

Ottawa County Maternal and Child Health Assessment

November 2017



Executive
Summary



Background



Methodology



Findings &
Implications

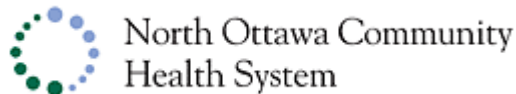
Table of Contents

	Page
Introduction	3
Background	5
Methodology	6
Executive Summary	8
Detailed Findings	24
Depression and Suicide	25
Abuse and Neglect	32
Access to Health Care Services	35
Hispanic Disparities	42
Substance Abuse	45
Access to Transportation	49
Obesity/Nutrition/Physical Activity	50
Prenatal/Postpartum Access to Services and Support	55
Policy/Procedural Structure of Medical Providers	57
Lack of Consistent Screening for Young Children	58
Value, Belief, Priority of Personal Health	59
References	61

INTRODUCTION

Financial Contributors

The following community organizations are responsible for primary funding of the 2017 Ottawa County Community Health Needs Assessment – Maternal and Child Health Addendum:





Background

- Every five years, Michigan Department of Health and Human Services (MDHHS) completes a comprehensive maternal and child health (MCH) needs assessment as part of Title V program requirements. The results of the needs assessment are used to select state priorities, and these priorities are aligned with federal performance measures. Funding is directed toward services that are designed to improve performance on these measures and address state priorities. Three types of services are supported:
 - ❖ Direct Services
 - ❖ Enabling Services
 - ❖ Public Health Functions and Infrastructure
- Local MCH needs and priorities vary across the state, and local communities may have needs that are not captured by the state priorities or state-selected federal performance measures. In order to understand local needs and priorities, MDHHS asks that Local Health Departments (LHDs) receiving Title V funding through Local MCH (LMCH) agreements complete an assessment of their community needs and align their LMCH objectives and strategies with those needs.
- Ottawa County conducted an LMCH assessment alongside two concurrent community processes: the 2017 Ottawa County Great Start Collaborative Strategic Plan and the 2017 Ottawa County Community Health Needs Assessment.



Methodology

- Ottawa County's CHNA/CHIP Advisory Council conducted an LMCH assessment comprised of the following:
 - ❖ Health Status Assessment
 - ❖ Community Themes and Strengths Assessment
 - ❖ System Assessment
- The goal of the LMCH assessment was to identify health issues where the community is experiencing:
 - ❖ Disparities by race/ethnicity, gender, income, geography, or other classifications
 - ❖ Outcomes worse than the state
 - ❖ Negative trends
- The CHNA/CHIP Advisory Council ranked key findings and identified strategic themes apparent in secondary data as well as both qualitative and quantitative data collected from area residents and health care professionals by the Great Start Collaborative. The nine strategic themes were reframed as questions the community should answer in trying to address each issue area. These questions appear in yellow bars at the bottom of the relevant slides within this report.
- Finally, Ottawa County's LMCH assessment incorporated maternal and child health data from the 2017 Ottawa County Community Health Needs Assessment (CHNA). As a result, a total of eleven Key Themes are identified, and this report's Executive Summary highlights the current status as well as implications and suggested solutions for each theme.



Methodology - CHNA

➤ Data incorporated from the Ottawa County CHNA was pulled from four different CHNA components, described in the table below.

	Data Collection Methodology	Target Audience	Number Completed
Key Stakeholders	In-Depth Telephone Interviews	Hospital Directors, Clinic Executive Directors	10
Key Informants	Online Survey	Physicians, Nurses, Dentists, Pharmacists, Social Workers	91
Community Residents (Underserved)	Self-Administered (Paper) Survey	Vulnerable and underserved sub-populations	489
Community Residents	Telephone Survey (BRFS)	Ottawa County Adults (18+)	1,318

EXECUTIVE SUMMARY



Executive Summary: Overview of Key Themes

Key Theme Discussed in Report	Included in LMCH Work Plan?	Notes
Youth/postpartum depression and suicide	Y	Supported by CHNA
Abuse and neglect	Y	Supported by CHNA
Access to health care services	Y	Supported by CHNA
Hispanic disparities across issues	Y	Due to small size of Hispanic sample, did not examine disparities in CHNA data; however, breadth and size of disparities is apparent in data examined from other sources.
Substance abuse	N	Issue arose in CHNA
Access to transportation	Y	Supported by CHNA
Obesity/nutrition/physical activity	N	Issue arose in CHNA
Prenatal/postpartum access to services and support	Y	CHNA uses a different prenatal measure. Key Informants report prenatal care meets area needs somewhat-to-very well (top-2 box ratings).
Policy/procedural structure of medical providers	Y	Some support from CHNA
Lack of consistent screening for young children (ASQ)	Y	No CHNA data; other data inconclusive
Value, belief, priority of personal health	Y	Contradicted by CHNA: Nearly all children had past-year well-child visit. Some concern about lack of immunizations.



Executive Summary: Key Themes – Status; Implications; Solutions

Youth/Postpartum Depression and Suicide

- **Status:** An abundance of data confirms the pervasiveness of mental health issues impacting youth and women of child-bearing age in Ottawa County.
 - ❖ One-third of female adolescents report depression.
 - ❖ Female adolescents are affected at more than twice the rate of males.
 - ❖ More than one in five female adolescents have thought about attempting suicide in the past year.
 - ❖ Suicide among young teens (age 13-16) has increased in recent years.
 - ❖ Women of child-bearing age (age 18-44) experience mental illness at two to three times the rate of the rest of the population.
 - ❖ Nearly three in ten women of child-bearing age have been diagnosed with depression.
 - ❖ Mental health resources (number of providers, affordable services, resources aimed at youth) are insufficient to meet the extent of the community's needs.
 - ❖ The Mental Health Millage and Be Nice Campaign are examples of successful efforts aimed at addressing the community's mental health concerns.



Executive Summary: Key Themes – Status; Implications; Solutions (cont'd)

Youth/Postpartum Depression and Suicide (cont'd)

➤ **Implications and Proposed Solutions:**

- ❖ Parental mental illness impacts child welfare and can have consequences not only for the affected family but also for subsequent generations. Children with multiple adverse childhood events (including household mental illness as one component) report much greater incidence of poor mental and physical health outcomes and behaviors as adults. Linking mothers to needed mental health resources can reap lifelong benefits for their children's mental and physical health. Early intervention can mitigate the impact of a parent's mental illness on children, as well as limiting cost of care in the long term.
- ❖ Embedding mental health resources within schools is one proposal to eliminate access barriers for youth struggling with depression or other mental health issues.
- ❖ Broadening public awareness through efforts such as the Be Nice Campaign can reduce the stigma associated with mental illness and arm parents and youth with the tools needed to speak up and reach out if they suspect a family member, friend, or classmate is at risk.
- ❖ Considering the widespread increase in attention to adolescent mental health in recent years nationwide, ideas and strategies may be gleaned from other communities that are working to address these same issues.
- ❖ Resources such as anonymous text message hotlines and widespread dissemination of suicide "talking points" can help eliminate barriers for youth who want to help a friend or classmate but don't know how.



Executive Summary: Key Themes – Status; Implications; Solutions (cont'd)

Child Abuse and Neglect

- **Status:** Ottawa County has experienced a near doubling of child abuse and neglect rates between 2011 and 2015.
 - ❖ Parental substance abuse and heroin addiction in particular were mentioned as one contributing factor.
 - ❖ Area health care professionals consider the community's response to the problem of child abuse and neglect to be insufficient.
 - ❖ Over half of Ottawa County adults have experienced at least one adverse childhood event (ACE), and one in seven have experienced four or more.
- **Implications and Proposed Solutions:**
 - ❖ Individuals who experience four or more ACEs exhibit broad-ranging negative outcomes and behaviors as adults (such as poor physical and mental health, disability, chronic pain, smoking, binge drinking, and obesity) at substantially higher rates than those who experienced fewer such events.
 - ❖ Pathways to Better Health is a step towards alleviating the negative health consequences or outcomes that oftentimes result from adverse childhood experiences because staff approach health and health care issues holistically, recognizing that the most effective solutions to these issues can come from taking a biopsychosocial perspective of the issues.



