2013 Madison County
Community Health Needs Assessment

MADISON COUNTY

OHIO

Approved December, 2013

The Board of Directors at Madison County Hospital has reviewed the findings of the 2013 Madison County Community Health Needs Assessment. The Board of Directors of Madison County Hospital formally adopted the Madison County Community Health Needs Assessment on December 16, 2013.

Table of Contents

Figures

Tables

Introduction

This Community Needs Assessment was developed by Madison County Family Council, the Madison County–London City Health District, the Madison County Hospital, and other agencies that formed the Steering Committee. This report compiles a year-long effort to gather and analyze data that addresses issues of community health and wellbeing for Madison County as well as for the Madison County Hospital's specific service area.

The research effort has included: interviews with 55 community leaders; a demographic analysis; a survey of 400 adult residents selected at random; focus group sessions with chronic disease patients at the Free Clinic and with low income women convened by the Madison County Department of Job and Family Services; as well as analysis of data from the Madison County Hospital, the Ohio Department of Health, Ohio Department of Job and Family Services, Mental Health & Recovery Board, Robert Wood Johnson Foundation and Centers for Disease Control and Prevention, the National Survey on Drug Use and Health, and the Bureau of the Census' American Community Survey. The study addresses secondary data for maternal and infant health data, behavioral risk factors, clinical and preventive services, diseases (such as cancer), hospital and emergency department discharge data, and leading causes of death. The steering committee has met about 8 times over the past year to study the results and identify health priorities.

In Madison County, the not-for-profit hospital is Madison County Hospital. Community benefit has been defined by the Internal Revenue Service (IRS) as "the promotion of health for a class of persons sufficiently large so the community as a whole benefits." Simply put, community benefit is composed of programs and services designed to address identified needs and improve community health (NACCHO Fact Sheet, 2010). To that end, the Hospital has joined forces with Madison County and the Family Council, and the rest of the steering committee, who have invested resources and significant time in gathering information to inform this Community Health Needs Assessment.

How to Read This Report and How Data were obtained

Data in this report are organized into topical areas, which can be located by referring to the table of contents. The report begins with a description of the service area, followed by a basic overview of the community's geographic location and its socio-economic makeup. This report compiles primary and secondary data in order to paint a detailed picture of Madison County. Primary data are data collected from first-hand experience. Secondary data analysis refers to reprocessing and reusing information that has already been collected such as institutional records from sources such as hospitals and the Ohio Department of Health. The framework for the report was based on key areas of need. The report integrates primary and secondary data and also compares the area's status to state and national data where possible, drawing out critical areas of concern. Narrative and graphics are used to highlight key findings. The report culminates in the presentation of priority needs for the community.

Definition of the Community Served

Madison County lies between Springfield and Columbus, and more than one-third of its working population drives 30+ minutes to work. Both I-70 and I-71 go through Madison County. Madison County is primarily a rural county, with over 93% of its land area being cropland, pasture, and forest. About 6% of its land cover is considered to be urban (that is, residential, commercial, industrial).

Madison County's total population is 43,151. Its largest community and singular city is London with 9,796 residents. West Jefferson Village has a population of about 4,200. Outside of those two jurisdictions, most of the population is distributed in townships. Population projections forecast Madison County's population to increase by 10% to the year 2030. The City of London grew by 13% from 2000 to 2010 and therefore County-level projections appear to be reasonable estimates for London as well. London Correctional Institution and Madison Correctional Institution are located in Madison County; prison inmates are included in population counts. Madison County is also home to the Ohio Peace Officer Training Academy (OPOTA) and the Ohio Bureau of Criminal Identification & Investigation (BCI).

Partners in the Process

Many partners from multiple agencies took part in this research effort, from key stakeholder interviews, to providing access to data and populations, to hosting focus group sessions, and more. Three agencies pooled their resources to support the research conducted by Wright State University– Madison County Hospital, Madison County Commissioners, and Madison County Family Council.

Last Name, First Name	Organizational Affiliation
Akers, Julie	Madison County Hospital
Alexander, Lynne	London ABLE
Baldwin, Sherry	Department of Family & Children
Baynes, Pat	Madison County Senior Center
Beathard, Heidi	Madison County Hospital
Ben, Thomas	London City Schools
Blakeslee, Elizabeth	Madison Co. Bd. MRDD
Brown, Sherrod	Guest
Browning, Michael	Madison County Hospital, CFO
Burns, Mary MVCDC	Miami Valley Child Dev. Centers
Canney, Jim	Madison Co. Bd. MRDD
Canney, Melissa	Madison County Health Partners, Inc.
Chapman, Gary	Jonathon Alder Schools
Cleaver, Karen	Parent Representative
Comer, Alexis	Madison County Senior Center
Consiglio, Sal	London Metropolitan Housing
Creamer, Kelly	Parent Representative
Daniels, Carol	London Elementary School
Davis, Kim	Jonathon Alder Schools
Davis, Missy	Plain City Vineyard/Daily Needs Assist
Dhume, David	Madison Co. Commissioner
Dodge-Dorsey, Lori	Madison County DJFS
Duffey, Lin	Dept. F&C/ Help Me Grow
Eldridge, Laura	Child Care Network/ Parent Rep
Engle, Dana	Madison County Hospital, CEO
Ferryman, Audrey	United Way
Florea, Nancy	Miami Valley Child Dev. Centers
Gillespie, Curtis	Mental Health Services for Clark & Madison
Gillespie, Linda	Central Ohio Area Agency on Aging
Glispie, Niki	A Friend's House, Inc.
Hackett, Robert	Guest
Harris, Pam	Parent Advocacy Connection
Hensel, Mike	London Public Library
Hix, Amy	Early Head Start
Hochstetler, Amanda	Parent Representative
Isaacs, Mindy	Early Head Start
Itani, Stuart	Legal Aid Society
Kaffenbarger, Daniel	Madison -Champaign ESC
Kaifas, Steve	Dept. of Jobs and Family Services.
Kohler, Amanda	Help Me Grow/EHS
Long, Syreeta	Troop & Family Assistance Center
Martindale, Jill	Plain City Vineyard/Daily Needs Assist

Last Name, First Name	Organizational Affiliation
Mast, Mike	Madison Co. DD/Fairhaven School
Mayer, Greta M.	Mental Health Recovery Board
Maynard, Brandy	Madison Co. Municipal Court
McClelland, Rev. Sue	London 1st United Methodist
McNamara, Twyla	Ministry for Community
Mirza, Adnan	Homeport by Columbus Housing Part
Mosier, Sue	Madison County DJFS
Mullett, Bill	Jefferson Local Schools
Norris, Brandi	The Buckeye Ranch
Padrutt, Diana	Mental Health Services for Clark & Madison
Pedraze, Kerry	United Way
Peters, Chris	Madison County Hospital
Piccione, Jennifer	Madison County Hospital, CNO
Poindexter, Beverly	London Metropolitan Housing
Prickett, Melinda	Girl Scouts of Ohio's Heartland
Radcliff, Marie	Parent Representative
Roberts, Roger	EMA
Roddy, Ruth	Madison County Hospital
Rodgers, Rev. Steven	London 1st United Methodist
Rozell, Becky	Madison County Hospital, HRO
Runnels, Roselin	Mental Health Recovery Board
Saltsman, Samantha	Help Me Grow
Schafer, Anna	Madison County DJFS
Schooley, Eric M., Judge	Municipal Court
Snyder, Kelly	Madison County Hospital, CDO
Sparks, Vicki	Early Head Start
Stern, Carly	Madison County Hospital
Stoops, Tammy	Juvenile Court
Summerlin, Sequoyah	Ohio BVR
Thomas, Lori	Family Services/Dept. F&C
Tomlinson, Annie	Mt. Sterling Community Center
Turner, Ginny	Tolles CTC/GRADS Coordinator
Twining, Rochelle Dennis	Community Action
Wagner, Lin	United Way
Warner, Debbie	Lifepointe Family Center
Webb, Mary Ann	Madison Co/London Health Department
Weber, Stacey	Madison County Hospital
Widener, Chris	State Representative
Wilson, Chanda	Comm. Action
Wilson, Jean	Municipal Court
Wyss, Chuck	Ohio Dept. of Youth Services
Young, Susan, RN	Madison/London Health Dept.

Last Name, First Name	Organizational Affiliation
Youngman, Kent	Mental Health Recovery Board

Demographics of the Community

Characteristics of the Population

Socioeconomic Status

Households: There are 4,001 households in the City of London and 2,537 family households. About 54% of housing units are owner-occupied and 46% are renter-occupied. In nearly one in five owner-occupied households, owners are spending more than 35% of their income on housing costs (the recommended percentage is 28%). More than one-third of renters spends more than 35% of their income on housing costs. Of those family households, 29.5% have children under the age of 18 (this is a common proportion). Of households with children, 27% live in female headed households with no husband present.

Poverty: Two-thirds of children who live in poverty are in female headed households (62.7%). In fact, 14.2% of London's population lives in poverty; among children under the age of 18 the percentage is 18.2%. Among children under the age of 5, the percentage of those living in poverty is estimated to be 45.5%. Among those ages 65 and over, the percentage living in poverty is 4.4%.

Across the entire County, 7,637 people receive food assistance, which is 17.7% of the population and is nearly equivalent to the number that received food assistance last year. The average monthly food assistance payment is $1,014. In terms of cash assistance, the number of households receiving this kind of support has dropped by nearly half from 2012 to 2013 (from 1,612 recipients to 907). Federal law requires that families receiving cash assistance participate in work activities. At least 50% of all able-bodied adults receiving benefits are required to participate in work activities at least 30 hours per week. In two-adult households, at least 90% are required to participate in work activities at least 35 hours per week. In Madison County, the percentage is 81.8% versus 59.5% for Ohio overall.

Educational Attainment: Nearly 14% of London's population has no high school diploma. This is higher than the State percentage but lower than the national percentage. Lower educational attainment levels are directly associated with unemployment and lower pay. The percent with a bachelor's degree or higher is 15.3% versus 24.5% for Ohio and 27.0% for the U.S.

Occupations: Taking into account all workers in London, the median hourly earnings for 6,408 workers are $16.99. More than one-third of jobs (35%) are in food preparation ($9.12), sales ($11.64), and office administration ($14.10). A sustainable wage for a household of two adults in Madison County is $13.15, as long as the person employed is employed full-time. For a household with one adult and one child, a sustainable wage is $17.74.

Characteristics of the Population and Socioeconomic Status

Figure 1: Population Trends, 2010-2040

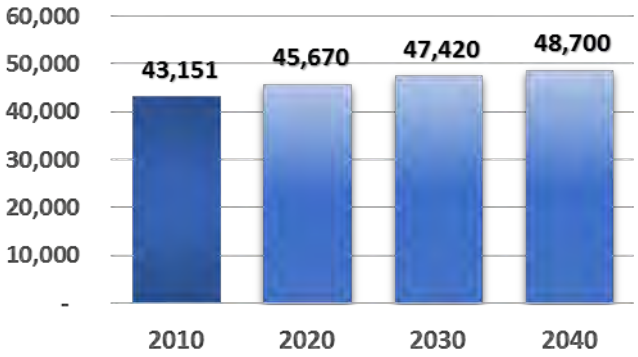


Figure 2: Age, 2011

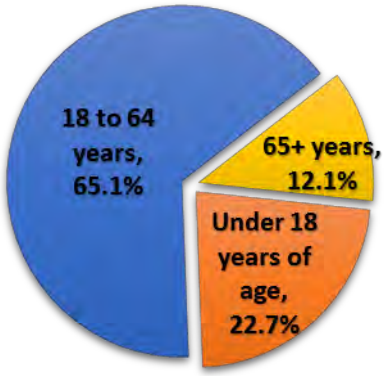
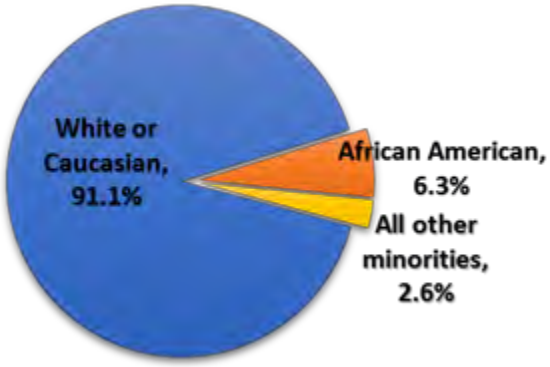


Figure 3: Race, 2011



The Ohio Development Services Agency forecasts Madison County's population to grow by 10% from 2010 to 2030, and an additional near 3% to 2040. The middle pie chart below shows that the senior population will grow considerably to the year 2030 (Census data). The majority of households are White/ Caucasian homeowners with no children (Census data).

Figure 3: Household Type

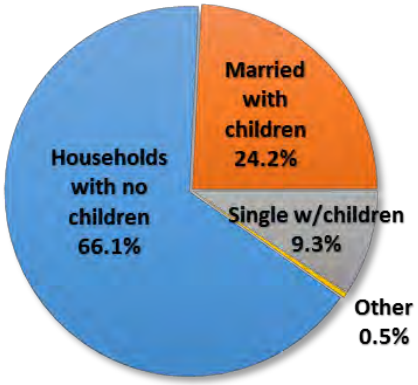


Figure 4: Senior Population Projections

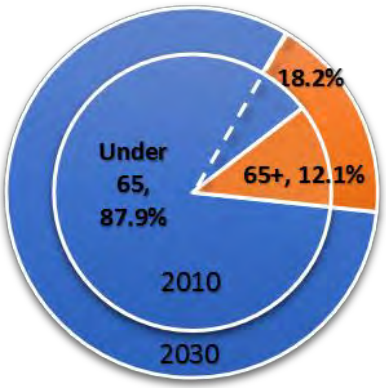


Figure 5: Occupied Housing Units

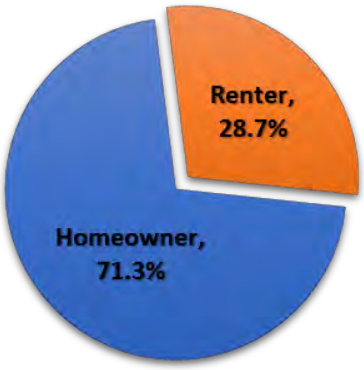


Figure 6: Educational Attainment for the Population 25 Years of Age & Older, 2011

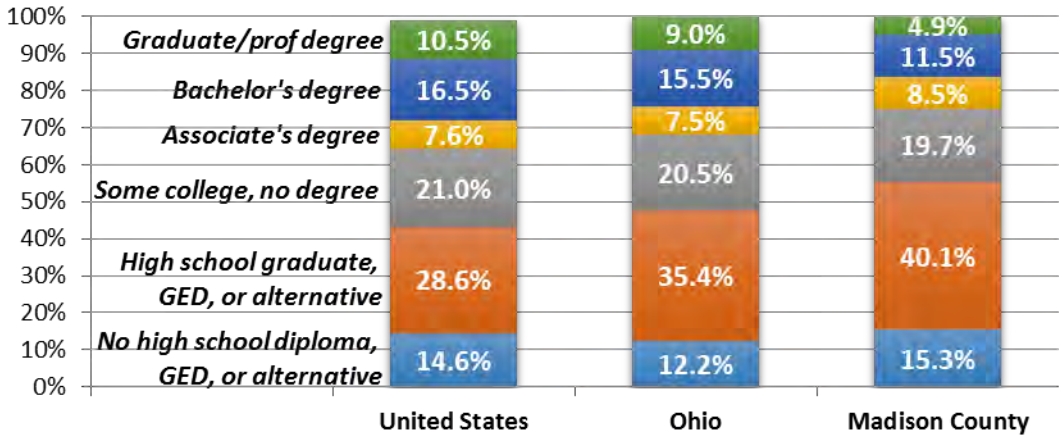


Figure 7: Median Household Income & Per Capita Income, 2011

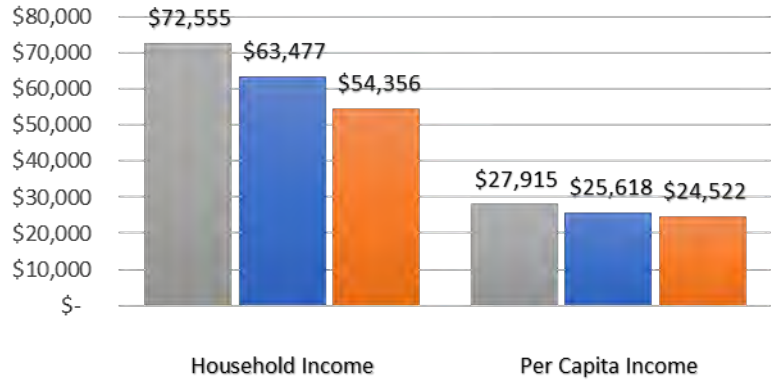
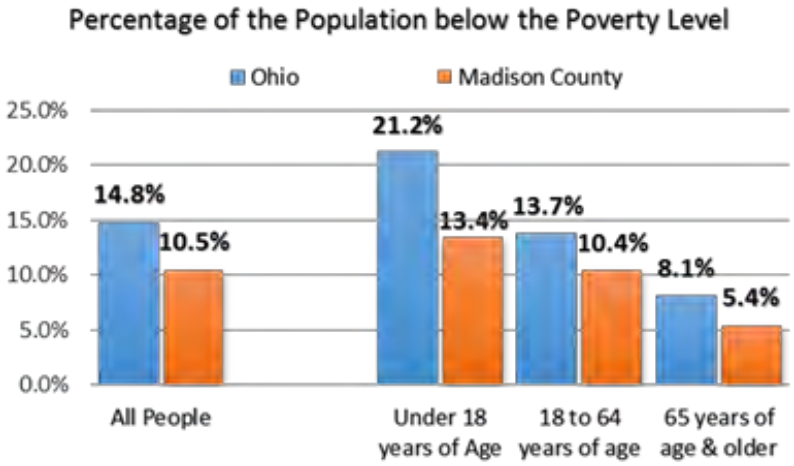


Figure 8: Percentage of the Population Living in Poverty, 2011



The County has lower educational attainment levels and income levels than the State and U.S. Conversely, poverty is less pervasive at every age level in the County as compared to the State (Census data).

Health Care Facilities and Resources within the Community

The County's health care infrastructure is comprised of one hospital, an urgent care facility, a free clinic for those who are chronically ill, two nursing homes, and hospice care.

Madison County Hospital

Madison County Hospital is a 94-bed facility that offers comprehensive inpatient and outpatient health care. Its unique affiliation with the OSU/Mount Carmel Health Alliance enables access to medical specialists.

Table 1: Short-term Care

14 Special Care
46 Adult Medical-Surgical
8 Psychiatric (licensed, not in use)
10 Physical Rehabilitation beds (licensed, not in use)
7 Obstetrics Level I
85 Sub-Total
Newborn Care
9 New Born Care - Level I
9 Sub-Total
94 TOTAL BEDS

Source: Ohio Department of Health http://publicapps.odh.ohio.gov/eid/reports/Report_Output_RS.aspx last accessed 11/14/2013 (except where noted)

Physicians and other Health Providers

According to HRSA, the following physicians and other health providers provide services in Madison County.

Table 2: Primary Care Physicians	21
PCP Physician/100K Pop	48.4
General/Family Practice	15
Gen/Family/100K Pop	34.6
Internal Medicine	2
Internal Medicine/100K Pop	4.6
Pediatricians	4
Pediatricians/100K Pop	37.1

Table 3: Obstetricians/Gynecologists	2
OB/GYN /100K Pop	10.2
General Surgeons	2
General Surgeons/100K Pop	4.6

Table 4: Psychiatrists	0
Psychiatrists/100K Pop	0

Table 5: Dentists	12
Dentist/100K Pop	27.6

Source: Health Resources and Services Administration, Health Resources Comparison Tool, http://arf.hrsa.gov/arfdashboard/HRCT.aspx, last accessed 11/15/2013 (except where noted)

Clinics

The Free Clinic is created from collaboration with Madison County Hospital, Madison County Health Department, Madison County Family Council, and Ministry for Community. As a result, Madison County Health Partners, Inc., incorporated in 2004, hired an executive director in 2005 and obtained its 501(c)(3) private not-for-profit status in 2007. The Free Clinic provides health care to low income, uninsured, chronically ill residents of Madison County. Appointments are scheduled because the need surpasses the capacity. Volunteer physicians, nurses, pharmacists, social workers, clergy, and lay persons see patients on Monday nights and at other scheduled clinics throughout the month at the Free Clinic building north of Madison County Hospital.

