Community Health Profile
Gratiot County

May 27, 2015
Polling Instructions

All you have to do to make a choice is press the key that corresponds to your selection.

BUT, be sure to look at the “clicker” to see that it lights up and your selection flashes on the screen.
What are the Three Most Important Issues We Need to Address?

A. Jobs
B. Obesity
C. Alcohol/Drug Abuse
D. Cancer
E. Environmental Contamination
F. Smoking
G. Drinking Water Quality
H. Prescription Drug Abuse
I. Child/Youth Health
J. Access to Health Care
Data sources

• **Primary Data (new data collected first-hand)**
  - Local Behavioral Risk Factor Surveillance (MMDHD)
  - MidMichigan Medical Center - Gratiot (MMMC-G)
  - Other community input

• **Secondary Data (existing data sources)**
  - Census Bureau; Michigan Dept. Community Health Vital Records, Hospital Admissions, Behavioral Risk Factor Surveillance; Mich. Dept. Human Services; State Police; Michigan Profile for Healthy Youth; Clinton Eaton Ingham substance abuse admissions data; 211 information, etc.
Community Profile Sections

• Demographics

• Priority Issue: Access to Care

• Priority Issue: Alcohol and Drug Use

• Priority Issue: Obesity

• Priority Issue: Tobacco

• Miscellaneous
Layout of Profile Sections

• Look at data on youth first

• Then adults

• Then look at the consequences
  • Morbidity
  • Mortality

• Then “vote”

• Two questions: Is this a priority? How are we doing?
Community safety
Education
Family & social support
Employment
Built environment
Environmental quality
Income
Unsafe sex
Alcohol use
Diet & exercise
Tobacco use
Access to care
Quality of care
Education
Employment
Income
Family & social support
Community safety
Environmental quality
Built environment

Health Factors

Mortality (length of life): 50%
Morbidity (quality of life): 50%

Health behaviors (30%)
Clinical care (20%)
Social & economic factors (40%)
Physical environment (10%)

Programs and Policies

County Health Rankings model © 2010 UWPHI
Heart Disease Death Rates, 2008-2010
Adults, Ages 35+, by County

Rates are spatially smoothed to enhance the stability of rates in counties with small populations.

Data Source:
National Vital Statistics System
National Center for Health Statistics
Days of Poor Mental Health

- ≥3.7
- 3.4 to <3.7
- 3.0 to <3.4
- <3.0
- No data

Map showing the number of days of poor mental health across the United States.
Unemployment Rate by County

SOURCE: Bureau of Labor Statistics
Local Area Unemployment Statistics
Health Outcomes Rankings - 2015

“Where we live matters…”
Child Poverty by School District

Percent Poverty

- 30 to 40 percent
- 25 to 30 percent
- 15 to 20 percent
- 10 to 15 percent
- 0 to 10 percent
Percentage of adults reporting at least 14 days of poor physical health during past 30 days.

Also used a 14 day cutoff. But question changed from on how many days in the past month was your mental health “not good?” to did it “keep you from doing activities?”

Gratiot '08-10  Gratiot '11-13  Michigan '12
Physical Health Status

- An individual’s perceived health status is strongly correlated to actual health outcomes. Here are data for both Gratiot County and Michigan.

- Results for Gratiot are more variable because we surveyed 387 people. Thousands were surveyed by the State of Michigan.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Percentage of adults reporting at least 14 days of poor physical health during past 30 days.

Also used a 14 day cutoff. But question changed from on how many days in the past month was your mental health “not good?” to did it “keep you from doing activities?”

General Health Status

<table>
<thead>
<tr>
<th>% of Adults</th>
<th>Phys. Health</th>
<th>Ment. Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gratiot '08-10</td>
<td>13.1%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Gratiot '11-13</td>
<td>12.4%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Michigan '12</td>
<td>13.5%</td>
<td>13.0%</td>
</tr>
</tbody>
</table>
How BRFS Data Affected By Sample and Questions

% of Adults

- Physical - Mich
- Mental - Mich
- Phys. - Grat.
- Ment. - Grat.

Years: 2004 to 2013
Percentage of adults reporting at least 14 days of poor physical health during past 30 days.

Also used a 14 day cutoff. But question changed from on how many days in the past month was your mental health “not good?” to did it “keep you from doing activities?”

Gratiot '08-10  Gratiot '11-13  Michigan '12
Mortality

- Approximately 2,600,000 deaths recorded in the U.S. for 2013.
- The U.S. mortality rate has declined since the 1950’s and reached a record low in 2012.
- Life expectancy is now up to 78.8 years for 2013, continuing a long-term upward trend.
- Michigan and Gratiot County have generally followed this national trend.

Age-adjusted Mortality Rate (deaths per 100,000 persons)
For the Ten Leading Causes of Death, 2011-13 avg.

Years of Potential Life Lost (YPLL)
(per 100,000 population less than age 75 yrs)
Michigan & Gratiot County, 2011-13 avg.

Twenty Leading Hospitalizations

Avg. hospitalization rates (per 10,000 resident Pop.) for period 2007-11

Source: Michigan Resident Inpatient File. Division for Vital Records and Health Statistics, Michigan Department of Community Health
Demographics

- Population
- Income
- Poverty
- Unemployment
- Educational Attainment
Demographics - Population

Gratiot County Population by Age Group, 1990-2013

% Change 1990-2010
- Total: +8.7%
  - Less than 20 yrs: -11.3%
  - 20-44 yrs: -0.9%
  - 45-64 yrs: +54.8%
  - 65+ yrs: +17.0%

% Change 2010-2013
- Total: -1.2%
  - Less than 20 yrs: -5.4%
  - 20-44 yrs: -1.7%
  - 45-64 yrs: -1.0%
  - 65+ yrs: +6.6%

Source: Division for Vital Records and Health Statistics, MDCH; using Estimates Produced by U.S. Census Bureau
A Closer Look...