Executive Summary: Key Themes – Status; Implications; Solutions (cont'd)

Access to Health Care Services

- **Status:** Health care access is a broad topic affecting the population as a whole, including mothers and children. [Note: In addition to the elements of health care access discussed below, several are discussed within other themes in this report (Transportation, Hispanic Disparities, Policies/Procedures, etc.).]
 - ❖ **Cost:**
 - More residents have health insurance than before; however, high deductibles/spend-downs, copays, and prescription costs prevent some residents from obtaining needed care.
 - In addition, the cost of healthy foods and fitness programs deter residents from making healthy choices or lifestyle changes.
 - ❖ **Number of providers:**
 - Ottawa County is experiencing a shortage of health care providers that impacts maternal and child health in several ways, including pediatric specialty services, pediatric and adult mental health, and pediatric providers accepting **all** forms of Medicaid.
 - MCH-related provider strengths include the area's hospitals, general pediatric services, Obstetrics/Gynecological services, and low-cost pediatric dental care.
 - ❖ **Other programs and services:**
 - Home visit programs and WIC support healthy living for residents.
 - Low-cost programs targeting nutrition/cooking, children's illnesses/first aid, and support groups for mothers are areas that underserved residents see as lacking.
 - ❖ **Comfort level:**
 - Fewer than half of female underserved residents of child-bearing age are highly confident navigating the health care system.
 - ❖ **Holistic care:**
 - Health care professionals discussed the benefits of collaboration and a comprehensive care approach that includes mental health and substance abuse treatment.
 - Pathways to Better Health was cited as an example of a successful collaborative effort.



Executive Summary: Key Themes – Status; Implications; Solutions (cont'd)

Access to Health Care Services (cont'd)

➤ **Implications and Proposed Solutions:**

- ❖ Cost barriers have long-reaching consequences when patients forego preventative care and health maintenance due to cost and then need higher levels of care at higher costs down the road.
- ❖ There may be a gap between existing services and awareness of services: Key Informants generally agree that lack of awareness is at least “somewhat” of a barrier to accessing programs and services.
- ❖ Extending provider office hours, structuring service locations to facilitate one-stop servicing, and implementing school-based health clinics are proposed solutions to access barriers.
- ❖ Expanding options for free and/or sliding-scale clinics (along the lines of Love INC and City on a Hill) can also alleviate some access challenges.
- ❖ In expressing a desire for community programs such as nutrition/cooking classes, first aid classes, and support groups, underserved residents specified that programs need to be free or low cost.



Executive Summary: Key Themes – Status; Implications; Solutions (cont'd)

Hispanic Disparities Across Issues

- **Status:** Disparities between Ottawa County's Hispanic residents and White/other residents are present across numerous health indicators, including pregnancy and childbirth, youth mental health and substance abuse, and youth obesity.
 - ❖ Nearly four in ten (37.3%) Hispanic mothers have less than adequate prenatal care, compared to 25.7% for all mothers.
 - ❖ Medicaid-covered births account for 70% of Hispanic births, whereas they are 29% of births among the population as a whole.
 - ❖ Roughly four in ten Hispanic adolescents report depression, twice the rate of White adolescents.
 - ❖ One in five Hispanic adolescents are obese, twice the rate of White adolescents.
- **Implications and Proposed Solutions:**
 - ❖ Language and cultural differences, which can include distrust of the health care system, can create barriers to health care for area Hispanics.
 - ❖ Area health care professionals recommend providing more interpreters and partnering with churches, schools, etc. to foster connections between area Hispanics and the health care system.



Executive Summary: Key Themes – Status; Implications; Solutions (cont'd)

Substance Abuse

- **Status:** Substance abuse was named a top community concern among area health care professionals.
 - ❖ There is a perception that more children are experiencing abuse and neglect and entering foster care due to parental heroin addiction and other forms of substance abuse.
 - ❖ Health care professionals report a lack of resources in the community aimed at treating substance abuse, including an absence of detox facilities in the county.
 - ❖ Ottawa County youth report declining rates of alcohol use, cigarette smoking, and marijuana use, as well as use of several other drugs.
 - ❖ Youth-reported rates of heroin use remain steady since 2009.
- **Implications and Proposed Solutions:**
 - ❖ Like parental mental illness, parental substance abuse impacts the entire family and can have far-reaching consequences in terms of child welfare, including proper nourishment.
 - ❖ Substance abuse can also impact the community in terms of neighborhood safety and crime.
 - ❖ Implementing consistent use of the Michigan Automated Prescription System is one proposed strategy to limit excess opioid prescriptions.
 - ❖ Locating detox facilities within the community and expanding access to Suboxone are additional recommendations, as is increasing youth education.
 - ❖ There is a newly formed opioid task force and there is a new position at Community Mental Health that serves as coordinator of the task force. For a number of years prior to this, there existed the Ottawa Substance Abuse Prevention Coalition (OSAP).



Executive Summary: Key Themes – Status; Implications; Solutions (cont'd)

Access to Transportation

- **Status:** Ottawa County's transportation limitations impact the population overall, including mothers and children.
 - ❖ Lack of transportation presents a barrier for some residents in keeping regular prenatal and well-child appointments and accessing health-related services and programs in general.
- **Implications and Proposed Solutions:**
 - ❖ Some portion of this barrier may be alleviated by the planned expansion to Uber or Lyft.

Obesity/Nutrition/Physical Activity

- **Status:** Obesity continues to be a top concern of area health care professionals, and nutritional needs are not being met for all residents, particularly women of child-bearing age.
 - ❖ One-third (33.9%) of Ottawa County women of child-bearing age are obese, a greater proportion than among other residents (28.7%).
 - ❖ In addition, nearly one in six women (15.7%) in this age group report some level of food insufficiency, compared to 5.6% for other residents.
 - ❖ Ottawa County's rate of adolescent obesity, 10.8%, is lower than state and national rates.
 - ❖ Ottawa County has a wealth of resources (parks, trails, farmers markets) that support nutritional health and physical activity, and food programs such as WIC provide extra support; however, lower-income parents note that the accessibility and relative affordability of fast food/high cost of healthy food, as well as the high cost of fitness programs, make it hard to live a healthy lifestyle. In addition, winter weather is a deterrent to making use of outdoor resources.



Executive Summary: Key Themes – Status; Implications; Solutions (cont'd)

Obesity/Nutrition/Physical Activity (cont'd)

➤ **Implications and Proposed Solutions:**

- ❖ Obesity leads to diabetes and other chronic health conditions and preventable deaths.
- ❖ Area health care professionals recommend increasing awareness and providing increased access to affordable nutritious foods, including school lunches, as well as exercise programs.
- ❖ Underserved residents note that fitness programming must be free or low-cost in order to be accessible.

Prenatal/Postpartum Access to Services and Support

- **Status:** While infant mortality rates remain steady in Ottawa County since 2010, the community has seen a steady rise in percentage of births with less than adequate prenatal care, percentage of births that are preterm, and percentage of births to women who smoked during pregnancy.
 - ❖ In addition, Ottawa County has a much lower proportion of Medicaid births that have an MIHP contact (26.43%) compared to several neighboring counties (roughly 40-50%).
 - ❖ Ottawa County also has a low proportion of mothers initiating breastfeeding (31% of live births) compared to the State of Michigan (42%).
 - ❖ Nearly all Key Informants say prenatal care programs/services and OB/GYN programs/services meet residents' needs "somewhat" or "very" well.
- **Implications and Proposed Solutions:**
 - ❖ An opportunity exists to improve rates of connection to MIHP among mothers whose childbirth was covered by Medicaid.



Executive Summary: Key Themes – Status; Implications; Solutions (cont'd)

Policy/Procedural Structure of Medical Providers

- **Status:** Parents report that policy and structural issues, such as limiting appointments to traditional hours, not allowing a well-child exam to take place during an illness visit, and doctors cancelling appointments with little notice, present barriers to scheduling and keeping medical appointments.
- **Implications and Proposed Solutions:**
 - ❖ Expanding office hours and stationing multiple services in a single location would facilitate access, reducing transportation and time-off-work barriers and potentially increasing patient engagement.

Lack of Consistent Screening for Young Children

- **Status:** Developmental screening results (e.g., Ages and Stages Questionnaire (ASQ)) are not used to their full potential in terms of communicating with parents or measuring child development across the community.
 - ❖ While medical offices report use of the ASQ or other screening tools, some parents do not recall ever having completed an ASQ.
 - ❖ In addition, no central repository exists for collected developmental screening data.
- **Implications and Proposed Solutions:**
 - ❖ There may be variations in the way doctors present and discuss screening results that impacts the impression the conversation has on parents.
 - ❖ Doctor-parent communications about developmental screening may be limited in some cases due to language barriers.
 - ❖ An opportunity exists to collect developmental screening information into one data repository to gain a better understanding of how childhood development compares across the community and over time.



Executive Summary: Key Themes – Status; Implications; Solutions (cont'd)

Value, Belief, Priority of Personal Health

- **Status:** Qualitative data reveal a segment of the population who do not prioritize well-child visits or prenatal visits after the first pregnancy; however, quantitative data show that Ottawa County children almost universally have received a well-child visit in the past year.
 - ❖ Although Ottawa County children are immunized at rates higher than children statewide, area health care professionals expressed concern about the issue.
 - ❖ Fewer than half of Ottawa County children enrolled in Medicaid had a preventative dental visit in the past year.
- **Implications and Proposed Solutions:**
 - ❖ Parents who reported de-prioritizing well-child and prenatal (after their first pregnancy) visits are the same group of parents who reported barriers imposed by provider and insurance company policies/procedures. Therefore, parents may be weighing the value of such visits in the context of the inconveniences they present.
 - ❖ Given that dental visits are covered for Medicaid-enrolled children, it's not clear whether the low proportion having preventative visits is related to parent values, lack of awareness, or other factors.
 - ❖ An opportunity exists to improve the connections of children on Medicaid to preventative dental services.



