# 2017 Behavioral Risk Factor Survey, Ottawa County, MI 

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Executive


Background


Methodology


Findings \& Implications

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INTRODUCTION

## Financial Contributors

The following community organizations are responsible for primary funding of the 2017 Ottawa County Behavioral Risk Factor Survey:

COMMUNITY MENTAL HEALTH

## SPECTRUM HEALTH

Zeeland Community Hospital

Additional funding for the Ottawa County Behavioral Risk Factor Survey was provided by:


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## Background and Objectives

$>$ VIP Research and Evaluation was contracted by the Community Health Needs Assessment (CHNA) team of Ottawa County to conduct a Behavioral Risk Factor Survey (BRFS) as part of their larger community-wide health needs assessment in Ottawa County.
$>$ The Patient Protection and Affordable Care Act (PPACA) passed by Congress in March of 2010 set forth additional requirements that hospitals must meet in order to maintain their status as a 501(c)(3) Charitable Hospital Organization. One of the main requirements states that a hospital must conduct a community health needs assessment (CHNA) and must adopt an implementation strategy to meet the community health needs identified through the assessment. The law further states that the assessment must take into account input from persons who represent the broad interests of the community, including those with special knowledge of, or expertise in, public health.
$>$ In response to the PPACA requirements, organizations serving both the health needs and broader needs of Ottawa County communities began meeting to discuss how the community could collectively meet the requirement of a CHNA. Currently these partners comprise a task force consisting of Ottawa County Department of Public Health, Community Mental Health of Ottawa County, Holland Hospital, North Ottawa Community Health System, Spectrum Health Zeeland Community Hospital, and the Greater Ottawa County United Way.

## Background and Objectives (Continued)

$>$ Information collected from this research will be utilized in the Community Health Needs Assessment for the three hospitals in Ottawa County and in the Health section of the broader United Way Community Assessment.
$>$ The overall objective of the BRFS is to obtain information from Ottawa County residents about a wide range of behaviors that affect their health. More specific objectives include measuring each of the following:
*Physical health status indicators, such as perception of general health, disability, chronic pain, and weight (BMI)
Mental health status indicators, such as mental heath status, psychological distress, anxiety disorder, depressive disorder, and suicide

* Health risk behaviors, such as smoking and tobacco use, drinking, diet, and physical activity
*Clinical preventative measures, such as routine physical checkups, oral health, and immunizations
* Chronic conditions, such as diabetes, asthma, and cancer, and their management


## Background and Objectives (Continued)

> The information collected will be used to:

* Prioritize health issues and develop strategic plans
* Monitor the effectiveness of intervention measures

Examine the achievement of prevention program goals

* Support appropriate public health policy
* Educate the public about disease prevention through dissemination of information


## Methodology

$>$ A Behavioral Risk Factor Survey was conducted among 1,318 Ottawa County adults (age 18+) via telephone. The response rate was $38 \%$.
$>$ Disproportionate stratified random sampling (DSS) was used to ensure results could be generalized to the population of Ottawa County. DSS utilizes both listed and unlisted landline sample, allowing everyone with a landline telephone the chance of being selected to participate.
$>$ In addition to landline telephone numbers, the design also targeted cell phone users. Of the 1,318 completed surveys:
$\$ 613$ are cell phone completes ( $46.5 \%$ ), and 705 are landline phone completes ( $53.5 \%$ )

* 466 are cell-phone-only households (35.4\%)

170 are landline-only households (12.9\%), and

* 682 have both cell and landline numbers (51.7\%)
$>$ For landline numbers, households were selected to participate subsequent to determining that the number was that of an Ottawa County residence. Vacation homes, group homes, institutions, and businesses were excluded.


## Methodology (Continued)

$>$ Respondents were screened to ensure they were at least 18 years of age and resided in Ottawa County, or resided in one of four zip codes that overlap with Ottawa County and neighboring counties (49404, 49423, 49448, 49456) that are considered to be service areas by health care and health-related organizations.
$>$ In households with more than one adult, interviewers randomly selected one adult to participate based on which adult had the nearest birthday. In these cases, every attempt was made to speak with the randomly chosen adult; interviewers were instructed to not simply interview the person who answered the phone or wanted to complete the interview.
$>$ Spanish-speaking interviewers were used where Spanish translation/interpretation was needed.
$>$ The 1,318 households represent $1.4 \%$ of the 96,283 households in Ottawa County according to the 2016 U.S. Census estimate.
$>$ The margin of error for the entire sample of 1,318 , at a $95 \%$ confidence level, is $+/-$ $2.7 \%$. This calculation is based on a population of roughly 213,331 Ottawa County residents 18 years or older, according to the 2016 U.S. Census estimate.

## Methodology (Continued)

> Unless noted, consistent with the Michigan BRFS, respondents who refused to answer a question or did not know the answer to a specific question were excluded from analysis. Thus, the base sizes vary throughout the report.
$>$ Data weighting is an important statistical process that was used to remove bias from the BRFS sample. The formula consists of both design weighting and iterative proportional fitting, also known as "raking" weighting. The purposes of weighting the data are to:

* Correct for differences in the probability of selection due to non-response and noncoverage errors
*Adjust variables of age, gender, race/ethnicity, marital status, education, home ownership, and region to ensure the proportions in the sample match the proportions in the population of Ottawa County adults
*Allow the generalization of findings to the entire Ottawa County adult population
$>$ The formula used for the final weight is: Design Weight X Raking Adjustment


## Methodology (Continued)

$>$ Adverse Childhood Experiences (ACEs) data were collected using the BRFS 11-item version. The 11 items measure the following adverse groups and subgroups:
*Abuse:

- Emotional abuse
- Physical abuse
- Sexual abuse
* Household challenges:
- Intimate Partner Violence
- Household Substance Abuse
- Household Mental Illness
- Parental Separation or Divorce
- Incarcerated Household Member

Five of the 11 questions have "yes" or "no" response categories and the remaining 6 questions have "never," "once," or "more than once" response categories. Respondents scored either " 0 " for each "no" and a " 1 " for each "yes," and they scored either a " 0 " for each "never" and a " 1 " for each "once" or "more than once." Their total ACEs score was computed by adding the sum of the scores across the 11 items. The total ACEs scores were segmented into three groups according to the number of adverse childhood experiences they had: none, 1 to 3, and 4 or more.

## Methodology (Continued)

> It should be noted that if the respondent said "don't know" or refused to answer any of the ACEs items then they were not included in the ACEs analyses by groups. This decision was made because the CHNA team and the researchers believe that coding "don't know" or "refused" answers as zero and then including them in one of the three groups could possibly create an inaccurate picture of the extent to which adverse childhood experiences exist in the population of Ottawa County residents. As an example, if someone refused to answer all 11 ACE questions, rather than coding them as a none (zero), it was determined best to exclude them from the analyses.

## GIS Section Map



| Section Name | Community Area | $\begin{aligned} & \text { ZIP } \\ & \text { Codes* } \end{aligned}$ |
| :---: | :---: | :---: |
| Northwest Section | Crockery <br> Ferrysburg <br> Grand Haven <br> Spring Lake \& surrounding areas | $\begin{aligned} & \text { 49409, } 49415, \\ & 49417,49456^{\star}, \\ & 49448^{\star} \end{aligned}$ |
| Northeast Section | Coopersville <br> Chester <br> Lamont <br> Wright <br> \& surrounding areas | $\begin{aligned} & 49318,49403, \\ & 49404^{\star}, 49430, \\ & 49451 \end{aligned}$ |
| Central Section | Allendale <br> Port Sheldon <br> Tallmadge \& surrounding areas | $\begin{aligned} & \text { 49401, 49435, } \\ & 49460,49534, \\ & 49544 \end{aligned}$ |
| Southwest Section | Holland <br> Olive <br> Park <br> Zeeland <br> \& surrounding areas | $\begin{aligned} & 49423^{*}, 49424, \\ & 49464 \end{aligned}$ |
| Southeast Section | Georgetown <br> Hudsonville <br> Jamestown <br> \& surrounding areas | $\begin{aligned} & 49315,49418, \\ & 49427,49428 \end{aligned}$ |

*Indicates a ZIP code where all respondents were included, even though the ZIP code extends beyond the border of Ottawa County.

## EXECUTIVE SUMMARY

## Executive Summary

$>$ In general, Ottawa County adults are physically and emotionally healthier than adults throughout Michigan or across the United States; they fare better on almost all of the key metrics.
$>$ That said, of the 35 key metrics measured, 21 were worse ( $60.0 \%$ ) than previous years; in fact, 9 of the 12 ( $75.0 \%$ ) chronic conditions were more prevalent this iteration.
$>$ Nearly nine in ten (87.4\%) area adults report their health as good or better, while $12.6 \%$ report their health as fair or poor. One in ten (10.0\%) are considered to have poor physical health ( 14 or more days per month).

* Although both of these measures are better than MI and the U.S., they are up from both 2011 and 2014
$>$ Fewer than one in ten (8.8\%) are considered to have poor mental health (14 or more days per month).
*Similarly, this measure is better than MI and the U.S., but up from both 2011 and 2014
One in five (20.9\%) adults are disabled, in the sense that they are limited in their activities because of physical, mental or emotional problems or have health problems that require them to use special equipment (e.g., wheelchair, cane).
*This proportion is better than the state and down slightly from 2011


## Executive Summary (Continued)

$>$ More than eight in ten (83.8\%) Ottawa County adults are considered to be psychologically well/healthy per the Kessler 6 questionnaire that was part of the BRFS instrument this year.
*Still, $13.6 \%$ are classified as having mild to moderate psychological distress and $2.5 \%$ have severe psychological distress
$>$ Further, $15.0 \%$ of area adults report having been told they have anxiety disorder while $17.1 \%$ report having been told they have depression.
*The proportion of those having depression in Ottawa County is slightly lower than MI or the U.S. and it is down from the last time it was measured in 2011
*The proportion of those having anxiety has remained roughly the same since 2011

* Despite the fact that two-thirds of adults with anxiety or depression feel very or extremely confident they can manage their conditions well, more than one-third say that area programs and services do not help them manage their condition well
$>$ One in twenty (5.0\%) adults has thought about committing suicide in the past year, and of these one in five (20.0\%) have actually attempted suicide in the past year.


