Community Health Needs Assessment and Action Plan



Date Completed: February 2012

Background

The Patient Protection and Affordable Care Act requires that non-profit hospitals conduct a Community Health Needs Assessment and adopt an Action Plan once every three years.

Our Approach

- Reviewed local demographics and vital health statistics.
- Reviewed the findings of a countywide Behavioral Risk Factor Surveillance Survey (BRFSS).
- Conducted a focus group of local non-profit organizations and community leaders.
- Conducted several key informant interviews.

Demographics

Demographics: St. Clair County, MI

| Population size ¹ | 168,894 |
|--|---------|
| Population density (people per square mile) ² | 233 |
| Individuals living below poverty level ³ | 11.1% |

| Age distribution ¹ | | Race/Ethnicity ¹ | |
|-------------------------------|-------|-----------------------------|-------|
| Under Age 19 | 24.5% | White | 95.1% |
| Age 19-64 | 62.0% | Black | 2.5% |
| Age 65-84 | 11.6% | American Indian | 0.5% |
| Age 85+ | 1.9% | Asian/Pacific Islander | 0.5% |
| | | Hispanic origin (non add) | 2.5% |

Profile of St. Clair County, 2009

| POPULATION | | NATALITY | | MORTALITY | | |
|--|-------------|---------------------------------------|------------|------------------------------------|----------|--|
| As of July 1, 2009 | 167,562 | Live Births: | 1,779 | Total Deaths: | 1,575 | |
| Rank Among Counties: | 13 | Teenage Mothers: | 170 | Infant Deaths: | 14 | |
| Per Square Mile: | 231.3 | Low Weight Births: | 153 | Neonatal Deaths: | 5 | |
| · | | First Births: | 713 | Postneonatal Deaths: | 9 | |
| MARRIAGE Marriages: Marriage Rate: | 868 10.4 | DIVORCE Divorces: Divorce Rate: | 621 7.4 | Perinatal Deaths: Fetal Deaths: | 13 11 | |

NATALITY BY RACE OF MOTHER

| | Total | | White | ! | Black | | Other | |
|---|--------|-------|--------|-------|--------|-------|--------|-------|
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| Live Births | 1,779 | 10.6 | 1,677 | 10.4 | 48 | 9.8 | 49 | 22.9 |
| | Total | | White | ! | Black | | Other | |
| | Number | Ratio | Number | Ratio | Number | Ratio | Number | Ratio |
| Teenage Mothers | 170 | 95.6 | 159 | 94.8 | 7 | 145.8 | 4 | * |
| Low Weight | 153 | 86.0 | 134 | 79.9 | 10 | 208.3 | 8 | 163.3 |
| Under 1,500 Grams | 29 | 16.3 | 25 | 14.9 | 2 | * | 2 | * |
| < 37 weeks Gestation | 227 | 127.6 | 208 | 124.0 | 12 | 250.0 | 7 | 142.9 |
| Prenatal Care Began in First Trimester | 1,366 | 767.8 | 1,303 | 777.0 | 22 | 458.3 | 39 | 795.9 |

Note: Rate is per 1,000 estimated 2009 population and ratio per 1,000 live births in 2009 in specified group.

INFANT AND PERINATAL MORTALITY BY RACE

| | Total | | White | | Black | | Other | ı |
|-------------------------------|--------|-------|--------|-------|--------|-------|--------|-------|
| | Number | Ratio | Number | Ratio | Number | Ratio | Number | Ratio |
| Infant Deaths | 14 | 7.9 | 13 | 7.8 | 1 | * | - | - |
| Neonatal Deaths | 5 | * | 4 | * | 1 | * | - | - |
| Postneonatal Deaths | 9 | 5.1 | 9 | 5.4 | - | - | - | - |
| Perinatal Deaths [†] | 13 | 7.3 | 9 | 5.3 | 2 | * | - | - |
| Fetal Deaths | 11 | 6.1 | 7 | 4.2 | 2 | * | - | _ |

Note: Rate is per 1,000 live births or total births in 2009 in specified group.