“I see, in my exam room, generations of dysfunction, and I have an optimism that if we can break those cycles, we can make a significant change in the wellness of our community.”

[Key Stakeholder]



Executive Summary: MCH System Assessment – General Strengths

- Ottawa County draws upon numerous system strengths in serving the health needs of mothers and children. Strengths noted by the CHNA/CHIP Advisory Council include the following:
 - ❖ A comprehensive Community Health Needs Assessment (CHNA) is conducted every three years, community stakeholders convene to process CHNA results as part of Ottawa County's Community Health Improvement Planning (CHIP) process, and results are shared with the public.
 - ❖ Ottawa County has a strong Public Health Department with a full-time Epidemiologist on staff.
 - ❖ Multiple other nonprofit, governmental, and other organizations have robust programs and services targeting MCH needs; examples include Great Start Collaborative, Ready for School, WIC, InterCare, Positive Options, and the medical community.
 - ❖ Two existing collaborative organizations (Ready for School and the Great Start Collaborative) regularly convene partners to address maternal and infant health needs.
 - Through the 2017 Great Start Collaborative Strategic Planning process, many of the barriers experienced by mothers in accessing quality medical care have been identified and planning is currently taking place to begin to address those needs.
 - ❖ Several countywide collaboratives (Food Policy Council, Lakeshore Housing Alliance, Great Start Collaborative, Case Coordinators Collaboration) connect resources in the community and communicate those resources to underserved populations.
 - ❖ Community Health Workers (CHW) were identified through the CHIP process as a strategy to address social determinants of health and link Medicaid clients to health care services, with pregnant women identified as one priority group; CHWs assist pregnant women in getting prenatal care and connect them to MIHP.
 - ❖ Three competing hospital systems partner to improve population health.
- In addition to the above points, Key Stakeholders cite the community's collaborative spirit, wealth of non-profit organizations, and strong schools/school partnerships as key community resources.



Executive Summary: MCH System Assessment – General Areas for Improvement

- General areas for improvement to the MCH system noted by the CHNA/CHIP Advisory Council include the following:
 - ❖ Building off of current system strengths, an opportunity exists to begin bringing community partners together collectively and on a regular basis to identify MCH-specific needs and develop a plan to address those needs.
 - ❖ A real opportunity exists to further engage policymakers in local efforts to solve MCH problems as they have not been at the table regularly in the past.
 - ❖ While strong partnerships exist between government, nonprofit, and healthcare partners, there remains an opportunity to further engage families in the work of MCH.
 - ❖ While data sharing does exist between community partners, it is recognized that this could be done to a greater extent in the future.
- Key Stakeholders concur that while Ottawa County has a strong cooperative spirit and is making positive strides in terms of collaborative efforts, further collaboration can facilitate progress on the community's health and health care goals.

DETAILED FINDINGS



Depression and Suicide*

- Mental health is a pressing concern that has tremendous impact on maternal and child well-being in Ottawa County.
 - ❖ The community lacks sufficient resources for mental health treatment, including resources aimed at youth.
- Key Stakeholders and Key Informants identify **mental health** more often than any other issue as a **pressing health concern**. [1,2]
 - Several Key Informants expressed concerns specific to children’s mental health and identified a **need for increased resources aimed at this age group**. [2]

*“Mental health is a very significant issue we continue to hear about. We just seem to see more of it, and it’s not always the severe persistent mental health, it’s the mild and moderate, and a lot of **people either don’t have access or they just choose not to reach out...it could be affordability or stigma or a number of things.**” [Key Stakeholder]*

*“There are **many people in this county who have mental health needs but are not receiving or being compliant with treatment.**” [Key Informant]*

*“We have **several students with mental health issues and often find our resources within the schools to be overloaded.**” [Key Informant]*

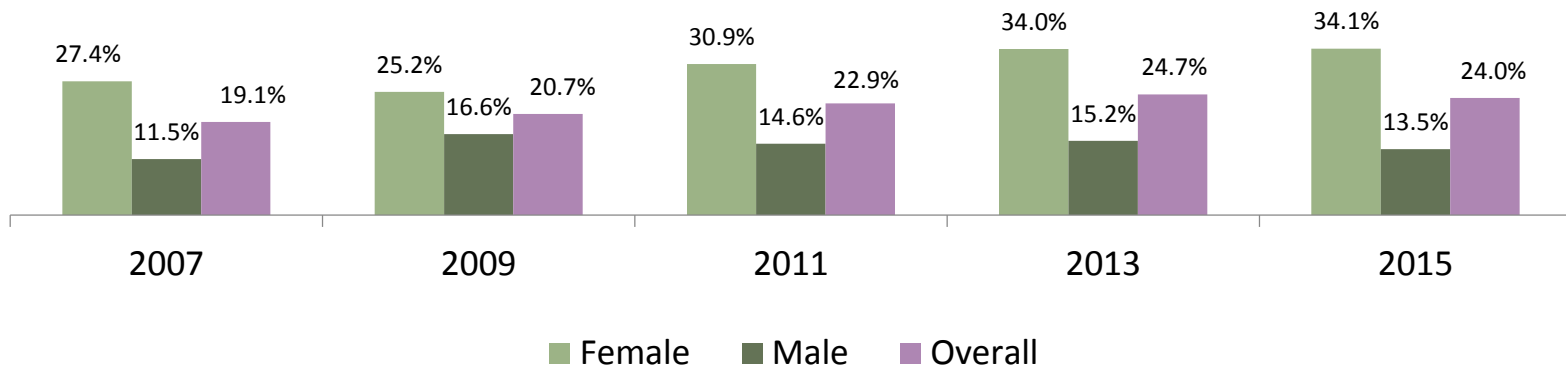


Depression and Suicide - Youth

- Depression is pervasive and rising among Ottawa County adolescents, especially females.
- **One in four Ottawa County adolescents (24.0%) report depression*** in the last 12 months.
 - **Females report depression** at more than **twice the rate of males** (34.1% vs. 13.5%, respectively).
 - The proportion of **females reporting depression** has been **trending upward** between 2007 and 2015.

% of 8th, 10th, and 12th Grade Students Reporting Depression in Last 12 Months

Sources: [5, 24]



*Defined as having stopped doing some usual activities because they felt so sad or hopeless almost every day for two weeks or more in a row.

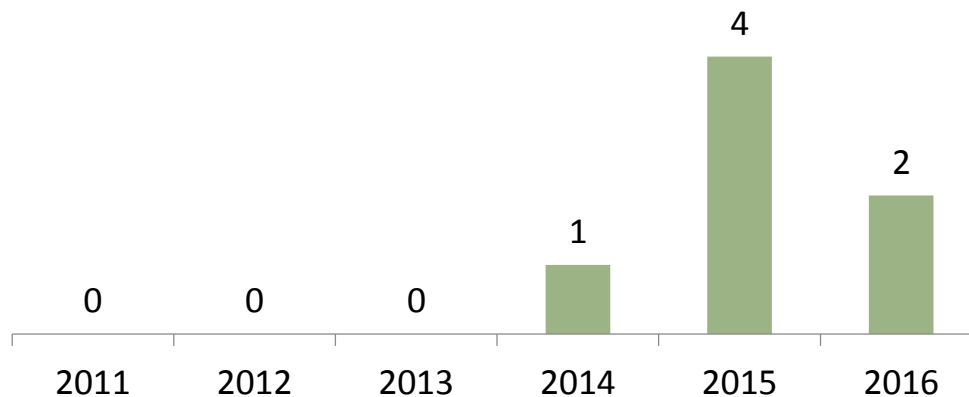


Depression and Suicide – Youth (cont'd)

- Youth suicide has become an increasingly pressing problem in Ottawa County.
 - More than **one in five female** Ottawa County **adolescents** (22.1%) report having seriously **thought about** attempting **suicide** in the past 12 months (7.7% for males), and **one in ten (10.0%)** report an **attempted suicide** in the past 12 months (2.7% for males). [5]
 - **Suicides among young teens (age 13-16) have increased** in recent years.

Number of Youth Ages 13-16 Who Take Their Own Life

Source: [13]





Depression and Suicide – Maternal

- Ottawa County women of child-bearing age experience mental illness at two to three times the rate of the rest of the population.
 - ❖ Nearly **three in ten** (27.9%) women age 18-44 have been **diagnosed with depression**.