## Executive Summary (Continued)

$>$ Even though there are low proportions of adults with poor mental health or severe psychological distress, one area of opportunity for local health professionals is to formulate a plan to address the fact that sizeable proportions of people with mental health challenges do not take medication or receive treatment for their condition.

* For example, the proportion of adults who currently take medication or receive treatment for a mental health condition or emotional problem is 49.5\% among those with mild to moderate psychological distress and $75.6 \%$ among those with severe psychological distress
* Further, only half (51.0\%) of adults who have poor mental health currently take medication or receive treatment for their mental health
* The good news is that these proportions have improved greatly from 2014
$>$ It is surprising that so few people engage in treatment or medication for mental health conditions considering that nearly all adults (90.0\%), regardless of mental health status, believe treatment can help people with mental illness lead normal lives.
* Reluctance to seek treatment or take medication might result from a perceived stigma attached to the label of mental illness
- More than one-third (35.6\%) of all adults do not view people as "caring and sympathetic to people with mental illness"


## Executive Summary (Continued)

$>$ Three in ten (29.9\%) adults in Ottawa County are considered to be obese per their BMI, while an additional 33.3\% are overweight (but not obese).
*The rate of obesity has increased from 2014 and is no longer better than the U.S. rate
*Respondents consider obesity to be the top health issue in Ottawa County
$>$ Moreover, people who are obese tend to see themselves in a better light; only $35.5 \%$ see themselves as very overweight, while $54.1 \%$ feel they are slightly overweight and $10.3 \%$ say they are at about the right weight.
$>$ Although more than eight in ten (83.2\%) obese adults are trying to lose weight or not gain additional weight, many are pursuing this goal without the advice from health care professionals

* Only half (49.5\%) of obese adults in Ottawa County report having received advice on their weight from a health care professional
$>$ The prevalence estimates of all chronic conditions measured are lower than state and national estimates, with the exception of skin cancer which is higher than both MI and the U.S.


## Executive Summary (Continued)

$>$ Specifically with regard to diabetes, one in ten (9.8\%) area adults report having it, a rate up from 2011 and 2014.
*And of those who don't have diabetes, and additional 10.9\% report having pre-, or borderline, diabetes
$>$ The majority of adults with chronic conditions are confident they can do all the things necessary to manage their condition.
*That said, there is clearly an opportunity for improvement with existing programs and services designed to help residents manage their chronic conditions. For example, below is the proportion of adults who feel the existing programs and services do not help them manage their condition well:

- Stroke (56.1\%)
- COPD (53.7\%)
- Angina/CHD (49.2\%)
- Asthma (45.4\%)
- Arthritis (40.1\%)
- Skin cancer (36.5\%)
- Diabetes (33.4\%)


## Executive Summary (Continued)

$>$ One in four (24.1\%) area adults has chronic pain, and a similar proportion (27.8\%) report that their pain is not managed well.
*There are myriad barriers to treating the pain, but cost and having multiple chronic conditions are at the top
$>$ Among adults aged 18-64, 90.8\% currently have health care coverage.
Of those currently with coverage, $5.2 \%$ say there was a time in the past year when they were not covered

* Over half (58.8\%) have coverage through a plan at work or through a union
$>$ Among all adults, $7.4 \%$ had to forego a needed doctor visit in the past year due to cost.

Moreover, in the past year, $7.5 \%$ delayed seeking medical care because of the general cost of care, while $7.4 \%$ delayed seeking medical care because of the cost of co-pays and/or deductibles
*Additionally, $8.0 \%$ report they were not able to take their medication as prescribed due to cost

One in four (24.5\%) Ottawa County adults have visited an Urgent Care Center in the past year and 20.0\% have visited the Emergency Room.

## Executive Summary (Continued)

$>$ While a large majority (84.4\%) are at least somewhat confident they can navigate the health care system, $15.6 \%$ are not confident. Almost all adults are at least moderately confident they can complete medical forms and almost always understand their condition and any communication from their provider.
*Those who lack confidence or have trouble understanding their situation tend to be the youngest adults (18-24) and/or have low incomes
$>$ Three-fourths of adults (76.6\%) participate in some form of leisure time physical activity, such as running, calisthenics, walking, golfing, or gardening.

* On the other hand, only four in ten adults participate in physical activities to strengthen their muscles
$>$ The prevalence of cigarette smoking among Ottawa County adults is $17.6 \%$, down slightly from 2014.
*The overall proportion of homes where at least one person smokes inside the home is low (6.9\%); however, this proportion rises to $19.5 \%$ for current smokers

The prevalence of other tobacco use (5.6\%) and vaping (6.1\%) is also low.
$>$ Three in ten (29.7\%) adults have taken prescription pain medication and 7.0\% have done so within the past month.

- Very few say they know anyone who abuses prescription drugs or amphetamines


## Executive Summary (Continued)

$>$ Half (51.0\%) of Ottawa County adults are considered non-drinkers of alcohol, meaning they consumed no alcohol in the past month. Additionally, 43.3\% are light to moderate drinkers and $5.7 \%$ are heavy drinkers.
*14.1\% of adults are binge drinkers, meaning they have consumed at least 4 (if female) or 5 (if male) drinks on at least one occasion in the past month
*Rates for heavy drinking and binge drinking are now better than both MI and the U.S. and lower than they were in 2011 and 2014
$>$ Fewer than one in five (17.6\%) adults consume an adequate amount (five or more times) of fruits and vegetables per day.

On average, $31.5 \%$ of adults consume less than one serving of fruit per day and $21.4 \%$ consume less than one serving of vegetables per day

More than nine in ten adults report that they:
*Always have enough food to eat (92.2\%)
*Haven’t had to cut the size of meals, or skip meals, because of lack of money (92.4\%)
*Think it's easy to find fresh fruits/vegetables in their community/neighborhood (97.0\%)
*Those who have experienced problems accessing needed dental care say lack of insurance and the inability to afford treatment are the main barriers

## Executive Summary (Continued)

$>$ Nearly nine in ten adults (87.6\%) have a medical home (have a personal care provider) and $5.1 \%$ have more than one.

Eight in ten (81.3\%) adults have visited a doctor for a routine checkup within the past year
*Almost all adults with children living at home say their children have visited their doctor for a routine checkup within the past year
> Although the vast majority of adults (93.5\%) have had no problem obtaining needed dental care, almost one in five adults (18.4\%) have not visited a dentist in the past year.
$>$ Seven in ten (70.8\%) adults aged 65 or older have had a flu shot within the past year and a similar proportion (72.9\%) have had a pneumonia vaccine at some point in their life.

## Executive Summary (Continued)

$>$ Although Ottawa County adults, in general, experience fewer adverse childhood experiences compared to adults across Michigan or the U.S., the prevalence of mental illness in the household and the prevalence of living with someone who had been incarcerated are greater in Ottawa County than in Michigan or across the U.S.
*Three in ten (29.6\%) Ottawa County adults have experienced emotional abuse. Roughly one in five have had divorced or separated parents and a similar proportion lived with someone who was a substance abuser

* Over half (53.3\%) of Ottawa County adults have experienced at least one adverse childhood event, and $14.0 \%$ have experienced four or more

There is a direct and linear relationship between the number of ACEs one experiences and negative outcomes later in life

## Executive Summary (Continued)

> There is also a direct relationship between health outcomes and both education and income. Positive outcomes are more prevalent among adults with higher levels of education and adults from households with higher income levels, while negative outcomes are more prevalent among those with less education and lower incomes. Examples of this disparity include:

* General health status
* Physical health, disability, and chronic pain
* Mental health, psychological distress, and having anxiety or depression
* Chronic diseases such as diabetes, COPD, or any cardiovascular disease
* Health risk behaviors such as fruit and vegetable consumption, smoking, physical activity, muscle strengthening activity
* Preventive practices such as visiting a dentist and being vaccinated against the flu or pneumonia
* Health care access such as having a primary care provider, having health insurance, lack of access to care and medication due to cost, or being health literate * Food insufficiency

The link between both education and income and positive health outcomes goes beyond the direct relationship. Those occupying the very bottom groups, for example no high school diploma and/or household income less than \$20K (or living below the poverty line), are most likely to experience the worst health outcomes.

## Executive Summary (Continued)

$>$ There is also a direct relationship between health outcomes and age. In many cases, negative outcomes are more often associated with younger adult age groups, for example:
*Poor mental health, having psychological distress, anxiety, or depression
*No health care coverage and having no personal care provider
*Risk behaviors such as smoking cigarettes and binge drinking
*Food insufficiency
*No routine physical checkup
$>$ In other cases, negative outcomes are more associated with older adult groups, such as:
*Fair or poor general health status, poor physical health, and activity limitation
Having chronic diseases like diabetes, arthritis, cancer, cardiovascular disease, and COPD
Having chronic pain
*Lack of muscle strengthening activities

## Executive Summary (Continued)

$>$ There are links between health outcomes and gender. For example:

* Men are more likely than women to:
- Engage in risk behaviors such as smoking, binge drinking, eating fewer fruits and vegetables
- Resist preventive practices such as visiting a dentist or having a routine physical exam
- Lack health insurance or a personal health care provider
* Women are more likely than men to:
- Be obese or be at a healthy weight
- Have poor physical health
- Have poor mental health, psychological distress, anxiety, or depression
- Have chronic conditions such as asthma, arthritis, and chronic pain
- Not engage in muscle strengthening activities

There are also links between race and outcomes. Non-Whites are more likely than Whites to:

Engage in risk behaviors such as smoking, binge drinking, and eating fewer fruits/vegetables
Not engage in preventive practices such as visiting a dentist or having a routine physical exam
*Lack health insurance or a personal health care provider
Experience psychological distress

## Executive Summary (Continued)

$>$ Adults living in the southeast section of Ottawa County fared better than adults in other sections on the following measures:

* General health status
* Activity limitation
* Health risk behaviors such as fruit and vegetable consumption, being physically active, smoking, heavy drinking, and binge drinking
*Preventive practices such as visiting a dentist or having a routine physical exam
$>$ The northeast section of the county demonstrates an odd mix where adults fare best on nine of the major outcomes (e.g., vaccinations, five of the chronic conditions) and fare worst on an additional nine major outcomes (e.g., obesity, having no insurance, heavy drinking).