**Pop. by Age Group - GRATIOT**

Year | <20 yrs | 20-44 yrs | 45-64 yrs | 65+ yrs
--- | --- | --- | --- | ---
1990 | 7,281 | 5,360 | 5,737 | 6,685
1992 | 12,020 | 11,680 | 9,215 | 10,089
1994 | 14,398 | 15,841 | 11,159 | 14,035
1996 | 3,700,078 | 3,610,130 | 3,114,431 | 3,700,078
1998 | 2,757,822 | 2,908,335 | 2,524,276 | 2,757,822
2000 | 1,744,011 | 2,251,659 | 1,487,593 | 1,744,011
2002 | 1,109,408 | 1,224,244 | 1,224,244 | 1,109,408
2004 | 1,010,000 | 1,050,000 | 1,050,000 | 1,010,000
2006 | 950,000 | 950,000 | 950,000 | 950,000
2008 | 900,000 | 900,000 | 900,000 | 900,000
2010 | 850,000 | 850,000 | 850,000 | 850,000
2012 | 800,000 | 800,000 | 800,000 | 800,000
2013 | 750,000 | 750,000 | 750,000 | 750,000

**Pop. by Age Group - MICHIGAN**

Year | <20 yrs | 20-44 yrs | 45-64 yrs | 65+ yrs
--- | --- | --- | --- | ---
1990 | 14,035 | 14,035 | 14,035 | 14,035
1992 | 15,841 | 15,841 | 15,841 | 15,841
1994 | 15,841 | 15,841 | 15,841 | 15,841
1996 | 15,841 | 15,841 | 15,841 | 15,841
1998 | 15,841 | 15,841 | 15,841 | 15,841
2000 | 15,841 | 15,841 | 15,841 | 15,841
2002 | 15,841 | 15,841 | 15,841 | 15,841
2004 | 15,841 | 15,841 | 15,841 | 15,841
2006 | 15,841 | 15,841 | 15,841 | 15,841
2008 | 15,841 | 15,841 | 15,841 | 15,841
2010 | 15,841 | 15,841 | 15,841 | 15,841
2012 | 15,841 | 15,841 | 15,841 | 15,841
2013 | 15,841 | 15,841 | 15,841 | 15,841

*Note: The data for GRATIOT is hypothetical and for demonstration purposes.*

*Note: The data for MICHIGAN is hypothetical and for demonstration purposes.*
Disability

- Disability increases with age, but poor health causes disabilities to appear earlier, and low-income populations are more at risk.

### Major Impairment

| Condition                  | Percent (%)
|----------------------------|--------------
| Arthritis                  | 27.1         |
| Back/neck problem          | 22.3         |
| Breathing problem          | 31.2         |
| Bone/joint injury          | 23.3         |
| Walking problem            | 23.8         |
| Diabetes                   | 8.5          |
| Mental/emotional           | 9.0          |
| Heart problem              | 24.6         |
| Cancer                     | 23.7         |
| Vision problem             | 35.0         |
| Other                      | 35.1         |
| refused/not sure           | 35.2         |

Source: Behavioral Risk Factor Surveillance, Gratiot County. Michigan District Health Department 2011-13
Mortality - Alzheimer’s Disease

- Alzheimer’s Disease is the sixth leading cause of death.
- It is the only leading cause of death that is not preventable.
- Alzheimer's Disease imposes significant caregiver burdens and costs. The health of caregivers often suffers as a result.

Mortality - Pneumonia & Influenza

• Pneumonia and influenza mortality in Gratiot County is similar to the state and national rate.

• Pneumonia and influenza are vaccine preventable diseases, although the vaccine is less effective in older people.

Demographics – Unemployment

Unemployment (Jobless) Rate
Gratiot County & Michigan, 2000 to 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Gratiot County</th>
<th>Michigan</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>4.5%</td>
<td>3.7%</td>
<td>4.0%</td>
</tr>
<tr>
<td>2001</td>
<td>5.5%</td>
<td>5.2%</td>
<td>4.7%</td>
</tr>
<tr>
<td>2002</td>
<td>6.1%</td>
<td>6.2%</td>
<td>5.8%</td>
</tr>
<tr>
<td>2003</td>
<td>7.2%</td>
<td>7.1%</td>
<td>6.0%</td>
</tr>
<tr>
<td>2004</td>
<td>7.9%</td>
<td>7.1%</td>
<td>5.5%</td>
</tr>
<tr>
<td>2005</td>
<td>8.2%</td>
<td>6.8%</td>
<td>5.1%</td>
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<tr>
<td>2006</td>
<td>8.5%</td>
<td>6.9%</td>
<td>4.6%</td>
</tr>
<tr>
<td>2007</td>
<td>8.5%</td>
<td>7.1%</td>
<td>4.6%</td>
</tr>
<tr>
<td>2008</td>
<td>9.3%</td>
<td>8.3%</td>
<td>5.8%</td>
</tr>
<tr>
<td>2009</td>
<td>13.6%</td>
<td>13.4%</td>
<td>9.3%</td>
</tr>
<tr>
<td>2010</td>
<td>12.4%</td>
<td>12.7%</td>
<td>9.6%</td>
</tr>
<tr>
<td>2011</td>
<td>10.3%</td>
<td>10.4%</td>
<td>8.9%</td>
</tr>
<tr>
<td>2012</td>
<td>9.4%</td>
<td>9.1%</td>
<td>8.1%</td>
</tr>
<tr>
<td>2013</td>
<td>9.7%</td>
<td>8.8%</td>
<td>7.4%</td>
</tr>
<tr>
<td>2014</td>
<td>7.5%</td>
<td>7.2%</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

Source: Michigan Department of Technology, Management, and Budget; Labor Market Information, 2015
Demographics – Household Income

Median Household Income
Gratiot County, Michigan and U.S., 2000 to 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Gratiot County</th>
<th>Michigan</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>37,665</td>
<td>45,202</td>
<td>41,990</td>
</tr>
<tr>
<td>2002</td>
<td>36,528</td>
<td>44,315</td>
<td>42,409</td>
</tr>
<tr>
<td>2004</td>
<td>37,910</td>
<td>44,409</td>
<td>44,334</td>
</tr>
<tr>
<td>2005</td>
<td>41,183</td>
<td>46,072</td>
<td>46,242</td>
</tr>
<tr>
<td>2006</td>
<td>40,777</td>
<td>47,187</td>
<td>48,451</td>
</tr>
<tr>
<td>2007</td>
<td>41,497</td>
<td>47,931</td>
<td>50,740</td>
</tr>
<tr>
<td>2008</td>
<td>42,687</td>
<td>48,606</td>
<td>52,029</td>
</tr>
<tr>
<td>2009</td>
<td>36,770</td>
<td>45,254</td>
<td>50,221</td>
</tr>
<tr>
<td>2010</td>
<td>40,227</td>
<td>45,354</td>
<td>50,046</td>
</tr>
<tr>
<td>2011</td>
<td>40,359</td>
<td>45,931</td>
<td>50,502</td>
</tr>
<tr>
<td>2012</td>
<td>42,657</td>
<td>46,793</td>
<td>51,371</td>
</tr>
<tr>
<td>2013</td>
<td>42,026</td>
<td>48,200</td>
<td>52,250</td>
</tr>
</tbody>
</table>

Source: Small Area Income and Poverty Estimates (SAIPE). U.S. Census Bureau
Demographics – Poverty