Source: [3]	Women Age 18-44	All Other Respondents
Poor mental health 14+ days in past 30	15.5%	6.9%
Diagnosed with depression	27.9%	14.0%
Diagnosed with anxiety	27.9%	11.3%
Score mild to severe on Kessler scale	28.4%	12.7%
Score severe on Kessler scale	5.9%	1.6%
Have thought about taking their own life in the past 12 months	7.8%	4.2%
[Among those who have thought about taking their life:] Have attempted to take their own life	27.6%	16.1%
Taking medication or receiving treatment for a mental health condition or emotional problem	24.6%	12.8%
4 or more ACEs	20.6%	11.0%

- A majority of Ottawa County **mothers enrolled in MIHP exhibit moderate-to-high depression/stress levels** (53.3% Oct-Dec 2015; 58.3% Jan-Mar 2016). [12]
- Medical offices identified the mental health of mothers (including substance abuse) as **a reason why mothers miss doctor’s appointments** and as a challenge to providing care. [9]



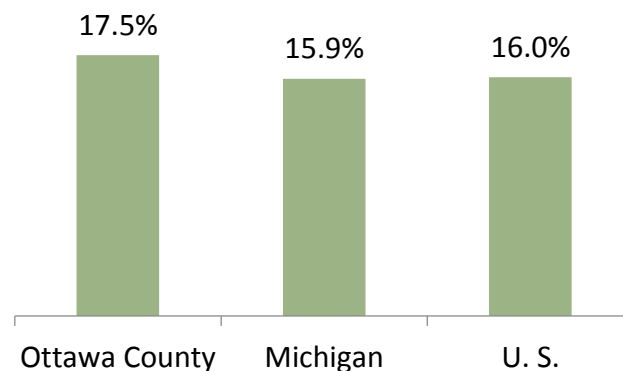
Depression and Suicide – Household

- Reports of mental illness in households with children age 0-17 are roughly on par with reports in households without minor children.
 - ❖ However, **fewer report suicidal thoughts and actions in households where minor children are present** than in households without children.
 - ❖ Ottawa County has a slightly higher rate of residents who lived with mental illness in their household as children, compared to the state and nation.

Source: [3]	Children Age 0-17 in Household	No Minor Children in Household
Poor mental health 14+ days in past 30	7.4%	9.6%
Diagnosed with depression	17.2%	17.0%
Diagnosed with anxiety	15.8%	14.6%
Score mild to severe on Kessler scale	15.1%	16.8%
Score severe on Kessler scale	1.0%	3.4%
Have thought about taking their own life in the past 12 months	3.2%	6.0%
[Among those who have thought about taking their life:] Have attempted to take their own life	7.1%	23.9%
Taking medication or receiving treatment for a mental health condition or emotional problem	14.0%	16.2%
4 or more ACEs	13.2%	13.1%

Before Age 18, Lived with Someone who was Depressed, Mentally Ill, or Suicidal

Sources: [3, 22, 23]





Depression and Suicide – Access to Care: Concerns

- Health care professionals and residents report mental health resources lag behind the community's needs.
- Key Informants report a lack of mental health providers in the community in general, as well as a **need for additional mental health resources for youth** and for Medicaid/uninsured patients in particular. [2]
- **Parents report difficulty accessing mental health resources** – of 32 parents who used mental health services in the last 12 months, **fewer than half (47%) rated services “very easy” to access**. One-third (34%) rated them “not very easy”/“not at all easy.” [7]
- In an open-ended question, one-third (31.8%) of Key Informants cited **resources for mental health** as something that could be done to **improve the community's overall health climate**. [2]

*“There’s **not enough therapists, psychiatrists**, especially in our area...In our schools, with the amount of **teen suicides** or attempted suicides in our area, it’s just heartbreaking, and I know that this is something that **schools are very, very worried about**.” [Key Stakeholder]*

*“Could be more mental health options that were affordable. Getting **counseling/therapy is extremely cost prohibitive** and not covered by insurance very well.” [Underserved Resident with Children in Household]*



Depression and Suicide – Access to Care: Solutions

- In the last few years, several successful efforts have been implemented to address mental health in general and children’s mental health in particular.
 - ❖ Key Informants offer additional suggestions, including increasing mental health support within schools.
- Area health professionals report the following **current initiatives that directly address mental health**: [1,2]
 - **Mental Health Millage**
 - **Be Nice Campaign**
 - **Community focused on** addressing the specific issue of **teen depression and suicide**
- Key Informants **proposed** additional **solutions** targeting youth, including: [2]
 - **Mental health services/nurses/counselors** in all schools
 - **Telehealth** in schools
 - Implement **pediatric task force** to address pediatric mental health among other issues
 - Offer **parenting classes**

“They’re just starting to get the funds from [the mental health millage] - from the winter taxes, so gaining more services that had to be eliminated due to Medicaid cuts.” [Key Stakeholder]



Abuse and Neglect*

- Rates of child abuse/neglect are rising in Ottawa County, and health care professionals consider the community’s response insufficient.
 - While consistently lower than state rates, the rate per 1,000 **children ages 0-8** who are **substantiated victims of abuse or neglect nearly doubled** between 2011 and 2015 in Ottawa County. [11]
 - During this period the rate of substantiated abuse or neglect also nearly doubled for children ages 0-17.
 - **Heroin addiction and substance abuse in general** are identified as **factors** in the increase in number of **children lacking adequate care**. [2]
 - Key Informants consider the **community’s response to child abuse and neglect** to be **insufficient**. [2]
 - 70.7% of Key Informants say child abuse/neglect is “somewhat” or “very” prevalent.
 - Only 40.4% are “somewhat” or “very “ satisfied with the community’s response to the problem.
 - Poor Family Management exhibits a negative trend over the last decade (5.4% in 2005 to 8.5% in 2015). [5]
 - Family Opportunities for Pro Social Involvement has trended upward (67.3% in 2005 to 75.8% in 2015). [5]

Source: [11]	Substantiated Victims of Abuse or Neglect Rate per 1,000 Children				
	FY11	FY12	FY13	FY14	FY15
Ottawa County ages 0-8	7.3	8.8	12.2	11.9	14.2
Michigan ages 0-8	19.1	19.7	20.6	20.6	23.8
Ottawa County ages 0-17	5.4	7.0	9.2	9.0	10.5
Michigan ages 0-17	14.3	14.6	14.9	14.7	16.8

“Not only is it destroying the lives of the individual addicted, [but] there has been an increase in the number of children entering foster care due to parental heroin addiction.” [Key Informant]



Abuse and Neglect – Adverse Childhood Events

- 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 Sources: [3, 22, 23]	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? (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? (n=1,227)	7.9%	7.8%	5.7%

ABUSE

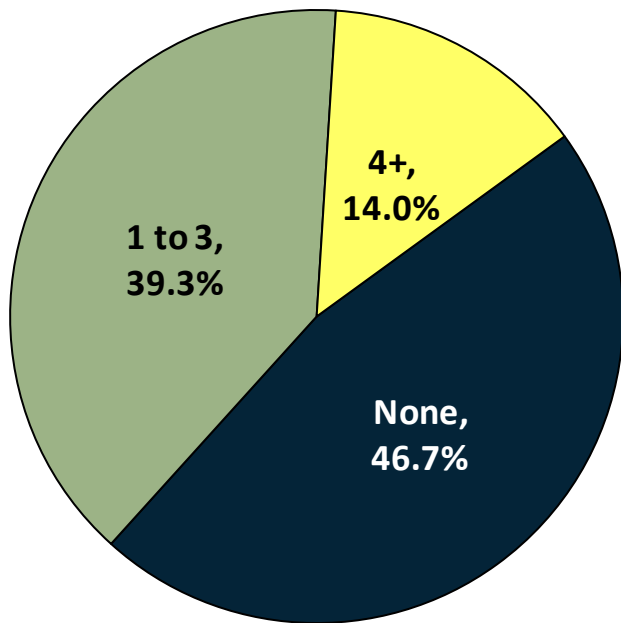
HOUSEHOLD CHALLENGES



Abuse and Neglect – Adverse Childhood Events (cont'd)

- 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
Source: [3]



n=1,158

	Number of ACEs Source: [3]		
	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%



Access to Health Care Services* – Cost and Insurance

- Health care access – encompassing cost, number of providers, transportation, comfort level, language, awareness, and other factors – affects all residents, including mothers and children.
 - ❖ While more residents are insured than before, high deductibles, service copays, and medication costs prevent many from receiving care.
- Nearly all (**99.9%**; 2015 5-year average) **Ottawa County children 0-17 have health care coverage** [14], and more than nine in ten (90.8%) adults under age 65 have coverage [3].
- However, cost of care remains a pressing issue. [1,2]
 - Key Informants identified **inability to afford copays/deductibles (88.2%), inadequate insurance (86.9%), and lack of insurance (77.6%)** as “somewhat”/“very much” **barriers** to health care programs and services. [2]
 - More than four in ten (43.1%) **underserved residents with children 0-17 had trouble meeting their family’s health care needs** during the past two years, with top reasons being **lack of health insurance (50.0%), inability to pay deductibles or copays (41.4%), inability to afford prescription drugs (39.7%), and provider doesn’t accept my insurance (22.4%)**. [4]
 - 11.3% of underserved residents with children 0-17 volunteered **cost of a healthy lifestyle** (food, fitness facilities, etc.) as an aspect of the community that **makes it hard to be healthy**. [4]

*“I don’t know if it’s a lack of coverage, but there’s definitely a lack of the ability to pay for what might be available. [Let’s say] I’m a low-income family - I’m finally insured, I show up to the doctor, who says I have to pay 35 to 50 bucks to get in, and then he gives me a prescription worth 200 bucks a month that will actually solve my problem finally - **there’s no way [on earth] I’m going to afford that 200 bucks a month.**” [Key Stakeholder]*

*Strategic Issue:

a) How do we attract providers that take Medicaid? b) How do we expand CHW programs to increase access to health care services?