^{†&}lt;sub>Provisional.</sub>

MORTALITY

| | | | Tota | ıl | | White | • | | Black | | | Oth | er | |
|------------------|----|------|------|--------|-------|-------|----------|-------|--------|---------|-------------|------|-----|------|
| | Ţ | otal | Male | Female | Total | Male | Female | Total | Male F | Female | Total | Male | Fer | nale |
| Deaths | 1 | ,575 | 808 | 767 | 1,518 | 777 | 741 | 26 | 14 | 12 | 9 | 6 | 5 | 3 |
| Crude Death Rate | | 9.4 | 9.7 | 9.1 | 9.5 | 9.8 | 9.1 | 5.3 | 5.5 | 5.1 | 4.2 | 6.1 | 1 | 2 |
| | | | | | | | | | | | | | | |
| | | | | | | | Age in \ | ears/ | | | | | | |
| | <1 | 1-4 | 5-8 | 10-14 | 15-19 | 20-24 | 25-29 | 30-39 | 9 40-4 | 49 50-5 | 59 60 | -69 | 70+ | Unk |
| Total Deaths | 14 | 2 | 2 | 3 | 11 | 10 | 7 | 39 | 9 8 | 35 16 | 66 2 | 251 | 985 | - |
| White Male | 8 | 2 | 1 | 1 | 9 | 7 | 4 | 25 | 5 6 | 51 9 | 92 ′ | 138 | 429 | _ |
| White Female | 5 | - | 1 | 2 | 1 | 3 | 3 | 13 | 3 1 | 19 6 | 63 <i>'</i> | 101 | 530 | |
| Black Male | _ | - | - | - | - | - | - | | - | 1 | 5 | 3 | 5 | - |
| Black Female | 1 | - | - | - | 1 | - | - | | - | 1 | 2 | _ | 7 | - |
| Other Male | _ | - | - | _ | - | - | - | • | 1 | 1 | 1 | 1 | 2 | _ |
| Other Female | - | - | _ | - | - | - | - | | _ | 1 | 1 | 1 | - | - |

Note: Rate is per 100,000, 2009 population in specified group.

LEADING CAUSES OF DEATH

LEADING HOSPITAL DISCHARGES -- 2009

| | Deaths | Rate | | Discharges | Rate |
|------------------------------------|--------|-------|--|------------|---------|
| Total | 1,575 | 840.7 | All Hospitalizations | 22,348 | 1,333.7 |
| Heart Disease | 433 | 229.7 | Heart Diseases | 2,596 | 154.9 |
| Cancer | 415 | 212.7 | Newborns and Neonates (Less than 7 days) | 1,819 | 108.6 |
| Chronic Lower Respiratory Diseases | 122 | 65.0 | Females with Deliveries | 1,750 | 104.4 |
| Stroke | 64 | 33.9 | Injury and Poisoning | 1,797 | 107.2 |
| Unintentional Injuries | 94 | 56.8 | Infectious and Parasitic Diseases | 928 | 55.4 |
| Diabetes Mellitus | 57 | 30.5 | Psychoses | 847 | 50.6 |
| Alzheimer's Disease | 39 | 21.0 | Cancer (Malignant Neoplasms) | 758 | 45.2 |
| Kidney Disease | 22 | 11.8 | Osteoarthrosis and Allied Disorders | 807 | 48.2 |
| Pneumonia/Influenza | 17 | * | Pneumonia | 590 | 35.2 |
| Intentional Self-harm (Suicide) | 25 | 14.9 | Cerebrovascular Diseases | 754 | 45.0 |

