
- Black
- American Indian
- Asian/Pacific Islander
- Hispanic
- Michigan
- HP 2020 Target

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.
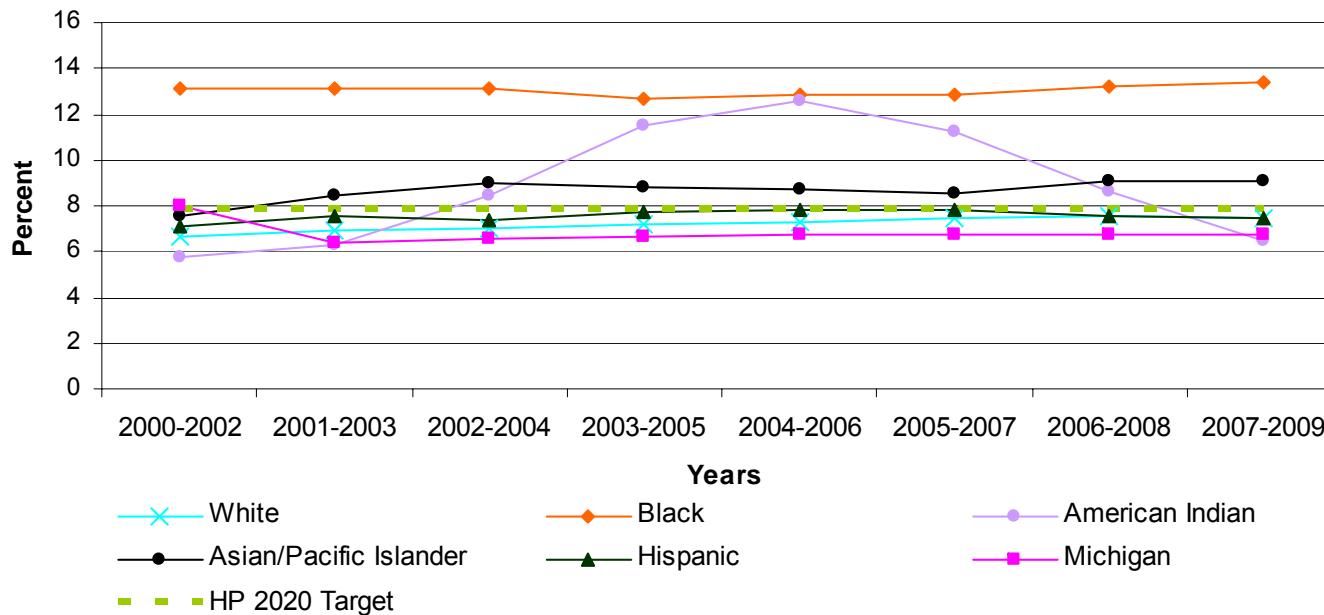
Very Low Birth Weight