## Comparison of BRFS Measures Between Ottawa County, Michigan, and the United States



- Ottawa County is best
- = Ottawa County is worst


# Comparison of BRFS Measures Between Ottawa County, Michigan, and the United States (Continued) 

|  | Clinical Preventive Practices |  |  |
| :--- | :---: | :---: | :---: |
|  | Ottawa <br> County | Michigan | United <br> States |
| No Routine Checkup in Past <br> Year | $\mathbf{1 8 . 7 \%}$ | $\mathbf{2 8 . 0 \%}$ | $\mathbf{2 9 . 1 \%}$ |
| No Dental Visit in Past Year | $\mathbf{1 8 . 4 \%}$ | - -- | $\mathbf{3 3 . 6 \%}$ |
| Had Flu Vaccine in Past Year <br> (65+ Only) | $\mathbf{7 0 . 8 \%}$ | $\mathbf{5 7 . 7 \%}$ | $\mathbf{5 8 . 6 \%}$ |
| Ever Had Pneumonia Vaccine <br> (65+ Only) | $\mathbf{7 2 . 9 \%}$ | $\mathbf{7 2 . 8 \%}$ | $\mathbf{7 3 . 4 \%}$ |


|  | Chronic Conditions |  |  |
| :---: | :---: | :---: | :---: |
|  | Ottawa County | Michigan | United States |
| Arthritis | - 19.4\% | 30.0\% | 25.8\% |
| Depression | - 17.1\% | 19.7\% | 17.4\% |
| Lifetime Asthma | - 12.7\% | 15.7\% | 14.0\% |
| Diabetes | - $9.8 \%$ | 10.7\% | 10.8\% |
| Current Asthma | - 8.7\% | 10.2\% | 9.3\% |
| Skin Cancer | - 6.3\% | 6.1\% | 5.9\% |
| Other Cancer | - $4.8 \%$ | 7.0\% | 6.7\% |
| COPD | - $\mathbf{4 . 0 \%}$ | 7.7\% | 6.3\% |
| Heart Attack | - 3.7\% | 4.7\% | 4.4\% |
| Angina/CHD | - 3.3\% | 4.6\% | 4.1\% |
| Stroke | - 1.7\% | 3.3\% | 3.1\% |

- Ottawa County is best
- = Ottawa County is worst


## Comparison of Ottawa County BRFS Measures From 2011, 2014, and 2017

|  | Health Status Indicators |  |  |  | Risk Behavior Indicators |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2011 | 2014 | 2017 |  | 2011 | 2014 | 2017 |
| $\star$ General Health Fair/Poor | 9.9\%\% | 10.5\% | 12.6\% | No Leisure Time Physical | 12.7\% | 20.5\% | 23.4\% |
| Poor Physical Health (14+ days) | 8.1\% | 6.1\% | 10.0\% | Activity <br> Adequate Fruit and |  |  |  |
| Poor Mental Health (14+ days) | 8.6\% | 8.6\% | 8.8\% - | Vegetable Consumption (5 or more/day) | -- | 29.50\% | 17.6\% |
| Activity Limitation (14+ days) | 5.1\% | 5.7\% | 7.6\% | Consumes Fruits <1 time/day | -- | 20.6\% | 31.5\% |
| Disability | 22.2\% | -- | 20.9\% | Consumes Vegetables <1 |  |  | 21.4\% |
| Obese | 25.8\% | 23.9\% | 29.9\% | time/day | -- | 17.1\% | 21.4\% |
| Overweight | 36.7\% | 35.3\% | 33.3\% | Current Cigarette Smoking | 17.2\% | 18.6\% | 17.6\% |
| $\star$ Healthy Weight | 36.3\% | 37.7\% | 35.9\% | Former Cigarette Smoking | 24.5\% | 22.6\% | 19.5\% |
| No Health Care Coverage | 12.6\% | .3\% | 9.2\% | Binge Drinking | 20.3\% | 19.3\% | 14.1\% |
| (18-64) |  |  |  | Heavy Drinking | 7.5\% | 6.5\% | 5.7\% |
| No Personal Health Care Provider | 12.0\% | 11.4\% | 12.4\% |  |  |  |  |
| No Health Care Access Due to Cost | -- | 9.8\% | 7.4\% |  |  |  |  |
| Confidence in Navigating the Health Care System | -- | 81.3\% | 84.4\% |  |  |  |  |
| Medication/Treatment for Mild to Severe Psychological Distress | -- | 25.8\% | 53.5\% |  |  |  |  |

- better/improved
- = worse
$\star=$ indicates an outcome measure for the 2015 Ottawa County Community Health Improvement Plan


# Comparison of Ottawa County BRFS Measures From 2011, 2014, and 2017 

|  | Clinical Preventive Practices |  |  |  | Chronic Conditions |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2011 | 2014 | 2017 |  | 2011 | 2014 | 2017 |
| No Routine Checkup in Past | 26.2\% | 19.9\% | 18.7\% | Arthritis | 23.2\% | 18.3\% | 19.4\% |
|  |  |  |  | Depression | 18.8\% | -- | 17.1\% |
| No Dental Visit in Past Year | 21.6\% | 21.2\% | 18.4\% | Anxiety | 14.8\% | -- | 15.0\% |
| Had Flu Vaccine in Past Year ( $65+$ Only) | 67.9\% | 72.1\% | 70.8\% | Lifetime Asthma | 13.5\% | 11.9\% | 12.7\% |
| Ever Had Pneumonia Vaccine | 70.9\% | 66.9\% | 72.9\% | Diabetes | 7.3\% | 7.8\% | 9.8\% |
| 5+ On |  |  |  | Current Asthma | 8.4\% | 6.5\% | 8.7\% - |
|  |  |  |  | Skin Cancer | 7.3\% | 4.7\% | 6.3\% - |
|  |  |  |  | Other Cancer | 5.3\% | 5.4\% | 4.8\% |
|  |  |  |  | COPD | -- | 3.0\% | 4.0\% - |
|  |  |  |  | Heart Attack | 2.1\% | 2.1\% | 3.7\% - |
|  |  |  |  | Angina/CHD | 3.0\% | 2.9\% | 3.3\% - |
|  |  |  |  | Stroke | 1.2\% | 2.1\% | 1.7\% |

- better/improved
- = worse
$\star=$ indicates an outcome measure for the 2015 Ottawa County Community Health Improvement Plan


## DETAILED FINDINGS

## Perception of Community Problems

## Top 10 Most Important Health Problems in the Community Today

Adults perceive the top health problem in Ottawa County to be obesity, followed by cancer, health care costs, substance abuse, and lifestyle choices such as lack of exercise, smoking, and diet.


## Health Status Indicators

## General Health Status

Although over half of Ottawa County adults report very good or excellent health, $12.6 \%$ report fair or poor health.

* The proportion of adults who perceive their health as fair or poor is inversely related to level of education and household income. People living below the poverty line are more likely to report fair or poor health than those above the poverty line.



## Physical Health Status

One in ten (10.0\%) Ottawa County adults have poor physical health.

* The prevalence of poor physical health is directly related to age and inversely related to education and income.
* Further, women and non-Whites experience poor physical health slightly more than men and Whites, respectively.


Q2.1: Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? ( $\mathrm{n}=1,307$ )

## Mental Health Status

Roughly one in eleven (8.8\%) area adults have poor mental health.

* The prevalence of poor mental health is inversely related to education and income.
* Poor mental health is higher among women and young adults (18-34) than men and older adults, respectively.

 health not good? $(n=1,311)$


## Activity Limitation

Overall, $7.6 \%$ of area adults are prevented from doing their usual activities (e.g.., self-care, work, recreation).

* The largest proportions of adults who experience activity limitation are found among the poorest adults and among those with less than a high school education.

Activity Limitation During Past 30 Days


## Disability

One in five (19.5\%) area adults are limited in one or more activities because of a physical, mental, or emotional problem, while $6.0 \%$ have a health problem that requires the use of special equipment.

* Persons who experience either limited activity or require special equipment are considered to be disabled, and this designation applies to one in five adults in Ottawa County.


## Limited Due to Physical, Mental, or Emotional Problems

## Have Health Problem Requiring Use of Special Equipment



## Disability (Continued)

The likelihood of being disabled is directly related to age.
$>$ Women are more likely to be disabled than men, and Whites are more likely to be disabled than non-Whites.
> Additionally, disability is more common among those with less than a high school diploma, with the lowest incomes, and/or living in the northeast or central sections of the county.


* The proportion of adults who reported being limited in any activities because of physical, mental, or emotional problems, or reported that they required use of special equipment (such as a cane, a wheelchair, a special bed, or a special telephone) due to a health problem $(n=1,312)$

Disabled by Demographics


## Psychological Distress

More than eight in ten (83.8\%) Ottawa County adults are considered to be mentally healthy according to the Kessler 6 Psychological Distress Questionnaire.*

* Conversely, $13.6 \%$ experience mild to moderate psychological distress and $2.5 \%$ are severely distressed.

|  | During the Past 30 Days, About How Often Did You.... |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency of <br> Feeling | Feel <br> Nervous <br> $(\mathrm{n}=1,307)$ | Feel <br> Hopeless <br> $(\mathrm{n}=1,305)$ | Feel Restless <br> or Fidgety <br> $(\mathrm{n}=1,307)$ | Depressed That <br> Nothing Could <br> Cheer You Up <br> $(\mathrm{n}=1,307)$ | Feel That <br> Everything <br> Is An Effort <br> $(\mathrm{n}=1,301)$ | Feel <br> Worthless <br> $(\mathrm{n}=1,305)$ |
| None of the time | $53.6 \%$ | $83.4 \%$ | $56.2 \%$ | $83.6 \%$ | $64.1 \%$ | $86.9 \%$ |
| A Little | $27.4 \%$ | $9.9 \%$ | $22.5 \%$ | $10.0 \%$ | $19.1 \%$ | $7.7 \%$ |
| Some of the time | $13.7 \%$ | $4.3 \%$ | $13.4 \%$ | $4.9 \%$ | $10.7 \%$ | $4.3 \%$ |
| Most of the time | $3.5 \%$ | $1.1 \%$ | $3.6 \%$ | $1.0 \%$ | $2.6 \%$ | $0.8 \%$ |
| All of the time | $1.7 \%$ | $1.3 \%$ | $4.2 \%$ | $0.5 \%$ | $3.6 \%$ | $0.2 \%$ |

Mentally Healthy (Well) = 83.8\%
Mild to Moderate Psychological Distress $=13.6 \%$
Severe Psychological Distress = 2.5\%

Psychological Distress (Continued)
Among Ottawa County adults, the groups most likely to be considered to have mild to severe psychological distress include those who: are younger (< age 35), are non-White, have less than a college degree, and have household incomes less than $\$ 35 \mathrm{~K}$. To this last point, one glaring difference is between those who live below the poverty line ( $35.1 \%$ ) and those who live above it ( $14.3 \%$ ).