Access to Health Care Services – Providers: Concerns

- Lack of providers is a pressing health issue in Ottawa County.
 - ❖ **Pediatric specialty services, pediatric mental health, and Medicaid pediatric** are areas specific to MCH where resources are **lacking**.

Concerns regarding number of providers include the following:

- **Ottawa County has a low rate of physicians per capita** (62.1 vs. State of Michigan 80.6 per 100,000 population). [19]
- **More providers are needed** in general; specific needs include more mental health and substance abuse providers (including **pediatric mental health**, underserved, detox), more underserved primary care (including **pediatricians who accept all forms of Medicaid**). [1,2]
- **Lack of providers** is a top mention (volunteered by 14.3%) among Key Informants asked to name elements of the community that **put MCH at risk**. [2]
- **Fewer than half (46.6%) of Key Informants report pediatric specialty services meet needs “somewhat”/“very” well**. [2]
- **Providers not accepting Medicaid is “somewhat” or “very much” a barrier** (83.3% of Key Informants). [2]
- 18.2% of Key Informants volunteer **resources for underserved/Medicare/Medicaid/etc.** as something that **would improve the overall health climate** in the community. [2]
- **Underserved Residents with children 0-17** report a **lack of mental health resources** in general and for adolescents in particular. [4]

*“[Pediatricians] will tell you that they tend to restrict [Medicaid patients] a lot less, but that when they try to refer those patients because they need other types of **specialized or sub-specialized care, you’re dealing with a brick wall.**” [Key Stakeholder]*



Access to Health Care Services – Providers: Strengths and Solutions

- Ottawa County is strong in several MCH-related provider categories, including hospitals and general pediatric services.

- Current strengths with regard to health care provider access include the following:
 - **General pediatric services meet residents’ needs** “somewhat” or “very” well (84.9% of Key Informants). [2]
 - Key Informants volunteered Ob-Gyns (23.3%) and Pediatricians/Pediatric services (25.6%) as aspects of the community that support MCH. [2]
 - Underserved residents with children 0-17 in their household named **access to good health care/hospitals/doctors** (10.5%) as characteristics of the community that facilitate healthy living. [4]
 - Access to **low-cost dental care for kids** has improved due to Healthy Kids Dental. [1]

- Proposed solutions to the provider shortage include: [2]
 - **Extended provider office hours**
 - **School-based health clinics**

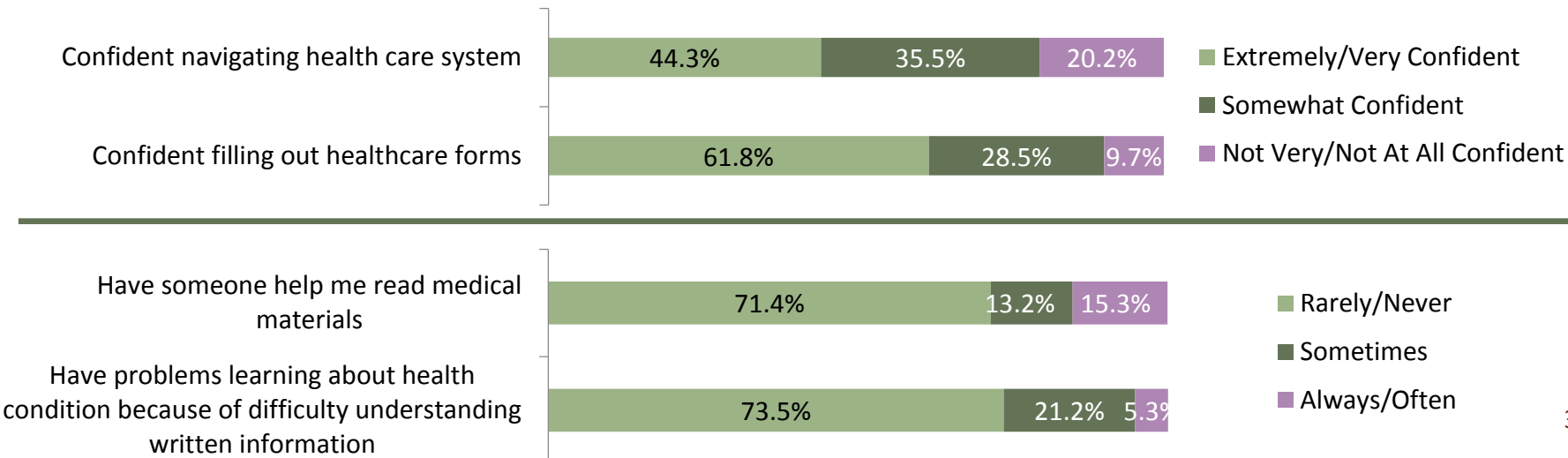


Access to Health Care Services – Comfort Level

- Substantial proportions of female underserved residents of child-bearing age (18-44) with children in their household have at least some difficulty navigating the health care system, completing medical forms, and understanding medical information.
 - Among **female underserved residents age 18-44 with children in their household**:
 - **Fewer than half (44.3%) are highly confident navigating the health care system.**
 - While most (61.8%) are highly confident **filling out healthcare forms**, nearly **four in ten are only somewhat or less confident.**
 - **More than one in four “sometimes” or “always/often” have someone help them read medical materials (28.5%) or have problems learning about a health condition because of difficulty understanding written information (26.5%).**

Female Underserved Residents Age 18-44 with Children in Household

Source: [4]





Access to Health Care Services – Programs/Services Currently in Place

- Home visit programs and WIC were identified by health care professionals and residents as aspects of the community that support healthy living.
 - ❖ Key Informants note that lack of awareness of available services can be a barrier.
- Key Informants volunteered several aspects of the community that **support maternal and child health**: [2]
 - MIHP/Home visit programs – 23.3%
 - Ready for School/Early Childhood/School readiness – 16.3%
 - WIC – 14.0%
- Parents of lower income confirmed that **WIC** as well as various **home-visiting programs** (Parents as Teachers, MIHP, etc.) are helpful **supports for healthy living**. [8]
- In 2016, Ottawa County’s Intermediate School District launched the **Help Me Grow** program to begin linking parents with key services in the community (health, education, and supportive services).
- There may be a gap between existing services and awareness of services: 81.1% of Key Informants agree that **lack of awareness** is “somewhat” or “very much” a **barrier** to programs and services. [2]



Access to Health Care Services – Programs/Services Needed

- Underserved residents named several types of health-related programs as lacking in the community, including nutrition/cooking classes, first aid classes, and support groups for mothers.
- Underserved residents with children 0-17 identified several types of **programs/services/classes** that would support family health but that are **lacking in the community**, including: [4]
 - Classes on **nutrition/healthy eating/healthy cooking**
 - Classes pertaining to **children’s illnesses/CPR/first aid**
 - Mother’s **support groups** (postpartum, young moms, “mom to mom,” etc.)
- Several residents specified the need for programs to be **free or low cost**. [4]

*[Characteristics of community that make it hard to be healthy:] “Being a **single mom** and doing it alone. The community should have **group meet-ups for kids to play**.” [Underserved Resident]*

*[Lacking in the community:] “**Nutrition classes** for children and families with **low resources**.” [Underserved Resident – Spanish Speaking]*

*[Lacking in the community:] “Basic child **CPR/1st aid** at a **affordable cost**.” [Underserved Resident]*

*“All of the **things that the higher-income populations enjoy** and [have] available **are technically unavailable to that lower population**, so the only thing that you can do with no money is go out for a walk...**You can’t afford to take the \$12 yoga class** three times a week; you can’t get to Muskegon to take the meditation class. It’s available, but only if you have access...[There] is a financial and transportation barrier to 35 percent of the population.” [Key Stakeholder]*