Table 6: Health Centers

Community Health Centers	0
Federally Qualified Health Centers	0
Free Clinic*	1

Source: HRSA and * http://www.madisoncountyhospital.org/freeclinic.php, last accessed 11/15/2013

Nursing Homes

Table 7: Nursing Homes

OHL01030 ARBORS AT LONDON
218 Elm Street
London, Ohio 43140
Licensed Capacity 100 Beds

OHL01071 ARBORS WEST
375 West Main Street
West Jefferson, OH 43162
Licensed Capacity 100 Beds

Source: Ohio Department of Health http://publicapps.odh.ohio.gov/eid/reports/EID_Report_Criteria.aspx Accessed 11/26/2013

Mental Health Care Capacity

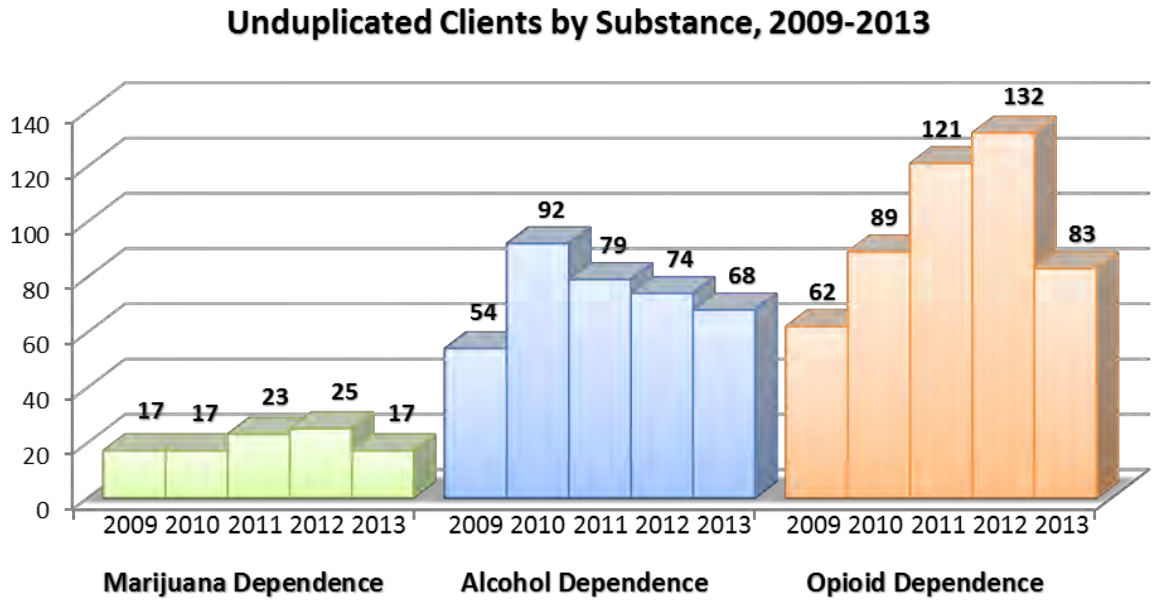
Madison County is part of a three-county board - the Mental Health & Recovery Board of Clark, Greene and Madison Counties (MHRB). In Madison County, MHRB provided service to 844 individuals (unduplicated count), to date, at a system-wide cost of $451,595 in fiscal year 2013.

In 1988 Ohio passed the “Mental Health Act” which stressed the importance of community treatment rather than institutionalization. Community Mental Health Boards received even more authority to plan and develop local systems of care.

In 1989, Ohio recognized that a cabinet level department and local community control could best serve the recovery needs of Ohioans with alcohol and/or other drug addictions. Counties throughout Ohio reengineered their existing Community Mental Health Boards to also plan and oversee alcohol and other drug services.

The chart below presents the general trend of Madison County residents (unduplicated clients) seeking treatment from MHRB for alcohol and other drug dependence. The number of individuals seeking treatment for marijuana dependence has increased 47% from 2009-2012. The number of individuals seeking treatment for alcohol dependence increased 70% from 2009-2010, but has continued to decrease in subsequent years. There has been a 112% increase in individuals seeking treatment for opioid dependency from 2009-2012. Complete data for 2013 has yet to be collected, therefore these data reflect only partial results for 2013.

Figure 9: Mental Health & Recovery Board Trends in Treatment



Source: MHRB of Clark, Greene, and Madison Counties

Health Needs of the Community

Key stakeholder Interviews Summary

Key stakeholders were surveyed via an online tool. Key stakeholders included individuals with special knowledge and or expertise in public health (the County's health commissioner), and 32 other community leaders that address the broad array of health and well-being topics. See the list of partners presented in this report.

The main point of the survey was to identify what community leaders experience as the main problems facing Madison County residents; the need for additional services to address unmet needs; and the top three priorities that need to be addressed in the coming three to five years.

Main Problems: The major problems facing the Madison County community today are drug and alcohol abuse, housing, un- and underemployment, poverty, and mental illness.

Additional Services Needed: Drug and alcohol treatment services, mental health services for adults and children, affordable housing and short-term shelter, and access to reliable transportation.

Priority Health and Human Services to Provide: Mental health services, substance abuse services, and housing services.

School Leaders Survey

To pursue more insight pertaining to child and youth health and human service needs, school leaders were invited to participate in an online survey. The results from 24 school leaders are presented below.

Respondent:

Teachers (8)
School Nurse
School Counselor
Transportation Director
Dir. of Curriculum
Intervention Specialist
Administrator
Admin Assistant
Principal (2)
Academic Director
Unspecified (6)

- Most of the respondents state that social stress is a problem for their students (21 of 24). Most are satisfied with the schools' efforts to prevent bullying (19 of 22), which helps to address one aspect of social stress. And most believe that patterns of student problem behavior are reported to appropriate staff and faculty for active decision-making (21 of 23).
- However, school leaders do not think the community is providing effective programs and services to help students address social and emotional needs that schools can provide referrals to (15 of 22). Most school leaders want to offer parental support to connect students to the services they may need and perceive this as the most important thing they can do (21 of 24). School leaders also see school counseling as a very important service that could be provided at schools (19 of 24).
- School leaders say that they see the following needs among students often or always:
    1. Unmet medical needs
    2. Lack of personal safety
    3. Housing/shelter
- The services and resources of greatest need:
    1. Unmet medical needs
    2. Housing/shelter
    3. Family intervention and counseling

Housing Leaders Interview Results

Housing Issues in Madison County

At the time of the discussion with the Community Action Organization (Spring 2013) there were seven families who could not be placed in housing. At the same time there are no homeless shelters in the County. (There is a battered women's shelter.) These leaders describe "deplorable housing" in one of the major affordable housing multi-units in London, Ohio and the renting out of chicken coops in the rural areas of the County. The health department has begun to take action on the multi-unit facility, but there is little to no code enforcement or no codes at all in the rural communities.

It is perceived that landlords in the County charge a higher rent to avoid having to house the low-income population, believing that those who pay for housing, versus those who receive housing subsidies, will take better care of the rental property.

The County has had success partnering with the faith community. One church member is a landlord who owns four rental units. The units are provided as transitional housing for a 24 month period. Church volunteers serve as advocates for the families in the rentals. However, this set of rentals does not accept people with substance abuse problems, because meeting the service needs of that population is beyond the scope of services that the church is able to provide.

The County does offer IDA's and financial literacy programs but there is no program to assist the low-income population toward achieving home ownership which could stabilize families.

The eligibility rules of Section 8 housing in Ohio are very specific. For a family to be eligible, the members must: be American citizens; qualify as a "family" unit; have an income below 50 percent of the average median income of the county or metropolitan area in which the family lives. Not only can an applicant be denied participation in the voucher program because of an adverse criminal history, but also an applicant who has a family member with a criminal background can be denied. It was also stated that persons who have been evicted from a rental in the past cannot qualify for Section 8 housing.

The Community Action Agency in Madison County serves Delaware and Union counties as well. These leaders say that Delaware County has policy makers who are more open to affordable housing than policy makers in cities in the other two counties. In fact, a housing needs assessment provided evidence of demand for 85 affordable housing units, and there is a developer who is interested in rehabbing 70 units, yet there was some lack of support among local officials. Such development could create jobs and economic development. What the County really needs is a strategic plan for housing to accompany the housing needs assessment to attract developers.

Medically Underserved and Low-Income Population Needs

Focus group sessions were conducted with patients of the Free Clinic in Madison County as well as with low income women via the Department of Job and Family Services (DJFS). The intent was to uncover disparities in coverage, access and other barriers to care, including chronic diseases. This summary begins with the results of the Free Clinic patients' focus group; the DJFS focus group results follow.

Background for the Free Clinic Participants Focus Group Session

The Free Clinic is created from collaboration with Madison County Hospital, Madison County Health Department, Madison County Family Council, and Ministry for Community. As a result, Madison County Health Partners, Inc., incorporated in 2004, hired an executive director in 2005 and obtained its 501(c)(3) private not-for-profit status in 2007. The Free Clinic provides health care to low income, uninsured, chronically ill residents of Madison County. Appointments are scheduled because the need in the County surpasses the capacity. Volunteer physicians, nurses, pharmacists, social workers, clergy, and lay persons see patients on Monday nights and at other scheduled clinics throughout the month at the Free Clinic building north of Madison County Hospital. The clinic served about 400 patients last year, 200 of which were new patients, in over 1,000 visits running on volunteer doctors. The current wait time for a new patient appointment is two months.

The Clinic has a psychiatrist who comes monthly to treat patients for their mental health needs. A total of 10 volunteer Pharmacists provide their expertise at the clinic. The Executive Director wrote a grant and obtained United Way funding for a person to gain the expertise in obtaining reduced cost prescription medicines. Such protocols are available but cumbersome to successfully follow. As the Free Clinic has become a more "full service" clinic, the Physicians and patients alike have a viable model. In addition, there is a women's health clinic held once a month staffed by two volunteer gynecologists, a monthly diabetic clinic and internal medicine clinic, as well as pediatrician services when needed.

Each of the patients in this focus group session has multiple chronic health challenges. According to the Executive Director, the four most common health problems of clinic patients are: respiratory problems, diabetes, depression, and hypertension.

Health-Related Gaps in Service

Focus group participants identified several barriers to accessing care prior to becoming a patient of the Free Clinic. The first barrier was finding the Free Clinic. Each patient described how they came to know of the Free Clinic. For example, one found the clinic via a pamphlet on Women's Health issues. One found it via a referral from the Hospital ER. One found it through the Madison County Emergency Management Agency (EMA). Lack of wide advertisement is not surprising, recognizing that the Free Clinic is 100% reliant on volunteer physicians to provide services.

Another barrier is access to SSDI because patients of the Free Clinic typically have not had a physician for so many years. Physicians are involved in determination of SSI or SSDI eligibility on a number of levels. "Foremost, those making the disability determination rely heavily on the medical chart and may even request that physicians write medical reports on the patients." On top of that, the Ohio Workers Compensation office told one focus group participant that she may not go into a job that requires repetitive lifting; lifting items over 10 pounds; long periods of sitting; long periods of standing; and so

on. According to this participant's understanding, if she were to go ahead and take such a job and then become hurt on that job, she would be denied workers comp in the future. On the other hand, those who do receive SSI have an income that prohibits them from qualifying for food stamps.

A third barrier is access to and costs of specialists. Participants described the near impossibility of accessing a specialist for someone who has no health insurance. Because these participants are patients of the Free Clinic, they are now able to access appointments with specialists which was described as a great benefit. Free Clinic patients need help in paying their co-pays when they see a specialist. And again, because the Free Clinic cannot serve all low income, chronically ill patients in the County, it may be assumed that accessing specialists continues to be a hardship for many.

Limitations of the HCAP program (Health Care Assurance Program) were cited as a fourth barrier. HCAP is Ohio's version of the federally required Disproportionate Share Hospital program. HCAP compensates hospitals that provide a disproportionate share of care to indigent patients, thus enabling hospitals to provide such care. But HCAP doesn't cover the physician or the anesthesiologist in a surgery situation or in the ER.

The Madison County Hospital Foundation established the "Heartfelt Program" to meet that gap and it is funded by charitable donations. However, stories were told across the focus groups of there still not being enough resources to meet the need.

The free clinic offers two ways for patients to receive help with prescription purchases: 1) the clinic enrolls them in prescription assistance programs offered through pharmaceutical companies and manages their refill orders as well as dispenses the medication, and 2) they are given a voucher to take with them to local pharmacies to use as cash toward the purchase of the medicine prescribed to them.

Participants also discussed the frustration of not being able to receive preventive health care services so that their disease(s) would not escalate to a chronic condition before they can receive care.

Housing-Related Barriers

A challenge that faces the service area is the lack of affordable housing. According to the focus group participants, many people reported not having enough money to pay their rent; nevertheless, they are not poor enough to be eligible for cash assistance.

Unstable housing arrangements are a serious factor that can influence health outcomes. Decent housing not only provides a shelter-function, but also a social-function by providing family stabilization. There is a need to address the critical gap of affordable housing and especially affordable rental units. As more people have lost their homeownership status, they have turned to renting, and this increased demand has increased the cost of rent. At the same time, the number of people receiving cash assistance in the County was cut in half from 2012 to 2013.

Job-Related

The participants identified difficulties in the local job market, where jobs do not pay sustainable wages and even the earnings from two jobs still is not enough to live on. They suggested a mobility-related solution to break the barrier and give them access to other job markets, ride-share vans to Columbus for instance.

In addition to those who are unemployed there are a few other considerations that should be taken into consideration, for example those who are underemployed and working at jobs that are below their qualifications; as well as those possibly working multiple jobs that reflect additional need for well-paying full-time employment.

Another difficulty has to do with the system itself; many who belong to a low socio-economic status and are willing to develop their qualifications in order to get a higher paying job, cannot actually afford education or training.

The County needs more, better sustainably paying jobs; and jobs that offer employment-based health insurance— which will have a direct impact on the health insurance coverage and hence on the access to health care.

Background for the Department of Job and Family Services Low Income Women Focus Group Session

A group of low-income young women was invited to discuss their barriers and access to health and human services. As might be expected from a group of young women, the barriers they discussed were broader than health issues. Other than the fact that they were young and healthy, another reason for not focusing on health care barriers is that most of the women in the group have a "health card."

Health-Related Gaps in Service

As just mentioned, most of these low-income, young women have a health card, so they can obtain health care services. One focus group member does not qualify for Medicaid because she has no children. In her case, she just does not seek health care services nor does she seek dental care services. In a survey of DJFS customers, the number one need is to address the lack of health insurance that leads to a lack of access to health services. Another major concern is not having a regular doctor or medical home.

Transportation-related Barriers

For all of the women in the focus group, transportation is a barrier which can reinforce and even deepen their poverty. Lack of transportation reinforces poverty by containing people within the circumference from their home that they can reach on foot or by "bumming rides." One participant said even though Springfield and Columbus offer more job opportunities, they are not accessible to single parents with children who don't have a solid source of transportation. "Even if some sort of bus service were available, what if my son gets sick? How would I get back immediately to get him from school?" Furthermore, most of the focus group participants cannot afford car insurance.

Another person was frustrated because she has a difficult time getting transportation to school. The DJFS office contracts with a bus service to pick her up to do a cleaning job at the DJFS office, for which this participant is grateful but it is "not leading anywhere," but the bus is not permitted to take her to school which could create a better future for her.

Another participant has a car but it needs repair and she cannot afford to repair it. So, when asked, "Where do you turn when you lose your transportation," this participant said, "I turn to my legs,"

meaning she would need to walk. The ramifications are that she now has to obtain groceries from a nearby convenience store, which uses up her foot stamps fast. The alternative is to take a taxi which costs $15 one way and for which she would need to use cash, which is even scarcer. Obtaining food from a convenience store for herself and her children creates a food dessert—a lack of fresh produce—and plenty of unhealthy food options.

Other Challenges

Some decisions one person had made in the past are making it difficult for her to obtain employment, even though she is going to school and working hard to improve her situation.

Rent prices have gone up in Madison County. However, most of these women have subsidized housing (Section 8), where they can afford a rent of $500-600 per month and they felt that the options in that range are plentiful. On the other hand, a survey of DJFS customers found that the number two perceived problem among the low income population is housing support—whether the house payment or rent payment. Among individual customers in the DJFS office, the biggest challenge is paying rent and utilities.

Need a better job resource center—it would be better if the DJFS office could work with employers to obtain internships for job seekers rather than investing in the computer resource room. “We can do that kind of job searching on any computer with internet access.” Given that the survey was conducted with DJFS customers, it may be expected that tied for the number one greatest challenge is obtaining a job or obtaining a job that is more than a “low skill job.”

Opportunities to improve Status

If the community could invest in public transit which would just go from one end of the City of London to the other, that would be beneficial.

Protect child care. One participant said that she has subsidized child care through a DJFS provider. The provider told this Mom that if the care taker were to get a Mother needing full-time child care, then the Mom with subsidized care would no longer receive the child care service.

The focus group participants are appreciative of the support that faith communities provide to people in need—help with food, clothing, personal hygiene products, and utility bills. They thought it would be a great help if the faith community could play a larger role in connecting people to available services.

Background for the Madison County Community Needs Assessment

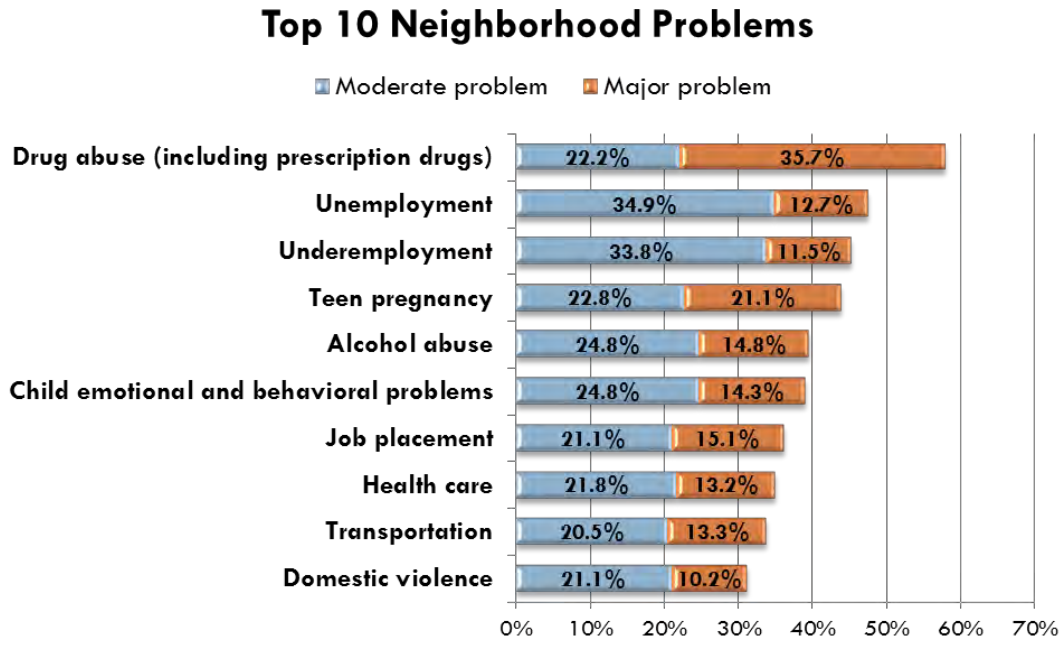
A survey was conducted with 402 adults in Madison County, using random listed telephone numbers, in July and August 2013 to engage the general population in this effort to define community needs. A copy of the full report is available upon request.