Mild to Severe Psychological Distress*
(Total Sample)

*Calculated from responses to Q. 18.1-18.6 where respondents scored 12 or more across the six items on the Kessler 6 scale. $\quad(n=1,294)$
Q18.1-Q18.6 During the past 30 days, about how often did you feel....

Mild to Severe Psychological Distress by Demographics


## Medication and Treatment for Psychological Distress

$>$ Of all Ottawa County adults, $15.4 \%$ currently take medication or receive treatment for a mental health condition or emotional problem.

* However, many of those who could benefit the most from medication/treatment are not getting it: only half (49.5\%) of those classified as having "mild to moderate psychological distress" and $51.0 \%$ of those classified as having "poor mental health" currently take medication and/or receive treatment for their mental health issues.

Taking Medication or Receiving Treatment for Mental Health Condition or Emotional Problem


Percent Taking Medication/Receiving Treatment by Psychological Distress Category

51.0\%

## Perceptions of Mental Health Treatment and Mental

## Illness

Even though nine in ten (90.0\%) Ottawa County adults believe treatment can help people with mental illness lead normal lives, just half ( $52.8 \%$ ) think people are generally caring and sympathetic to people with mental illness, and this drops to $13.9 \%$ among those with severe psychological distress.
*This continued stigma could be the reason more people don't seek treatment even though they could benefit from it.

## "Treatment Can Help People With Mental Illness Lead "People Are Generally Caring and Sympathetic to People

 Normal Lives" With Mental IIIness"

```
Agree by Psychological Distress Category
Well (90.0%)
Mild to Moderate (91.1%)
Severe (83.4%)
```

```
Agree by Psychological Distress Category
Well (56.1%)
Mild to Moderate (41.0%)
Severe (13.9%)
```

18.8 What is your level of agreement with the following statement? "Treatment can help people with mental illness lead normal lives." Do you - agree slightly or strongly, or disagree slightly or strongly? $(n=1,291)$
18.9 What is your level of agreement with the following statement? "People are generally caring and sympathetic to people with mental illness." Do you - agree slightly or strongly, or disagree slightly or strongly? $(n=1,294)$

## Suicide

One in twenty (5.0\%) area adults has thought about committing suicide in the past year.

* Of these, one in five actually attempted suicide in the past year.



## Weight Status

More than six in ten (63.2\%) Ottawa County adults are considered to be either overweight or obese per their BMI. More than one-third (35.9\%) are at a healthy weight.


Obese = among all adults, the proportion of respondents whose BMI was greater than or equal to 30.0 Overweight = among all adults, the proportion of respondents whose BMI was greater than or equal to 25.0 , but less than 30.0 .
Healthy weight = among all adults, the proportion of respondents whose BMI was greater than or equal to 18.5

Obesity
Three in ten (29.9\%) area adults are obese per their BMI, and it's fairly universal among demographics.

* That said, obesity is slightly more common in women than in men and more common in those below the poverty line than in those above it.
* It's less common among those with a college degree and/or with the highest incomes.



## Healthy Weight

More than one-third (35.9\%) of Ottawa County adults are at a healthy weight per their BMI.

* More women are at a healthy weight compared to men, and the youngest (18-24) and oldest (75+) adults are more often at a healthy weight compared to adults age 25-74.
* More adults in the central section of the county are at a healthy weight compared to adults living elsewhere in the county.



## Weight Control

$>$ Four in ten adults (42.0\%) see themselves at about the right weight, while an equal proportion of adults think they are slightly overweight and $11.7 \%$ report being very overweight.
$>$ Six in ten $(59.1 \%)$ adults are currently trying to lose or maintain their current weight.

## Self-Described Weight Status

## Currently Trying to Lose or Maintain Weight




## Weight Control (Continued)

One in four adults has received advice from a healthcare professional regarding their weight.

* Of these, the vast majority ( $83.2 \%$ ) are satisfied with that advice.

Received Advice Regarding Weight from Health Professional

## Satisfaction with Advice Regarding Weight



## Weight Control (Continued)

In light of the fact that nearly two-thirds of adults in Ottawa County are either overweight or obese per this BRFS, it is surprising that many are not receiving advice from health care professionals regarding their weight.
> Further, many of those overweight or obese see themselves in a slightly better image; for example, $54.1 \%$ of those considered obese per their BMI see themselves as only slightly overweight, and $39.6 \%$ of those who are overweight view themselves as about the right weight.

> Trying to Lose/Maintain Weight by BMI Categorv "Overweight" or "Obeses".

Self-Described Weight Status
by BMI Category
"Overweight" or "Obese"

Received Advice Regarding Weight from Health Professional by BMI Category "Overweight" or "Obese"


## Health Care Access

## Health Care Coverage

> More than nine in ten (90.8\%) adults under age 65 have health care coverage.
$>$ The most widespread primary source of health coverage for all adults, by far, is a plan purchased through an employer or union.
$>$ Slightly more than one in ten (11.3\%) purchase health coverage on their own.

## Currently Have Health Coverage <br> (Among Adults 18-64)



Primary Source of Health Coverage (Total Sample)

| A plan purchased through an employer or union |  | 58.8\% |
| :---: | :---: | :---: |
| Medicare | 12.2\% |  |
| A plan that you or another family member buys on your own | 11.3\% |  |
| Medicaid or other state program | 8.9\% |  |
| TRICARE, VA, or military | 0.6\% |  |
| None | 8.1\% |  |

Lack of Health Care Coverage
Adults most likely to lack health care coverage come from groups that are male, are non-White, have lower incomes (<\$35K), have less than a high school diploma, and live in the northeast section of the county.

No Health Care Coverage* (Among Adults 18-64)

## Lack of Health Care Coverage (Continued)

> Among those currently insured, one in twenty (5.2\%) Ottawa County adults have gone without health care coverage in the past year.

* Those most impacted tend to be younger (<35), non-White, lacking a high school diploma, and/or in low income households.



## Any Time Without Health Insurance in Past 12 Months by Demographics



## Problems Receiving Health Care

## Among all Ottawa County adults, $7.4 \%$ have foregone health care in the past year due to cost.

* Equal proportions have delayed medical care over the past year because of general health care costs and because of out-ofpocket expenses such as co-pays and deductibles.


## Could Not Receive Needed Medical Care in

 Past 12 Months Due to Cost

Reasons for Delays in Getting Needed Medical Care


Q3.5: Was there a time in the past 12 months that you needed to see a doctor but could not because of cost? ( $\mathrm{n}=1,318$ )
Q3.6: There are many reasons why people delay getting needed medical care. Have you delayed getting needed medical care for any of the following reasons in the past 12 months? $(\mathrm{n}=1,309)$

Problems Receiving Health Care (Continued)
The barrier of health care costs prevents certain subpopulations from seeking needed medical care more than others. For example, costs are more likely to be a barrier for: younger adults (25-44), non-Whites, those with less than a college education, and those with low incomes or below the poverty line.

## No Health Care Access During Past 12 Months Due to Cost* (Total Sample)

## 7.4\%

## Problems Affording Medication

- Among all Ottawa County adults who take medication, $8.0 \%$ did not take their medication as prescribed due to costs.
\% Prescription costs tend to impact the youngest adults (18-24) and those with the lowest incomes.


Did Not Take Medication Due to Cost by Demographics


## Use of Urgent Care and ER/ED

Among Ottawa County adults, $24.5 \%$ and $20.0 \%$ have visited an Urgent Care Center and the Emergency Room, respectively, in the past 12 months

* Both of these proportions are up slightly from 2014.


## Number of Times Visited Urgent Care Center in Past 12 Months

## Number of Times Visited ED/ER in Past 12 Months



Confidence In Navigating The Healthcare System
A large majority ( $84.4 \%$ ) of adults are at least somewhat confident they can successfully navigate the health care system; however, $15.6 \%$ are not very or not at all confident.

* The most confident groups are those that are at least 65 years old, have incomes of $\$ 20 \mathrm{~K}$ or more, and/or live in the southeast section of the county. Conversely, those least confident are young adults under age 25 , those with incomes under $\$ 20 \mathrm{~K}$, and those living in the central section of the county.



## Health Literacy

Eight in ten (81.5\%) Ottawa County adults are highly confident in completing medical forms.

* Those who are least confident have lower incomes (under \$35K), lack a high school diploma, and/ live in the northeast section of the county.

Level of Confidence in Filling out Medical Forms


## Low Confidence in Filling out Medical Forms by Demographics



## Health Literacy (Continued)

The vast majority of Ottawa County adults rarely or never have problems either (1) learning about their health condition because of difficulty understanding written information, or (2) understanding written or verbal information provided by their health care provider.

* Still, more than one in ten area adults do have these issues at least some of the time.


## Frequency of Problems Learning About Health Condition



## Risk Behavior Indicators

## Physical Activity

More than three-fourths (76.6\%) of adults participate in leisure time physical activity outside of their job.

* Of those who do, eight in ten (80.4\%) participate at least three times per week. Almost six in ten (57.6\%) participate for less than four hours per week, while $23.4 \%$ participate for six hours or more .

Number of Times Performed
Physical Activity Per Week (Among Those Who Participate)

Number of Hours Performed Physical Activity Per Week (Among Those Who Participate)


Q14.1: During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise? ( $\mathrm{n}=1,312$ )
Q14.2: (If yes) How many times per week or per month did you take part in physical activity during the past month? ( $\mathrm{n}=955$ )
Q14.3: And when you took part in physical activity, for how many minutes or hours did you usually keep at it? ( $n=944$ )

Physical Activity (Continued)
P Physical activity is directly related to income and education; those with higher incomes and/or higher levels of education tend to be more active than those with less.