Access to Health Care Services – Holistic Care/Collaboration

- Area health care professionals discussed the benefits of collaboration and holistic care.
 - ❖ Pathways to Better Health was cited as an example of a successful collaborative effort.
- In an open-ended question, 16.7% of Key Informants say **collaboration/integrated care would improve** the overall **health climate** in the community. [2]
- Key Stakeholders report that the **community needs more comprehensive care** aimed at mental/behavioral health and more services for substance abuse. [1]
- Key Informants noted that locating **multiple providers under one roof** and/or within one care system would **facilitate patient access and compliance**. [2]
- Key Stakeholders name **Pathways to Better Health/Community Health Workers** as an example of a **successful collaborative effort**. [1]
- Key Stakeholders identified the community's **strong collaborative spirit** as a **key community resource**. [1]

*“[Anxiety/depression] is a multi-faceted problem which needs multiple areas of people to help. Physicians can take a more proactive and comprehensive approach to assess for depression, such as the ACE screening tool or others...The physician can spend more time discussing the root of physical problems in their visit (ex. 'I have a sore throat' What has caused this? Why are you staying up too late? etc.); this can then lead to more productive discussion and referrals. The physician does not 'ship off' the patient but co-manages the referral to behavioral health or counseling. **Medication may be needed, but root issues should ultimately be addressed.**” [Key Informant]*

*“People are truly **looking at a full perspective of someone’s life**, like, ‘What supports can be provided to you? What other things can we put into place besides just “Here, take this med’ kind of thing?” We also have Pathways to Better Health that’s just starting, we’ve got Pathways to Potential in the schools,...**we’ve got a lot of different entities that are doing more of a wrap-around with a family.**” [Key Stakeholder]*



Hispanic Disparities* – Pregnancy and Childbirth

- Disparities exist in Ottawa County on numerous pregnancy and childbirth measures with regard to Hispanic mothers.
 - ❖ For example, **Hispanic mothers** are more likely than mothers of other races to have **less than adequate prenatal care** and are **less** likely to initiate **breastfeeding**.

Disparities – Pregnancy and Childbirth	Hispanic	All Races
Less than adequate prenatal care (According to the Kessner Index) [10]	37.3%	25.7%
Births where breastfeeding is initiated as a percentage of all births [11]	22%	31%
Births where maternal marital status is single as a percentage of all live births [11]	54%	24%
Births where maternal age <20 years as a percentage of all live births [11]	12%	4%
Medicaid covered births as a percentage of all births [11]	70%	29%
Births where maternal education <12 years as a percentage of all live births [11]	21%	6%

***Strategic Issue:**

How can we reduce the negative socio/economic impact on the health of Hispanic youth and females of child bearing age?



Hispanic Disparities – Youth

- **Hispanic adolescents** in Ottawa County exhibit a **greater prevalence of risk factors and behaviors** compared to White adolescents.
 - ❖ Hispanic youth report **depression** at **nearly twice the rate of White youth**.
 - ❖ Hispanic students are **disproportionately represented** in the seven risk factors and underrepresented in the single protective factor measured in the Youth Assessment Survey.
 - ❖ Hispanic youth exhibit **higher rates of alcohol and drug use** and **higher rates of obesity** compared to White youth.

Youth Mental Health and Risk Behaviors Source: [5]	Hispanic	White
Stopped doing some usual activities during the past 12 months because I felt so sad or hopeless almost every day for two weeks or more in a row	39.7%	20.5%
During past 12 months, seriously thought about attempting suicide	20.5%	12.7%
Attempted suicide in past 12 months	11.0%	5.0%
Used marijuana in past 30 days	18.9%	8.5%
Drank alcohol in past 30 days	21.4%	14.8%
Had more than a few sips of alcohol before age 13	17.2%	4.6%
Never used any of the drugs in the YAS	48.5%	68.6%
Overweight or obese/Obese	36.8% /21.0%	21.4%/9.5%
Physically active for 60+ minutes per day on five or more of the past seven days	44.4%	58.1%

MENTAL HEALTH

RISK BEHAVIORS

Youth Risk/Protective Factors Source: [5]	Hispanic	White
Community Disorganization	8.4%	2.0%
Perceived Availability of Drugs	44.6%	32.6%
Low School Commitment	24.4%	19.2%
Family Conflict	37.3%	26.5%
Parental Attitudes Favorable Towards Alcohol, Tobacco, and Other Drug Use	6.5%	4.8%
Poor Family Management	10.7%	7.8%
Low Perceived Risk of Drug Use	28.1%	16.2%
Family Opportunities for Pro-Social Involvement	68.5%	78.2%

RISK FACTOR

PROTECTIVE FACTOR



Hispanic Disparities – Barriers and Solutions

- **Language and cultural differences create barriers** to health care for area Hispanics.
 - ❖ While steps have been taken to alleviate language and cultural barriers, area health care professionals report that more work is needed in this area.
- Roughly half of of Key Informants consider **cultural differences (54.7%)** and **language (48.4%)** to be “somewhat” or “very much” **barriers to health care programs and services**. [2]
- Key Stakeholders name various **language and cultural supports** that **have been put in place**, such as the **Language Line** and **partnering with churches**; however, they note that more work needs to be done. [1]
- **Suggestions** for additional supports include **providing more interpreters**, proactively **reaching out to the Hispanic communities**, and **partnering with schools** to build Hispanic students’ connections to the healthcare system through projects, internships, etc. [1,2]

*“If people come to our organization, I feel like they have access to the things they would need, whether it’s an interpreter or information that’s printed in their native language...but that’s kind of a passive approach...I **don’t know that we’re taking a proactive approach** to reach out into those specific communities to say, ‘Are we meeting your needs? Are you afraid of anything? How can we create or design something that makes the access for you better, easier?’” [Key Stakeholder]*

*“**We have made attempts to connect to organizations that have minority populations**, like churches, and we’ve had some success in trying to improve our relationships with them, but I think there’s **still lots of work to be done.**” [Key Stakeholder]*

*“A number of children in the school systems, especially in the **Hispanic population**, actually **view larger size [as] a healthier metric** when, indeed, medically, we would say that’s not true.” [Key Stakeholder]*



Substance Abuse – General/Adult

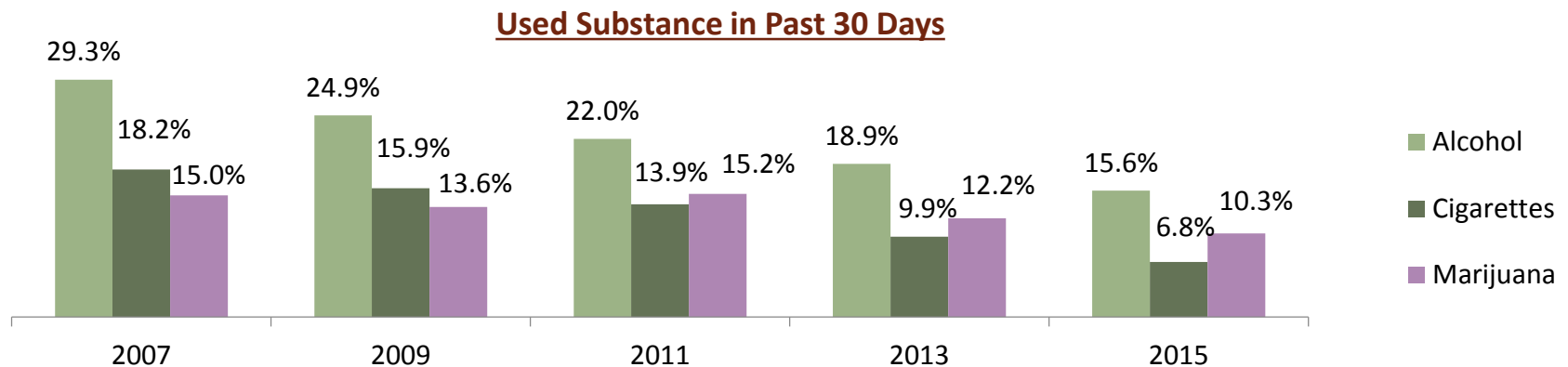
- Health care professionals consider substance abuse to be one of Ottawa County's most pressing health issues.
 - ❖ **Substance abuse impacts the entire family** and can have far-reaching consequences in terms of child welfare.
- Substance abuse was widely identified by area health care professionals as a pressing community health issue. [1,2]
- Key Informants report: [2]
 - **Heroin prevalent**, prescription **narcotics over-prescribed**, and alcohol abuse a continuing problem
 - Increase in patients reporting to ER with overdose and **age of patients becoming younger**
 - More **children entering foster care** due to parental heroin addiction
 - **No detox facilities** in the county

“Substance use for us has caused an increase in child abuse and neglect...where they're leaving their kids with other people for days on end on a binge or people that are having their kids in their car when they're intoxicated...It also creates other systemic issues such as having food for kids that might be in their family [and] they're seeing more increases in law enforcement referrals, drug court, and things like that.” [Key Stakeholder]



Substance Abuse – Youth: Alcohol, Cigarettes, and Marijuana

- Among youth, self-reported rates of alcohol use, cigarette smoking, and marijuana use have been in decline since 2007.
- **Cigarette smoking among youth has declined** steadily from 18.2% in 2007 to 6.8% in 2015.
 - However, **secondary smoke** is present in some homes. At least 25.3%* of households with children 0-18 have a smoker in the household, and at least 7.0%** have a household member who smokes **inside the home**. [3]
 - 14.3% of youth report use of electronic vapor products within the past 30 days (23.0% among 12th graders).
- Rates of **marijuana and alcohol use**, including binge drinking, have also steadily **declined**.
 - However, 30.8% of 12th graders have had at least one drink of alcohol in the past 30 days, and 17.8% of 12th graders have had five or more drinks of alcohol within a couple of hours in the past 30 days.