Top Needs Identified at the Neighborhood Level

In the survey interviews, residents were provided with a list of potential community-level problems and were asked if they thought each was a major, moderate, minor, or no problem in their neighborhood.

The figure below presents the top 10 neighborhood problems organized in order of prevalence. Recall that the key stakeholders had identified drug and alcohol abuse, housing, un- and underemployment, poverty, and mental illness as their assessment of the major problems facing the community.

Figure 10: Top 10 Neighborhood Problems



Top 10 Needs for Low Income Populations

To delve more deeply into the needs of the low income population, the survey results were organized into responses from households with an income below $50,000 and those with an income greater than that. A comparison of the perceptions of the top 10 problems facing people in their neighborhoods is presented below. Findings are similar; however, adult mental illness (rank 3) and child abuse and neglect (rank 7) were in the top 10 neighborhood problems for respondents with a household income below $50,000. Health care (rank 8) and alcohol abuse (rank 5) were on the list of top 10 neighborhood problems for all survey respondents.

Table 8: Top 10 Neighborhood Problems for Lower Income vs. all Respondents

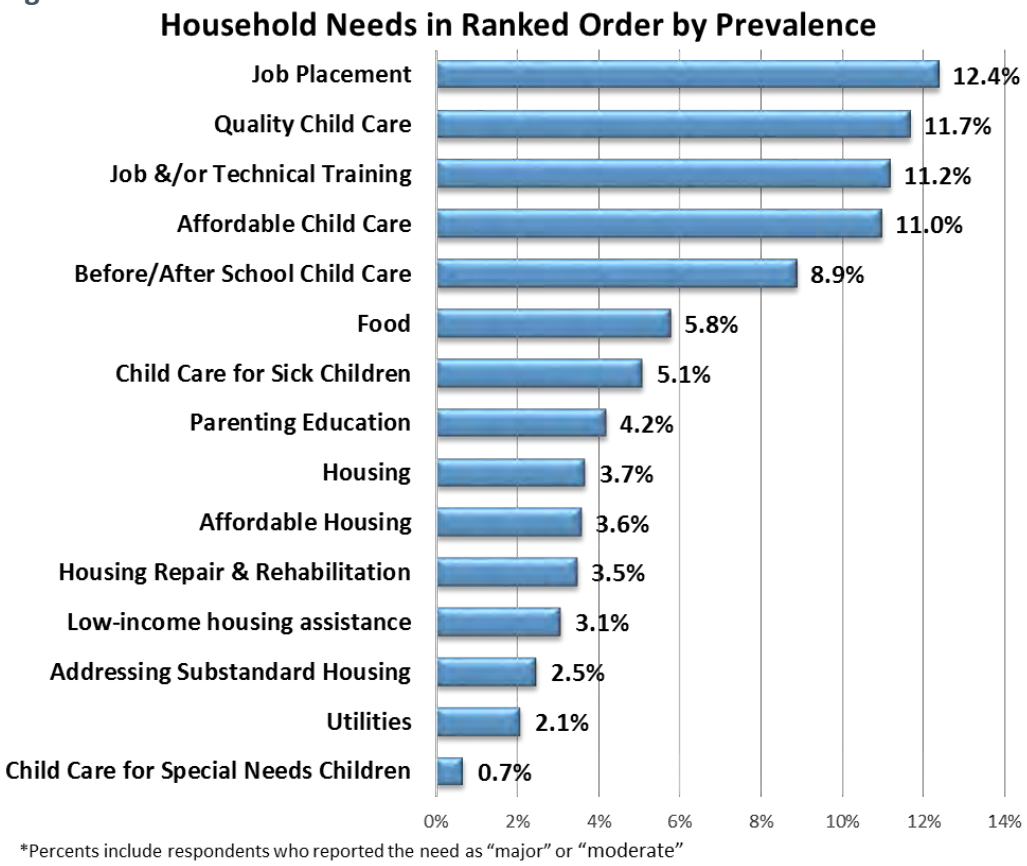
Top 10 Neighborhood Problems:
Respondents with household incomes below $50,000 vs. All Respondents

Rank	Respondents with a household income below $50,000	All Respondents
1	Drug abuse (including prescription drugs)	Drug abuse (including prescription drugs)
2	Job placement	Unemployment
3	Adult mental illness	Underemployment
4	Unemployment	Teen pregnancy
5	Underemployment	Alcohol Abuse
6	Transportation	Child emotional and behavioral problems
7	Child abuse and neglect	Job placement
8	Child emotional and behavioral problems	Health care
9	Teen pregnancy	Transportation
10	Domestic violence	Domestic violence

Top 10 Needs for Individual Households

Respondents were provided with a list of needs and were asked to report whether each one was a major, moderate, minor or no need for their household. The figure below shows the household needs organized in order of prevalence. The table presents rankings by lower income versus all respondents.

Figure 11: Household Needs in Ranked Order



*Percents include respondents who reported the need as "major" or "moderate"

Top 10 Needs for Low Income Households

Table 9: Top 10 Neighborhood Problems for Lower Income vs. all Respondents

Top Ten Household Needs:
Respondents with household incomes below $50,000 vs. All Respondents

Rank	Respondents with a household income below $50,000	All Respondents
1	Job Placement	Job Placement
2	Job &/or Technical Training	Quality Child Care
3	Food	Job &/or Technical Training
4	Housing	Affordable Child Care
5	Affordable Housing	Before/After School Child Care
6	Housing Repair & Rehabilitation	Food
7	Addressing Substandard Housing	Child Care for Sick Children
8	Low-income housing assistance	Parenting Education
9	Utilities	Housing
10	Parenting Education	Affordable Housing

Community Needs Assessment Primary and Secondary Data Results

County Health Rankings Data

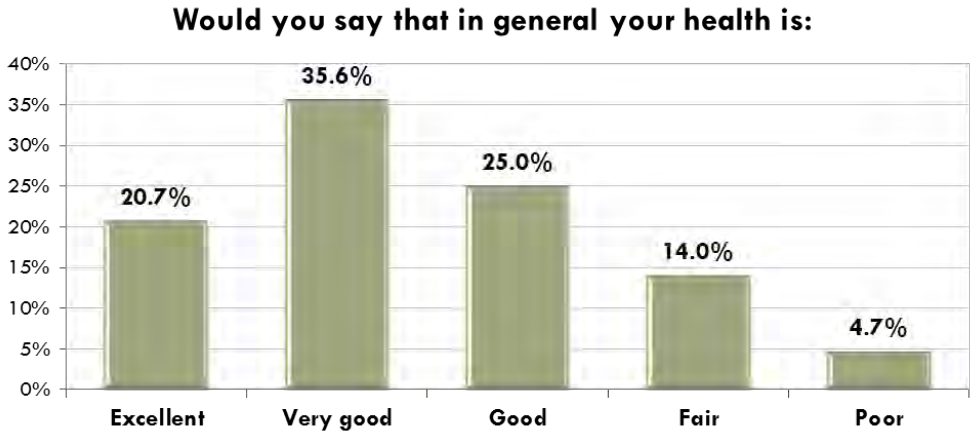
Table 10: County Health Rankings Data	Madison County	Ohio	National Benchmark	National Median	Rank (of 88)
Overall Health Outcomes					**44**
Maternal and Infant Health					
Teen Pregnancy (15-19)					
Low birth weight	6.9%	8.6%	6.0%		
Pregnant Mothers who smoked (ODH)	17.8%	26.3%			
Mothers without 1st trimester care (ODH)	23.4%	43.6%			
Behavioral & Other Risk Factors					**54**
Adult smoking (% of adults that smoke ≥100 cigarettes)	23%	22%	13%		
Adult overweight/obesity* (BMI: 25-29.9=overweight; BMI 30+=obese)	64.5%	65.7%		64.5%	
Physical inactivity* (No leisure time physical activity)	21.2%	27%	21%		
Excessive drinking (Consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or drinking more than 1 (women) or 2 (men) drinks per day on average)	15%	18%	7%		
Motor vehicle crash death rate (Crude mortality rate per 100,000 population due to traffic accidents involving a motor vehicle)	16	11	10		
Sexually transmitted infections (Chlamydia rate per 100,000 population)	173	422	92		
Limited access to healthy foods (% low-income population that do not live close to a grocery store)	4%	6%	1%		
% of restaurants that are fast-food establishments	60%	55%	27%		
Clinical Care					**67**
Uninsured (% population < age 65 without health insurance)	16%	14%	11%		
Primary care physicians (Primary care physicians include practicing physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. Population per physician)	2,172:1	1,348:1	1,067:1		
Dentists (Population per dentist)	4,868:1	1,928:1	1,516:1		
Mental health providers (Population to the number of mental health providers including child psychiatrists, psychiatrists, and psychologists active in patient care)	10,861:1	2,553:1			
Preventable hospital stays (Hospital discharge rate for ambulatory care-sensitive conditions per 1,000 Medicare enrollees)	93	79	47		

Table 10: County Health Rankings Data	Madison County	Ohio	National Benchmark	National Median	Rank (of 88)
Diabetic screening (Proxy measure: % diabetic Medicare patients whose blood sugar control was screened in the past year using a test of their glycated hemoglobin (HbA1c) levels.)	85%	83%	90%		
Mammography screening (Proxy measure: % female Medicare enrollees age 67-69 that had at least one mammogram over a two-year period.)	57%	63%	73%		
Disease					**38**
Poor or fair health* (Measure is based on a survey question)	18.7%	15%	10%		
Poor physical health days (Measure is based on a survey question)	4.2	3.6	2.6		
Poor mental health days (Measure is based on a survey question)	4.2	3.8	2.3		
High blood pressure* (Measure is based on a survey question asking, "Has a doctor ever told you that you have high blood pressure?")	39.8%	31.7%		28.7%	
Blood cholesterol* (Measure is based on a survey question asking, "Has a doctor ever told you that you have high blood cholesterol?")	29.9%	39.6%		37.5%	
Heart Attack (myocardial infarction)* (Measure is based on a survey question asking, "Has a doctor ever told you…?")	3.1%	4.3%		4.2%	
Coronary heart disease* (Measure is based on a survey question asking, "Has a doctor ever told you…?")	9.4%	4.3%		4.1%	
Diabetes* (Measure is based on a survey question asking, "Has a doctor ever told you…?")	11.8%	11%		8.7%	
Leading Causes of Death					**52**
Premature death (Years of potential life lost before age 75 (YPLL-75) presented as an age-adjusted rate per 100,000 population)	7,707	7,457	5,317		
**Note: Self-reports from the Madison County Community Needs Assessment Survey; all other Data from RWJF except where noted*					

Overall Health Status

Approximately eighty percent (81.3%) of survey respondents reported that their general health is excellent, very good or good; this percent is comparable to that of the State of Ohio (81.7%) and slightly lower than that of the United States (83.1%).

Figure 12: Health Status

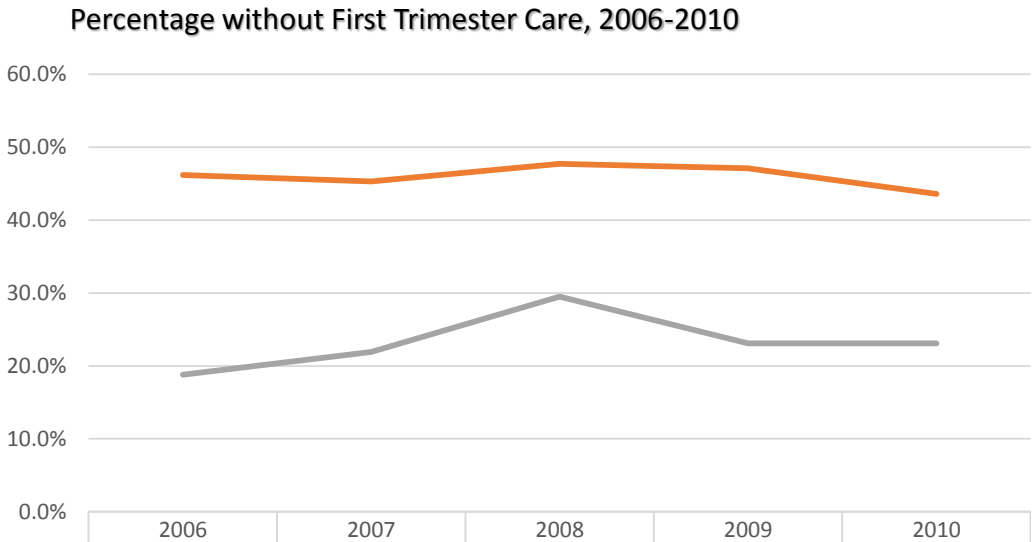


Maternal and Infant Health

First Trimester Prenatal Care

The percentage of women not obtaining first trimester prenatal care is generally increasing in Madison County; however, the County's percentages are about one-half of the State's percentages over time.

Figure 13: Percentage of Births without First Trimester Prenatal Care, 2006-2010



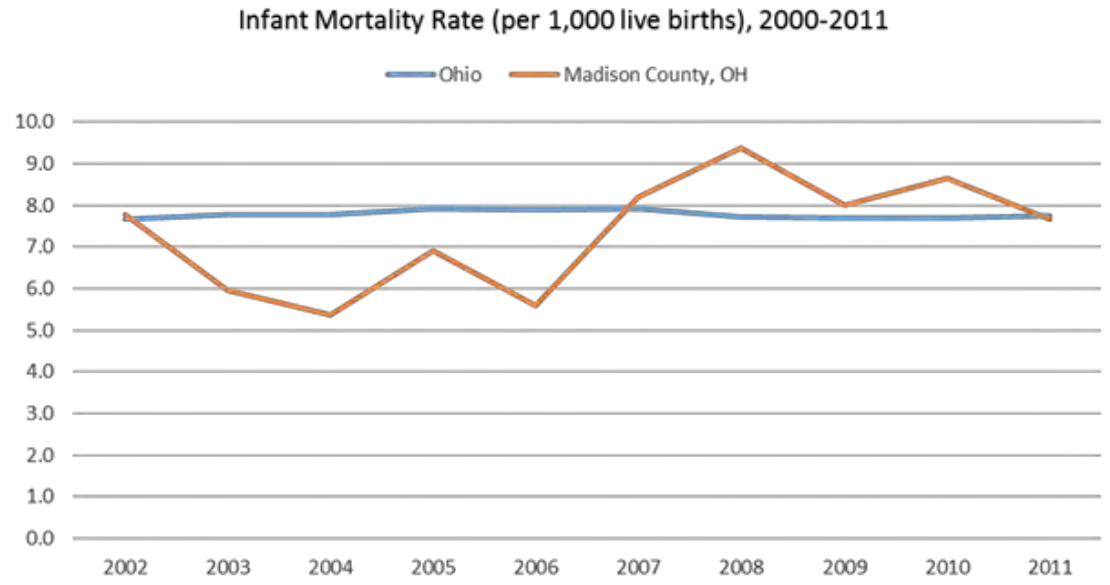
	2006	2007	2008	2009	2010
Ohio	46.2%	45.3%	47.7%	47.1%	43.6%
Madison County, OH	18.8%	21.9%	29.5%	23.1%	23.1%

Source: 2006-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.

Infant Mortality Rate

The chart below presents the general trend of infant mortality in the County and the State using a three-year rolling average. The number of infant deaths is below the threshold for reporting, therefore specific numbers have been removed from the chart, but the impression indicates a substantially lower rate in the County over the first half of the study period and a higher rate in more recent years.

Figure 14: Infant Mortality Rate

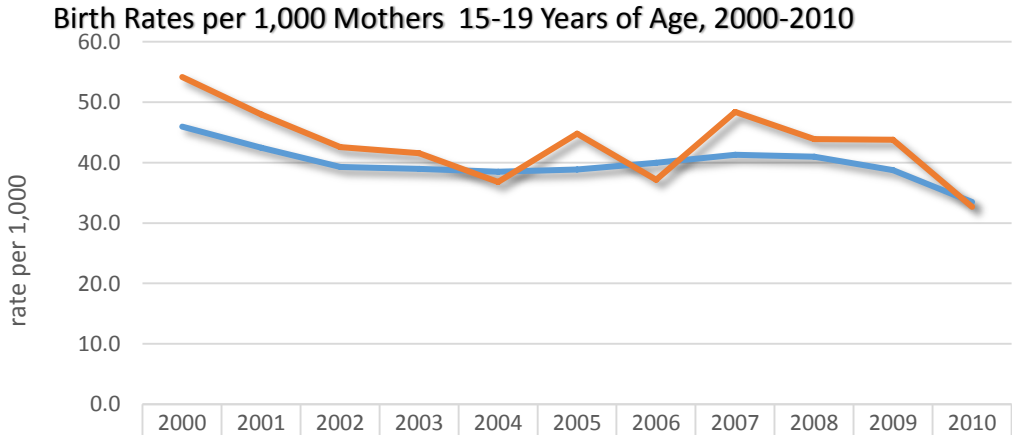


Source: 2000-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.
Note: Small numbers are unstable and should be interpreted with caution

Teen Birth Rates

The teen birth rate is declining in the County and in the State.

Figure 15: Teen Birth Rate



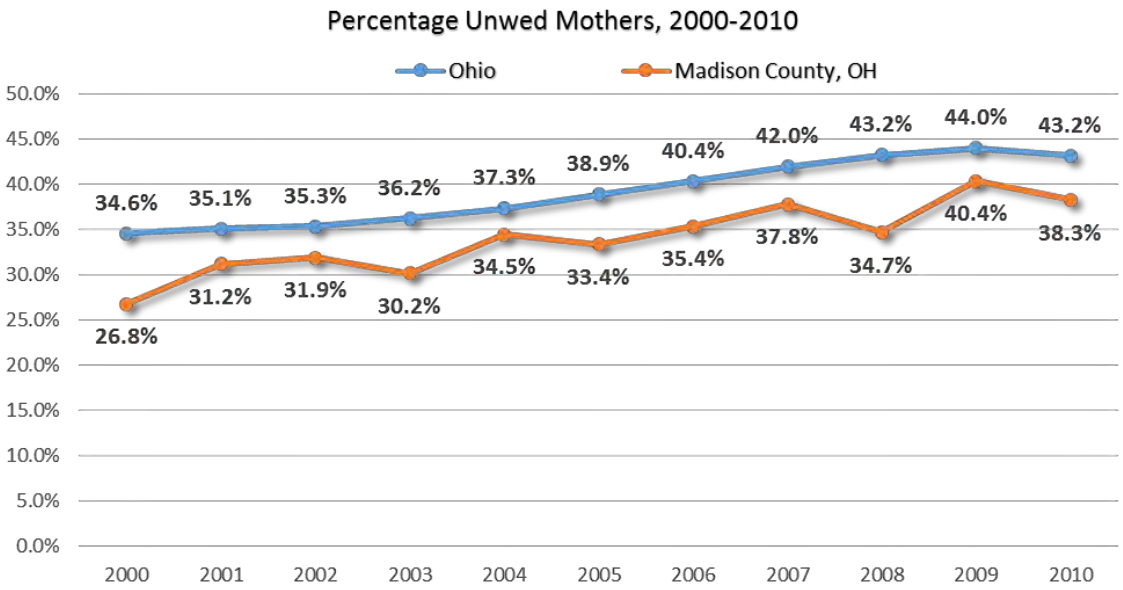
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ohio	46.0	42.5	39.3	39.0	38.5	38.9	40.0	41.3	41.0	38.8	33.5
Madison County, OH	54.2	48.0	42.6	41.6	36.8	44.8	37.2	48.4	43.9	43.8	32.7

Source: 2000-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.

Births to Unwed Mothers

The percentage of births to unwed mothers is generally increasing; however, the percentage in 2010 decreased in the State and the County.