* Adults in the southeast section of Ottawa County are more active than those in other sections.



## Muscle Strengthening Activities

Among Ottawa County adults, six in ten (60.3\%) engage in no muscle strengthening activities, while $34.3 \%$ perform muscle-strengthening activities at least twice a week.

* The latter group is more likely to be younger (under 35), male, college educated, and/or from high income households ( $\$ 75 \mathrm{~K}+$ ).



## Cigarette Smoking

More than one-third (37.2\%) of Ottawa County adults have smoked at least 100 cigarettes in their lifetime. Of these, $36.8 \%$ currently smoke every day and $10.7 \%$ smoke some days.

* Using 100 cigarettes as the minimum to be classified as a current or former smoker, $17.6 \%$ of Ottawa County adults are considered to be current smokers, $19.5 \%$ are former smokers, and $62.9 \%$ of adults never smoked.

*Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life and that they smoke cigarettes now, either every day or on some days.
${ }^{* *}$ Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 70 packs) in their life but they do not smoke now.


## Cigarette Smoking (Continued)

$>$ Cigarette smoking is inversely related to age, education, and income; younger adults (25-34), those with less education, and those with lower incomes are more likely to smoke than others.

* Men and non-Whites are more likely to smoke than women and Whites, respectively.


## Current Cigarette Smoking* <br> (Total Sample)



## Cigarette Smoking (Continued)

> On the other hand, adults least likely to have ever smoked are women, are young (18-24), are college graduates, have high incomes, and/or live in the southeast section of the county.


Other Tobacco Usage
Small proportions of area adults currently use tobacco products other than cigarettes (5.6\%), currently use ecigarettes (6.1\%), and/or have used vaping devices for products other than tobacco or nicotine (7.2\%).

## Use Tobacco Products Other Than Cigarettes

## Current Use of e-Cigarettes or <br> Other Electronic Vaping Products

## Ever Used e-Cigarettes or Other Electronic Vaping Devices for Product Other Than Tobacco/Nicotine



## Secondhand Smoke

Almost one-fourth (23.7\%) of adults report that at least one person in their household smokes.

* A small proportion of area adults report smoking inside the home.


Q8.4: How many people that live with you smoke cigarettes, cigars, little cigars, pipes, water pipes, hookah, or any other tobacco products? (n=1,316)
Q8.5: Not counting decks, porches, or detached garages, how many of these people smoke cigarettes, cigars, little cigars, pipes, water pipes, hookah, or any other tobacco product inside your home? ( $n=1,316$ )
Q8.6: Next I am going to ask you about exposure to smoke from other people's cigarettes, cigars or pipes. Please do not include yourself. In the past seven days, did anyone smoke cigarettes, cigars, or pipes anywhere inside your home? $(n=1,317)$

## Alcohol Consumption

With regard to alcohol consumption, half of Ottawa County adults are non-drinkers, and slightly more than four in ten (43.3\%) are considered to be light to moderate drinkers. Heavy drinkers comprise 5.7\% of Ottawa County adults, meaning they consume an average of more than seven (if female) or fourteen drinks (if male) per week.

## Number of Days Drank Alcohol in Past 30 Days



| Non Drinker | $51.0 \%$ |
| :--- | :---: |
| Light/Moderate <br> Drinker | $43.3 \%$ |
| Heavy Drinker | $5.7 \%$ |

Drinking Status
Average Number of Drinks When Drinking

Q17.1: During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage, or liquor? ( $n=1,294$ )
Q17.2: One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average? ( $n=601$ )

## Alcohol Consumption (Continued)

Adults age 25-34 are more likely to engage in heavy drinking than other age groups. The largest proportions of heavy drinkers are found in the northeast section of Ottawa County.


## Alcohol Consumption (Continued)

> Among Ottawa County adults who drink alcohol, half (49.3\%) have at most consumed one to two drinks on any occasion in the past 30 days, while $16.4 \%$ have consumed six or more drinks.

Largest Number of Drinks Consumed on One Occasion in Past 30 Days
(Among Drinkers)


## Binge Drinking

Among all adults, $14.1 \%$ have engaged in binge drinking in the past 30 days. Among those who drink, this proportion rises to $28.7 \%$.

## Number of Times Consumed 5 or More (Men)/4 or More (Women) Drinks on an Occasion in Past 30 Days (All Adults)

Number of Times Consumed 5 or More (Men)/4 or More (Women) Drinks on an Occasion in Past 30 Days (Drinkers)


## Binge Drinking (Continued)

The prevalence of binge drinking is highest, by far, among adults age 25-34. It is also higher among men than women and higher among non-Whites compared to Whites.


## Prescription Drug Use

Three in ten (29.7\%) Ottawa County adults has taken prescription pain medication at some point.

* Women are more likely than men to have used prescription pain medication.
* Prescription drug use is least common among the youngest adults (18-24).

Have Taken Prescription Pain Medication
Have Taken Prescription Pain Medication by Demographics


## Prescription Drug Abuse

> Very few Ottawa County adults say they know anyone who takes pain medication, stimulants, or amphetamines that are not prescribed to them.

## Know Anyone Who Currently Takes Pain Medication That Is Not Prescribed to Them



Know Anyone Who Currently Takes Stimulants or Amphetamines That Are Not Prescribed to Them


## Fruit Consumption

Three in ten (31.5\%) adults consume less than one serving of fruit per day; four in ten among non-Whites.

* Adults less likely to fall into this group are the oldest (75+), those with college degrees, and those with the highest incomes (\$75K+).


Q12.1: During the past month, how many times per day, week, or month did you eat fruit or drink 100\% PURE fruit juices? Do not include fruit flavored drinks with added sugar or fruit juice you made at home and added sugar to. Only include $100 \%$ juice. ( $n=1,305$ )

## Vegetable Consumption

One in five (21.4\%) adults consume less than one serving of vegetables per day; one-third among non-Whites. * Non-whites and those in the lowest income group are least likely to consume vegetables.

## Number of Times Consumed Vegetables Per Day



Consumed Vegetables <1 Time Per Day by Demographics


## Fruit and Vegetable Consumption

Fewer than one in five (17.6\%) adults consume adequate amounts of fruits and vegetables per day, which is defined as five or more servings per day.

* Adults with college degrees and/or with annual incomes of $\$ 75 \mathrm{~K}$ or more are most likely to consume adequate amounts of fruits and vegetables; still, only one-fourth of those groups do so.


## Fruit and Vegetable Consumption Per Day



## Food Sufficiency

Just under 8\% of area adults report they sometimes or often don't have enough food to eat and an equal proportion say they've had to cut the size of meals or skip meals due to lack of money.

* Not surprisingly, those who are more likely to experience food insufficiency have the lowest incomes.



## Availability of Fruits and Vegetables

Nearly all (97.0\%) report that fruits and vegetables are easy to find in their community or neighborhood.
"It is easy to find fresh fruits and vegetables within your community or neighborhood."


## Clinical Preventive Practices

## Personal Health Care Provider

Nearly nine in ten adults (87.6\%) have a personal health care provider.

* Those who don't tend to be represented by groups that are younger (< age 35), are male, are non-White, have lower incomes, have less than a high school diploma, and live in the southwest section of the county.



## Routine Physical Checkup

Eight in ten adults (81.3\%) have had a routine checkup within the past year.

* Those who haven't tend to be represented by groups that are younger (< age 45), are male, are non-White, have lower incomes, and live in the southwest section of the county.


Q3.7: About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition. $(n=1,314)$

## Oral Health

Almost one in five adults (18.4\%) have not visited a dentist in the past year, and these people tend to come from groups that are male, non-White, without a high school diploma, and from lower income households.


## Oral Health (Continued)

Similarly, one in five (20.5\%) adults have not had a teeth cleaning in the past year, and these people tend to come from groups that are male, non-White, without a high school diploma, and from lower income households.


## Barriers to Dental Care

## A small proportion (6.5\%) of adults had problems getting needed dental care in the past year.

* Those who have had problems cite lack of insurance and an inability to pay for services as the top barriers to receiving dental care.


## Problems Getting Needed Dental Care

Reasons for Difficulty in Getting Dental Care (Among Those Who Reported Problems Getting Care)


## Flu Vaccination

Seven in ten (70.8\%) Ottawa County adults age 65 or older have had a seasonal flu shot within the past year.

* Among this age group, being vaccinated against the flu is directly related to level of education and income.
* Adults with less than a high school education and/or living in the central section are most at risk.

Had Flu Vaccine in Past 12 Months
(Adults Age 65+)


## Had Flu Vaccine in Past 12 Months by Demographics

(Adults Age 65+)


## Pneumonia Vaccination

Similarly, slightly more than seven in ten (72.9\%) Ottawa County adults aged 65 or older have been vaccinated against pneumonia.

* Those most vulnerable have less education and/or live in the central section of the county.


Had Pneumonia Vaccine by Demographics
(Adults Age 65+)


## Last Routine Checkup for Children

Almost all children under age 18 have visited a health care provider in the past year for a routine checkup or physical/well-being exam.

## Children Ages 0-5

Children Ages 6-11
Children Ages 12-17


Q10.5: How many children less than 18 years of age live in your household? $(n=1,316)$

## Chronic Conditions

## Prevalence of Chronic Health Conditions

Arthritis, depression, and anxiety are the most prevalent chronic conditions among adults in Ottawa County, followed by diabetes and asthma. Prevalence of heart related problems remains low.

* One in ten (9.8\%) adults have been told they have diabetes and an additional 10.9\% have pre-diabetes.


Prevalence of Diabetes
One in ten area adults has been told by a health care professional that they have diabetes.

* The prevalence of diabetes is greater for older adults (55+), Whites, those with incomes less than \$35K, those with less than a high school diploma, and those in the northeast section.



## Diabetes Management

Almost eight in ten $(78.0 \%)$ adults with diabetes are very or extremely confident in managing their condition despite the fact that only one-third ( $32.6 \%$ ) say that area programs and services help them manage their diabetes very or extremely well.

* The few who are less than confident cite lack of, or inadequate, programs and services and the fact that they don't have insurance as the reasons for their lack of confidence.


Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your diabetes? Would you say you are... ( $n=157$ )
Q5.2: (If not at all confident or a little confident:) Why do you say you are [rating from above] that you can do all the things necessary to manage your diabetes? ( $\mathrm{n}=4^{*}$ ) Q5.3: How well do you feel the existing programs and services in the community help you in managing your diabetes? Would you say... ( $n=144$ )

Prevalence of Pre-Diabetes/Borderline Diabetes
One in ten area adults has been told by a health care professional that they have pre- or borderline diabetes.

* The prevalence of pre-diabetes is greater for older adults, females, Whites, those with incomes of \$50K or more, and those living in the southeast section of the county.


Lifetime Asthma
Roughly one in eight area adults has been told by a health care professional at some point in their life that they had asthma.

* The prevalence of lifetime asthma is greater for women, those with incomes less than $\$ 35 \mathrm{~K}$, and those in the northeast section.


Current Asthma

## Roughly one in eleven area adults currently has asthma.

* Like lifetime asthma, the prevalence of those who currently have asthma is greater for women and those with incomes less than $\$ 35 \mathrm{~K}$. Those in the Central and Northwest sections have higher rates of current asthma than those in other sections.


## Current Asthma Prevalence* (Total Sample)



## Asthma Management

More than eight in ten (82.5\%) adults with asthma are very or extremely confident in managing their condition despite the fact that almost half ( $45.4 \%$ ) say area programs and services do not help them manage their asthma well.
*For the few who are less than confident, barriers to confidence include the number of chronic issues they have and cost.


Prevalence of Heart Attacks
The prevalence of having a heart attack is low (3.7\%) but most likely to occur among the oldest adults (75+).

* Adults with less than a high school diploma are more than five times as likely to have a heart attack than those with more education.


## Ever Told Had Heart Attack*

 (Total Sample)

## Heart Attack Management

Six in ten (59.0\%) adults who have had a heart attack are very or extremely confident in managing their condition despite the fact that only $37.7 \%$ say area programs and services help them manage their condition very or extremely well.

* The few who are less than confident cite their multiple chronic conditions and lack of programs and services to help them manage their condition well.


Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your heart attack? Would you say you are... $(n=58)$
Q5.2: (If not at all confident or a little confident:) Why do you say you are [rating from above] that you can do all the things necessary to manage your heart attack? ( $\mathrm{n}=\mathbf{3}^{*}$
Q5.3: How well do you feel the existing programs and services in the community help you in managing your heart attack? Would you say... (n=53)

Prevalence of Angina/Coronary Heart Disease
> The prevalence of angina or CHD is also low (3.3\%) but most likely to occur among the oldest adults (55+) and those with the lowest incomes (<\$35K).
$\frac{\text { Ever Told Have Angina/Coronary Heart Disease* }}{\text { (Total Sample) }}$

Told Have Angina/Coronary Heart Disease by Demographics


## Angina/CHD Management

More than three-fourths (77.0\%) of area adults with angina/CHD are very or extremely confident in managing their condition despite the fact that almost half (46.4\%) say area programs and services do not help them manage their condition well at all.

* The couple who are less than confident cite lack of, or inadequate, programs and services, their multiple chronic conditions, and transportation as barriers to feeling confident.


Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your angina/CHD? Would you say you are... ( $n=62$ )
Q5.2: (If not at all confident or a little confident:) Why do you say you are [rating from above] that you can do all the things necessary to manage your angina/CHD? (n=2*)
Q5.3: How well do you feel the existing programs and services in the community help you in managing your angina/CHD? Would you say... (n=57)

Prevalence of Stroke
> Few Ottawa County adults have had a stroke.
$>$ The highest prevalence of stroke can be found in the highest age and lowest income groups.

> Ever Told Had a Stroke*
> (Total Sample)
Told Had Stroke by Demographics

## Stroke Management

Almost six in ten (57.3\%) area adults who have had a stroke are very or extremely confident in managing their condition despite the fact that a similar proportion (56.1\%) say that area programs and services do not help them manage their condition well.

* The few who are less than confident cite transportation most often as a barrier to feeling confident.


Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your stroke? Would you say you are... ( $n=39$ )
Q5.2: (If not at all confident or a little confident:) Why do you say you are [rating from above] that you can do all the things necessary to manage your stroke? ( $\mathrm{n}=3^{*}$ )
Q5.3: How well do you feel the existing programs and services in the community help you in managing your stroke? Would you say... ( $\mathrm{n}=35$ )

## Prevalence of Any Cardiovascular Disease

$>$ One in fifteen (6.7\%) Ottawa County adults have had a heart attack, angina/CHD, or stroke.
$>$ The highest prevalence of cardiovascular disease can be found in the highest age group (75+), the lowest education group, and the lowest income groups.

## Ever Told Had Heart Attack, Angina, or Stroke* <br> (Total Sample)

Told Had Heart Attack, Angina, or Stroke by Demographics

## 6.7\%

## Prevalence of Skin Cancer

## One in sixteen (6.3\%) Ottawa County adults has skin cancer.

* The prevalence of skin cancer is higher among the oldest groups (65+), those with the most education, and those living in the southeast section of the county.

Ever Told Have Skin Cancer* (Total Sample)

Told Have Skin Cancer by Demographics

| Age |  | Education |  |
| :---: | :---: | :---: | :---: |
| 18-24 | 0.0\% | < High School | 3.6\% |
| 25-34 | 2.0\% | High School Grad | 4.5\% |
| 35-44 | 2.9\% | Some College | 5.5\% |
| 45-54 | 7.6\% | College Grad | 8.9\% |
| 55-64 | 8.6\% | HH Income |  |
| 65-74 | 13.7\% | <\$20,000 | 1.6\% |
| 75+ | 19.3\% | \$20,000-\$34,999 | 5.4\% |
| Gender |  | \$35,000-\$49,999 | 11.4\% |
| Male | 4.8\% | \$50,000-\$74,999 | 5.6\% |
| Female | $\square 7.7 \%$ | \$75,000+ | 6.4\% |
| Race/Ethnicity |  | Section |  |
| White | 7.3\% | Northwest | 8.1\% |
| Non-White | 0.2\% | Northeast | 1.9\% |
| Poverty Level |  | Central | 3.7\% |
| Below Poverty Line | 2.6\% | Southwest | 4.5\% |
| Above Poverty Line | $\square 6.8 \%$ | Southeast | 11.1\% |

## Skin Cancer Management

Almost all (93.3\%) area adults with skin cancer are very or extremely confident in managing their condition despite the fact that more than one-third (36.5\%) say area programs and services do not help them manage their condition well.

* The couple who are less than confident cite cost as the major barrier to their confidence.


Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your skin cancer? Would you say you are... ( $n=120$ )
Q5.2: (If not at all confident or a little confident:) Why do you say you are [rating from above] that you can do all the things necessary to manage your skin cancer? (n=2*)
Q5.3: How well do you feel the existing programs and services in the community help you in managing your skin cancer? Would you say... (n=111)

## Prevalence of Other Cancer (Non-Skin)

One in twenty (4.8\%) Ottawa County adults has other forms of cancer.

* This proportion rises dramatically with age, especially beginning around age 55.
* The prevalence drops with higher incomes.

Ever Told Have Cancer (Other Than Skin)*
(Total Sample)


## Other Cancer Management

Three-fourths (75.6\%) of area adults with cancer (non-skin) are very or extremely confident in managing their condition and the majority feel that existing programs and services are highly effective in helping them manage their condition well.

* The few who are less than confident cite lack of, or inadequate, programs and services, their multiple chronic conditions, a lack of trust, and cost as barriers to feeling confident.


Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your cancer? Would you say you are... ( $n=97$ )
Q5.2: (If not at all confident or a little confident:) Why do you say you are [rating from above] that you can do all the things necessary to manage your cancer? ( $\mathrm{n}=5^{*}$ )
Q5.3: How well do you feel the existing programs and services in the community help you in managing your cancer? Would you say... (n=91)

Prevalence of COPD
A small proportion (4.0\%) of Ottawa County adults have chronic obstructive pulmonary disease (COPD).
\% The disease is more common in adults who are older ( $55+$ ) and/or have low incomes.


## COPD Management

More than six in ten (64.1\%) adults with COPD are very or extremely confident in managing their condition despite the fact that over half ( $53.7 \%$ ) say area programs and services do not help them manage their COPD well.

* Among the few who are less than confident, lack of, or inadequate, programs and services and lack of health insurance are cited as barriers to their confidence.


Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your COPD? Would you say you are... $(\mathrm{n}=77$ )
Q5.2: (If not at all confident or a little confident:) Why do you say you are [rating from above] that you can do all the things necessary to manage your COPD? ( $\mathrm{n}=4^{*}$ )
Q5.3: How well do you feel the existing programs and services in the community help you in managing your COPD? Would you say... ( $n=72$ )

Prevalence of Arthritis
One in five (19.0\%) area adults have arthritis, and this is largely a condition that comes with age.

* The disease is also more common in women than men, more common in Whites compared to non-Whites, and more common among adults with incomes below \$50K compared to adults with higher incomes.
* Arthritis is less common in the northeast and southwest sections of Ottawa County.

Ever Told Have Arthritis* (Total Sample)

Told Have Arthritis by Demographics


## Arthritis Management

Two-thirds (66.7\%) of area adults with arthritis are very or extremely confident in managing their condition although they are split as to how well existing area programs and services help them manage their condition.

* Those who are less than confident mainly cite lack of, or inadequate, programs and services and their multiple chronic conditions as barriers to feeling confident.


Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your arthritis? Would you say you are... (n=379)
Q5.2: (If not at all confident or a little confident:) Why do you say you are [rating from above] that you can do all the things necessary to manage your arthritis? ( $\mathrm{n}=22^{*}$ )
Q5.3: How well do you feel the existing programs and services in the community help you in managing your arthritis? Would you say... (n=341)

## Prevalence of Anxiety Disorder

## Roughly one in seven (15.0\%) Ottawa County adults has an anxiety disorder.

* The disease is more common in adults who are younger (under 45), are female, and/or have low incomes.
*Among all adults, the proportion who reported ever being told by a health care professional that they had an anxiety disorder (including acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, phobia, posttraumatic stress disorder, or social anxiety disorder)

Told Have Anxiety Disorder by Demographics


## Anxiety Disorder Management

Two-thirds (68.4\%) of area adults with anxiety are very or extremely confident in managing their condition, although they are split as to how well area programs and services help them manage their condition.