Children Ages 1-19

Children Ages 1-19

| | Deaths | Rate | | Discharges | Rate |
|--------------------------|--------|------|-------------------------|------------|-------|
| Total | 18 | 42.9 | All Hospitalizations | 1,053 | 251.0 |
| Accidents | 10 | 23.8 | Females with Deliveries | 172 | 41.0 |
| Assault (Homicide) | 1 | * | Injury and Poisoning | 134 | 31.9 |
| Suicide | 3 | * | Pneumonia | 71 | 16.9 |
| Cancer | - | - | Asthma | 54 | 12.9 |
| Congenital malformations | - | - | Appendicitis | 54 | 12.9 |

Note: Rates are per 100, 000. Leading causes of death are computed by the direct method, using as the standard population the age distribution of the total population of the United States for the year 2000. Children and discharge data are per 100,000, 2009 population in specified group.

Selected Chronic Disease Indicators, St. Clair County Residents 2007-2009

| CANCER MORTAL | r | 009 Mortality | CANCER INCIDENCE, 2005-2007 Incidence | | | | |
|------------------------------------|-------------------|------------------------|---------------------------------------|-----------------------------------|-------------------|--------------------------|--|
| Cause of Death and ICD-10 Codes | Average Number | Crude Death Rate | Age- adjusted Rate | Primary Site and ICD-0-3 Codes | Average Number | Age- adjusted Rate | |
| All Cancer (C00-C97) | 390 | 231.2 | 206.2 | All Cancer (C00-C97) | 913 | 500.8 | |
| Bladder (C67) | 13 | 7.9 | 7.3 | Bladder (C67) | 47 | 26.6 | |
| Breast (C50) | 30 | 35.2 | 28.2 | Breast (C50) | 122 | 124.2 | |
| Cervix (C53) | 2 | • | • | Cervix (C53) | 8 | 9.0 | |
| Colon & Rectum (C18-C20, C26.0) | 37 | 22.1 | 19.9 | Colon & Rectum (C18-C20, C26.0) | 86 | 47.4 | |
| Lung and Bronchus (C34) | 125 | 73.8 | 64.9 | Lung & Bronchus (C34) | 143 | 79.2 | |
| Melanoma (C43) | 5 | 3.0 | • | Melanoma (C43) | 32 | 17.7 | |
| Oral Cavity & Pharynx (C00-C14) | 7 | 3.9 | 3.5 | Oral Cavity & Pharynx (C00-C14) | 18 | 9.8 | |
| Prostate (C61) | 16 | 19.6 | 23.1 | Prostate (C61) | 134 | 160.9 | |

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| Ma | urtal | litu. |
| INIV. | n tan | III.V |
| | | |

| Cause of Death and ICD-10 Codes | Average Number | | |
|---|-------------------|-------|-------|
| | Mailinei | Rate | Rate |
| Major Cardiovascular Diseases (I00-I78) | 558 | 330.3 | 298.1 |
| Heart Disease (II00-I09, I11, I13, I20-I51) | 464 | 274.8 | 247.6 |
| Congestive Heart Failure (I50.0) | 34 | 20.1 | 18.4 |
| Coronary Heart Disease (I11, I20-I25) | 365 | 216.0 | 194.0 |
| Stroke (160-169) | 69 | 40.9 | 37.2 |

CARDIOVA SCULAR DISEASE HOSPITAL DISCHARGES, 2007-2009

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|-----------------------------------|---------|---------------|--------------------------|------------------------------|
| Diagnosis and ICD-9 Codes | Average | Crude Rate | Age- adjusted Rate | Average Length of Stay |
| Acute Myocardial Infarction (410) | 413 | 242.4 | 219.6 | 4.7 |
| Congestive Heart Failure (428.0) | | | | |
| All Ages | 404 | 237.1 | 221.9 | 4.9 |
| Ages 65 & Over | 333 | 1,501.2 | | 4.8 |
| Stroke (430-434 & 436-438) | | | | |
| All Ages | 491 | 288.6 | 287.9 | 4.9 |
| Ages 65 & Over | 347 | 1,565.8 | | 4.9 |