Poverty Prevalence
Gratiot County & Michigan, 2000 to 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Gratiot - all ages</th>
<th>Michigan - all ages</th>
<th>Gratiot - under age 18</th>
<th>Michigan - under age 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>10.8%</td>
<td>9.7%</td>
<td>13.4%</td>
<td>13.7%</td>
</tr>
<tr>
<td>2002</td>
<td>12.3%</td>
<td>10.9%</td>
<td>13.9%</td>
<td>14.2%</td>
</tr>
<tr>
<td>2004</td>
<td>13.1%</td>
<td>12.5%</td>
<td>16.7%</td>
<td>17.3%</td>
</tr>
<tr>
<td>2006</td>
<td>18.1%</td>
<td>13.5%</td>
<td>21.8%</td>
<td>18.3%</td>
</tr>
<tr>
<td>2008</td>
<td>15.2%</td>
<td>14.4%</td>
<td>19.1%</td>
<td>19.3%</td>
</tr>
<tr>
<td>2009</td>
<td>19.5%</td>
<td>16.1%</td>
<td>24.2%</td>
<td>22.2%</td>
</tr>
<tr>
<td>2010</td>
<td>18.3%</td>
<td>16.7%</td>
<td>25.6%</td>
<td>23.4%</td>
</tr>
<tr>
<td>2011</td>
<td>19.5%</td>
<td>17.5%</td>
<td>27.5%</td>
<td>24.6%</td>
</tr>
<tr>
<td>2012</td>
<td>18.3%</td>
<td>17.4%</td>
<td>25.4%</td>
<td>24.7%</td>
</tr>
<tr>
<td>2013</td>
<td>19.5%</td>
<td>17.0%</td>
<td>26.5%</td>
<td>23.7%</td>
</tr>
</tbody>
</table>

Source: Small Area Income and Poverty Estimates (SAIPE). U.S. Census Bureau
Demographics – Education

Educational Attainment, Age 25+ yrs.

<table>
<thead>
<tr>
<th></th>
<th>Less than 9th Grd.</th>
<th>9-12, No Diploma</th>
<th>Diploma, GED</th>
<th>Some College</th>
<th>Assoc. Degree</th>
<th>Bach. Degree</th>
<th>Grad. or Prof. Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gratiot 2008-10</td>
<td>3.6%</td>
<td>9.4%</td>
<td>41.4%</td>
<td>25.8%</td>
<td>7.2%</td>
<td>8.7%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Gratiot 2011-13</td>
<td>3.3%</td>
<td>8.1%</td>
<td>41.4%</td>
<td>24.7%</td>
<td>8.2%</td>
<td>9.3%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Michigan 2011-13</td>
<td>3.3%</td>
<td>7.5%</td>
<td>30.3%</td>
<td>24.0%</td>
<td>8.7%</td>
<td>16.1%</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

Source: American Community Survey 2011-13. U.S. Census Bureau
Access to Care

LWG Strategies:

- Implement Pathways to Better Health
- Promote Awareness (e.g. 211, 8-Cap, Masonic, MMH)
- Enhance Public Transportation
- Support the Free Clinic
- Promote Anti-Stigma Campaign
Access to Health Care

Percentage of adults 18-64 yrs reporting no health insurance coverage.

Percentage of adults reporting they have no personal health care provider.

Percentage of adults reporting they needed to but did not seek medical care.

Percentage of adults reporting they needed to but did not seek dental care.

* MI results not available for Delayed Dental Care
Behavioral Risk Factor Survey
Gratiot County

Percent of Adults 18-64 yrs. Uninsured

2015 uninsured were calculated by using the 2013 BRFS estimate and subtracting Healthy Michigan enrollees and Marketplace enrollees who are paying their premiums.
Behavioral Risk Factor Survey
Gratiot County

No Personal Healthcare Provider

2015 number without a provider was calculated using the fact that 60% of Healthy Michigan enrollees have had at least one primary care visit.
**Uninsured**

- These data are from the period just before the implementation of Obamacare in Michigan. The number of uninsured has since been reduced by more than half.

- The data illustrate that lower-income people were much less likely to be insured.

- Lack of health insurance is associated with worse health outcomes, and uninsured people are less able to access preventive services.

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### No Health Care Coverage (age 18-64 yrs)
Gratiot County 2011-13 & MI 2012

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Gratiot Co. %</th>
<th>Michigan %</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>15.5</td>
<td>14.2</td>
<td>16.7</td>
<td>16.6</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>5.6</td>
<td>5.6</td>
<td>5.6</td>
<td>5.6</td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>13.3</td>
<td>13.3</td>
<td>13.3</td>
<td>13.3</td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td>11.2</td>
<td>11.2</td>
<td>11.2</td>
<td>11.2</td>
<td></td>
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<tr>
<td>65-74</td>
<td>7.5</td>
<td>7.5</td>
<td>7.5</td>
<td>7.5</td>
<td></td>
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<tr>
<td>75+</td>
<td>4.6</td>
<td>4.6</td>
<td>4.6</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>9.4</td>
<td>9.4</td>
<td>9.4</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td>20.4</td>
<td>20.4</td>
<td>20.4</td>
<td>20.4</td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>18.4</td>
<td>18.4</td>
<td>18.4</td>
<td>18.4</td>
<td></td>
</tr>
<tr>
<td>College graduate</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>&lt;$20,000</td>
<td>31.0</td>
<td>31.0</td>
<td>31.0</td>
<td>31.0</td>
<td>32.8</td>
</tr>
<tr>
<td>$20,000-$34,999</td>
<td>28.9</td>
<td>28.9</td>
<td>28.9</td>
<td>28.9</td>
<td>29.6</td>
</tr>
<tr>
<td>$35,000-$49,999</td>
<td>15.6</td>
<td>15.6</td>
<td>15.6</td>
<td>15.6</td>
<td>16.0</td>
</tr>
<tr>
<td>$50,000-$74,999</td>
<td>5.4</td>
<td>5.4</td>
<td>5.4</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>$75,000+</td>
<td>3.6</td>
<td>3.6</td>
<td>3.6</td>
<td>3.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Access to Prescription Drugs

- These data are from before the expansion of Obamacare in Michigan. Since then, we know people on Healthy Michigan Plan have been filling prescriptions.