*Some households where only non-cigarette tobacco products are used may not be included in this percentage.

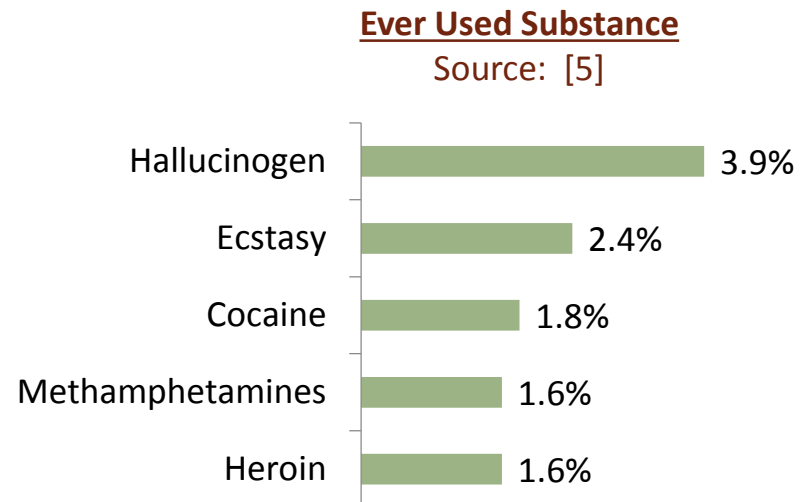
**Some households where the respondent is the only household member who smokes inside the home may not be included in this percentage.



Substance Abuse – Youth: Other Substances

- Ottawa County has seen a slight decrease in adolescents' use of several other drugs over the past decade.
 - ❖ Self-reported rates of heroin use remain steady since 2009.
- **Cocaine usage has declined** over the past decade, with 1.8% reporting having ever used it in 2015, compared to 6.0% in 2007. [5]
- Use of **methamphetamines, ecstasy, and hallucinogens** have also **declined** slightly since 2007/2009. [5]
- 5.7% have used a prescription drug without a doctor's prescription in the past 30 days (10.7% among 12th graders). [5]
- **1.6% report having used heroin.**

*“Overdoses are becoming commonplace in area emergency rooms. **Heroin addiction** in particular appears to be **affecting teens** through older adults.” [Key Informant]*





Substance Abuse – Proposed Solutions

- Area health care professionals propose several solutions to address substance abuse.
 - ❖ Collaborating with schools is one suggestion aimed at youth specifically.
- 10.6% of Key Informants volunteered **resources for substance abuse** as something that **would improve the community's overall health climate**. [2]
- Several solutions to the substance abuse problem were proposed, including: [1,2]
 - Increase **vigilance and limits in prescribing narcotics**, including more consistent use of MAPS (Michigan Automated Prescription System)
 - Increase **detox facilities**
 - **Educate youth** on dangers of drug and alcohol use
 - **Teach youth coping skills** as a preventative measure
 - Build a **collaborative effort** among schools, medical community, public health, law enforcement, and the public
 - Provide **community center activities** for at-risk population
 - Implement convenient system for patients to **return unused prescriptions**
 - Expand access to **Suboxone**

*“Perhaps more programming for youth to prevent substance abuse and addiction. **More community places** that are accessible to all to **provide meaningful activities to at-risk populations.**” [Key Informant]*

*“**We don’t have a methadone clinic** here in Ottawa; that comes with stigma, so [a county doesn’t want] to say, ‘Hey! Let’s have a methadone clinic in our county,’ and so I think that creates a barrier.” [Key Stakeholder]*



Access to Transportation*

- Both residents and health professionals widely identify **transportation** as a **barrier to accessing medical care and resources for healthy living** in general.
 - ❖ For some families, inadequate transportation **results in missed prenatal and well-child visits.**
- Health care professionals and residents report the following transportation concerns:
 - Low-income parents: A **barrier to** making regular **prenatal and well-child visits** [8]
 - Medical office personnel: A **major contributor to parents missing doctor appointments** [9]
 - Parents with children age 0-5: 18% volunteer that a lack of transportation **prevented them from accessing community services that support their family's well-being** [7]
 - Parents with children age 0-5: A **barrier to sending children to preschool** for 8% of parents [7]
 - Key Stakeholders: A **service needing improvement** [1]
 - Key Informants: A **barrier to health care programs and services** (79.1% “somewhat”/“very much”) [2]
- Bus system limitations (lack of service to some areas; inconvenient pick up/drop off times; long wait times; bus stops without weather covering) prevent the bus system from serving the needs of all residents.
- Some portion of this barrier may be alleviated by the planned expansion to Uber or Lyft.

“We’re always trying to help figure out how to get people places. Some of it is they can’t afford a car or reliable car, or they’re dependent upon public transportation that isn’t always very reliable and that doesn’t get people on time.” [Key Stakeholder]



Obesity/Nutrition/Physical Activity – General and Adult

- Obesity and inadequate nutrition are pressing issues in Ottawa County, particularly among women of child-bearing age.
 - ❖ One-third of Ottawa County women of child-bearing age are obese.

Obesity

- Key Stakeholders and Key Informants identified obesity as one of Ottawa County's most pressing health issues. [1,2]
- **Among women of child-bearing age (age 18-44), 33.9% are obese**, compared with 28.7% in the rest of the population. [3]

Nutrition

- **Among women of child-bearing age, 15.7% sometimes/often don't have enough food**, vs. 5.6% among the rest of the sample. [3]
- Among **residents with children under 18** in the household, **nearly one in ten (9.2%)** report that they or others in their household have **cut the size of meals or skipped meals because there wasn't enough money for food**. [3]
 - This percentage is higher than the percentage of those without minor children in the household who cut or skip meals (6.7%). [3]

"Obesity continues to contribute to all kinds of health problems. I don't think we've even touched the tip of the iceberg yet with that." [Key Stakeholder]



Obesity/Nutrition/Physical Activity – Youth

- While Ottawa County has a lower rate of adolescent obesity compared to the state or nation, one in ten adolescents are obese.
 - ❖ In addition, many adolescents do not meet guidelines for nutrition or physical activity.

Obesity

- Ottawa County has a **lower proportion of obese adolescents** compared to Michigan and the U.S.
 - More than one in ten Ottawa County adolescents are obese, and 23.4% are either overweight or obese. [5]

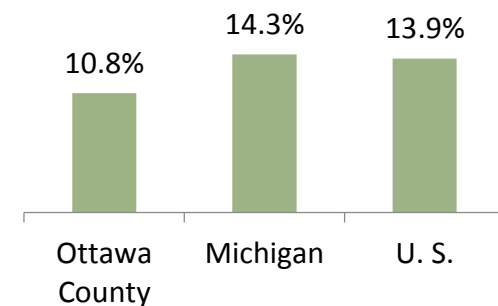
Nutrition and Physical Activity

- Only one-third (32.2%) of Ottawa County adolescents eat 5+ servings of fruits and vegetables per day. [5]
- Roughly half (55.3%) report physical activity 60+ minutes per day at least 5 days per week. [5]

% of Adolescents Who Are Obese

Source for Ottawa: [5]

Source for MI/US [17]



*“Many **children** in area schools are **presenting as obese**, with **limited resources for clothing, healthy lifestyles, access to outdoor programming, and good nutrition.**” [Key Informant]*

*“**School lunch programs FAIL our children** by providing non-nutritious meals comprised mostly of junk foods. Gym classes are offered on an extremely limited basis to our public school students. We are raising a generation of children who know nothing of healthy eating OR physical activity.” [Key Informant]*



Obesity/Nutrition/Physical Activity – Community Resources

- Ottawa County has numerous **resources that support healthy living** for families, including **paths/trails, parks, farmers markets, fitness facilities, and food programs.**

- Underserved residents with children 0-17 [4] and parents of lower income [8] named several **characteristics** of the community **that facilitate healthy living**, including:
 - Paths/trails for walking and biking
 - Parks
 - Farmers markets
 - Gyms, pools, and other places to be active
 - Access to food/healthy food/affordable food
 - WIC, food pantries, Food Stamps, and the Double Up Food Bucks program

- Area health care professionals note that **food programs have been implemented** in the community in response to prior Community Health Needs Assessments. [1,2]

*“[There are] safe, designated **bike paths or sidewalks, parks, farmers markets, easy access to grocery stores with produce.**” [Underserved Resident with Children in Household]*

*“We’ve done a lot of **reach-out during the summer with the food programs, making sure that healthy food options are available for kids that are on free and reduced lunch during the school year.**” [Key Stakeholder]*



Obesity/Nutrition/Physical Activity – Community Challenges

➤ The **prevalence of fast food** and the **higher cost of healthy foods** present challenges to healthy living.