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| Cause of Death and ICD-10 Codes | Average Number | Crude Death Rate | Age- adjusted Rate |
|---|-------------------|------------------------|--------------------------|
| Asthma (J45-J46) | 3 | 2.0 | • |
| Chronic Liver Disease (K70 or K73-K74) | 21 | 12.4 | 10.9 |
| Chronic Lower Respiratory Diseases- Ages 45 & Over (J40-J47) | 105 | 149.0 | |
| Diabetes (E10-E14) | 65 | 38.7 | 35.3 |
| Any Mention ¹ | 165 | 97.7 | 89.5 |
| Nephritis, Hydronephrosis & Renal Failure | 2 24 | 14.2 | 12.9 |
| Any Mention ³ | 135 | 79.8 | 12.9 |

OTHER SELECTED HOSPITAL DISCHARGES, 2007-2009

| | Discharges | | | | | |
|--|------------|---------------|--------------------------|------------------------------|--|--|
| Diagnosis and ICD-9 Codes | Average | Crude Rate | Age- adjusted Rate | Average Length of Stay | | |
| Arthritis Ages 45 & over 4 | 931 | 1,357.8 | _ | 3.6 | | |
| Asthma (493) | 283 | 166.4 | 160.0 | 3.9 | | |
| Diabetes (250) | | | | | | |
| All | 266 | 156.0 | 148.7 | 4.5 | | |
| with Lower Extremity Amputation ⁵ | 19 | 11.0 | 10.0 | 10.5 | | |
| Hip Fractures-Ages 65 & over (820) | 148 | 667.2 | | 6.3 | | |
| Osteoporosis Any Mention- Ages 65 & over | 6 683 | 3,079.1 | _ | | | |

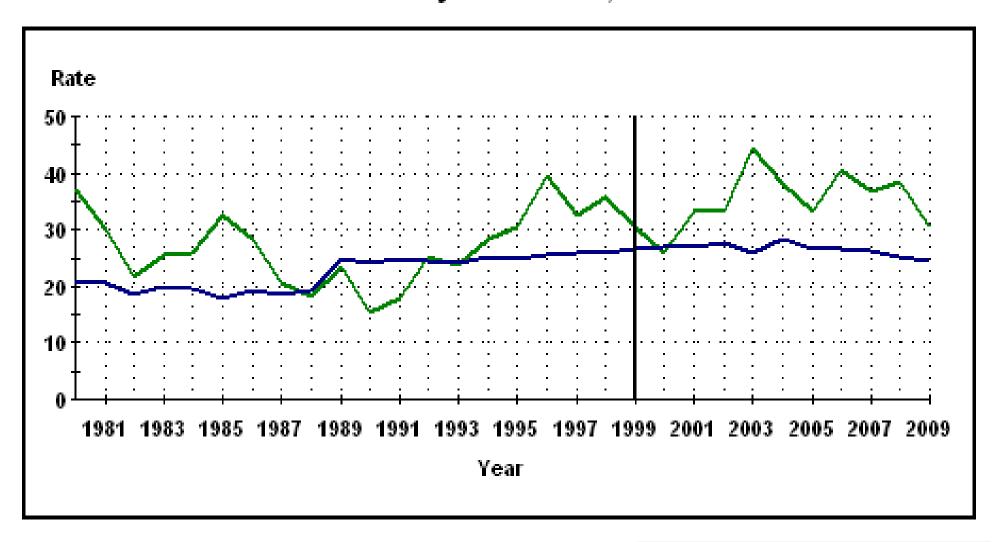
Age-Adjusted Death Rates for Ten Leading Causes by Race and Sex St. Clair County Residents, 2009