Indicator Definition/Overview:
- Very low birth weight is defined as under 1,500 grams, or 3 pounds, 4 ounces.
- Very low birth weight infants are at a significantly increased risk of severe health problems, including physical, visual, cognitive, and developmental difficulties.
- Data are reported as three-year moving averages due to small sample sizes in some groups.
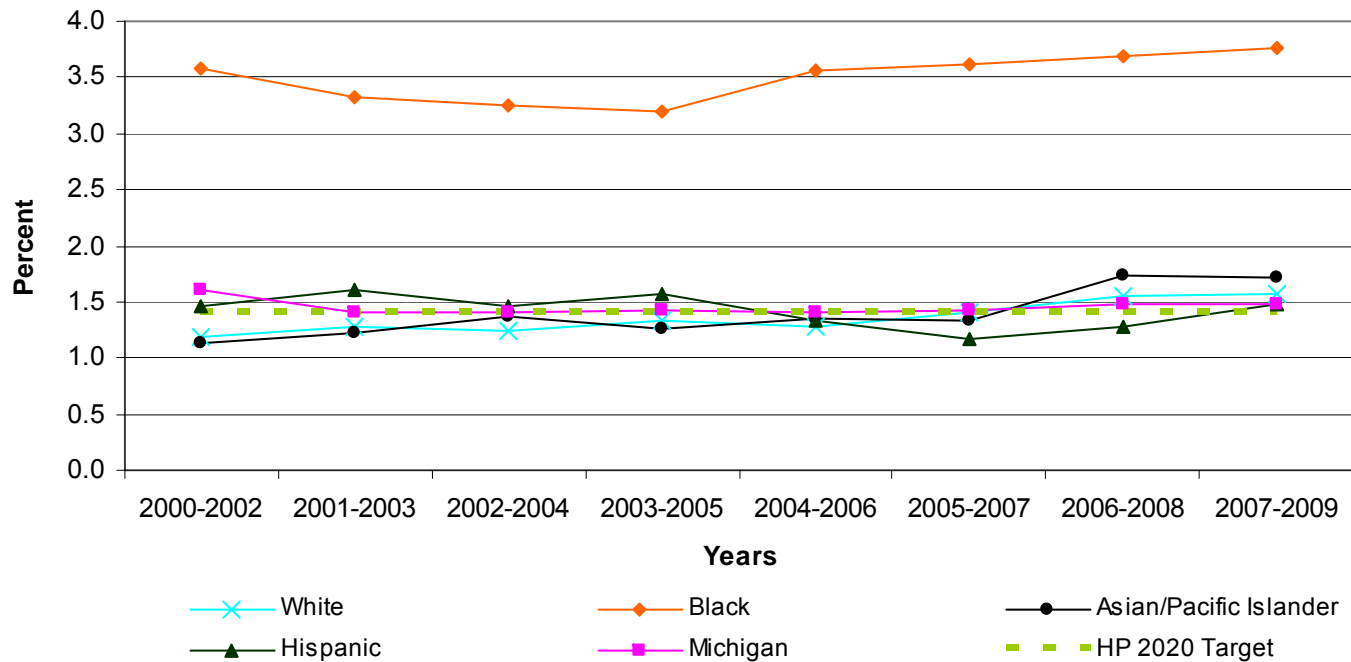
Healthy People 2020 Target:
The HP 2020 target for very low birth weight is 1.4 percent of live births.

Very Low Birth Weight by Race/Ethnicity, Region 2N

Legend:
- White
- Black
- Asian/Pacific Islander
- Hispanic
- Michigan
- HP 2020 Target

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.

Adult Immunizations

**Indicator Definition/Overview:**
- Rates of severe illness and death from the influenza virus are highest among children less than two years old, people aged 65 years and older and those with chronic medical conditions.
- Pneumococcal disease can also result in chronic problems, such as brain damage, hearing loss, limb loss, or death.
- This indicator is measured as the percentage of adults, age 65 years and older, who have had a flu vaccine in the past year and a pneumonia vaccine ever, respectively.

Flu and Pneumonia Vaccination Among Adults Aged 65 Years and Older, Region 2N and Michigan