Figure 16: Births to Unwed Mothers

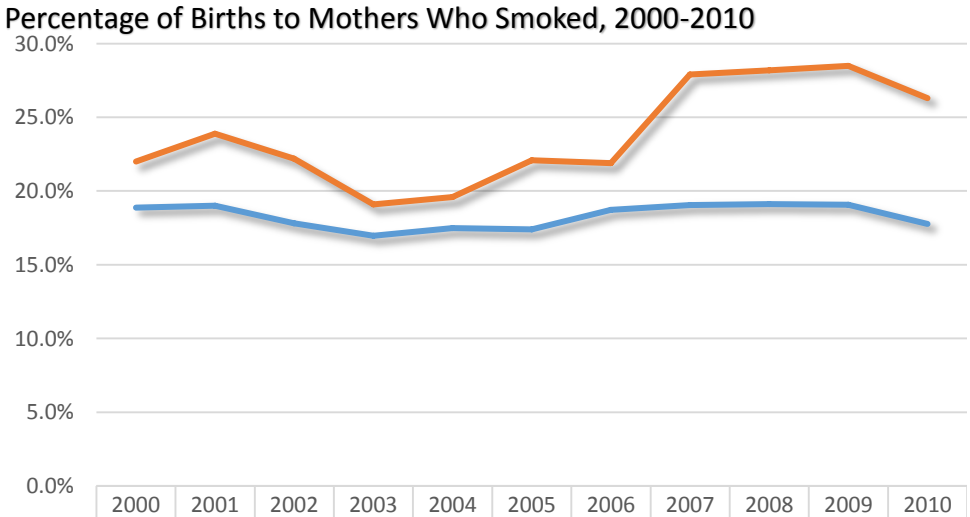


Source: 2000-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.

Births to Mothers Who Smoke

The percentage of Madison County mothers who smoked while pregnant is substantially higher than the State (26.3% versus 17.8% in 2010) and 2.5 times higher than the nation (10.4%). The Healthy People 2020 goal is to reduce the percentage to 1.4%.

Figure 17: Births to Mothers Who Smoke



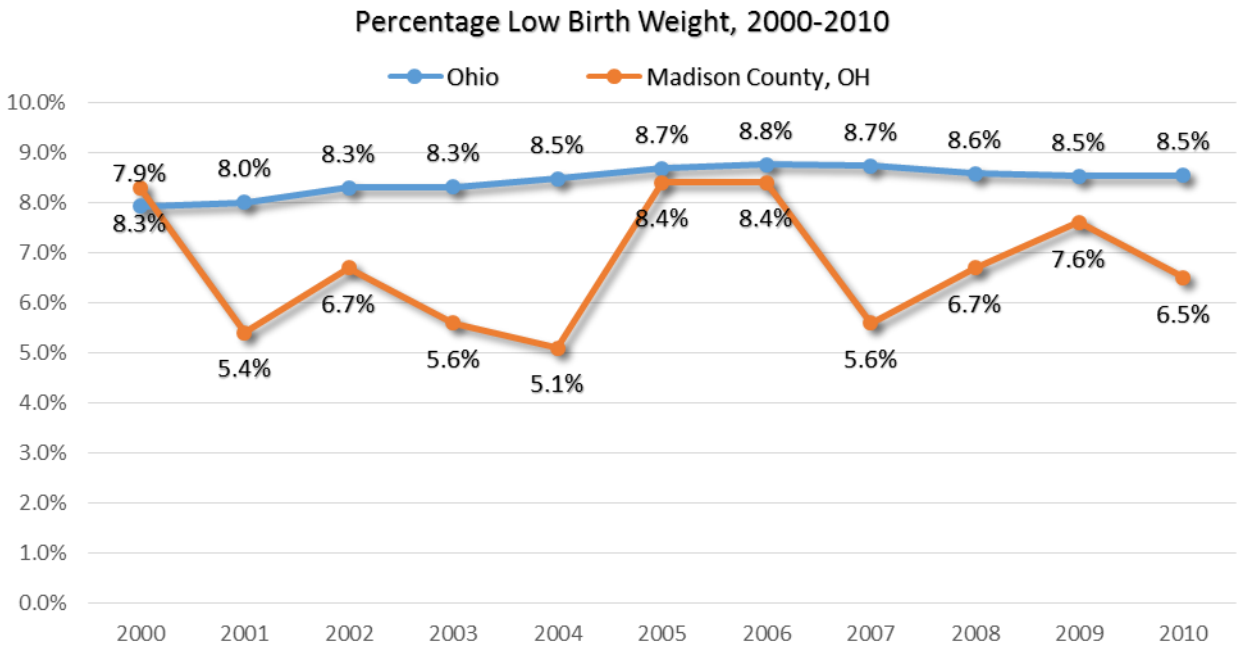
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ohio	18.9%	19.0%	17.8%	17.0%	17.5%	17.4%	18.7%	19.1%	19.1%	19.1%	17.8%
Madison County, OH	22.0%	23.9%	22.2%	19.1%	19.6%	22.1%	21.9%	27.9%	28.2%	28.5%	26.3%

Source: 2000-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.

Low Birth Weight Rate

The low birth weight rate in the State is 8.5%, while the national rate is 8.2% with a national target for reduction to 7.8%. Madison County's rate has been lower than the state rate for every year in the study period except 2000.

Figure 18: Percentage of Low Birth Weight Babies



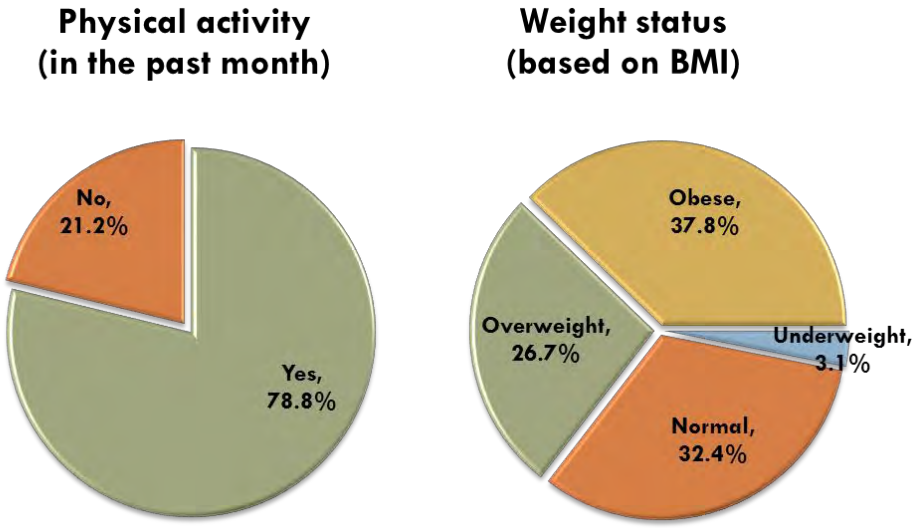
Source: 2000-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.

Behavioral Risk Factors

Physical Activity & Obesity

In regard to exercise, approximately 2 out of 10 Madison County adults (21.2%) participated in physical activity in the past month. As shown below, nearly two-thirds (64.5%) are overweight or obese while almost one-third are normal weight.[1] These percentages are comparable to the State and nation.

Figure 19: Physical Activity and Weight Status



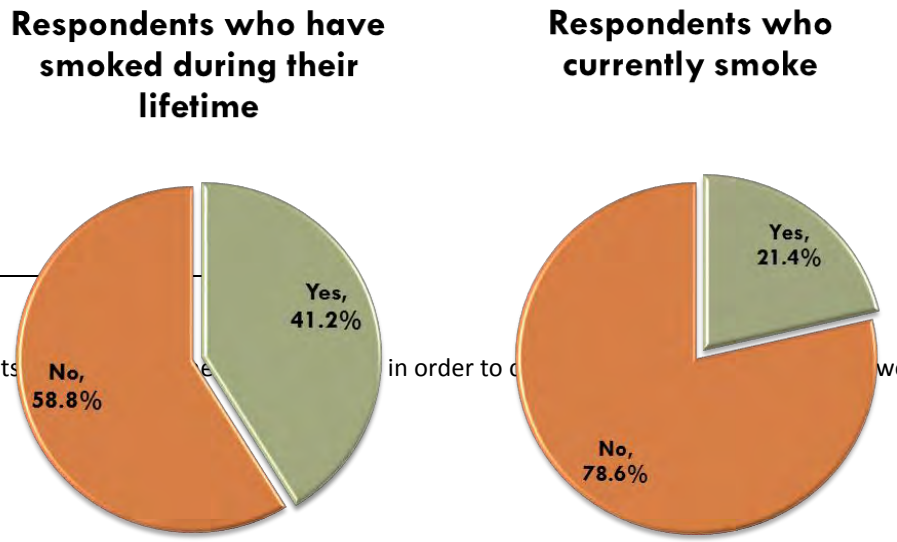
Childhood Obesity

Overweight and obesity prevalence among Ohio 3rd graders was measured in 2004-2005 and in 2009-2010. The rate in 2004-2005 was 35.2% and was 30.0% in 2009-2010. This change was not statistically significant.

Adult Smoking

Less than one-quarter (21.4%) of Madison County adults currently smoke. Approximately 7 out of 10 respondents (70.6%) who currently smoke, stopped smoking for 1 day or longer in the past 12 months because they were trying to quit smoking.

Figure 20: Adult Smoking



[1] Participants e in order to c weight status).

Excessive drinking

According to the community needs assessment survey, over half of Madison County adults (52.8%) drank on at least one day in the past 30 days. Roughly 14% reported having binged at least once in the past 30 days.[2] The percentages for the State and nation are 17% and 15%, respectively. The majority of adults in the County (97.4%) *strongly agreed* or *somewhat agreed* that women who are trying to get pregnant should avoid alcohol altogether.

Motor vehicle crash death rate

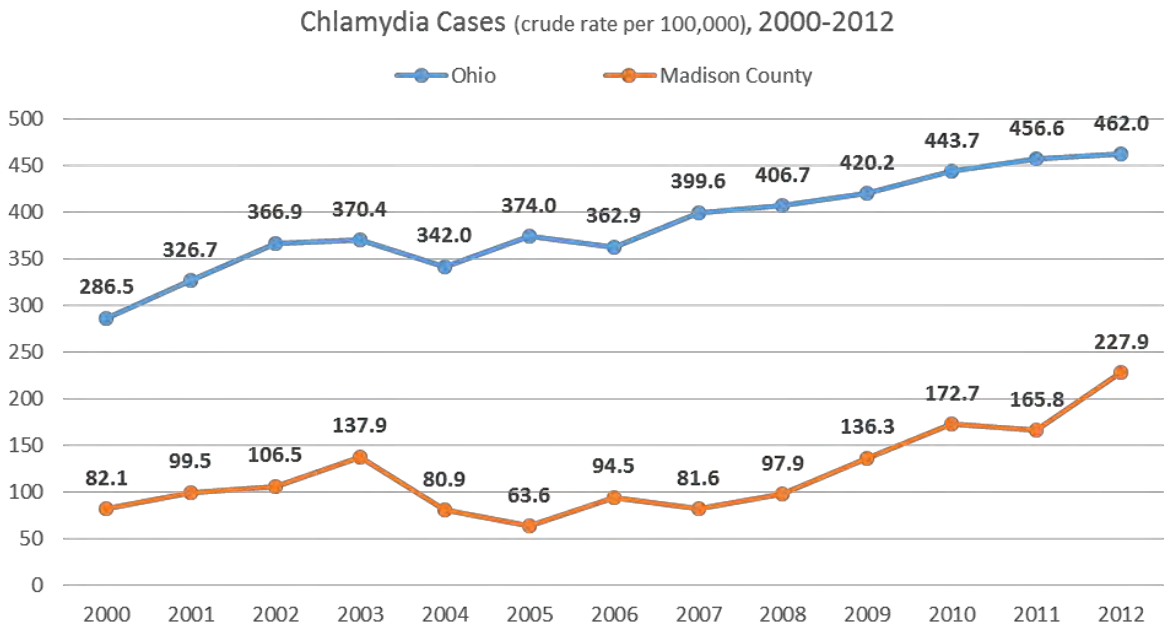
The National Center for Health Statistics, using the National Vital Statistics System, estimates the number of motor vehicle crash deaths per 100,000 in population. According to this source, the motor vehicle crash death rate is substantially higher in Madison County than for the State or nation—16 deaths per 100,000 in the County versus 11 for the State and 10 for the nation.

Sexually Transmitted Infections

The rates per 100,000 in population of chlamydia cases in Ohio and in the County are rapidly increasing. The next figure presents gonorrhea cases, which shows a leveling out in the State rate but an uptick in 2012 for the County.

[2] A binge is defined as consuming at least 5 drinks on one occasion for males or at least 4 drinks on one occasion for females.

Figure 21: Chlamydia Cases, 2000-2012

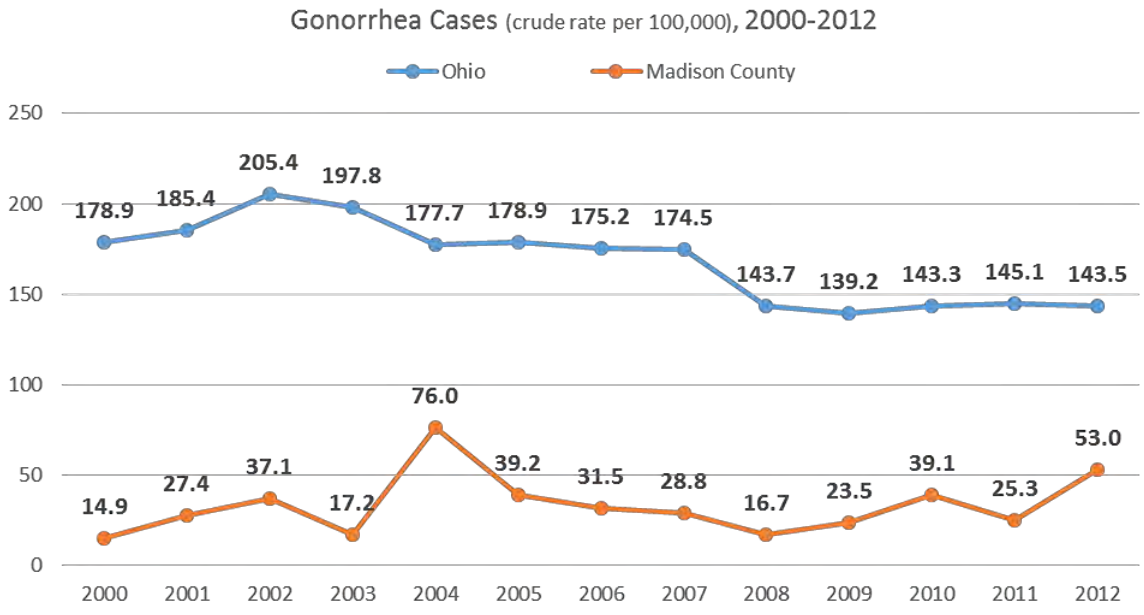


Source:

2006-2012, Ohio Department of Health, STD Surveillance Program. Data reported through 05/05/2013.

2000-2005, Ohio Department of Health, Information Warehouse, Vital Statistics Birth and Death Data - Last updated: March 1, 2007.

Figure 22: Gonorrhea Cases, 2000-2012



Source:

2006-2012, Ohio Department of Health, STD Surveillance Program. Data reported through 05/05/2013.

2000-2005, Ohio Department of Health, Information Warehouse, Vital Statistics Birth and Death Data - Last updated: March 1, 2007.

Mental Health and Wellness

Prevalence of Major Depressive Episodes

According to SAMHSA's National Survey of Drug Use and Health (NSDUH), 7% of adults 18 years of age and over had a major depressive episode in the year prior to the survey reported in 2006-2008 for "Board 12" which is Greene, Clark, and Madison Counties. (This region is the smallest geography available to identifying trends in Madison County.) For the survey reported in 2008-2010, the percentage was 7.6%. Recall from the survey of County adults that adult mental illness is considered by those with lower incomes to be the third ranked neighborhood problem.

Poor mental health days

A slightly higher percentage of adults in Madison County report that they had poor mental health days in the month prior to the Behavioral Risk Factor Surveillance Survey versus the percentage for Ohio and the U.S. (4.2%, 3.8%, and 2.3%, respectively).

Substance Abuse

According to the NSDUH, the prevalence of illicit drug use by individuals 12 years of age and over in the Greene, Clark, and Madison county-area was 8% in 2006-2008, decreasing to 6.8% in 2008-2010. Nonmedical use of pain relievers for the area's population 12 years and over was estimated to be 6% in both time periods. In terms of access to services, about 3% of the population 12 years of age and over reported needing but not receiving treatment for illicit drug use. Likewise, the percentage needing but not receiving treatment for alcohol use was 7% in both time periods.

According to the County's key stakeholders and County residents (whether of lower income or not) drug abuse is considered to be the number one neighborhood problem in the County.

Hospitalization and/or ER use due to Poor Mental Health or Substance Abuse

The International Classification of Diseases (also known by the abbreviation ICD) is the United Nations-sponsored World Health Organization's "standard diagnostic tool for epidemiology, health management and clinical purposes."[3] ICD-9 codes for mental disorders and substance abuse are presented for the Emergency Department and Hospital Inpatient discharge diagnoses in the following two figures for further exploration of trends in the service area.

The Emergency Department trends show an overall diagnosis discharge rate that has increased by 61.0% from 2010 to 2012 for adult neurotic disorders and declined by 14.7% for adult other primary onset mental disorders. The hospital inpatient rate shows decline in inpatient hospital usage for neurotic and primary onset mental disorders from 2010 through 2012.

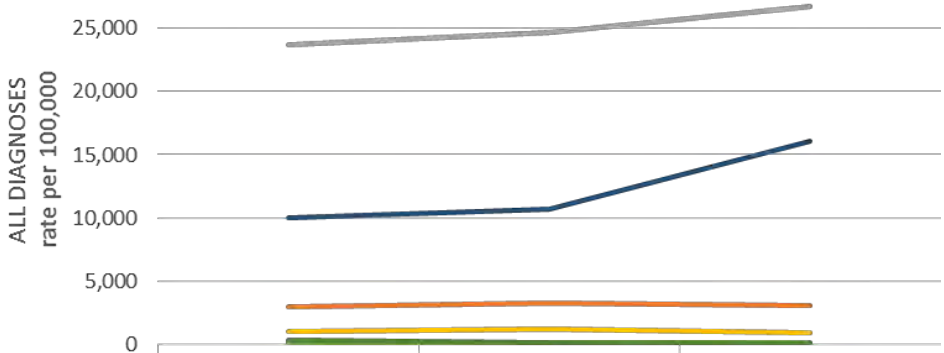
In regards to substance abuse, the Emergency Department trends show a diagnosis discharge rate that has decreased sharply for alcohol dependence syndrome from 2010 to 2012 (290.2 in 2010 – down nearly 84% in 2012), while drug dependence syndrome remained relatively stable. The hospital inpatient

[3] http://www.who.int/classifications/icd/en/

rate shows 25.7% increase in inpatient hospital usage due to alcohol dependence syndrome from 2010 through 2012, while hospitalization due to drug dependence doubled over that same period.