- The extensive use of medications to reduce effects of diseases that can be prevented through lifestyle changes has its own problems including drug abuse and environmental impacts.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
## Access to Health Care

- Delaying health care can increase the likelihood of poor health outcomes.
- Access to timely health care is largely driven by insurance status and costs.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Could not afford it / cost</td>
<td>34.0</td>
<td>48.3</td>
</tr>
<tr>
<td>Didn't want to go (afraid, lack confidence)</td>
<td>11.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Could not get time off from work</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Could not get an appointment</td>
<td>0</td>
<td>20.7</td>
</tr>
<tr>
<td>Didn't have transportation</td>
<td>11.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Insurance did not cover</td>
<td>22.2</td>
<td>10.3</td>
</tr>
<tr>
<td>Didn't have time</td>
<td>11.1</td>
<td>3.4</td>
</tr>
<tr>
<td>No child or respite care</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other reason</td>
<td>10.0</td>
<td>10.3</td>
</tr>
<tr>
<td>Did not recall why</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Source:
Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Access to Dental Care

- Oral health is fundamental to good physical and mental health.
- Access to oral health care has improved because of Medicaid coverage and the expansion of public dental clinics.

Reason | Male | Female
--- | --- | ---
Could not afford it / cost | 44.8% | 62.9%
Didn't want to go (afraid, lack confidence) | 0% | 0%
Could not get time off from work | 0% | 2.9%
Could not get an appointment | 3.4% | 2.9%
Didn't have transportation | 3.4% | 0%
Didn't have time | 6.9% | 0%
No child or respite care | 0% | 0%
Other reason | 37.9% | 25.7%
Did not recall why | 3.4% | 5.7%

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Prevention - Screening

- Screening for disease is one important means of preventing early death that is afforded by access to health care.

- The pap test detects cervical cancer. Lower income and less well educated people are less likely to get preventive screening.

- Lower screening rates are common in rural areas.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Prevention - Screening

• Screening for disease is one important means of preventing early death that is afforded by access to health care.

• Colonoscopy detects colorectal cancer among other things. Lower income and less well educated people are less likely to get preventive screening.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Polling Instructions

All you have to do to make a choice is press the key that corresponds to your selection.

BUT, be sure to look at the “clicker” to see that it lights up and your selection flashes on the screen.
Access to Care remains a priority for our community.

A. Strongly agree.
B. Somewhat agree.
C. Neutral.
D. Somewhat disagree.
E. Strongly disagree.
Given what you have seen, which statement reflects your feelings about our work on Access so far?

A. We have made great progress.
B. Some things have gone well but more remains to be done.
C. We did not do what we said we would.
D. Our strategies are off target.
E. We should drop this strategy.
Tobacco

**LWG Strategies:**

- Continue Vendor Education and Checks
- Continue SYNAR Checks
- Raise Awareness of Quitline
- Smoke Free Ordinances in Parks
- Work with Businesses to Encourage People to Quit
- Implement Above the Influence
Tobacco Smoking, Past 30 Days
Gratiot County and Michigan Students

<table>
<thead>
<tr>
<th>Year</th>
<th>MI - Grades 9-12 (YRBS)</th>
<th>GRATIOT - Grade 7 (MiPHY)</th>
<th>GRATIOT - Grade 9 (MiPHY)</th>
<th>GRATIOT - Grade 11 (MiPHY)</th>
</tr>
</thead>
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<tr>
<td>2007</td>
<td>18.0%</td>
<td>n/a</td>
<td>6.6%</td>
<td>n/a</td>
</tr>
<tr>
<td>2008</td>
<td>14.0%</td>
<td>n/a</td>
<td>1.6%</td>
<td>n/a</td>
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<tr>
<td>2009</td>
<td>11.8%</td>
<td>2.2%</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>2010</td>
<td>13.1%</td>
<td>n/a</td>
<td>5.6%</td>
<td>n/a</td>
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<tr>
<td>2011</td>
<td>11.8%</td>
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<tr>
<td>2012</td>
<td>9.4%</td>
<td>n/a</td>
<td>18.7%</td>
<td>16.3%</td>
</tr>
<tr>
<td>2013</td>
<td>14.0%</td>
<td>n/a</td>
<td>18.8%</td>
<td>18.7%</td>
</tr>
</tbody>
</table>

Source: Michigan Profile for Health Youth, Michigan Department of Education.
**Behavioral Risk Factor Survey**

**Tobacco and Alcohol**

- **Smoke**: Percentage of adults 18+ years old that report they are current smokers.
  - Gratiot '08-10: 27.1%
  - Gratiot '11-13: 24.2%
  - Michigan '12: 23.3%

- **Heavy Drink**: Percentage of adults that reported 2+ drinks/day (male) or 1+ drink/day (female) during past 30 days.
  - Gratiot '08-10: 6.3%
  - Gratiot '11-13: 4.2%
  - Michigan '12: 6.1%

- **Binge Drink**: Percentage of adults that reported at least one episode of binge drinking during past 30 days.
  - (Binge= 5 drinks male or 4 drinks female)
  - Gratiot '08-10: 17.0%
  - Gratiot '11-13: 12.1%
  - Michigan '12: 19.2%
Smoking

- Gratiot County has a higher rate of smoking than the state as a whole. This is the same result we found last time.
- Smoking is one health risk behavior which seriously impacts the health of lower-income and less well-educated people.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Chronic Disease – Asthma

- Lower income people are more likely to have asthma for many reasons. As we saw, smoking rates are higher in low-income homes and those affected include people exposed to second-hand smoke. Other risk factors include aging homes and the presence of insects.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Mortality - Chronic Lower Respiratory Disease

- These diseases include COPD, emphysema and deaths due to asthma and bronchitis.

- Mortality due to respiratory disease is higher in Gratiot County, at least in part, because of higher smoking rates.

Mortality - Cancer

- Cancer mortality in Gratiot is similar to Michigan and the nation.
- Cancer mortality is declining because of improvements in cancer screening and treatments.
- The number of new cancer cases is also falling because of reductions in smoking.

Reducing tobacco use remains a priority area for our community.

A. Strongly agree.
B. Somewhat agree.
C. Neutral.
D. Somewhat disagree.
E. Strongly disagree.
Given what you have seen, which statement reflects your feelings about our work on tobacco use?