- Underserved residents with children 0-17 [4] and parents of lower income [8] named several features of the community that **detract from healthy living**, including:
 - Accessibility and affordability of **fast food** restaurants and **junk food**
 - **High cost of healthy food**/Lack of healthy food options

*“There are lots of **farmers markets** in the **summer** months and you can double your money from food stamps there. **During the rest of the year, there is no way to stretch food dollars** further because there aren't any farmers markets.” [Underserved Resident with Children in Household]*

*“**Fast food** seems to be **everywhere** and it's more convenient at times.” [Underserved Resident with Children in Household]*



Obesity/Nutrition/Physical Activity – Proposed Solutions

- Health care professionals propose **ideas for curbing obesity**, such as providing more **nutritious school lunches** and implementing **affordable exercise programs**.

- Key Informants propose several solutions to the problem of obesity, including: [2]
 - Switch focus from management to **prevention**
 - **Educate** community on dangers of obesity/importance of diet and exercise/nutrition
 - Provide more **nutritious school lunches**
 - Increase access to and awareness of **healthy affordable foods**
 - Implement **free/affordable exercise programs**

*“It may help to **offer incentives in the workplace** for practical nutrition classes and target health challenges that do not focus as much on the weight but on healthy living: food and activity ideas. This would hopefully translate into the home for parents to begin choosing wholesome versus convenient foods for children.” [Key Informant]*



Prenatal/Postpartum Access to Services and Support*

- Ottawa County is seeing a **rise** in several prenatal and postpartum risk indicators, including **inadequate prenatal care, preterm births, and smoking during pregnancy.**
 - Since 2010, Ottawa County has seen a **steady rise** in percentage of births with **less than adequate prenatal care**, percentage of **births that are preterm**, and percentage of births to **women who smoked during pregnancy.**
 - **Infant mortality rates** have remained **stable** from 2010 to 2014.
 - Nearly all Key Informants say **prenatal care programs/ services** (92.2%) and OB/GYN programs/services (90.6%) **meet residents’ needs “somewhat” or “very” well.** [2]

Source for Row 4 and for Rows 1-3 Michigan: [20] Source for Rows 1-3 Ottawa: [21]	2010	2011	2012	2013	2014	2014 State of MI
% of Live Births with Less than Adequate Prenatal Care (3-Yr. Avg.)	21.7%	22.3%	22.5%	23.6%	24.4%	31.2%
% of Live Births Preterm (< 37 Weeks Gestation) (3-Yr. Avg.)	8.0%	8.2%	8.6%	9.5%	9.5%	12.2%
% of Live Births to Women Who Smoked During Pregnancy (3-Yr. Avg.)	8.7%	9.3%	9.7%	10.1%	10.6%	21.4%
Infant Mortality Rate Per 1,000 Live Births (3-Yr. Avg.)	5.9	5.7	5.9	6.5	5.7	6.9



Prenatal/Postpartum Access to Services and Support (cont'd)

- **Low incidence of breastfeeding and low incidence of Medicaid births with MIHP contact** are additional concerns.
 - Ottawa County has a **low proportion of mothers initiating breastfeeding** (31% of live births) compared to the State of Michigan (42%). [11]
 - **Among Medicaid births** in Ottawa County, a **low proportion have an MIHP contact** (26.43%) compared to several neighboring counties (Kent: 41.87%; Muskegon: 52.91%; Newaygo: 50.19%). The highest ranking county, Berrien, has 80.89% of Medicaid births with a MIHP contact. [12]
 - One of the two primary providers of MIHP in Ottawa County (InterCare, an FQHC) is discontinuing this service in summer 2017, leaving a significant gap in home-visiting services being provided. Going forward, Ottawa County Department of Public Health will be the only MIHP provider in the county.

*“For some reason, we have a **low initiation of breastfeeding** in our community. This **adds some unnecessary risk into the maternal and child health equation.**” [Key Informant]*



Policy/Procedural Structure of Medical Providers*

- Provider and insurance company **policies and procedures present a barrier to scheduling and keeping appointments.**
 - ❖ “One-stop servicing” would increase convenience and facilitate patient engagement.
- Several policies and procedures deter parents from scheduling and keeping medical appointments: [6]
 - **Traditional doctor’s office hours** – a barrier to well-child visits and parent doctor appointments due to parent work schedules
 - **Insurance policies that don’t allow a well-child visit to be conducted at the same time a child comes in for an illness** – a barrier to achieving all of the expected well-child visits
 - **Doctor’s office failing to schedule next well child visit at end of current visit** – can result in future well-child visits being overlooked by parents
 - **Doctor’s office cancelling/rescheduling appointment** with little notice
- Among underserved residents with children 0-17 in their household, **inconvenient office hours** was identified as a reason **why some residents have had trouble meeting the health care needs of themselves and their family** during the past two years. (Of the 43.1% who have had trouble, 13.8% identified inconvenient office hours.) [4]
- Several Key Informants suggested that **offering multiple services** within one health care system and/or under one roof **would facilitate access and increase patient engagement.** [2]

*“If families can get **all their services done in one building**, it would eliminate the barrier of transportation and time off work.” [Key Informant]*



Lack of Consistent Screening for Young Children*

- Child development screening results are not always effectively conveyed to parents or used as a tool for effective parenting.
- All surveyed **medical offices report conducting the ASQ or other developmental screening.** [9]
 - However, only 65% of Ottawa County parents report ever having completed an ASQ for their child. [7]
- Parents report that **doctors often conduct developmental screenings without parent knowledge** and without sharing information about how results could increase parent effectiveness. [6]
- **No central repository** exists for collected developmental screening data.

*Strategic Issue:

How can we ensure all providers are using ASQ and reporting consistently into a single shared database?



Value, Belief, Priority of Personal Health* – Doctor Visits

- Although some parents have de-prioritized routine prenatal and well-child visits, nearly all Ottawa County children 0-17 have routine doctor visits.
 - ❖ However, a majority of children enrolled in Medicaid do not receive yearly preventative dental visits.
- In focus groups, parents revealed that **well child visits are not viewed as valuable** enough to schedule and maintain unless their child is receiving a vaccination or other important milestone. [6]
 - However, **almost all children under age 18** represented in the 2017 Behavioral Risk Factor Survey have visited a health care provider in the **past year** for a **routine checkup** or physical/well-being exam (roughly 94-99% depending on age group). [3]
- In focus groups, parents revealed that **prenatal visits are viewed as less important after a first pregnancy** because parents know what to expect, and therefore the visits are often skipped. [6]
- **Fewer than half** (44.6%) of Ottawa County **children enrolled in Medicaid had a preventative dental visit** in the past year. The highest county-wide percentage in the state is 62.6%. [18]
 - Given that dental visits are covered for Medicaid-enrolled children, it's not clear whether the low proportion is related to parent values, lack of awareness, or other factors.



Value, Belief, Priority of Personal Health* – Immunizations

- Although Ottawa County children age 19-35 months are immunized at higher rates than children statewide, some health care professionals remain concerned.
- Ottawa County **children** age 19-35 months are **consistently immunized* at rates higher than** children **statewide** (roughly 84% Ottawa vs. roughly 74% state). [20]
- However, many **Key Informants expressed concern about lack of childhood immunizations**. [2]
 - 44.4% of Key Informants say lack of childhood immunizations is “somewhat” or “very” prevalent.
 - More than one-third (36.3%) are less than “somewhat” satisfied with the community response to the issue.
 - In an open-ended question, 9.5% of Key Informants named parents **not immunizing children** as an aspect of the community that **puts maternal and child health at risk**.

*“The number of children **opting out of immunizations** poses a health risk as we start **seeing an increase in preventable diseases**.” [Key Informant]*

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