| Cause of Death | All Races | | | White | | | Black | | |
|---------------------------------------|-----------|---------|--------|-------|---------|--------|-------|------|--------|
| Cause of Death | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Heart Disease | 229.7 | 296.7 | 175.7 | 230.0 | 294.8 | 178.1 | * | * | * |
| Cancer | 212.7 | 241.8 | 191.5 | 212.0 | 238.5 | 193.1 | * | * | * |
| Chronic Lower Respiratory Diseases | 65.0 | 79.4 | 56.0 | 66.7 | 81.3 | 57.5 | * | * | * |
| Stroke | 33.9 | 30.8 | 35.9 | 33.7 | 30.4 | 35.8 | * | * | * |
| Unintentional Injuries | 56.8 | 85.2 | 30.3 | 58.5 | 88.7 | 30.1 | * | * | * |
| Diabetes Mellitus | 30.5 | 33.0 | 27.0 | 30.8 | 33.0 | 27.7 | * | * | * |
| Alzheimer's Disease | 21.0 | * | 24.7 | 21.5 | * | 25.3 | * | * | * |
| Kidney Disease | 11.8 | * | * | 11.5 | * | * | * | * | * |
| Pneumonia/Influenza | * | * | * | * | * | * | * | * | * |
| Intentional Self-harm (Suicide) | 14.9 | * | * | 15.1 | * | * | * | * | * |
| All Other Causes | 155.7 | 182.0 | 133.9 | 155.2 | 183.5 | 132.1 | * | * | * |
| Total | 840.7 | 1,019.6 | 694.7 | 843.7 | 1,020.9 | 699.0 | 776.4 | * | * |

Rates of Years of Potential Life Lost Below Age 75, By Sex, Due to Selected Causes of Death St. Clair County and Michigan Residents, 2009

| Michigan | | | St. Clair | | Michigan | | | |
|----------|--|---------|-----------|---------|----------|---------|---------|--|
| Rank | Cause of Death | Total | Male | Female | Total | Male | Female | |
| 1 | Malignant neoplasms | 2,189.4 | 2,213.4 | 2,165.2 | 1,652.5 | 1,714.7 | 1,590.5 | |
| 2 | Diseases of heart | 1,072.4 | 1,699.7 | 440.7 | 1,227.5 | 1,689.5 | 767.1 | |
| 3 | Accidents | 1,786.5 | 2,758.8 | 806.0 | 948.5 | 1,318.1 | 580.1 | |
| 4 | Certain conditions originating in the perinatal period | * | * | * | 377.4 | 433.8 | 321.2 | |
| 5 | Intentional self-harm (suicide) | 541.0 | * | * | 347.3 | 542.8 | 152.5 | |
| 6 | Assault (homicide) | * | * | * | 291.6 | 481.0 | 102.8 | |
| 7 | Chronic lower respiratory diseases | 334.1 | 279.0 | 389.6 | 222.7 | 232.3 | 213.2 | |
| 8 | Congenital malformations, deformations and chromosomal abnormalities | * | * | * | 198.1 | 213.2 | 183.2 | |
| 9 | Diabetes mellitus | 295.9 | 412.2 | 178.8 | 187.3 | 214.7 | 160.0 | |
| 10 | Chronic liver disease and cirrhosis | * | * | * | 185.3 | 247.9 | 123.0 | |
| 11 | Cerebrovascular diseases | 105.0 | 126.8 | 83.0 | 169.0 | 186.2 | 151.7 | |
| 12 | Influenza and pneumonia | * | * | * | 82.0 | 85.8 | 78.3 | |
| 13 | Nephritis, nephrotic syndrome and nephrosis | 31.8 | * | * | 78.1 | 89.4 | 66.8 | |
| 14 | Septicemia | * | * | * | 74.3 | 82.3 | 66.4 | |
| 15 | Other diseases of respiratory system | * | * | - | 62.8 | 68.2 | 57.4 | |
| | | | | | | | | |