A. We have made great progress.

B. Some things have gone well but more remains to be done.

C. We did not do what we said we would.

D. Our strategies are off target.

E. We should drop this strategy.
Alcohol and Drugs

LWG Priority Areas:

• Engage School Leadership
• Support Media Campaign
• Continue Alcohol Compliance Checks
• Increase Medication Drop-Off Sites
• Promote Brief Screening and Intervention
Alcohol Use, Past 30 Days
Gratiot County and Michigan Students

**Student Prevalence (%)**

**Mi - YRBS**

<table>
<thead>
<tr>
<th>Year</th>
<th>MI - Grades 9-12 (YRBS)</th>
<th>2007</th>
<th>2009</th>
<th>2011</th>
<th>2013</th>
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<tbody>
<tr>
<td></td>
<td>42.8%</td>
<td>37.0%</td>
<td>30.5%</td>
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<table>
<thead>
<tr>
<th>Year</th>
<th>GRATIOT - Grade 7 (MiPHY)</th>
<th>2008</th>
<th>2010</th>
<th>2012</th>
<th>2014</th>
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<tbody>
<tr>
<td></td>
<td>17.5%</td>
<td>0.0%</td>
<td>2.1%</td>
<td>0.0%</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>GRATIOT - Grade 9 (MiPHY)</th>
<th>2008</th>
<th>2010</th>
<th>2012</th>
<th>2014</th>
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<tbody>
<tr>
<td></td>
<td>17.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>GRATIOT - Grade 11 (MiPHY)</th>
<th>2008</th>
<th>2010</th>
<th>2012</th>
<th>2014</th>
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<tbody>
<tr>
<td></td>
<td>27.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
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</tr>
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</table>

**Source:** Michigan Profile for Health Youth, Michigan Department of Education.
Marijuana Use, Past 30 Days
Gratiot County and Michigan Students

Source: Michigan Profile for Health Youth, Michigan Department of Education.
Behavioral Risk Factor Survey

Tobacco and Alcohol

Percentage of adults 18+ years old that report they are current smoker.

- Gratiot '08-10: 27.1%
- Gratiot '11-13: 24.2%
- Michigan '12: 23.3%

Percentage of adults that reported 2+ drinks/day (male) or 1+ drink/day (female) during past 30 days.

- Gratiot '08-10: 6.3%
- Gratiot '11-13: 4.2%
- Michigan '12: 6.1%

Percentage of adults that reported at least one episode of binge drinking during past 30 days. (Binge= 5 drinks male or 4 drinks female)

- Gratiot '08-10: 17.0%
- Gratiot '11-13: 12.1%
- Michigan '12: 19.2%
**Alcohol Consumption**

- In addition to posing its own health risks, alcohol consumption is a major factor in accidents, violence and suicide.

- Notice that alcohol consumption does not vary with education and income. If anything, more affluent people drink more. This is always found to be the case.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
## Alcohol Consumption

- In addition to posing its own health risks, alcohol consumption is a major factor in accidents, violence and suicide.

- Notice that alcohol consumption does not vary with education and income. If anything, more affluent people drink more. This is always found to be the case.

### Alcohol Consumption Rates

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>18-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65-74</th>
<th>75+</th>
<th>TOTAL</th>
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<td>4.2</td>
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<td>25-34</td>
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<td>55-64</td>
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<td>0.0</td>
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<td>0.0</td>
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<td>0.0</td>
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<tr>
<td>65-74</td>
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<td>0.0</td>
<td>0.0</td>
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<tr>
<td>75+</td>
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<td><strong>Education</strong></td>
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<td>Less than high school</td>
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<td>&lt;$20,000</td>
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<td>$20,000-$34,999</td>
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</table>

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Alcohol is Primary Drug at Treatment Entry
Gratiot County & Michigan
3-yr averages, 2006-12

Source: MidSouth Substance Use Disorder Admissions and Michigan Department of Community Health.
Opiates (including Rx drugs) is Primary Drug at Treatment Entry
Gratiot County & Michigan
3-yr averages, 2006-12

Source: MidSouth Substance Use Disorder Admissions and Michigan Department of Community Health.
Adult Drug-Related Death Rate
Gratiot County & Michigan
Deaths per 100,000, 3-yr. avg., 2002-12

Source: MidSouth Substance Use Disorder Admissions and Michigan Department of Community Health.
Alcohol-Related Traffic Crash Rate
Gratiot County & Michigan
Crashes per 100,000, 3-yr. avg., 2002-13

Source: MidSouth Substance Use Disorder Admissions and Michigan Department of Community Health.
Meth lab Seizure/Incident Rate
Gratiot County & Michigan
Incidents per 100,000, 3-yr. avg., 2006-13

Source: MidSouth Substance Use Disorder Admissions and Michigan Department of Community Health.
Mortality – Unintentional Injury (Accidents)

• About half of deaths due to accidents are connected to being intoxicated.

• Rural communities in which people routinely drive long distances also have higher accident death rates.

• Gratiot County has a lower injury mortality rate than the state as a whole.

All Fatal Injuries (including unintentional, suicide, homicide)  
*Gratiot County, 2004-13*

<table>
<thead>
<tr>
<th></th>
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<tbody>
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<td>ALL CAUSES</td>
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<td>18</td>
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<tr>
<td>Unintentional - fall</td>
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<tr>
<td>Unintentional - suffocation</td>
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<td>1</td>
<td>3</td>
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<tr>
<td>Unintentional - drowning</td>
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<tr>
<td>Suicide - firearm</td>
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<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
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<td>0</td>
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<tr>
<td>Suicide - hanging/suff.</td>
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<td>1</td>
<td>3</td>
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<td>1</td>
<td>0</td>
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<td>1</td>
<td>0</td>
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<tr>
<td>Homicide - firearm</td>
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<td>1</td>
<td>0</td>
<td>0</td>
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<tr>
<td>all other</td>
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<td>2</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Mortality – Intentional Injury (Homicides)

Firearm Homicides in Michigan

Source: Michigan State Police
Morbidity – Intentional Injury (Assault)

Assaults in Gratiot County

Years 2000-2013

Source: Michigan State Police
Substance Use

- While the age-adjusted rate for drug-poisoning deaths involving opioid analgesics has leveled in recent years, the rate for deaths involving heroin has almost tripled in the U.S. since 2010.
Substance abuse remains a priority area for our community.

A. Strongly agree.
B. Somewhat agree.
C. Neutral.
D. Somewhat disagree.
E. Strongly disagree.
Given what you have seen, which statement reflects your feelings about our work on substance abuse?

A. We have made great progress.

B. Some things have gone well but more remains to be done.

C. We did not do what we said we would.

D. Our strategies are off target.

E. We should drop this strategy.
Reduce Obesity

**LWG Priority Area Strategies**

• Community-Wide Campaign
• Establish Winter Event
• Increase Number of Places to Exercise
• Enhance Farmer’s Markets
• Adopt Complete Streets Ordinances
Weight Status - Obesity
Gratiot County and Michigan Students