Legend:
- Flu - Region 2N
- Flu - Michigan
- Pneumonia - Region 2N
- Pneumonia - Michigan
- HP 2020 Target
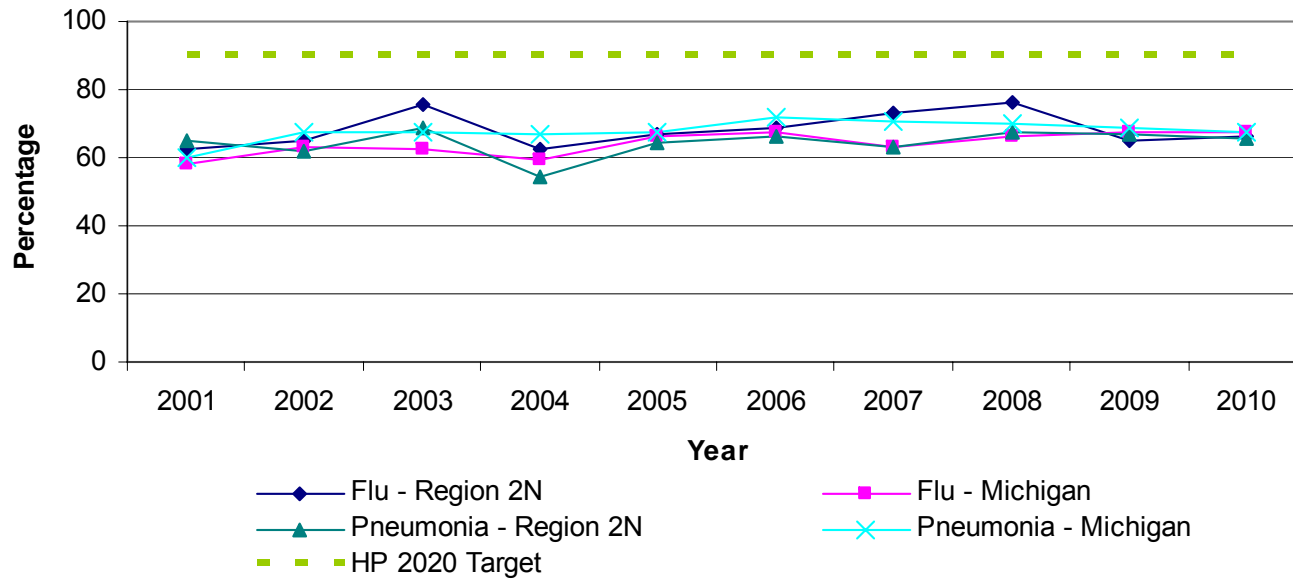
Healthy People 2020 Target:
The HP 2020 target for both pneumococcal and flu vaccines in the adult population ages 65 and above is 90 percent.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2001 - 2010.

Gonorrhea

Indicator Definition/Overview:
- The CDC estimates that less than half of incident gonorrheal infections are reported to them.
- In the United States, sexually active teenagers, young adults, and African Americans report the highest rate of infections.
- Left untreated, gonorrhea increases the chance of having an ectopic pregnancy.

Gonorrhea Incidence Rates by Age Group, Region 2N and Michigan
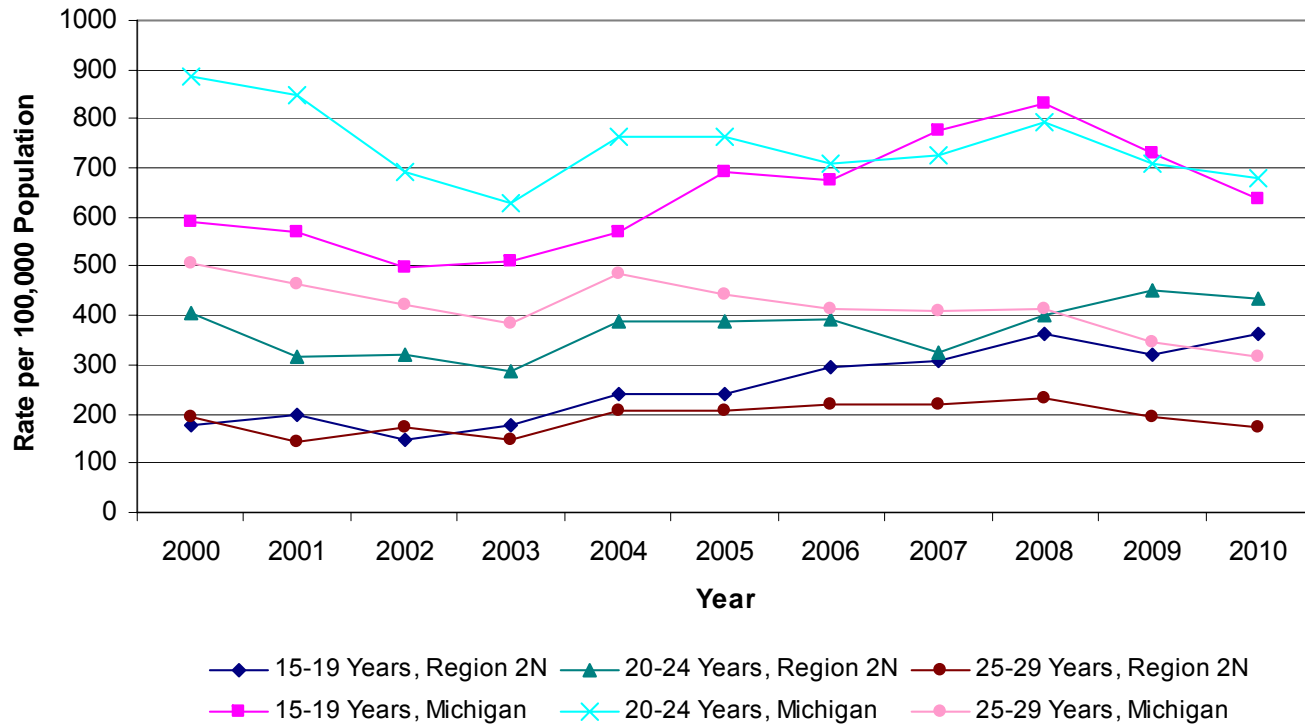
Healthy People 2020 Target:
The HP 2020 target for females is no more than 257 incident cases per 100,000 population aged 15-44 years be reported per year. The HP 2020 target for males is no more than 198 incident cases per 100,000 population aged 15-44 years be reported per year.