* Those who are less than confident cite myriad reasons, including their multiple chronic conditions, the lack of or inadequacy of existing programs and services, forgetfulness, a lack of trust in health care providers, and insurance or cost barriers.


Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your anxiety? Would you say you are... ( $n=184$ )
Q5.2: (If not at all confident or a little confident:) Why do you say you are [rating from above] that you can do all the things necessary to manage your anxiety? (n=13*)
Q5.3: How well do you feel the existing programs and services in the community help you in managing your anxiety? Would you say... ( $\mathrm{n}=169$ )

## Prevalence of Depressive Disorder

- Roughly one in six (17.1\%) Ottawa County adults has a depressive disorder.
* Similar to anxiety, the disease is more common in adults who are younger (under 45), are female, and/or have low incomes.


## Ever Told Have Depressive Disorder* (Total Sample)



Told Have Depressive Disorder by Demographics


## Depressive Disorder Management

Almost two-thirds (64.3\%) of area adults with depression are very or extremely confident in managing their condition, although they are split as to how well area programs and services help them manage their condition.

* Those who are less than confident cite myriad reasons, including cost or insurance barriers, their multiple chronic conditions, the lack of or inadequacy of existing programs and services, forgetfulness, and transportation issues.


Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your depression? Would you say you are... ( $\mathrm{n}=218$ )
Q5.2: (If not at all confident or a little confident:) Why do you say you are [rating from above] that you can do all the things necessary to manage your depression? ( $\mathrm{n}=18^{*}$ )
Q5.3: How well do you feel the existing programs and services in the community help you in managing your depression? Would you say... ( $\mathrm{n}=199$ )

## Chronic Pain

## One-fourth (24.1\%) of Ottawa County adults suffer from chronic pain.

* Chronic pain is more common among women, those age 55 or older, and those who have incomes less than $\$ 35 \mathrm{~K}$.
* Conversely, it is less common among adults age 18-24, those with college degrees, and those with the highest incomes.


## Suffer from Chronic Pain



Suffer from Chronic Pain by Demographics


## Chronic Pain Management

More than one-fourth (27.8\%) of Ottawa County adults who suffer from chronic pain say their pain is not well managed.
$>$ More than four in ten (42.4\%) of those with chronic pain report myriad barriers to treating their pain, including cost, multiple chronic issues, lack of programs that could help them deal with the pain better, and insurance issues.

Pain is Well Managed


Barriers to Treating Pain

| Too costly/can't afford | 10.0\% |  |
| :---: | :---: | :---: |
| Too many chronic issues to manage | 9.3\% |  |
| Don't ask for treatment of my pain | 8.7\% |  |
| Chronic conditions make it tough to be mobile | 7.6\% |  |
| Current provider not helpful | 7.3\% |  |
| Not enough programs/services | 6.9\% |  |
| Existing programs/services inadequate | 5.8\% |  |
| Insurance doesn't cover treatment | 4.4\% |  |
| Do not have health insurance | 3.1\% |  |
| Too hard to remember/forget easily | 3.0\% |  |
| Transportation issues | 2.4\% |  |
| Don't trust health care providers | 1.1\% |  |
| Other | 3.4\% |  |
| There are no barriers |  | 57.6\% |

## Adverse Childhood Experiences

## Adverse Childhood Experiences (All 11 Items)

| ACE Questions | Percent of Adults With Each ACE in Ottawa County |
| :---: | :---: |
| How often did a parent or adult in your home ever swear at you, insult you, or put you down? ( $n=1,158$ ) | 29.6\% |
| Before age 18 , how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking. Would you say... $(n=1,158)$ | 14.6\% |
| How often did anyone at least five years older than you or an adult, ever touch you sexually? ( $n=1,158$ ) | 7.0\% |
| How often did anyone at least five years older than you or an adult, try to make you touch them sexually? $(n=1,158)$ | 5.3\% |
| How often did anyone at least five years older than you or an adult, force you to have sex? ( $\mathrm{n}=1,158$ ) | 3.4\% |
| Were your parents separated or divorced? ( $\mathrm{n}=1,158$ ) | 22.0\% |
| Did you live with anyone who was a problem drinker or alcoholic? ( $n=1,158$ ) | 16.0\% |
| Did you live with anyone who used illegal street drugs or abused prescription medication? ( $n=1,158$ ) | 8.1\% |
| Did you live with anyone who was depressed, mentally ill, or suicidal? ( $n=1,158$ ) | 17.5\% |
| How often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up? ( $n=1,158$ ) | 12.8\% |
| Did you live with anyone who served time, or was sentenced to serve time, in prison, jail, or other correctional facility? $(n=1,158)$ | 7.9\% |



## Adverse Childhood Experiences

Although Ottawa County adults, in general, experience fewer adverse childhood events compared to adults across Michigan or the U.S., the prevalence of mental illness in the household or living with someone who had been incarcerated is greater in Ottawa County than in Michigan or across the U.S.
$>$ Three in ten (29.6\%) Ottawa County adults have experienced emotional abuse and roughly one in five have had divorced or separated parents and/or lived with someone who was a substance abuser.

| ACE Questions | Percent of People With Each ACE |  |  |
| :---: | :---: | :---: | :---: |
|  | Ottawa County | Michigan | United States |
| How often did a parent or adult in your home ever swear at you, insult you, or put you down? ( $n=1,208$ ) | 29.6\% | 35.3\% | 35.0\% |
| Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking. Would you say... $(n=1,215)$ | 14.6\% | 17.2\% | 15.9\% |
| How often did anyone at least five years older than you or an adult, ever touch you sexually, try to make you touch them sexually, or force you to have sex? ( $n=1,205$ ) | 7.5\% | 10.7\% | 10.9\% |
| Were your parents separated or divorced? ( $n=1,223$ ) | 22.0\% | 26.6\% | 22.8\% |
| Did you live with anyone who was a problem drinker or alcoholic, or who used illegal street drugs or abused prescription medication? $(\mathrm{n}=1,223)$ | 19.4\% | 27.2\% | 25.1\% |
| Did you live with anyone who was depressed, mentally ill, or suicidal? ( $n=1,230$ ) | 17.5\% | 15.9.\% | 16.0\% |
| How often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up? ( $n=1,214$ ) | 12.8\% | 16.3\% | 14.9\% |
| Did you live with anyone who served time, or was sentenced to serve time, in prison, jail, or other correctional facility? $(\mathrm{n}=1,227)$ | 7.9\% | 7.8\% | 5.7\% |

ABUSE HOUSEHOLD CHALLENGES

## Adverse Childhood Experiences (Continued)

Over half (53.3\%) of Ottawa County adults have experienced at least one adverse childhood event, and 14.0\% have experienced four or more.
$>$ There is a direct and linear relationship between the number of ACEs one experiences and negative outcomes later in life.

## Number of Adverse Childhood Events



|  | Number of ACEs |  |  |
| :---: | :---: | :---: | :---: |
|  | None | 1-3 | 4 or More |
| Health status fair/poor | 9.8\% | 12.3\% | 18.8\% |
| Poor physical health | 6.0\% | 9.6\% | 13.3\% |
| Poor mental health | 4.3\% | 6.2\% | 27.1\% |
| Disability | 14.8\% | 18.4\% | 40.7\% |
| Anxiety | 6.0\% | 15.6\% | 42.3\% |
| Depression | 7.3\% | 17.8\% | 48.5\% |
| Suffer from chronic pain | 18.5\% | 19.7\% | 48.9\% |
| Current smoker | 9.8\% | 22.8\% | 32.6\% |
| Heavy drinker | 3.2\% | 5.2\% | 10.8\% |
| Binge drinker | 8.8\% | 15.3\% | 29.2\% |
| Obesity | 26.3\% | 29.3\% | 41.2\% |
| Mild to severe mental illness (Kessler 6) | 5.4\% | 20.6\% | 39.5\% |
| Suicide attempt in past year (among those who thought of taking their own life) | 0.0\% | 4.3\% | 50.3\% |

## Prevalence of 4+ ACEs

The proportion of Ottawa County adults with 4 or more ACEs (14.0\%) is similar to MI (15.2\%) and U.S. (14.3\%) adults.

Reporting 4+ ACEs is more common among females, those with low incomes, and/or those without college degrees.


4 or More ACEs by Demographics


## APPENDIX

## Respondent Profile

## Gender, Age, Race/Ethnicity and Section of Residence

|  | TOTAL | A. Northwest | B. <br> Northeast | C. Central | D. <br> Southwest | D. <br> Southeast |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | ( $\mathrm{n}=1318$ ) | ( $\mathrm{n}=410$ ) | ( $\mathrm{n}=96$ ) | ( $\mathrm{n}=160$ ) | ( $\mathrm{n}=446$ ) | ( $\mathrm{n}=206$ ) |
| Male | 49.5\% | 46.8\% | 69.6\% | 39.6\% | 55.8\% | 41.1\% |
| Female | 50.5\% | 53.2\% | 30.4\% | 60.4\% | 44.2\% | 58.9\% |
| Age | ( $\mathrm{n}=1307$ ) | ( $\mathrm{n}=407$ ) | ( $\mathrm{n}=95$ ) | ( $\mathrm{n}=158$ ) | ( $\mathrm{n}=443$ ) | ( $\mathrm{n}=204$ ) |
| 18 to 24 | 18.3\% | 9.7\% | 20.2\% | 16.5\% | 26.3\% | 11.9\% |
| 25 to 34 | 15.2\% | 12.2\% | 17.8\% | 7.9\% | 21.3\% | 10.8\% |
| 35 to 44 | 15.2\% | 14.1\% | 18.5\% | 13.3\% | 16.0\% | 15.0\% |
| 45 to 54 | 20.0\% | 19.1\% | 8.1\% | 30.7\% | 16.8\% | 23.0\% |
| 55 to 64 | 15.4\% | 20.6\% | 18.6\% | 14.8\% | 10.9\% | 18.4\% |
| 65 to 74 | 9.0\% | 14.1\% | 10.1\% | 8.1\% | 5.5\% | 11.0\% |
| 75 or Older | 7.0\% | 10.3\% | 6.5\% | 8.8\% | 3.3\% | 9.7\% |
| Race/Ethnicity | ( $\mathrm{n}=1307$ ) | ( $\mathrm{n}=408$ ) | ( $\mathrm{n}=94$ ) | ( $\mathrm{n}=159$ ) | ( $\mathrm{n}=441$ ) | ( $\mathrm{n}=205$ ) |
| White, non-Hispanic | 85.9\% | 95.9\% | 95.7\% | 92.6\% | 70.0\% | 98.2\% |
| Other, non-Hispanic | 5.8\% | 1.8\% | 2.6\% | 5.6\% | 11.5\% | 0.0\% |
| Hispanic | 8.3\% | 2.2\% | 1.8\% | 1.7\% | 18.5\% | 1.8\% |
| Section of Ottawa County | ( $\mathrm{n}=1318$ ) | ( $\mathrm{n}=410$ ) | ( $\mathrm{n}=96$ ) | ( $\mathrm{n}=160$ ) | ( $\mathrm{n}=446$ ) | ( $\mathrm{n}=206$ ) |
| Northwest | 18.5\% | 100\% |  |  |  |  |
| Northeast | 6.8\% |  | 100\% |  |  |  |
| Central | 14.8\% |  |  | 100\% |  |  |
| Southwest | 38.6\% |  |  |  | 100\% |  |
| Southeast | 21.4\% |  |  |  |  | 100\% |