Student Prevalence (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>MI - Grades 9-12 (YRBS)</th>
<th>GRATIOT - Grade 7 (MiPHY)</th>
<th>GRATIOT - Grade 9 (MiPHY)</th>
<th>GRATIOT - Grade 11 (MiPHY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>12.4%</td>
<td>14.2%</td>
<td>16.8%</td>
<td>n/a</td>
</tr>
<tr>
<td>2009</td>
<td>11.9%</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2011</td>
<td>12.1%</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2013</td>
<td>13.0%</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2008</td>
<td>12.6% (avg.)</td>
<td>17.5% (avg.)</td>
<td>16.8%</td>
<td>14.5% (avg.)</td>
</tr>
<tr>
<td>2010</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2012</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2014</td>
<td>16.8%</td>
<td>12.2%</td>
<td>14.5% (avg.)</td>
<td>18.9% (avg.)</td>
</tr>
<tr>
<td>U.S. - Grade 9 (YRBS)</td>
<td>13.5%</td>
<td>12.6% (avg.)</td>
<td>13.0%</td>
<td>12.6%</td>
</tr>
<tr>
<td>U.S. - Grade 10 (YRBS)</td>
<td>11.5%</td>
<td>12.6% (avg.)</td>
<td>11.7%</td>
<td>13.0%</td>
</tr>
<tr>
<td>U.S. - Grade 11 (YRBS)</td>
<td>13.6%</td>
<td>11.7%</td>
<td>12.9%</td>
<td>14.5%</td>
</tr>
<tr>
<td>U.S. - Grade 12 (YRBS)</td>
<td>13.2%</td>
<td>10.8%</td>
<td>12.9%</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

Source: Michigan Profile for Health Youth, Michigan Department of Education.
Physical Activity (60 min/day for 5 of 7 days)
Gratiot County and Michigan Students

Student Prevalence (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>MI - Grades 9-12 (YRBS)</th>
<th>GRATIOT - Grade 7 (MiPHY)</th>
<th>GRATIOT - Grade 9 (MiPHY)</th>
<th>GRATIOT - Grade 11 (MiPHY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>44.0%</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2009</td>
<td>46.8%</td>
<td>52.9% avg.</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2011</td>
<td>49.4%</td>
<td>50.6% avg.</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2013</td>
<td>49.7%</td>
<td>51.8% avg.</td>
<td>50.5% avg.</td>
<td>46.0% avg.</td>
</tr>
</tbody>
</table>

Source: Michigan Profile for Health Youth, Michigan Department of Education.
Behavioral Risk Factor Survey

Diet, Weight and Activity

Percentage of Adults consuming less than 5 combined servings of fruits and vegetables per day.

- **Fruit/Veg**
  - Gratiot '08-10: 91.1%
  - Gratiot '11-13: 63.8%
  - Michigan '12: 82.2%

- **OverWeight**
  - Gratiot '08-10: 29.8%
  - Gratiot '11-13: 34.0%
  - Michigan '12: 34.6%

- **Obese**
  - Gratiot '08-10: 32.7%
  - Gratiot '11-13: 35.6%
  - Michigan '12: 31.1%

- **Sedentary**
  - Gratiot '08-10: 23.8%
  - Gratiot '11-13: 11.6%
  - Michigan '12: 23.3%

Percentage of Adults with Body Mass Index (BMI) corresponding to “Overweight” status.

Percentage of Adults with Body Mass Index (BMI) corresponding to “Obese” status.

Percentage of Adults not participating in any physical activity during the past month.
Weight Status

- Obesity is a risk factor for many diseases including diabetes, heart disease, stroke, kidney disease and others.

- When being overweight and obesity are taken together, more than two-thirds of us are affected.

- Gratiot has higher rates of obesity than the state.

<table>
<thead>
<tr>
<th>Weight Status</th>
<th>Percent (%) of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>35.6 31.1</td>
</tr>
<tr>
<td>Male</td>
<td>41.0 31.5</td>
</tr>
<tr>
<td>Female</td>
<td>30.1 30.6</td>
</tr>
<tr>
<td>18-24</td>
<td>21.3 18.9</td>
</tr>
<tr>
<td>25-34</td>
<td>18.9 18.2</td>
</tr>
<tr>
<td>35-44</td>
<td>30.2 31.4</td>
</tr>
<tr>
<td>45-54</td>
<td>35.3 33.2</td>
</tr>
<tr>
<td>55-64</td>
<td>35.3 35.3</td>
</tr>
<tr>
<td>65-74</td>
<td>35.6 35.3</td>
</tr>
<tr>
<td>75+</td>
<td>20.0 22.5</td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Physical Activity

- Residents of Gratiot County report being more active (less sedentary) than for Michigan as a whole.
- This was the same result we got during the last survey.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Diet

- People from all walks of life do not eat a healthy diet.
- The way fruits and vegetables were counted changed between 2010 and 2013.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Chronic Disease – High Blood Pressure

- Of course the risk of hypertension rises with age, but it also varies with education and income, even when age is taken into account.
- People often do not know they have hypertension so it may be underreported.

**Lifetime History of Hypertension**
Gratiot County 2011-13 & MI 2011

<table>
<thead>
<tr>
<th>Age Group</th>
<th>TOTAL</th>
<th>Gratiot Co. %</th>
<th>Michigan %</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>0.0</td>
<td>27.4</td>
<td>34.2</td>
</tr>
<tr>
<td>25-34</td>
<td>7.1</td>
<td>28.2</td>
<td>35.8</td>
</tr>
<tr>
<td>35-44</td>
<td>15.9</td>
<td>26.7</td>
<td>32.6</td>
</tr>
<tr>
<td>45-54</td>
<td>21.6</td>
<td>31.6</td>
<td>36.3</td>
</tr>
<tr>
<td>55-64</td>
<td>36.3</td>
<td>42.1</td>
<td>50.3</td>
</tr>
<tr>
<td>65-74</td>
<td>50.3</td>
<td>54.3</td>
<td>61.7</td>
</tr>
<tr>
<td>75+</td>
<td>61.7</td>
<td>51.4</td>
<td>67.7</td>
</tr>
</tbody>
</table>

**Sex**

<table>
<thead>
<tr>
<th>Sex</th>
<th>TOTAL</th>
<th>Gratiot Co. %</th>
<th>Michigan %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>28.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>26.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Education**

<table>
<thead>
<tr>
<th>Education</th>
<th>TOTAL</th>
<th>Gratiot Co. %</th>
<th>Michigan %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td>37.0</td>
<td></td>
<td>38.4</td>
</tr>
<tr>
<td>High school graduate</td>
<td>34.5</td>
<td></td>
<td>34.6</td>
</tr>
<tr>
<td>Some college</td>
<td>26.4</td>
<td></td>
<td>34.6</td>
</tr>
<tr>
<td>College graduate</td>
<td>11.5</td>
<td></td>
<td>27.8</td>
</tr>
</tbody>
</table>

**Income**

<table>
<thead>
<tr>
<th>Income</th>
<th>TOTAL</th>
<th>Gratiot Co. %</th>
<th>Michigan %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$20,000</td>
<td>36.1</td>
<td></td>
<td>40.9</td>
</tr>
<tr>
<td>$20,000-$34,999</td>
<td>38.0</td>
<td></td>
<td>38.5</td>
</tr>
<tr>
<td>$35,000-$49,999</td>
<td>34.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$50,000-$74,999</td>
<td>19.7</td>
<td></td>
<td>33.7</td>
</tr>
<tr>
<td>$75,000+</td>
<td>14.0</td>
<td></td>
<td>26.1</td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Chronic Disease – High Cholesterol

- High cholesterol follows the by now familiar pattern.
- This is another chronic condition that can go undetected if a person does not have good access to health care.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Chronic Disease - Diabetes

- A personal history of having diabetes is associated with both education and income.
- Diabetes may go undetected if a person does not have good access to health care. The level in Gratiot may be higher than reported.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Mortality - Diabetes

- Diabetes mortality in Gratiot County is similar to the state and nation.