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.

Chlamydia

Indicator Definition/Overview:
- Chlamydia is the most commonly reported bacterial sexually transmitted disease in the United States.
- Many people with Chlamydia are not aware of their infection, which means that the true incidence is higher than reported.
- Left untreated, Chlamydia can negatively impact a woman's ability to have children.

Chlamydia Incidence Rates by Age Group, Region 2N and Michigan
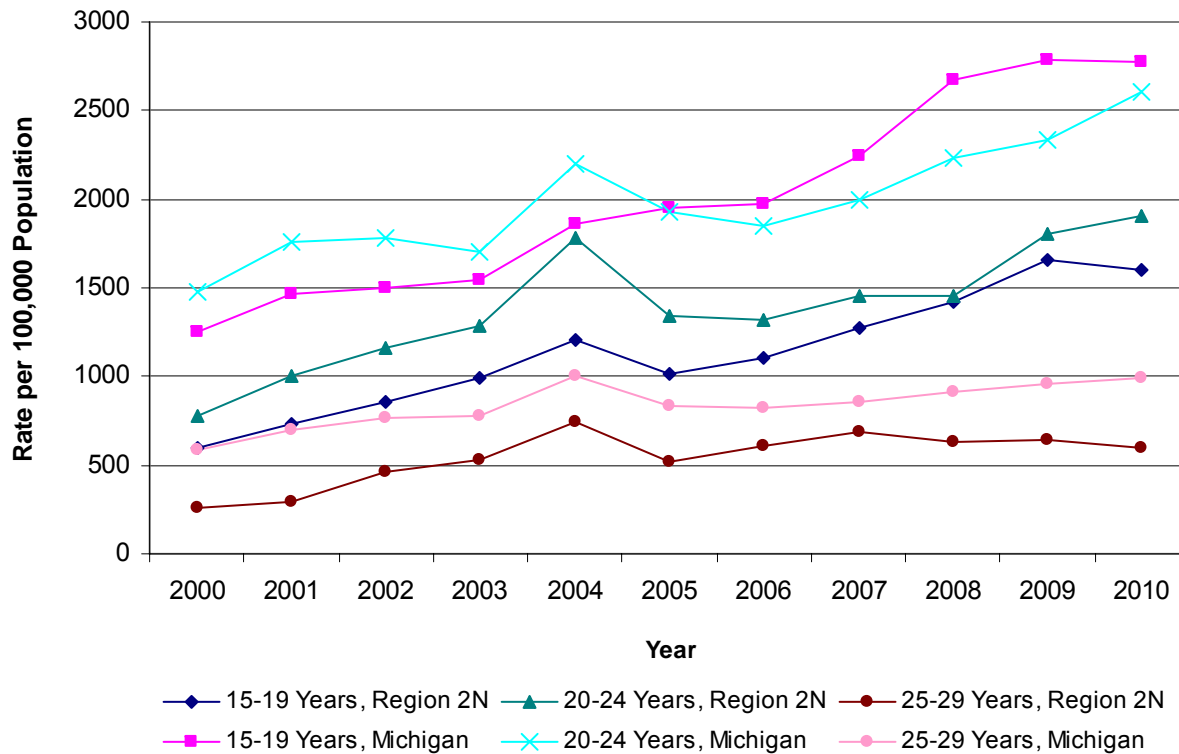
Healthy People 2020 Target:
The HP 2020 target for females is no more than 11.5 percent of the population aged 24 years and under who are enrolled in the National Job Training Network in the last 12 months test positive per year. The HP 2020 target for males is no more than 6.3 percent of the population aged 24 years and under who are enrolled in the National Job Training Network in the last 12 months test positive per year.