Figure 23: Emergency Department Mental Health Discharge Diagnoses for the Adult Population, 2010-2012

Emergency Department Mental Health Discharge Diagnoses for the Adult Population



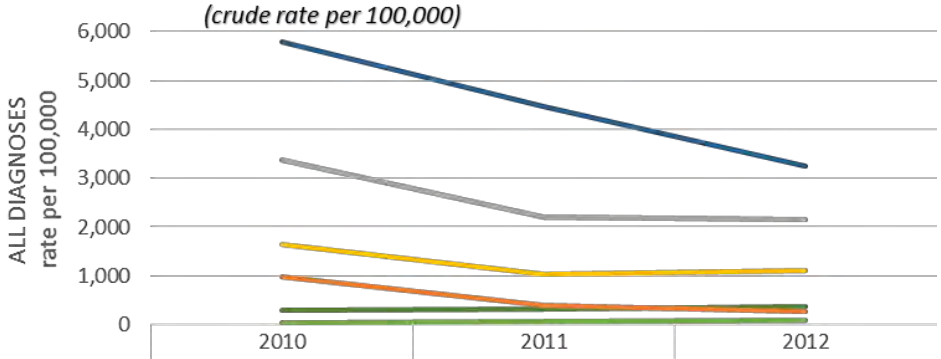
	2010	2011	2012
Nondependent abuse of drugs	23,661.9	24,694.7	26,764.7
Neurotic disorders, personality disorders, and other nonpsychotic mental disorders	10,009.2	10,713.1	16,115.0
Other psychoses	2,987.1	3,261.5	3,045.1
Organic psychotic conditions	1,015.7	1,165.3	898.9
Drug dependence	170.4	181.1	171.9
Alcohol dependence syndrome	290.2	178.7	46.5

Source: Madison County Hospital Discharge Diagnoses data, 2010-2012

Figure 24: Inpatient Mental Health Discharge Diagnoses for the Adult Population, 2010-2012

Inpatient Mental Health Discharge Diagnoses for the Adult Population, 2010-2012

(crude rate per 100,000)



	2010	2011	2012
Neurotic disorders, personality disorders, and other nonpsychotic mental disorders	5,794.6	4,471.0	3,244.8
Nondependent abuse of drugs	3,369.4	2,200.7	2,160.1
Organic psychotic conditions	1,632.9	1,033.0	1,098.6
Alcohol dependence syndrome	299.4	322.7	376.3
Other psychoses	983.4	390.0	264.8
Drug dependence	41.5	62.7	83.6

Source: Madison County Hospital Discharge Diagnoses data, 2010-2012

Access to Mental Health Care Providers

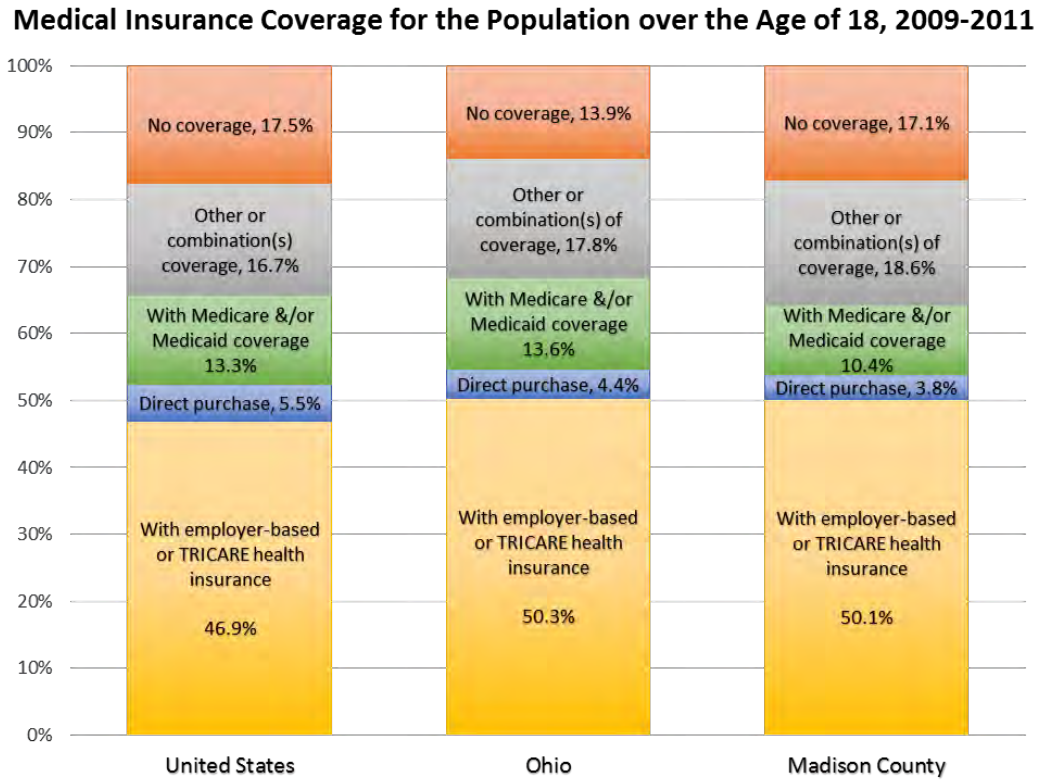
The Robert Wood Johnson Foundation reports that Madison County has the following mental health provider ratio of population to provider—10,861:1, while the State's ratio is 2,553:1. This measure represents the ratio of the county population to the number of mental health providers including child psychiatrists, psychiatrists, and psychologists active in patient care in a given county.

Clinical & Preventive Services

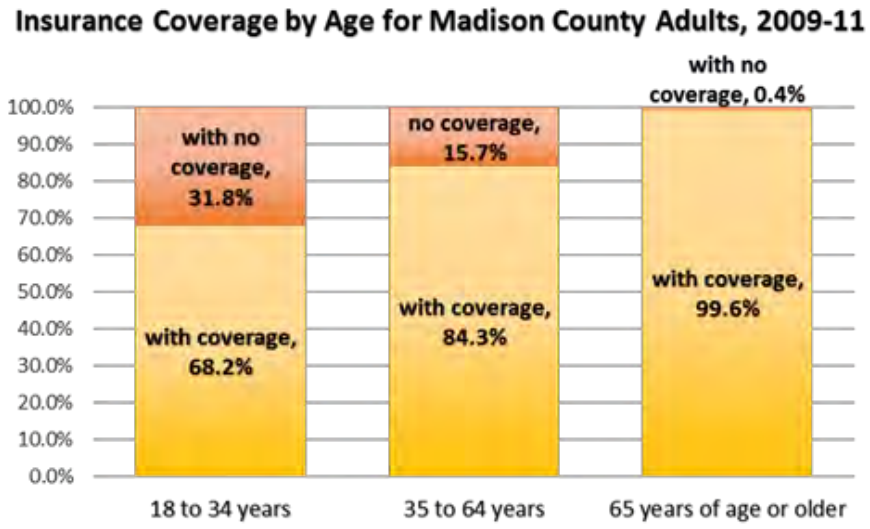
Health Care Access

The US Census Bureau's Small Area Health Insurance Estimates (SAHIE) program produces estimates of health insurance coverage for all states and counties. The percent of County residents under age 65 that do not have health insurance coverage is 16% versus 14% for the State and 11% as the national benchmark. The percent of County residents over the age of 18 without medical insurance coverage is presented below along with State and national comparisons, followed by more detail by age.

Figure 25: Medical Insurance Coverage



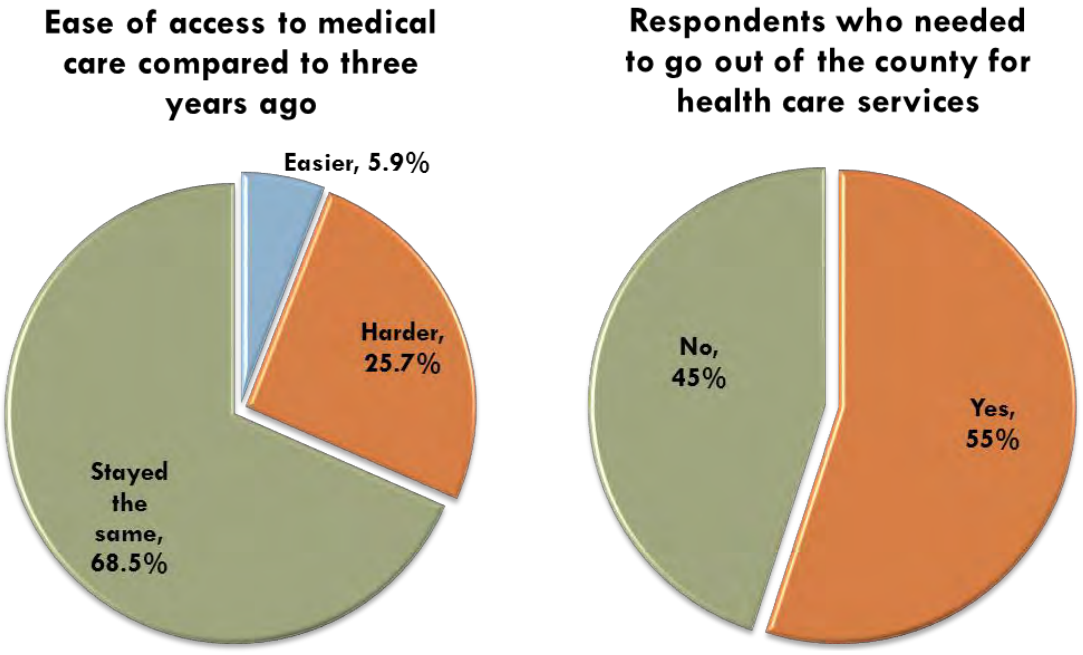
Source: Bureau of the Census American Community Survey, 2009-2011



Source: Bureau of the Census American Community Survey, 2009-2011

In the survey of County adults, respondents were asked several questions regarding their ability to access healthcare. One-quarter of respondents (25.7%) felt that getting the medical care they need has become harder; this percentage increases to 71.0% for respondents with a household income below $50,000. Furthermore, over half of respondents (55%) found it necessary to go out of the County for certain health care services.

Figure 26: Access to Medical Care



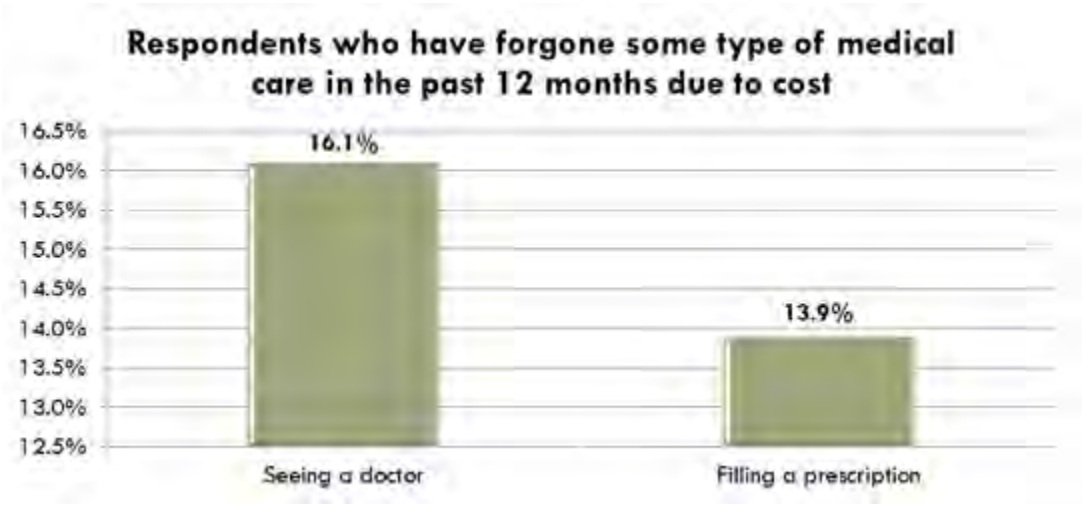
Physician and Prescription Access

Approximately 8 out of 10 respondents go to a doctor's office when they are sick or need advice about their health. But 7% of Madison County adults go to the ER as a regular source of health care.

The Health Resources and Services Administration prepares the Area Resource File, which is a collection of data from more than 50 sources, including: American Medical Association, American Hospital Association, US Census Bureau, Centers for Medicare & Medicaid Services, Bureau of Labor Statistics, and the National Center for Health Statistics. Those sources are used to estimate the ratio of the County population to primary care physicians. Primary care physicians include practicing physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. The ratio for Madison County is 2,172:1 versus 1,348:1 for Ohio, and is two times the national benchmark of 1,067:1.

The survey also asked respondents if they were unable to see a doctor or fill a prescription due to cost in the past 12 months. Figures below show the percent of respondents who had to forgo this medical care.

Figure 27: Percent of Residents Foregoing Medical Care



Clinical Care Access

The table below lists from most to least prevalent, the types of medical care that respondents to the Community Needs Survey expressed as needed, but were not able to get during the past 12 months.

Table 11: Lack of Access to Specific types of Medical Care

Have you needed but could not get any of the following types of medical care during the past 12 months?

Rank	Types of medical care	Percent of Respondents
1	Appointment or referral to a specialist (surgeon, cardiologist, oncologist, etc.)	11.7%
2	Other medical treatments such as tests, procedures, or therapies (lab work, x-rays, etc.)	10.7%
3	Dental care	10.4%
4	Medications/prescriptions (patches, pills, shots, vaccinations)	10.2%
5	A doctor visit, checkup, or exam	5.4%
6	Women's health services (Pap test, mammography)[4]	5.2%
7	Eyeglasses or vision care (ophthalmologist, optometrist)	4.8%
8	Medical supplies or equipment	3.5%
9	Mental health care (counseling)	2.6%

The Dartmouth Atlas examines patterns of health care delivery and practice across the U.S. based on data from the Centers for Medicare and Medicaid Services. According to these sources, females in Madison County are well below the State and the national benchmark in obtaining mammograms. Regarding diabetic screening, a higher percentage of Madison County adults obtain this screening when compared to the State overall, but still fall short of the national benchmark.

Table 12: Percent of Resident obtaining Screenings

Screening	County	State	US Benchmark
Diabetic screening	85%	83%	90%
Mammography screening	57%	63%	73%

Preventable hospital stays

The rate of preventable hospital stays is often used to assess the effectiveness and accessibility of primary healthcare. The Dartmouth Atlas also provides the number of preventable hospital stays, as measured by the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 Medicare enrollees. In 2010, the rate per 1,000 Medicare enrollees for Madison County was 93 versus 79 for the State, with a national benchmark of 47.

[4] This option was asked of women only.

Disease

Poor Health

The Centers for Disease Control and Prevention has developed a survey called the Behavioral Risk Factor Surveillance System, on which several Madison County adult survey questions were based. Comparison results are presented in the table below and indicate a greater prevalence of poor health in the County as compared to the State and as compared to national goals.

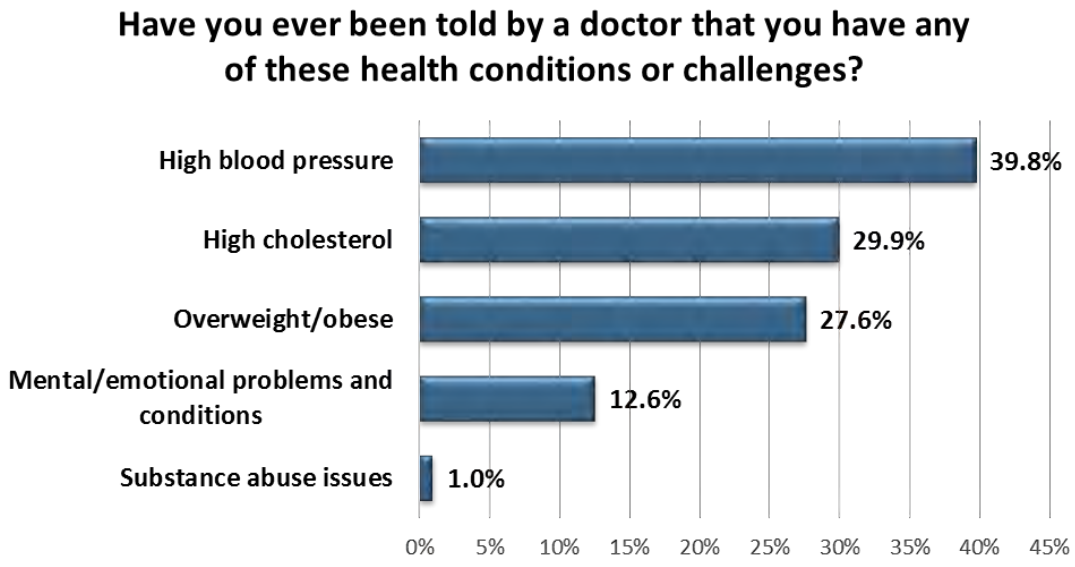
Table 13: Poor Health Status

Condition	County	State	US Benchmark
Poor or fair health	18.7%	15%	10%
Poor physical health days	4.2	3.6	2.6

Self-reported Disease Status

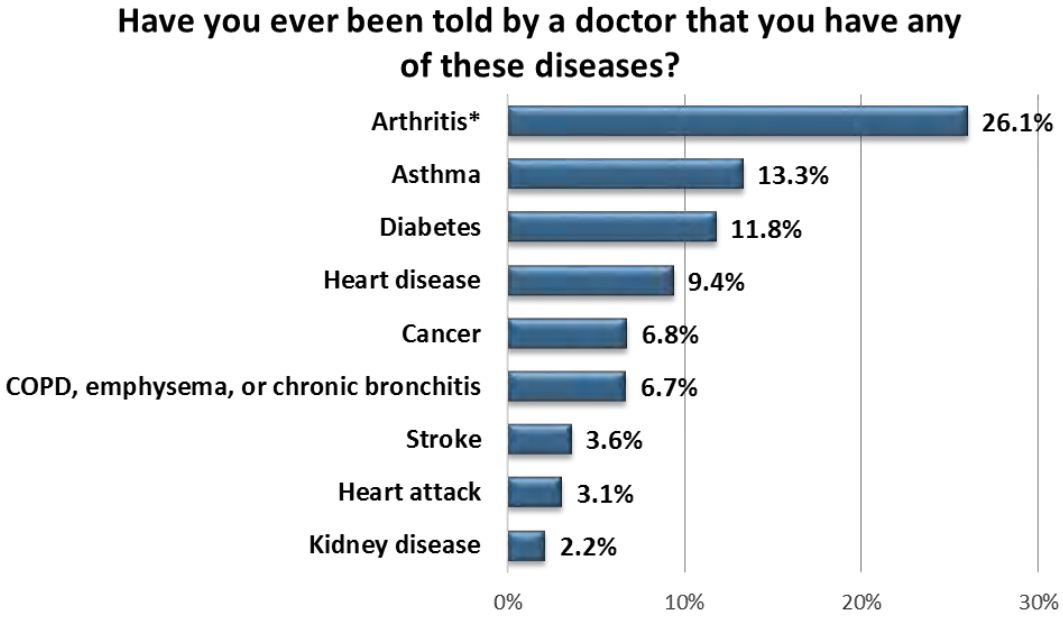
In the survey of County adults, respondents were asked about their health status. The figure below present the percent of adults having one or more of the listed health challenges/conditions.

Figure 28: Prevalence of Health Conditions or Challenges



Respondents were asked to report if they had been told by a doctor that they had any of the diseases listed in the figure below.

Figure 29: Prevalence of (self-reported) Diseases

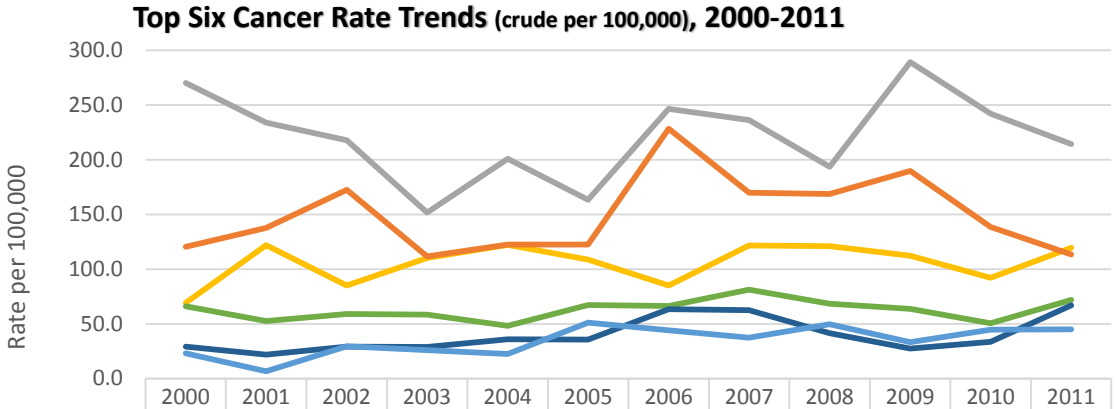


* Includes rheumatoid arthritis, gout, lupus, or fibromyalgia.