## Marital Status and Number of Household Members

|  | TOTAL | A. Northwest | B. <br> Northeast | C. Central | D. Southwest | D. Southeast |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marital Status | ( $\mathrm{n}=1313$ ) | ( $\mathrm{n}=406$ ) | ( $\mathrm{n}=96$ ) | ( $\mathrm{n}=159$ ) | ( $\mathrm{n}=446$ ) | ( $\mathrm{n}=206$ ) |
| Married | 57.7\% | 63.2\% | 57.3\% | 68.7\% | 43.1\% | 72.1\% |
| Divorced | 7.3\% | 8.8\% | 8.3\% | 4.6\% | 8.9\% | 4.6\% |
| Widowed | 3.3\% | 4.5\% | 3.3\% | 2.9\% | 1.8\% | 5.0\% |
| Separated | 0.7\% | 0.3\% | 0.4\% | 0.5\% | 1.4\% | 0.0\% |
| Never married | 29.3\% | 21.2\% | 30.8\% | 22.0\% | 42.9\% | 16.1\% |
| A member of an unmarried couple | 1.7\% | 1.9\% | 0.0\% | 1.3\% | 1.8\% | 2.2\% |
| Number of Children Less Than Age 18 At Home | ( $\mathrm{n}=1316$ ) | ( $\mathrm{n}=410$ ) | ( $\mathrm{n}=96$ ) | ( $\mathrm{n}=159$ ) | ( $\mathrm{n}=446$ ) | ( $\mathrm{n}=205$ ) |
| None | 64.8\% | 70.3\%\% | 57.2\% | 70.2\% | 61.0\% | 65.5\% |
| One | 11.5\% | 9.4\% | 7.6\% | 11.0\% | 14.6\% | 9.2\% |
| Two | 13.7\% | 10.0\% | 25.3\% | 9.0\% | 14.7\% | 14.8\% |
| Three or more | 10.0\% | 10.3\% | 9.9\% | 9.8\% | 9.7\% | 10.5\% |
| Number of Adults and Children in Household | ( $\mathrm{n}=1316$ ) | ( $\mathrm{n}=410$ ) | ( $\mathrm{n}=96$ ) | ( $\mathrm{n}=159$ ) | ( $\mathrm{n}=446$ ) | ( $\mathrm{n}=205$ ) |
| One | 9.5\% | 8.2\% | 6.1\% | 6.5\% | 12.3\% | 8.4\% |
| Two | 31.8\% | 38.4\% | 30.3\% | 28.8\% | 29.1\% | 33.5\% |
| Three | 20.2\% | 20.5\% | 18.0\% | 19.5\% | 21.9\% | 17.8\% |
| Four | 17.7\% | 16.1\% | 13.5\% | 23.5\% | 15.7\% | 19.9\% |
| Five | 11.2\% | 11.2\% | 5.7\% | 14.4\% | 10.3\% | 12.3\% |
| More than five | 9.7\% | 5.6\% | 26.4\% | 7.2\% | 10.6\% | 8.8\% |

## Education and Employment Status

|  | TOTAL | A. Northwest | B. <br> Northeast | C. Central | D. Southwest | D. Southeast |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Education | ( $\mathrm{n}=1313$ ) | ( $\mathrm{n}=408$ ) | ( $\mathrm{n}=95$ ) | ( $\mathrm{n}=159$ ) | ( $\mathrm{n}=445$ ) | ( $\mathrm{n}=206$ ) |
| Never attended school, or only Kindergarten | 0.7\% | 0.0\% | 11.0\% | 0.0\% | 0.0\% | 0.0\% |
| Grades 1-8 (Elementary) | 3.0\% | 2.0\% | 5.8\% | 4.7\% | 4.1\% | 0.0\% |
| Grades 9-11 (Some high school) | 5.0\% | 4.5\% | 6.5\% | 3.2\% | 7.1\% | 2.2\% |
| Grade 12 or GED (High school graduate) | 27.9\% | 26.6\% | 39.9\% | 24.6\% | 28.9\% | 25.6\% |
| College 1 year to 3 years (Some college) | 29.8\% | 30.3\% | 23.3\% | 30.5\% | 33.1\% | 24.8\% |
| College 4 years or more (College graduate) | 33.6\% | 36.6\% | 13.5\% | 36.9\% | 26.7\% | 47.4\% |
| Employment Status | ( $\mathrm{n}=1315$ ) | ( $\mathrm{n}=410$ ) | ( $\mathrm{n}=95$ ) | ( $\mathrm{n}=160$ ) | ( $\mathrm{n}=445$ ) | ( $\mathrm{n}=205$ ) |
| Employed for wages | 60.4\% | 48.1\% | 60.8\% | 60.1\% | 66.4\% | 60.4\% |
| Self-employed | 5.4\% | 6.4\% | 0.0\% | 6.7\% | 6.0\% | 4.3\% |
| Out of work for a year or more | 1.0\% | 1.4\% | 0.0\% | 2.0\% | 1.1\% | 0.3\% |
| Out of work for less than a year | 1.7\% | 1.4\% | 0.0\% | 2.2\% | 2.2\% | 1.3\% |
| A homemaker | 5.4\% | 7.1\% | 1.9\% | 5.6\% | 4.2\% | 6.8\% |
| A student | 2.7\% | 4.0\% | 4.0\% | 2.0\% | 3.7\% | 0.0\% |
| Retired | 18.1\% | 25.3\% | 31.4\% | 16.5\% | 10.2\% | 22.8\% |
| Unable to work | 5.3\% | 6.4\% | 1.9\% | 4.8\% | 6.3\% | 3.9\% |

## Household Income, Poverty Status, Home Ownership, and Military Service

|  | TOTAL | A. <br> Northwest | B. <br> Northeast | C. Central | D. <br> Southwest | D. Southeast |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Household Income | ( $\mathrm{n}=1009$ ) | ( $\mathrm{n}=321$ ) | ( $\mathrm{n}=72$ ) | ( $\mathrm{n}=127$ ) | ( $\mathrm{n}=334$ ) | ( $\mathrm{n}=155$ ) |
| Less than \$10,0000 | 2.9\% | 1.3\% | 2.7\% | 3.7\% | 4.7\% | 0.3\% |
| \$10,000 to less than \$15,000 | 3.7\% | 3.4\% | 1.2\% | 1.3\% | 5.2\% | 3.5\% |
| \$15,000 to less than \$20,000 | 3.2\% | 3.3\% | 3.0\% | 6.2\% | 3.0\% | 1.5\% |
| \$20,000 to less than \$25,000 | 6.1\% | 5.9\% | 4.3\% | 4.1\% | 6.6\% | 7.3\% |
| \$25,000 to less than \$35,000 | 15.5\% | 20.6\% | 25.5\% | 10.7\% | 16.9\% | 8.3\% |
| \$35,000 to less than \$50,000 | 15.2\% | 13.1\% | 26.3\% | 8.1\% | 15.7\% | 17.2\% |
| \$50,000 to less than \$75,000 | 20.1\% | 16.3\% | 17.8\% | 25.6\% | 22.5\% | 16.4\% |
| \$75,000 or more | 33.4\% | 36.1\% | 19.2\% | 40.3\% | 25.4\% | 45.5\% |
| Poverty Status | ( $\mathrm{n}=1009$ ) | ( $\mathrm{n}=321$ ) | ( $\mathrm{n}=72$ ) | ( $\mathrm{n}=127$ ) | ( $\mathrm{n}=334$ ) | ( $\mathrm{n}=155$ ) |
| Income under poverty line | 11.1\% | 8.5\% | 23.6\% | 9.2\% | 14.4\% | 4.7\% |
| Income over poverty line | 88.9\% | 91.5\% | 76.4\% | 90.8\% | 85.6\% | 95.3\% |
| Home Ownership | ( $\mathrm{n}=1311$ ) | ( $\mathrm{n}=409$ ) | ( $\mathrm{n}=96$ ) | ( $\mathrm{n}=158$ ) | ( $\mathrm{n}=442$ ) | ( $\mathrm{n}=206$ ) |
| Own | 73.7\% | 80.3\% | 70.0\% | 74.5\% | 63.4\% | 87.1\% |
| Rent | 21.8\% | 14.3\% | 25.1\% | 22.5\% | 29.8\% | 12.2\% |
| Other Arrangement | 4.5\% | 5.4\% | 4.9\% | 3.0\% | 6.7\% | 0.8\% |
| Military Service | ( $\mathrm{n}=1318$ ) | ( $\mathrm{n}=410$ ) | ( $\mathrm{n}=96$ ) | ( $\mathrm{n}=160$ ) | ( $\mathrm{n}=446$ ) | ( $\mathrm{n}=206$ ) |
| Served | 7.0\% | 12.1\% | 6.2\% | 4.0\% | 6.3\% | 6.2\% |
| Did not serve | 93.0\% | 87.9\% | 93.8\% | 96.0\% | 93.7\% | 93.8\% |