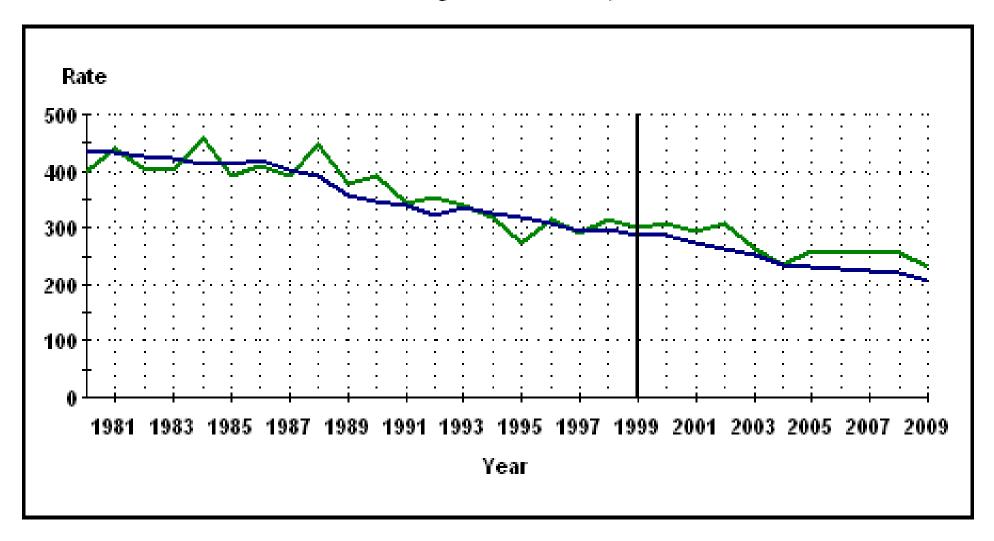
Diabetes Mellitus Age-adjusted Death Rates, St. Clair County Residents, 1989-2009



Source: 1989 - 2009 Michigan Resident Death Files, Division for Vital Records & Health Statistics, Michigan Department of Community Health



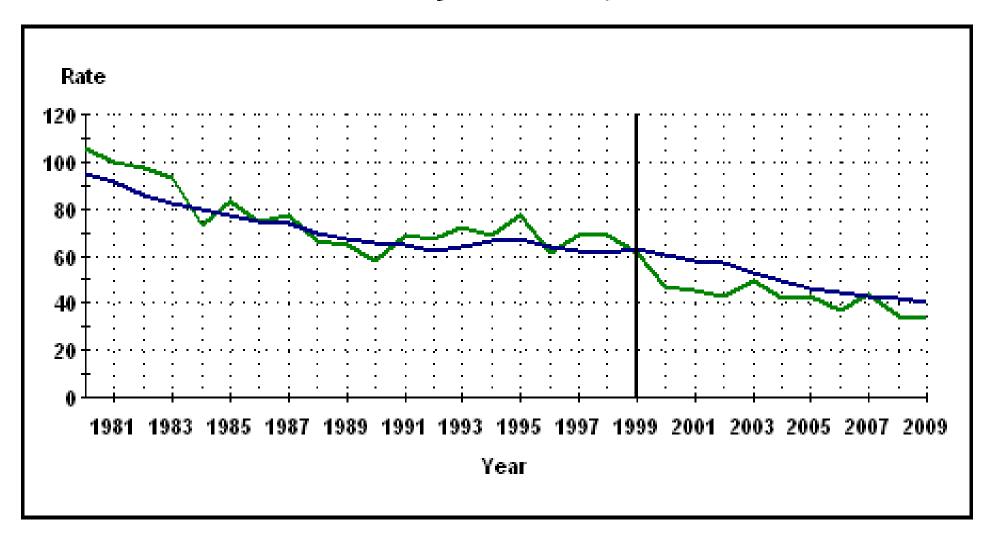
Heart Disease Age-adjusted Death Rates, St. Clair County Residents, 1989-2009



Source: 1989 - 2009 Michigan Resident Death Files, Division for Vital Records & Health Statistics, Michigan Department of Community Health