- Although the number of people living with diabetes is increasing, mortality is flat or declining because of advances in care.

- This comes at a cost: hundreds of billions is spent on diabetes care and lost productivity.

Mortality - Heart Disease

• Leading cause of death in the U.S., Michigan, and Gratiot County.

• One in three Americans will be affected by heart disease during their lifetime.

• Trend: declining in the long-term.

• Contributing factors: high cholesterol, high blood pressure, smoking, obesity, sedentary lifestyles.

Mortality - Stroke

- Stroke deaths increased after the economic downturn but have since come back in line.
- The two main risk factors for stroke are high blood pressure and smoking. Gratiot has high rates of smoking and we suspect high blood pressure is underreported.

Mortality - Kidney Disease

- Diabetes and high blood pressure are the main causes of kidney disease.

- If it is true that diabetes and high blood pressure are underreported in Gratiot this could explain the high rates of kidney disease.

Colorectal Cancer Incidence
Age-adjusted Rates, per 100,000 persons
1995-2011 using 5-year averages

Prostate Gland Cancer Incidence
Age-adjusted Rates, per 100,000 persons
1995-2011 using 5-year averages
Reducing obesity remains a priority for our community.

A. Strongly agree.
B. Somewhat agree.
C. Neutral.
D. Somewhat disagree.
E. Strongly disagree.
Given what you have seen, which statement reflects your feelings about our work on obesity?

A. We have made great progress.
B. Some things have gone well but more remains to be done.
C. We did not do what we said we would.
D. Our strategies are off target.
E. We should drop this strategy.
Mental Health

• One strategy in our CHIP: Reduce stigma.

• But we agreed mental health is central to community health.

• Lots of activity related to mental health in the community.
Depressed Mood (more than 2 wks.)
Gratiot County and Michigan Students

Source: Michigan Profile for Health Youth, Michigan Department of Education.
Mental Health Status

- In this round of the survey we found people in Gratiot County reporting lower rates of poor mental health overall.
- However, there was a change in the wording of the question for local BRFS for 2011-13.
- Regardless, the rates of poor mental health are much higher for lower-income and less well educated people.

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Health Outcomes

- Smokers get heart disease
- Low income people more likely to get diabetes
- Low income people more likely to smoke
- Low income people have worse mental health

Income (Root Causes)

Health Behaviors

Mental Health
Correlation between income and risk behaviors or health factors, Gratiot County Adults

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Low income people more likely to get diabetes

Low income people have worse mental health

Health Behaviors

Income (Root Causes)

Mental Health

Low income people more likely to smoke

Smokers get heart disease

Health Outcomes
Correlation between mental health status and risk behaviors or health conditions, Gratiot County Adults

- **Mental Health Status**
  - Good
    - High Cholesterol: 31.1%
    - Currently Smoke: 23.4%
    - Diabetes: 10.8%
    - No Exercise: 7.8%
  - Not Good
    - High Cholesterol: 50.0%
    - Currently Smoke: 57.1%
    - Diabetes: 40.0%
    - No Exercise: 40.0%

Source: Behavioral Risk Factor Surveillance, Gratiot County. Mid-Michigan District Health Department 2011-13
Health Outcomes

Smokers get heart disease

Low income people more likely to get diabetes

Health Behaviors

Low income people more likely to smoke

Income (Root Causes)

Poor mental health leads to risk behavior

Mental Health

Poor mental health leads worse outcomes

Low income people have worse mental health
Mortality - Suicide

- Suicide rates vary tremendously across the country, with the highest rates tending to be in rural areas and places where depressed people have easy access to firearms.

Addressing mental health remains a priority for our community.

A. Strongly agree.
B. Somewhat agree.
C. Neutral.
D. Somewhat disagree.
E. Strongly disagree.
Given what you have seen, which statement reflects your feelings about our work on mental health?

A. We have made great progress.

B. Some things have gone well but more remains to be done.

C. We did not do what we said we would.

D. Our strategies are off target.

E. We should drop this strategy.
Maternal and Child Health

• Not part of our CHIP

• Lots of activity in our community
Maternal Health Characteristics
Gratiot County 2010 & 2013, Michigan 2013

Source: Michigan Resident Births File. Division for Vital Records and Health Statistics, Michigan Department of Community Health
Teen Pregnancy

The teen pregnancy rate is continuing to fall as girls and women choose to stay in school and enter the workforce.

Source: Michigan Resident Births File. Division for Vital Records and Health Statistics, Michigan Department of Community Health
Teen Births

Teen Birth Count
Gratiot County
2000-2013, using 3-year moving averages

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-02</td>
<td>48.3</td>
</tr>
<tr>
<td>2001-03</td>
<td>47.0</td>
</tr>
<tr>
<td>2002-04</td>
<td>44.3</td>
</tr>
<tr>
<td>2003-05</td>
<td>51.3</td>
</tr>
<tr>
<td>2004-06</td>
<td>55.3</td>
</tr>
<tr>
<td>2005-07</td>
<td>55.7</td>
</tr>
<tr>
<td>2006-08</td>
<td>53.0</td>
</tr>
<tr>
<td>2007-09</td>
<td>52.7</td>
</tr>
<tr>
<td>2008-10</td>
<td>48.3</td>
</tr>
<tr>
<td>2009-11</td>
<td>44.0</td>
</tr>
<tr>
<td>2010-12</td>
<td>37.3</td>
</tr>
<tr>
<td>2011-13</td>
<td>36.0</td>
</tr>
</tbody>
</table>

Gratiot (avg. # teen births)

Source: Michigan Resident Births File. Division for Vital Records and Health Statistics, Michigan Department of Community Health
Pre-term Births

(% of births delivered before 37 weeks gestation)
Gratiot County & Michigan

Source: Michigan Resident Births File. Division for Vital Records and Health Statistics, Michigan Department of Community Health
Infant Mortality

Rural areas of northern and central Michigan have low infant mortality rates even though they have an abundance of risk factors.

Source: Michigan Resident Births File. Division for Vital Records and Health Statistics, Michigan Department of Community Health
Maternal and child health should be a priority for our community.