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.
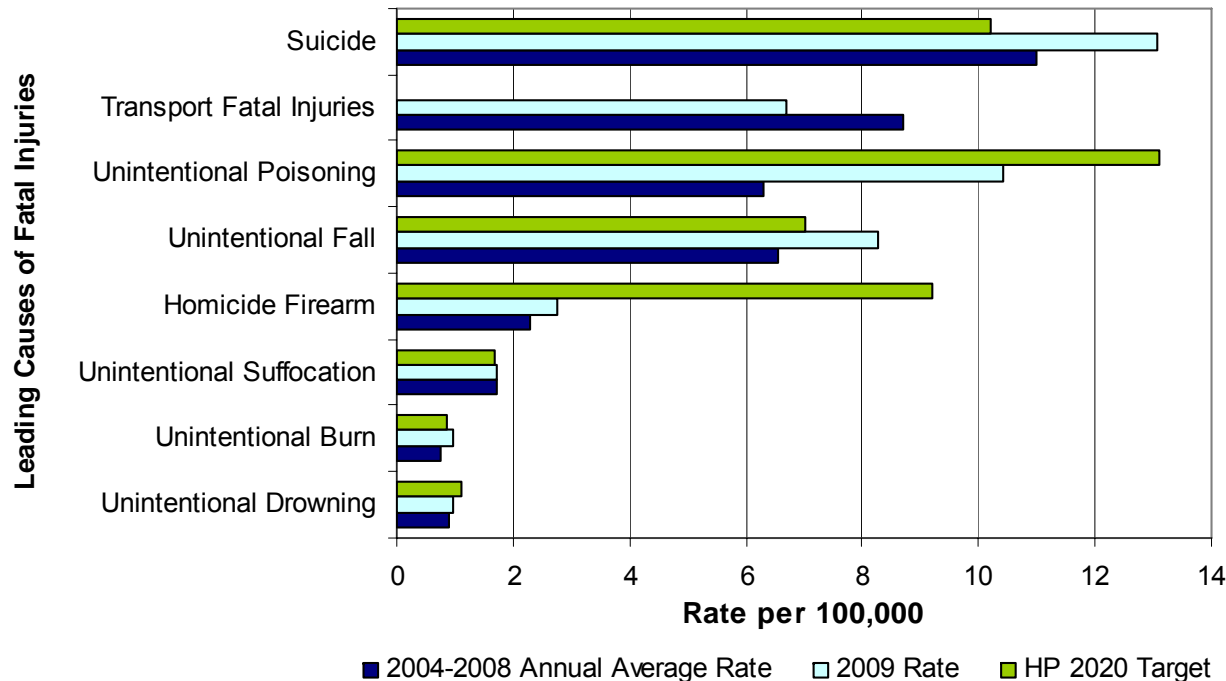
Injury Mortality

Indicator Definition/Overview:
- Injuries are a major cause of death and disability.
- Injury death and disability create a large economic burden. The estimated cost of injuries in the United States – including medical care and lost productivity – was $406 billion in 2005.
- Like diseases, injuries and violence are preventable – they do not occur at random. The same scientific methods used to prevent disease are also successfully applied to prevent injuries and violence.
- Injury mortality is reported in crude rates.