Cancer Rates

The most common form of cancer among the Madison County population is breast cancer (that rate is calculated for the female population only). A few cancer rates increased from 2010 to 2011—lung and bronchus, colon and rectum, and uterine cancers. For a comparison of cancer rates to the State, refer to Appendix B.

Figure 30: Cancer Rates, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Breast	270.2	234.0	217.7	151.6	200.8	163.5	246.5	236.2	193.6	289.1	242.0	214.4
Lung & Bronchus	69.3	121.8	85.0	110.2	122.2	108.8	85.1	121.6	120.9	112.2	92.1	119.6
Prostate	120.4	137.7	172.5	111.7	122.5	122.3	228.2	169.7	168.7	189.7	138.6	113.4
Colon & Rectum	66.0	52.7	58.8	58.3	48.2	67.2	66.2	81.1	68.2	63.7	50.5	71.8
Uterus	29.2	21.9	29.0	28.9	35.9	35.5	63.4	62.5	41.5	27.5	33.6	67.0
Melanoma of Skin	23.1	6.6	29.4	25.9	22.5	51.2	44.1	37.4	49.6	33.4	44.6	44.9

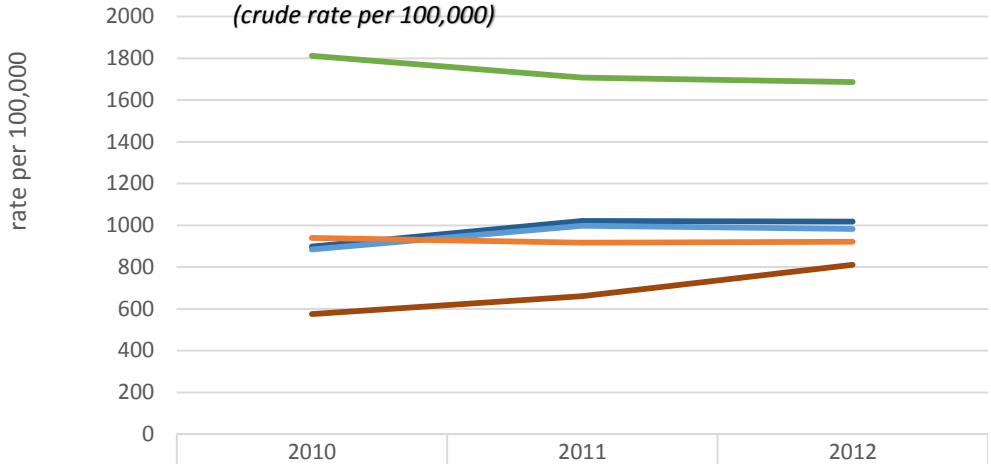
Source: Ohio Department of Health Ohio Cancer Incidence Surveillance System

Adult Hospital and ER Discharge Diagnoses

The most prevalent emergency department primary discharge diagnosis among adults is sprains and strains of joints and adjacent muscles, which has a rate per 100,000 population that is nearly 66% higher than the second most prevalent diagnosis. Diagnoses for acute respiratory infections, contusions with intact skin surface and open wounds have remained relatively stable since 2010, while COPD and allied conditions has been increasing steadily.

Figure 31: Primary Adult Emergency Department Discharge Diagnoses

Top Five Emergency Department Primary Discharge Diagnoses for the Adult Population, 2010-2012



	2010	2011	2012
Sprains & strains of joints and adj muscles	1812.5	1708.5	1686.3
Acute respiratory infections	898.2	1021.4	1017.4
Contusion with intact skin surface	884.4	998.2	982.5
Open wound	939.7	916.9	922.1
COPD and allied conditions	575.8	661.6	810.6

Source: Madison County Hospital Discharge Diagnoses data, 2010-2012

The following lists show the top 10 conditions associated with each emergency department primary discharge diagnosis listed in the figure above.

Sprains and strains of joints and adjacent muscles

1. Arthropathies and related disorders
2. Other accidents
3. Dorsopathies
4. Nondependent abuse of drugs
5. Hypertensive disease
6. Accidental falls
7. Neurotic disorders, personality disorders, and other nonpsychotic mental disorders
8. Symptoms, Signs, and Ill-Defined Conditions
9. Chronic obstructive pulmonary disease and allied conditions
10. Other metabolic disorders and immunity disorders

Acute respiratory infections

1. Symptoms, Signs, and Ill-Defined Conditions
2. Nondependent abuse of drugs
3. Chronic obstructive pulmonary disease and allied conditions
4. Hypertensive disease
5. Neurotic disorders, personality disorders, and other nonpsychotic mental disorders
6. Other metabolic disorders and immunity disorders
7. Diseases of other endocrine glands
8. Diseases of esophagus, stomach, and duodenum
9. Acute respiratory infections
10. Ischemic heart disease & Other forms of heart disease (tie)

Contusion with intact skin surface

1. Accidental falls
2. Arthropathies and related disorders
3. Nondependent abuse of drugs
4. Other accidents
5. Symptoms, Signs, and Ill-Defined Conditions
6. Hypertensive disease
7. Rheumatism, excluding the back
8. Neurotic disorders, personality disorders, and other nonpsychotic mental disorders
9. Dorsopathies
10. Contusion with intact skin surface

Open wound

1. Other accidents
2. Hypertensive disease
3. Nondependent abuse of drugs
4. Neurotic disorders, personality disorders, and other nonpsychotic mental disorders
5. Accidental falls
6. Diseases of other endocrine glands
7. Other metabolic disorders and immunity disorders
8. Homicide and injury purposely inflicted by other persons
9. Rheumatism, excluding the back
10. Accidents due to natural and environmental factors & Vehicle accidents, NEC (tie)

Chronic obstructive pulmonary disease and allied conditions

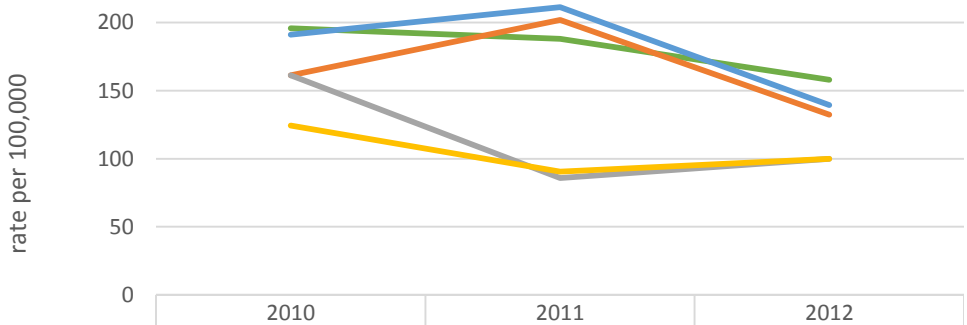
1. Symptoms, Signs, and Ill-Defined Conditions
2. Nondependent abuse of drugs
3. Hypertensive disease
4. Neurotic disorders, personality disorders, and other nonpsychotic mental disorders
5. Chronic obstructive pulmonary disease and allied conditions
6. Other metabolic disorders and immunity disorders
7. Diseases of esophagus, stomach, and duodenum
8. Diseases of other endocrine glands
9. Other forms of heart disease
10. Ischemic heart disease

Though the rate of pneumonia and influenza has been decreasing since 2010, it is the top inpatient primary discharge diagnosis for Madison County's adult population in 2012. The second and third top diagnoses (other forms of heart disease; COPD and allied conditions) have fluctuated since 2010, but have consistently remained in the top three. Other diseases of the digestive system and of the intestines and peritoneum decreased considerably in 2011, but show a slight uptick in 2012.

Figure 32: Primary Adult Inpatient Discharge Diagnoses

Top Five Inpatient Primary Discharge Diagnoses for the Adult Population, 2010-2012

(crude rate per 100,000)



	2010	2011	2012
Pneumonia and influenza	195.8	188.0	157.9
Other forms of heart disease	191.2	211.2	139.4
COPD and allied conditions	161.2	202.0	132.4
Other diseases of digestive system	161.2	85.9	99.9
Other diseases of intestines and peritoneum	124.4	90.5	99.9

Source: Madison County Hospital Discharge Diagnoses data, 2010-2012

The following lists show the top 10 conditions associated with each inpatient primary discharge diagnosis listed in the figure above.

Pneumonia and influenza

1. Symptoms, Signs, and Ill-Defined Conditions
2. Other metabolic disorders and immunity disorders
3. Other forms of heart disease
4. Persons with potential health hazards related to personal and family history
5. Hypertensive disease
6. Chronic obstructive pulmonary disease and allied conditions
7. Arthropathies and related disorders
8. Ischemic heart disease
9. Other diseases of respiratory system
10. Persons with a condition influencing their health status

Other forms of heart disease

1. Other forms of heart disease
2. Symptoms, Signs, and Ill-Defined Conditions
3. Hypertensive disease
4. Other metabolic disorders and immunity disorders
5. Diseases of the Genitourinary System
6. Ischemic heart disease
7. Persons with a condition influencing their health status
8. Persons with potential health hazards related to personal and family history
9. Arthropathies and related disorders
10. Diseases of other endocrine glands

Chronic obstructive pulmonary disease and allied conditions

1. Symptoms, Signs, and Ill-Defined Conditions
2. Persons with potential health hazards related to personal and family history
3. Hypertensive disease
4. Other metabolic disorders and immunity disorders
5. Persons with a condition influencing their health status
6. Neurotic disorders, personality disorders, and other nonpsychotic mental disorders
7. Other forms of heart disease
8. Arthropathies and related disorders
9. Ischemic heart disease
10. Nondependent abuse of drugs

Other diseases of digestive system

1. Other metabolic disorders and immunity disorders
2. Symptoms, Signs, and Ill-Defined Conditions
3. Other diseases of digestive system
4. Hypertensive disease
5. Arthropathies and related disorders
6. Diseases of esophagus, stomach, and duodenum
7. Persons with potential health hazards related to personal and family history
8. Diseases of other endocrine glands
9. Other forms of heart disease
10. Other diseases of intestines and peritoneum

Other diseases of intestines and peritoneum

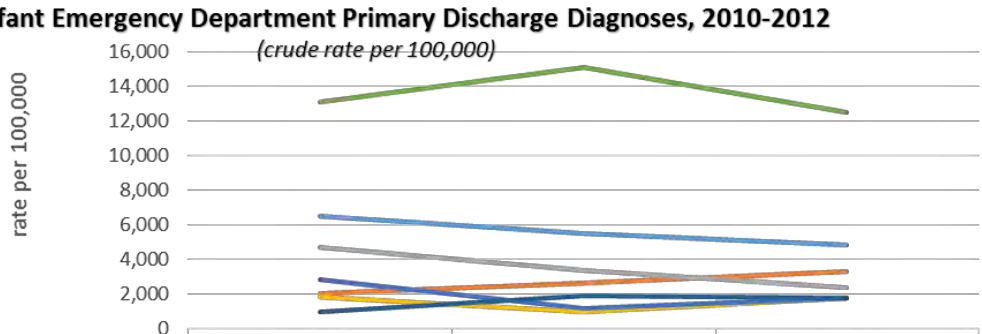
1. Symptoms, Signs, and Ill-Defined Conditions
2. Hypertensive disease
3. Other metabolic disorders and immunity disorders
4. Persons with potential health hazards related to personal and family history
5. Diseases of esophagus, stomach, and duodenum
6. Other diseases of intestines and peritoneum
7. Arthropathies and related disorders
8. Diseases of the blood and blood-forming organs
9. Ischemic heart disease
10. Other forms of heart disease

Child & Youth Hospital and ER Discharge Diagnoses

Infant ED Diagnoses Trends

The Infant ED discharge diagnoses, per 100,000, indicate that acute respiratory infections are the most common diagnoses. Diagnoses for diseases of the ear are trending down, while eye disorders are trending up.

Figure 33: Primary Infant Emergency Department Discharge Diagnoses



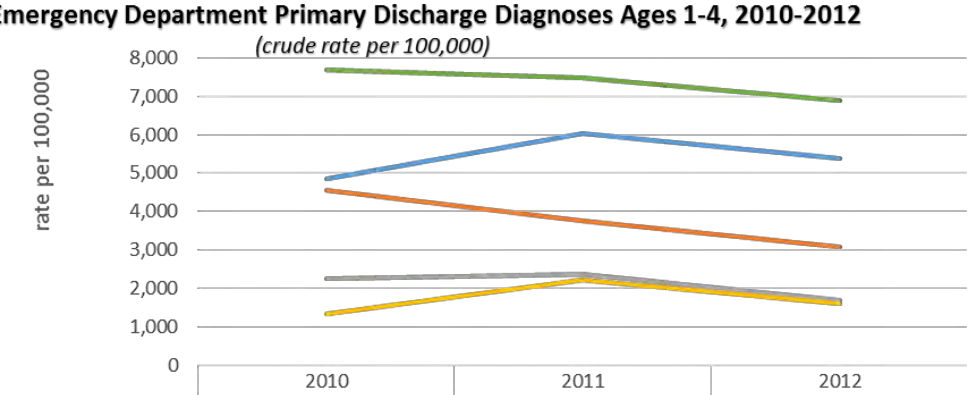
	2010	2011	2012
Acute respiratory infections	13,087.9	15,107.9	12,527.5
Diseases of the ear/mastoid process	6,544.0	5,515.6	4,835.2
Disorders of the eye & adnexa	2,045.0	2,637.9	3,296.7
Oth disease due to viruses & Chlamydiae	4,703.5	3,357.3	2,417.6
Contusion with intact skin surface	1,840.5	959.2	1,758.2
Mycoses	2,863.0	1,199.0	1,758.2
Other inflam cond of skin & subcu tissue	1,022.5	1,918.5	1,758.2

Source: Madison County Hospital Discharge Diagnoses data, 2010-2012

Young Child ED Diagnoses Trends, Ages 1-4

Acute respiratory infections are again the most common ER diagnoses for young children, ages 1 to 4. There were a fewer number of diagnoses in 2012 for all ailments presented in the figure below.

Figure 34: Top Five Emergency Department Primary Discharge Diagnoses Ages 1-4, 2010-2012



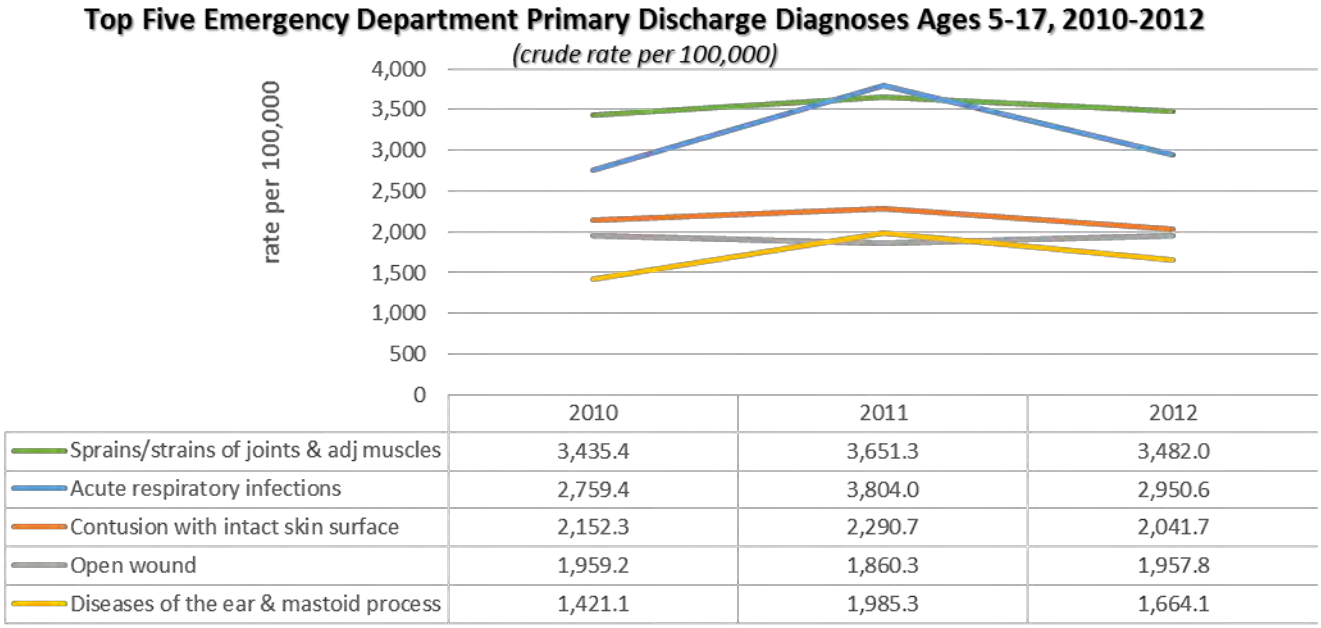
	2010	2011	2012
Acute respiratory infections	7,688.5	7,478.9	6,875.3
Diseases of the ear & mastoid process	4,848.2	6,042.6	5,387.4
Open wound	4,554.4	3,764.2	3,078.5
Oth dis due to viruses & Chlamydiae	2,252.7	2,377.4	1,693.2
Disorders of the eye and adnexa	1,322.2	2,228.8	1,590.6

Source: Madison County Hospital Discharge Diagnoses data, 2010-2012

Youth ED Diagnoses Trends, Ages 5-17

The most prevalent emergency department primary discharge diagnosis for the population ages 5-17 is sprains and strains of joints and adjacent muscles, which has a rate of 3,482 per 100,000 population. Diagnoses in 2012 for acute respiratory infections, contusions with intact skin surface and open wounds, and diseases of the ear and mastoid process have remained relatively stable compared to 2010.

Figure 35: Top Five Emergency Department Primary Discharge Diagnoses Ages 5-17



	2010	2011	2012
Sprains/strains of joints & adj muscles	3,435.4	3,651.3	3,482.0
Acute respiratory infections	2,759.4	3,804.0	2,950.6
Contusion with intact skin surface	2,152.3	2,290.7	2,041.7
Open wound	1,959.2	1,860.3	1,957.8
Diseases of the ear & mastoid process	1,421.1	1,985.3	1,664.1

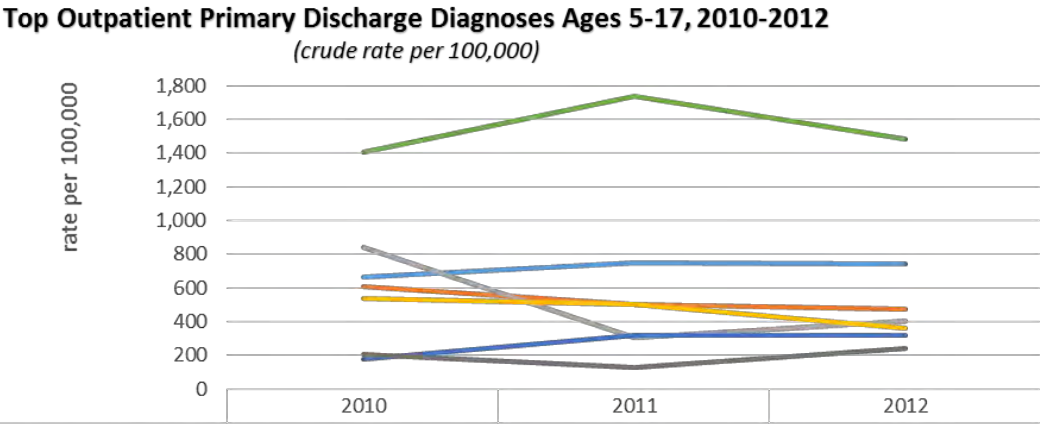
Source: Madison County Hospital Discharge Diagnoses data, 2010-2012

Infant, Child, and Youth Inpatient and Outpatient Diagnoses Trends

The primary inpatient diagnosis reported for infants relates to other conditions originating in the perinatal period, which declined by 8.4% from 2011 to 2012 (719.4 and 659.3 per 100,000, respectively). Pneumonia and influenza was the primary diagnosis (51.3 per 100,000) reported for children ages 1-4. Finally, the top three inpatient diagnoses reported for the population ages 5-17 years of age resulted from complications of pregnancy, childbirth, and the puerperium (steadily increasing from 209.3 per 100,000 females ages 14-17 in 2010 to 762.6 in 2012); appendicitis (steadily increasing from 13.8 per 100,000 in 2010 to 55.9 in 2012); and diseases of the blood and blood-forming organs (14.0 per 100,000 in 2012).