A. Strongly agree.
B. Somewhat agree.
C. Neutral.
D. Somewhat disagree.
E. Strongly disagree.
Given what you have seen, which statement reflects your feelings about our work on maternal and child health?

A. We have made great progress.

B. Some things have gone well but more remains to be done.

C. We did not do what we said we would.

D. Our strategies are off target.

E. We should drop this strategy.
Feedback

• What surprised you about what you saw?

• What are some strengths of our community?

• Where do we need to improve?
Group Interaction

• What 3 to 5 things are most important to address?

• What positive things are we doing that already exist?

• What information are we missing?
What are the Three Most Important Issues We Need to Address?

A. Jobs
B. Obesity
C. Alcohol/Drug Abuse
D. Cancer
E. Environmental Contamination
F. Smoking
G. Drinking Water Quality
H. Prescription Drug Abuse
I. Child/Youth Health
J. Access to Health Care
Additional Input

• Please provide us with further input by going to the following Survey Monkey link:

  • [https://www.surveymonkey.com/s/LiveWellGratiot](https://www.surveymonkey.com/s/LiveWellGratiot)
Save the Data!
Gratiot Regional Excellence & Transformation (GREAT) Plan

**Proposed Actions Supporting Health & Healthy Lifestyles...**

- **Goal 1: Preserve County’s Rural Character**
  - **Obj. 1.4: Protect the quality of the County’s ground & surface water**

- **Goal 2: Strengthen existing cities/villages to serve as quality community centers for living, working, and recreating.**
  - **Obj. 2.3: Provide more recreation options & places of interest**

- **Goal 3: Provide quality public services**
  - **Obj. 3.4: Provide public transit services within & connecting the county**
  - **Obj. 3.7: Provide non-motorized facilities to increase opportunities for non-motorized transport (walking, biking, etc.)**

- **Goal 4: Provide and sustain economic opportunities by growing/attracting employers**
  - **Obj. 4.5: Minimize impact of industrial land use on the environment**
  - **Obj. 4.6: Establish visitor and recreation-oriented businesses**
Gratiot Regional Excellence & Transformation (GREAT) Plan

Areas supporting health & healthy lifestyles – (CONTINUED)

• Goal 5: Provide high quality of life opportunities, such as cultural and recreational resources
  • Obj. 5.1: Provide public access to the waterfront
  • Obj. 5.2: Enhance parks & recreational opportunities that meet the needs of all segments of the community
  • Obj. 5.3: Enhance the walkability of the cities
  • Obj. 5.4: Ensure that adequate land is reserved for parks, open space, and trails.
  • Obj. 5.5: Develop a countywide community center

• Goal 6: Provide quality educational opportunities & experiences for all residents
  • Obj. 6.1: Enhance quality of local public school system
  • Obj. 6.3: Develop the skills area residents need for employment opportunities

• Goal 7: Strengthen community collaboration to elevate Gratiot County as a whole
  • Obj. 7.1: Nurture community involvement, pride, and awareness
  • Obj. 7.2: Enhance relationship with educational system to maximize quality of recreational facilities and services
  • Obj. 7.3: Foster relationships with local institutions for the social benefit of all
Coronary heart disease deaths (rate per 100,000 persons)

The age adjusted coronary heart disease death rate for Gratiot County, MI is:

180.6 (per 100,000)
Mortality

Cancer deaths (rate per 100,000 persons)

The age adjusted cancer death rate for Gratiot County, MI is:

177.3 (per 100,000)

---

Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA 30333, USA
800-CDC-INFO (800-232-4636) TTY: (888) 232-6348 - Contact CDC-INFO
Mortality

Stroke deaths (rate per 100,000 persons)

The age adjusted stroke death rate for Gratiot County, MI is:

58.4 (per 100,000)
### Chronic lower respiratory disease (CLRD) deaths

The age adjusted chronic lower respiratory disease (CLRD) death rate for Gratiot County, MI is:

- **53.1** (per 100,000)

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Description</th>
<th>Populations</th>
<th>Census Tracts</th>
<th>Associated Indicators</th>
</tr>
</thead>
</table>

- **Better**
- **Moderate**
- **Worse**

US Median: 49.6

Show peer counties

---

Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA 30333, USA 800-CDC-INFO (800-232-4636) TTY: (888) 232-6348 - Contact CDC-INFO
Unintentional injury (including motor vehicle) (rate per 100,000 persons)

The age adjusted unintentional injury (including motor vehicle) death rate for Gratiot County, MI is:

- **32.7** (per 100,000)
The rate of violent crime for Gratiot County, MI is:

138.5 (per 100,000)
Alzheimer's disease deaths (rate per 100,000 persons)

The age adjusted Alzheimer's disease death rate for Gratiot County, MI is:

19.5 (per 100,000)
The percent of adults living with diagnosed diabetes for Gratiot County, MI is:

14.1 %
Cancer (rate per 100,000 persons)

The age adjusted cancer incidence rate for Gratiot County, MI is:

490.7 (per 100,000)
The teen births rate for Gratiot County, MI is: 29.4 (per 1,000)
**Gratiot County, MI**

The following Summary Comparison Report provides an “at a glance” summary of how the selected county compares with peer counties on the full set of Primary indicators. Peer county values for each indicator were ranked and then divided into quartiles.

<table>
<thead>
<tr>
<th>Better</th>
<th>Moderate</th>
<th>Worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>(most favorable quartile)</td>
<td>(middle two quartiles)</td>
<td>(least favorable quartile)</td>
</tr>
</tbody>
</table>

**Mortality**

- Alzheimer’s disease deaths
- Cancer deaths
- Unintentional injury (including motor vehicle)
- Chronic lower respiratory disease (CLRD) deaths
- Diabetes deaths
- Female life expectancy
- Male life expectancy
- Motor vehicle deaths
- Coronary heart disease deaths
- Stroke deaths

**Morbidity**

- HIV
- Syphilis
- Adult overall health status
- Alzheimer’s diseases/dementia
- Cancer
- Depression
- Older adult smoking
- Preterm births
- Adult diabetes
- Adult obesity
- Older adult depression

**Health Care Access and Quality**

- Cost barrier to care
- Older adult preventable hospitalizations
- Primary care provider access
- Uninsured
- Adult smoking

**Health Behaviors**

- Adult female routine pap tests
- Teen Births
- Adult binge drinking
- Adult physical inactivity

**Social Factors**

- Violent crime
- Children in single-parent households
- Inadequate social support
- On time high school graduation
- Poverty

**Physical Environment**

- Access to parks
- Limited access to healthy food
- Annual average PM2.5 concentration
- Housing stress
- Drinking water violations
- Living near highways
- High housing costs
- Unemployment