Injury Mortality in Region 2N, By Cause

Leading Causes of Fatal Injuries (y-axis): Suicide, Transport Fatal Injuries, Unintentional Poisoning, Unintentional Fall, Homicide Firearm, Unintentional Suffocation, Unintentional Burn, Unintentional Drowning

Rate per 100,000 (x-axis): 0, 2, 4, 6, 8, 10, 12, 14

Legend: ■ 2004-2008 Annual Average Rate □ 2009 Rate ■ HP 2020 Target

Healthy People 2020 Target:
HP 2020 targets for fatal injuries are as follows:
- Suicide = 10.2 per 100,000
- Poisoning = 13.1 per 100,000
- Falls = 7 per 100,000
- Suffocation = 1.7 per 100,000
- Drowning = 1.1 per 100,000
- Motor Vehicle Traffic Crash-Related = 13.8 per 100,000

The HP 2020 target for deaths related to residential fires is .86 per 100,000. This chartbook measures all burn/fire/flame as one indicator. The HP 2020 target for firearm-related deaths is 9.2 per 100,000 and does not break deaths into intentional and unintentional.

Please note that baseline data for HP 2020 targets may be derived from a different source than is used in this chartbook.

Data Source:
Michigan Department of Community Health, Division of Vital Records and Health Statistics.
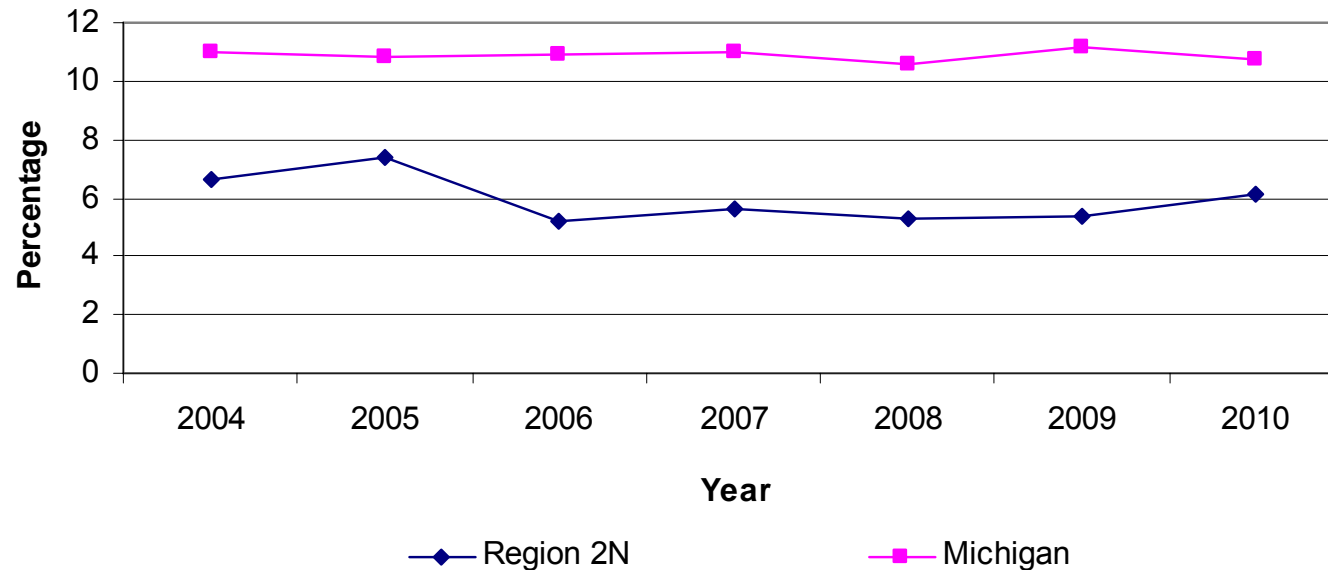
Mental Health

Indicator Definition/Overview:
- Forty percent of the top ten leading causes of disability in the United States are mental disorders.
- The National Institute of Mental Health estimates that 25 percent of adults endure a mental health disorder in a given year.
- The cost of untreated mental illness exceeds 100 billion dollars per year in the United States.

Healthy People 2020 Target:
An HP 2020 target does not exist for adults reporting poor mental health.

Data Source:
Michigan Department of Community Health, Michigan Behavioral Risk Factor Surveillance System, 2004 ‐ 2010.