Similarly, the primary outpatient diagnosis reported for infants also relates to other conditions originating in the perinatal period, which declined by 60.7% from 2010 to 2012 (10,634.0 and 4,175.8 per 100,000, respectively). Acute respiratory infection was the primary outpatient diagnosis reported for children ages 1-4, which steadily declined 54.1% from 2010 through 2012 (783.5 per 100,000 in 2010 to 359.2 in 2012).

Figure 36: Top Outpatient Primary Discharge Diagnoses Ages 5-17, 2010-2012



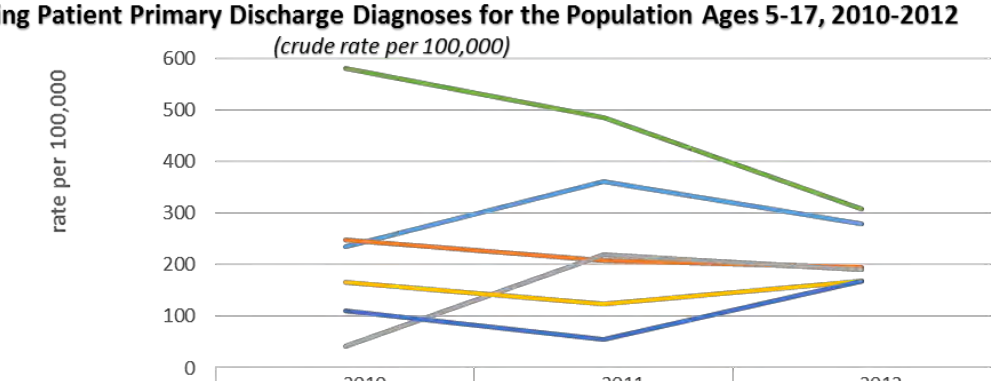
	2010	2011	2012
Arthropathies and related disorders	1,407.3	1,735.4	1,482.3
Rheumatism, excluding the back	662.3	749.7	741.2
Dorsopathies	607.1	499.8	475.5
Diseases of the Genitourinary System	841.6	305.4	405.5
Acute respiratory infections	538.1	499.8	363.6
Pneumonia and influenza	179.4	319.3	321.6
Neurotic, personality, & oth nonpsychotic mental disorders	207.0	124.9	237.7

Source: Madison County Hospital Discharge Diagnoses data, 2010-2012

Recurring Patient Discharge Diagnoses

The only specific results to be discussed in this section are for youth ages 5-17. With the exception of rheumatism and other metabolic and immunity disorders, all diagnoses presented in the figure below have declined in 2012.

Figure 37: Top Six Recurring Patient Primary Discharge Diagnoses for the Population Ages 5-17, 2010-2012



	2010	2011	2012
Arthropathies & related disorders	579.5	485.9	307.6
Sprains/strains of joints & adj muscles	234.5	361.0	279.7
Dorsopathies	248.3	208.2	195.8
Complications of Pregnancy	42.4	219.2	190.7
Oth metabolic & immunity disorders	165.6	124.9	167.8
Rheumatism, excluding the back	110.4	55.5	167.8

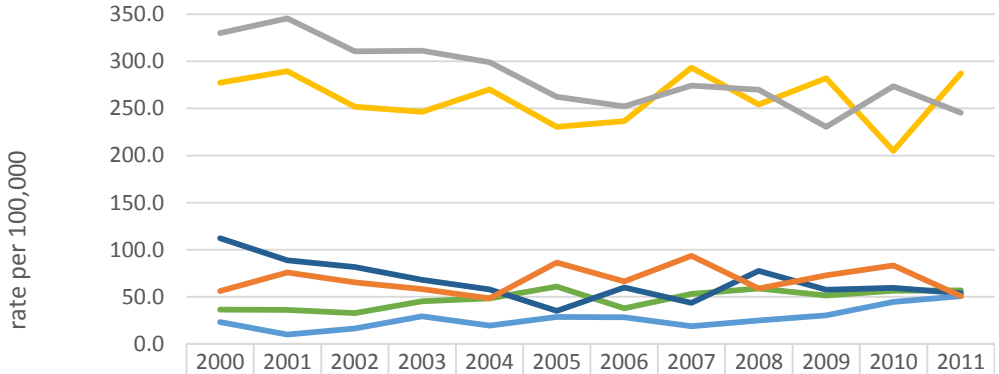
Source: Madison County Hospital Discharge Diagnoses data, 2010-2012

Leading Causes of Death

The top two leading causes of death—cancer and heart disease--have rates that are about four times greater than the other leading causes of death presented in the chart below for all Madison County residents. While death due to heart disease has declined over the study period, the cancer rate has not. The rate of deaths caused by accidents (unintentional injuries) increased steadily over the decade. The rate of death due to Alzheimer's disease is also increasing at a very fast pace over the last five years. For a comparison of the top six leading causes of death to the State, refer to Appendix B.

Figure 38: Top Six Leading Causes of Death. 2000-2011

Top Six Leading Causes of Death for the Adult Population, 2000-2012 *(crude rate per 100,000)*



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Malignant neoplasms	277.2	289.6	251.7	246.3	270.2	230.5	236.4	293.1	254.3	282.0	205.1	287.1
Diseases of heart	330.0	345.6	310.6	311.1	299.1	262.5	252.1	274.4	269.8	230.5	273.5	245.2
Accidents (unintentional injuries)	36.3	36.2	32.7	45.4	48.2	60.8	37.8	53.0	58.9	51.5	56.5	56.8
Cerebrovascular diseases	112.2	88.9	81.7	68.1	57.9	35.2	59.9	43.7	77.5	57.6	59.5	53.8
Alzheimer's disease	23.1	9.9	16.3	29.2	19.3	28.8	28.4	18.7	24.8	30.3	44.6	50.8
Chronic lower respiratory diseases	56.1	75.7	65.4	58.3	48.2	86.4	66.2	93.5	58.9	72.8	83.2	50.8

Source: 2000-2011, Ohio Department of Health Vital Statistics

Process for Identifying and Prioritizing Community Health Needs

The data collection and analysis efforts described above expose community health priority needs. The process used to select priorities from this needs assessment depends upon shared decision criteria. The first set of criteria used pertain to prevalence, seriousness (e.g., hospitalization and death), and comparison to state and/or national averages. The next step is for subject matter experts to review the results of this Community Health Needs Assessment and apply a second set of criteria such as the following.

- Urgency—what are the consequences of not addressing this issue?
- Prevention—is the strategy preventative in nature?
- Economics — is the strategy financially feasible? Does it make economic sense to apply this strategy?
- Acceptability – Will the stakeholders and the community accept the strategy?
- Resources — is funding likely to be available to apply this strategy? Are organizations able to offer personnel time and expertise or space needed to implement this strategy?

Methodology

The data provided in this report were obtained from multiple sources:

- U.S. Bureau of the Census American Community Survey: the most recent 5-year estimates were obtained wherever possible
- Madison County Hospital: in-patient, out-patient and emergency department crude rates were calculated
- The Ohio Department of Health: crude rates were calculated for multiple diseases
- The Ohio Department of Job and Family Services
- The Ohio Development Services Agency
- Robert Wood Johnson Foundation
- Community Needs Survey of Madison County residents: primary data collection was carried out by Wright State University using random listed sampling and conducting 402 interviews with adults using Computer-aided Telephone Interviewing software. The results for the County as a whole can be reviewed with 95 percent confidence level and a ±5.0 percent sampling error. Calls were made each day of the week in late afternoon and evening hours in July and August 2013.
- Health Resources and Services Administration (HRSA): to determine if the County as a "Health Professionals Shortage Area" or HPSA. The County's corrections facilities were determined to be HPSAs for both primary medical care and mental health care
- Substance Abuse and Mental Health Services Administration (SAMHSA): Selected statistics were extracted from the NSDUH
- Economic Modeling Specialists, Inc.: Industry and occupation level data were extracted

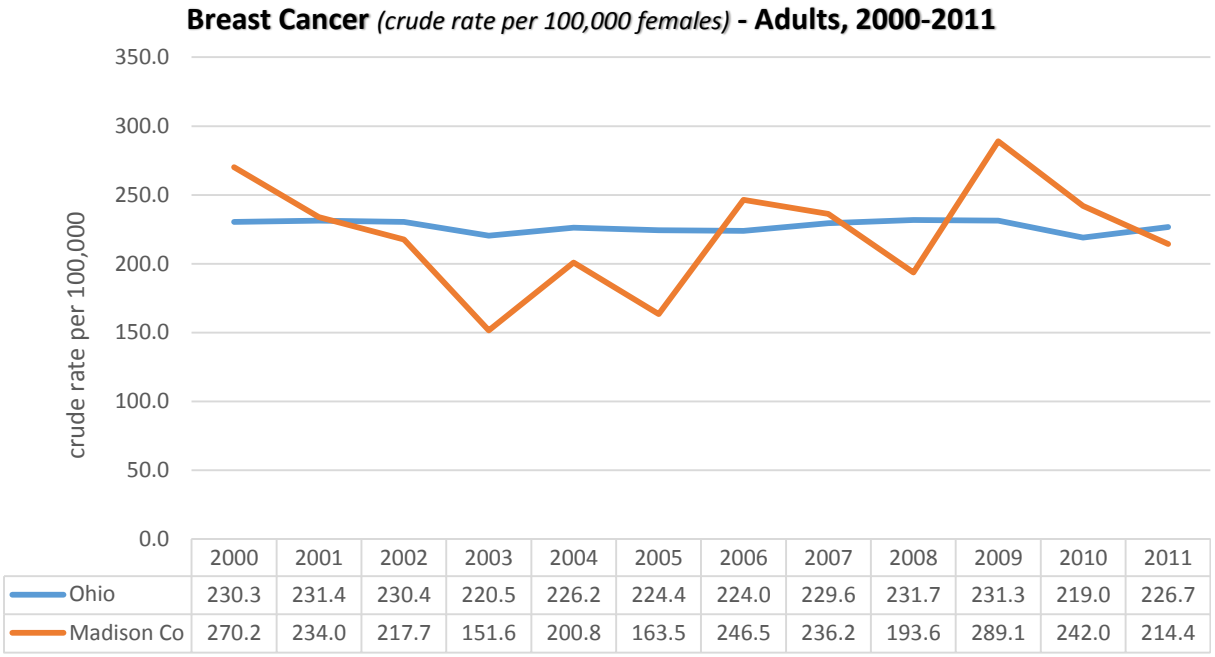
Limitations of the Data

Information gaps that limit the ability to assess the community's health needs include:

- No data are included from private clinics
- The most recent data from the Ohio Department of Health for mortality data is 2010.
- The health data presented in this report is not exhaustive.

Appendix A: Cancer Rates – State Comparison

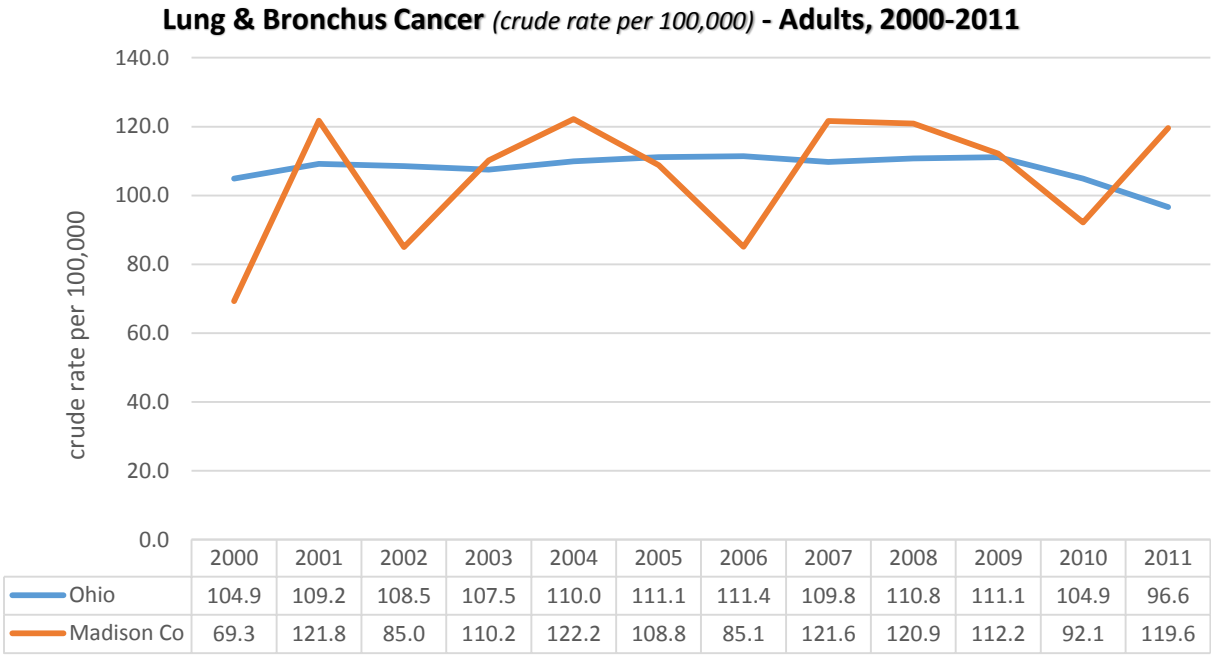
Figure 39: Breast Cancer, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	230.3	231.4	230.4	220.5	226.2	224.4	224.0	229.6	231.7	231.3	219.0	226.7
Madison Co	270.2	234.0	217.7	151.6	200.8	163.5	246.5	236.2	193.6	289.1	242.0	214.4

Source: Ohio Department of Health Ohio Cancer Incidence Surveillance System, last updated Sept. 2013.

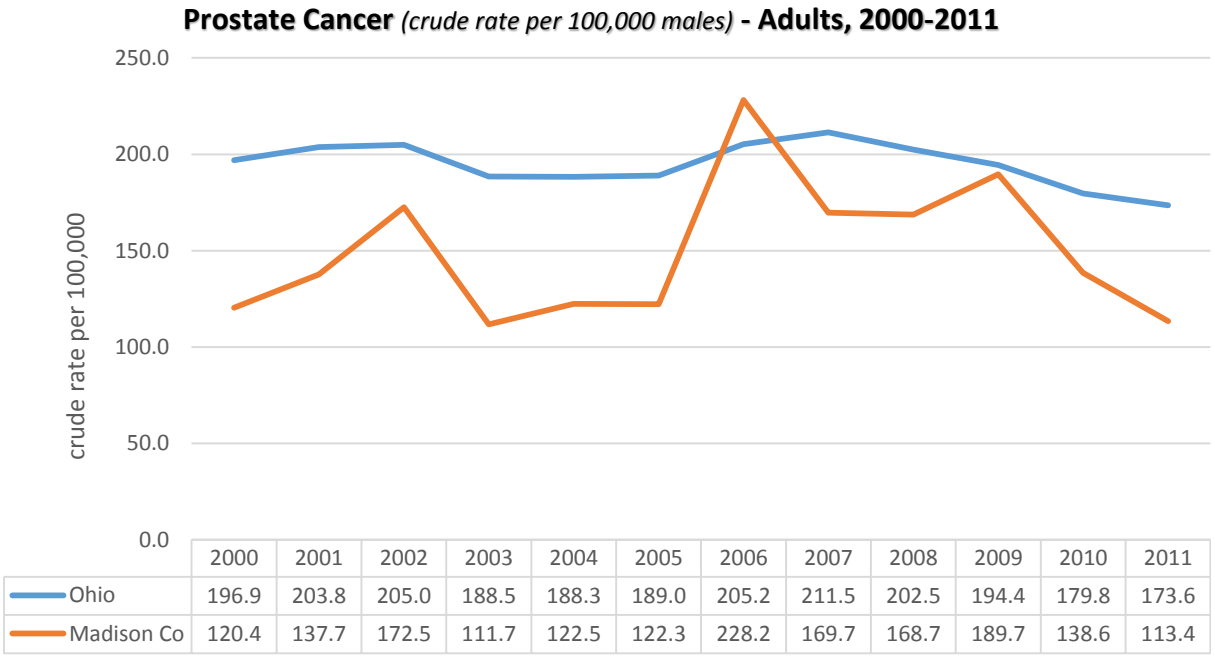
Figure 40: Lung & Bronchus Cancer, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	104.9	109.2	108.5	107.5	110.0	111.1	111.4	109.8	110.8	111.1	104.9	96.6
Madison Co	69.3	121.8	85.0	110.2	122.2	108.8	85.1	121.6	120.9	112.2	92.1	119.6

Source: Ohio Department of Health Ohio Cancer Incidence Surveillance System, last updated Sept. 2013.

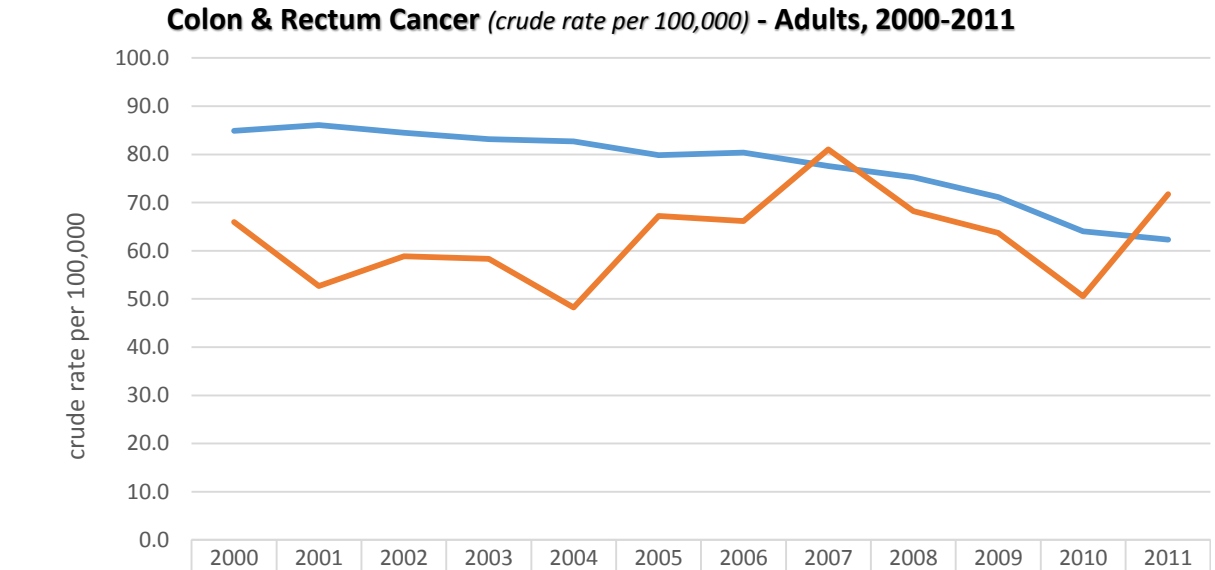
Figure 41: Prostate Cancer, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	196.9	203.8	205.0	188.5	188.3	189.0	205.2	211.5	202.5	194.4	179.8	173.6
Madison Co	120.4	137.7	172.5	111.7	122.5	122.3	228.2	169.7	168.7	189.7	138.6	113.4

Source: Ohio Department of Health Ohio Cancer Incidence Surveillance System, last updated Sept. 2013.