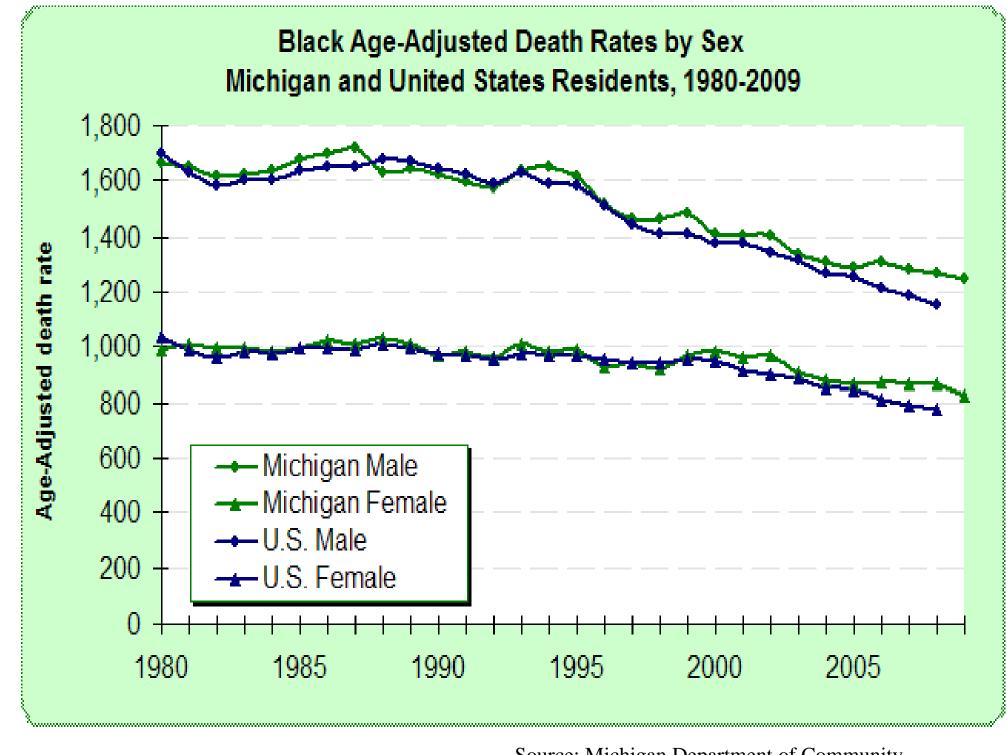


Stroke Age-adjusted Death Rates, St. Clair County Residents, 1989-2009



Source: 1989 - 2009 Michigan Resident Death Files, Division for Vital Records & Health Statistics, Michigan Department of Community Health





Behavioral Risk Factor Surveillance (BRFSS)

- 709 completed interviews (Approx 3.5% of MoE)
- Assessment of the health status and health behavior of St. Clair County adult residents
- Part of a community partnership committed to improving health, along with St. Clair County, St. Clair County Health Department, St. Joseph Mercy Hospital, and St. John's River District Hospital
- Published in December 2010 (conducted 2009-2010)
- Enabled outreach to broad interests of community
- Key tool for CHNA
- St. Clair County Community Health Profile can be read in full at:

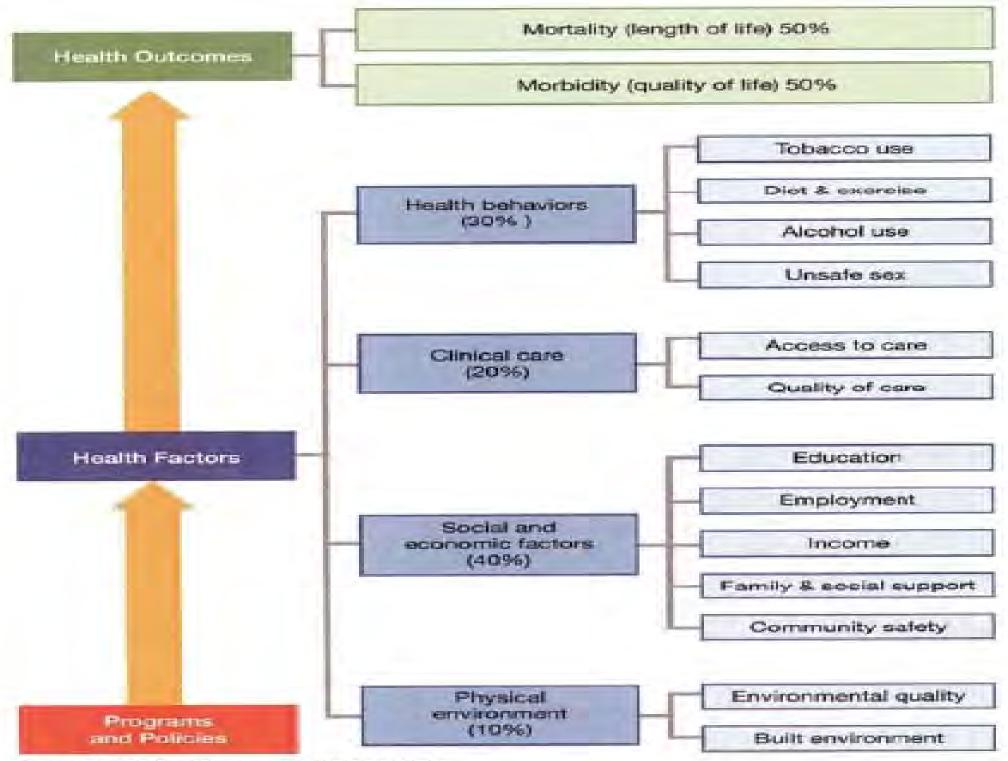
http://www.stclaircounty.org/offices/health/forms/SCC-CHAP2010_v2.pdf

St. Clair County Findings

- Physical activity/sedentary lifestyle
- Obesity and overweight
- Inadequate consumption of fruits and vegetables
- No physical activity in the past month
- Heavy/Binge Drinking
- Tobacco use/Second-hand smoke exposure
- High Blood Pressure (hypertension)
- High Blood Cholesterol
- Angina or Coronary Artery Disease
- Arthritis
- Flu Shot Deficiency
- HIV Tests Deficiency
- Health Status
- Health Insurance Coverage
- Angina or Coronary Heart Disease

St. Clair County Recommended Priorities

- Obesity and overweight
- Physical activity and sedentary lifestyle
- Consumption of fruits and vegetables
- High blood pressure
- High blood cholesterol
- Tobacco use
- Heavy/binge drinking



County Health Rankings model ©2010 UWPHI

Key Community Health Assets

- Port Huron Hospital
- St. Joseph Mercy Hospital Port Huron
- St. John River District Hospital
- St. Clair County Health Department
- St. Clair County Community Mental Health
- Blue Water "Y"
- Port Huron Area School District

Hospital Role in Improving Community Health

- Comparative Advantage
 - Downstream
 - But opportunities throughout continuum
- Ongoing Outreach
 - Prevention e.g. smoking cessation
 - Screenings e.g. BP & Cholesterol
 - Chronic Disease Management e.g. Diabetes
 - Access to Care e.g. Free or Discounted Care
- Venues
 - Good Health Events
 - "Today's Health"
 - Foundation Outreach
 - Industrial Health, "Take-Care-a-Van"
 - > 55 Plus
 - Outpatient Services

PHH Action Plan

More Upstream

-

- Prevention Tobacco Use: Offer smoking cessation assistance through employee and community programs
- Prevention Obesity and Overweight: Participate in the "Y's"
 Activate America program to target obesity reduction in local schools
- Screening High Blood Pressure/High Cholesterol/other: Offer Working on Wellness, "Good Health Events" and Foundation Outreach to employers and the community
- Chronic Disease Management Obesity and overweight: Offer diabetes education aimed at reducing morbidity, and "living well" with diabetes
- Access to care: Offer free or discounted mammograms

More Downstream