Percentage of Adults Reporting Poor Mental Health on At Least 14 of the Past 30 Days, Region 2N and Michigan

Legend: Region 2N, Michigan

Appendix A: Sources for Indicator Overview/Definition

Workforce - Primary Care	American Academy of Family Physicians, 2011. http://www.aafp.org/online/en/home/policy/policies/p/primarycare.html Piggott, Kevin, Ann Batdorf-Barnes, Dana Watt, and Dennis Paradis. "Primary Care Is in Crisis." *Michigan Primary Care Consortium*. http://www.mipcc.org/sites/mipcc.org/files/u4/crisis_part1_web.pdf National Association of Community Health Centers, 2009. http://www.nachc.com/client/documents/pressreleases/PrimaryCareAccessRPT.pdf
Unemployment Rate	U.S. Bureau of Labor Statistics: http://www.bls.gov/bls/unemployment.htm LARA: Labor Market Information: http://www.milmi.org/
Access to Care	Institute of Medicine, *State of the USA Report*, 2009.
Leading Causes of Death	Centers for Disease Control and Prevention, 2011. http://www.cdc.gov/nchs/fastats/lcod.htm
Years of Potential Life Lost	Gardner, J. W., and J. S. Sanborn. "Years of Potential Life Lost (YPLL)--what Does It Measure?" *Epidemiology* 1.4 (1990): 322-29.
Cancer Mortality	Centers for Disease Control and Prevention, 2007. http://www.cdc.gov/nchs/fastats/lcod.htm American Cancer Society, Cancer Facts and Figures, 2010. http://www.cancer.org/acs/groups/content/@epidemiologysurveilance/documents/document/acspc-026238.pdf National Cancer Institute, 2008. http://www.cancer.gov/cancertopics/factsheet/disparities/cancer-health-disparities
Breast Cancer Screening	National Cancer Institute, 2010. http://www.cancer.gov/cancertopics/factsheet/detection/mammograms
Cervical Cancer Screening	National Cancer Institute, 2010. http://www.cancer.gov/cancertopics/factsheet/detection/Pap-test
Colorectal Cancer Screening	National Cancer Institute, 2008. http://www.cancer.gov/cancertopics/factsheet/detection/colorectal-screening Centers for Disease Control and Prevention, 2011. http://www.cdc.gov/cancer/colorectal/statistics/screening_rates.htm

Cardiovascular Disease	Centers for Disease Control and Prevention, 2007. http://www.cdc.gov/nchs/fastats/lcod.htm Centers for Disease Control and Prevention, 2010. http://www.cdc.gov/chronicdisease/resources/publications/AAG/dhdsp.htm
Diabetes	Centers for Disease Control and Prevention, 2011. http://www.cdc.gov/diabetes/
Overweight and Obesity	Institute of Medicine, *State of the USA Report*, 2009.
Nutrition	Institute of Medicine, *State of the USA Report*, 2009.
Physical Activity	Institute of Medicine, *State of the USA Report*, 2009.
Smoking	Institute of Medicine, *State of the USA Report*, 2009.
Binge Drinking	Institute of Medicine, *State of the USA Report*, 2009.
Controlled Blood Pressure	Centers for Disease Control and Prevention, 2011. http://www.cdc.gov/bloodpressure/
Infant Mortality	Institute of Medicine, *State of the USA Report*, 2009.
Teen Pregnancy	Centers for Disease Control and Prevention, 2011. http://www.cdc.gov/TeenPregnancy/AboutTeenPreg.htm
Low Birth Weight and Very Low Birth Weight	Health Resources and Services Administration, 2009. http://mchb.hrsa.gov/chusa08/hstat/hsi/pages/202lbw.html Health Resources and Services Administration, 2009. http://mchb.hrsa.gov/chusa08/hstat/hsi/pages/203vlbw.html
Adult Immunizations	Institute of Medicine, *State of the USA Report*, 2009.
Gonorrhea	Centers for Disease Control and Prevention, 2011. http://www.cdc.gov/std/Gonorrhea/
Chlamydia	Centers for Disease Control and Prevention, 2011. http://www.cdc.gov/std/chlamydia
Injury Mortality	Institute of Medicine, State of the USA Report, 2009. Finkelstein, E.A., Corso, P.S., & Miller, T.R. (2006). *Incidence and economic burden of injuries in the United States*. New York, NY: Oxford University Press.
Mental Health	National Alliance on Mental Illness, 2011. http://www.nami.org/template.cfm?section=about_mental_illness