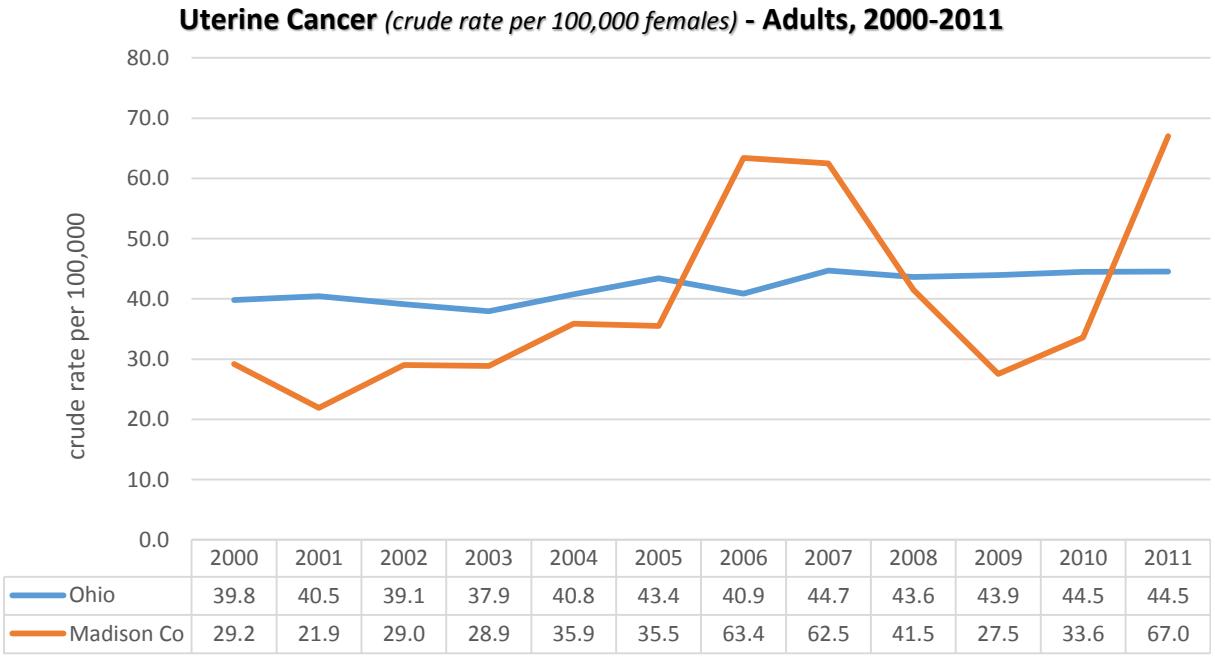
Figure 42: Colon & Rectum Cancer, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	84.9	86.1	84.5	83.2	82.7	79.8	80.4	77.6	75.2	71.1	64.1	62.3
Madison Co	66.0	52.7	58.8	58.3	48.2	67.2	66.2	81.1	68.2	63.7	50.5	71.8

Source: Ohio Department of Health Ohio Cancer Incidence Surveillance System, last updated Sept. 2013.

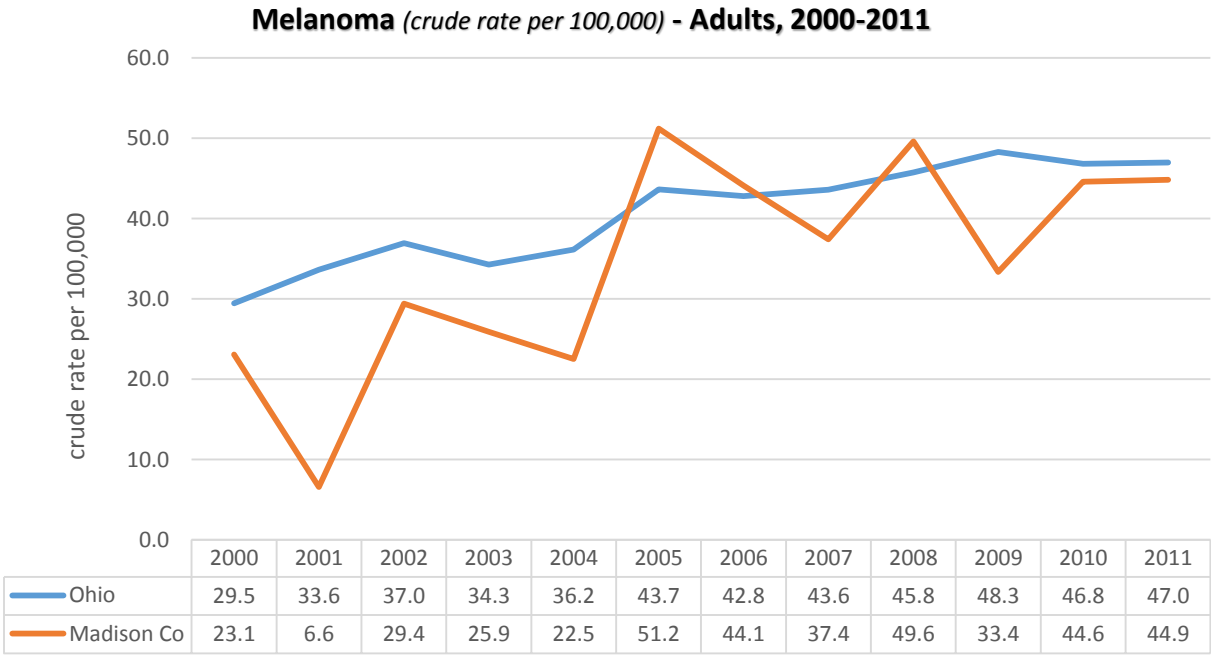
Figure 43: Uterine Cancer, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	39.8	40.5	39.1	37.9	40.8	43.4	40.9	44.7	43.6	43.9	44.5	44.5
Madison Co	29.2	21.9	29.0	28.9	35.9	35.5	63.4	62.5	41.5	27.5	33.6	67.0

Source: Ohio Department of Health Ohio Cancer Incidence Surveillance System, last updated Sept. 2013.

Figure 44: Melanoma, 2000-2011

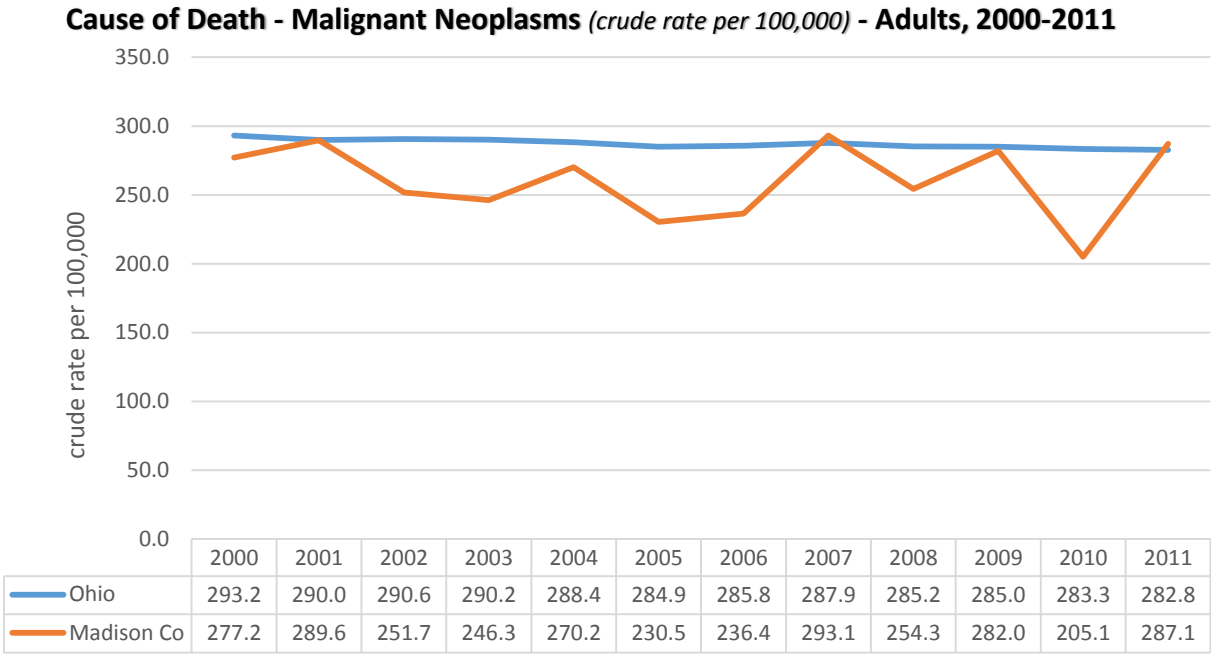


	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	29.5	33.6	37.0	34.3	36.2	43.7	42.8	43.6	45.8	48.3	46.8	47.0
Madison Co	23.1	6.6	29.4	25.9	22.5	51.2	44.1	37.4	49.6	33.4	44.6	44.9

Source: Ohio Department of Health Ohio Cancer Incidence Surveillance System, last updated Sept. 2013.

Appendix B: Leading Causes of Death – State Comparison

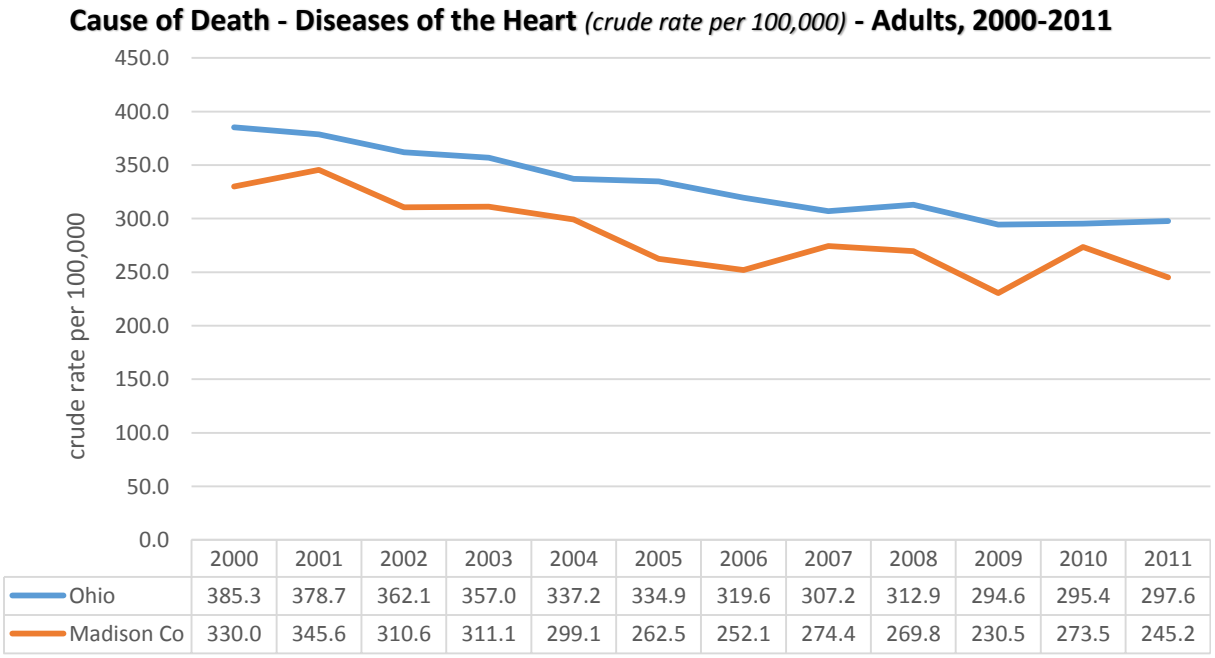
Figure 45: Malignant Neoplasms, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	293.2	290.0	290.6	290.2	288.4	284.9	285.8	287.9	285.2	285.0	283.3	282.8
Madison Co	277.2	289.6	251.7	246.3	270.2	230.5	236.4	293.1	254.3	282.0	205.1	287.1

Source: Ohio Department of Health Ohio Vital Statistics, 2000-2011, last updated Sept. 2013.

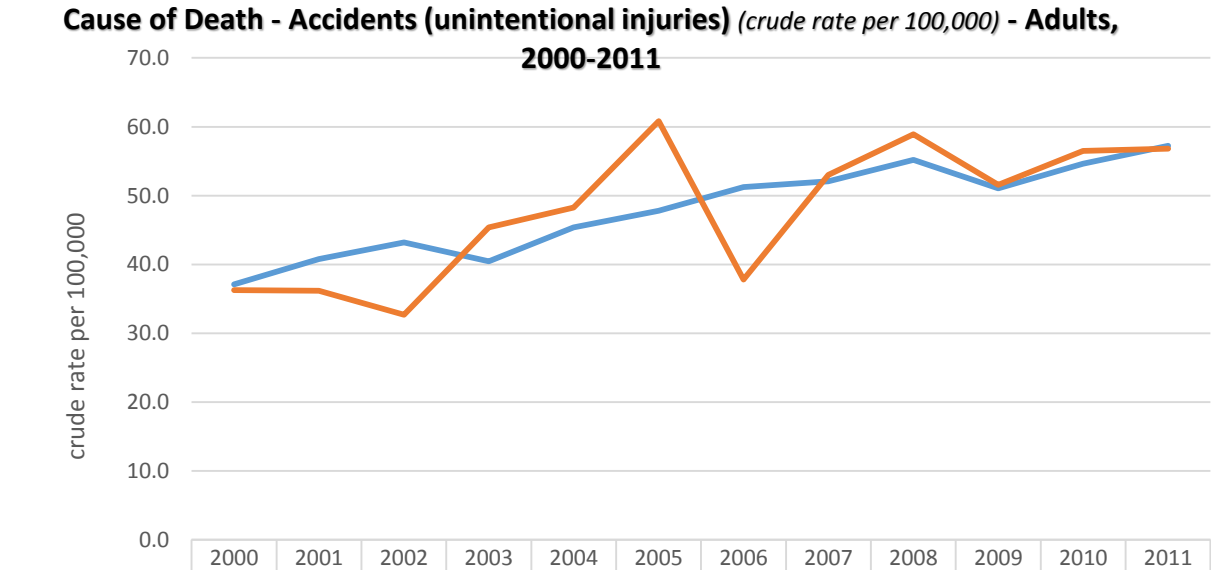
Figure 46: Diseases of the Heart, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	385.3	378.7	362.1	357.0	337.2	334.9	319.6	307.2	312.9	294.6	295.4	297.6
Madison Co	330.0	345.6	310.6	311.1	299.1	262.5	252.1	274.4	269.8	230.5	273.5	245.2

Source: Ohio Department of Health Ohio Vital Statistics, 2000-2011, last updated Sept. 2013.

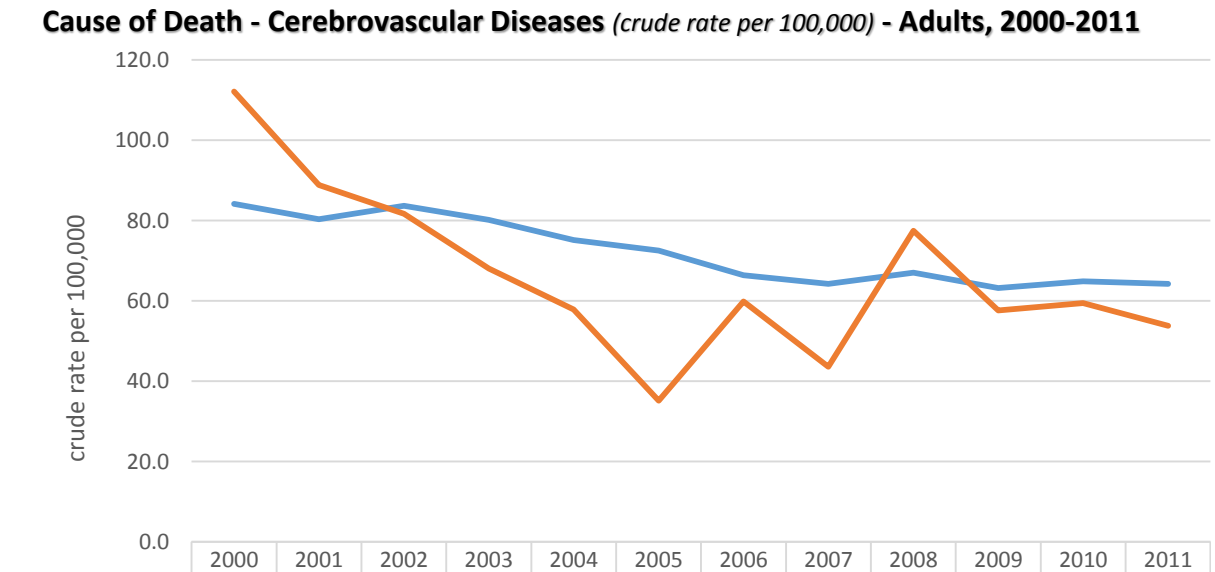
Figure 47: Accidents (unintentional injuries), 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	37.1	40.8	43.2	40.4	45.4	47.8	51.2	52.1	55.2	51.0	54.6	57.2
Madison Co	36.3	36.2	32.7	45.4	48.2	60.8	37.8	53.0	58.9	51.5	56.5	56.8

Source: Ohio Department of Health Ohio Vital Statistics, 2000-2011, last updated Sept. 2013.

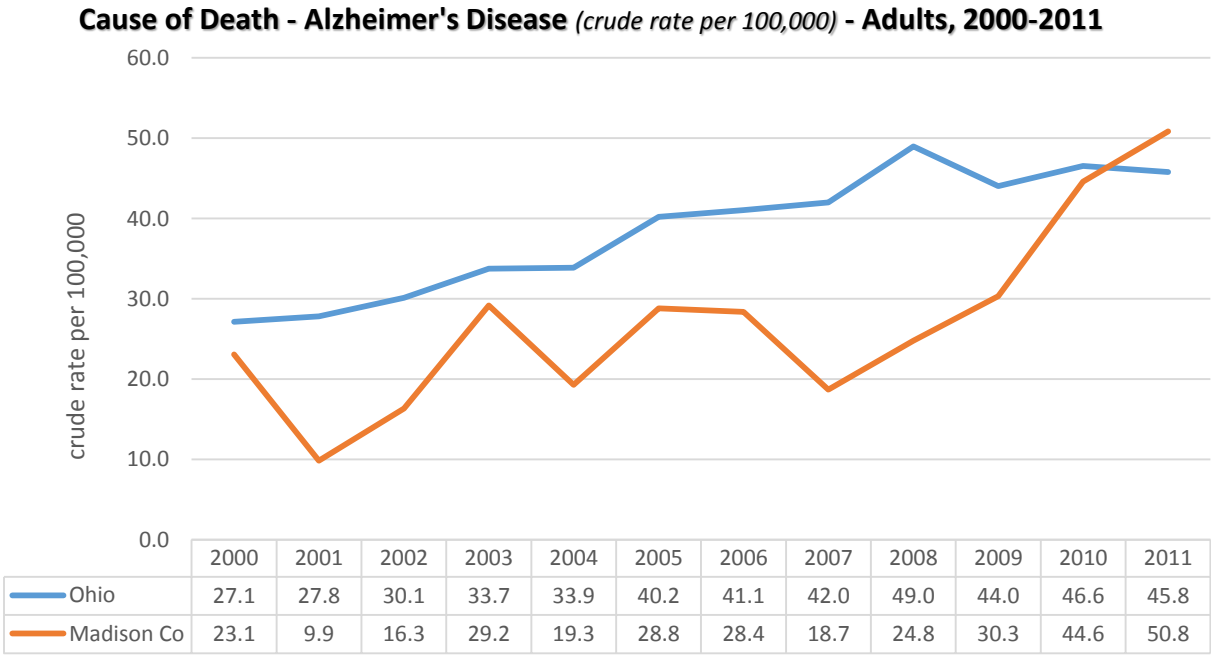
Figure 48: Cerebrovascular Diseases, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	84.2	80.3	83.7	80.2	75.2	72.5	66.4	64.2	67.1	63.2	64.9	64.2
Madison Co	112.2	88.9	81.7	68.1	57.9	35.2	59.9	43.7	77.5	57.6	59.5	53.8

Source: Ohio Department of Health Ohio Vital Statistics, 2000-2011, last updated Sept. 2013.

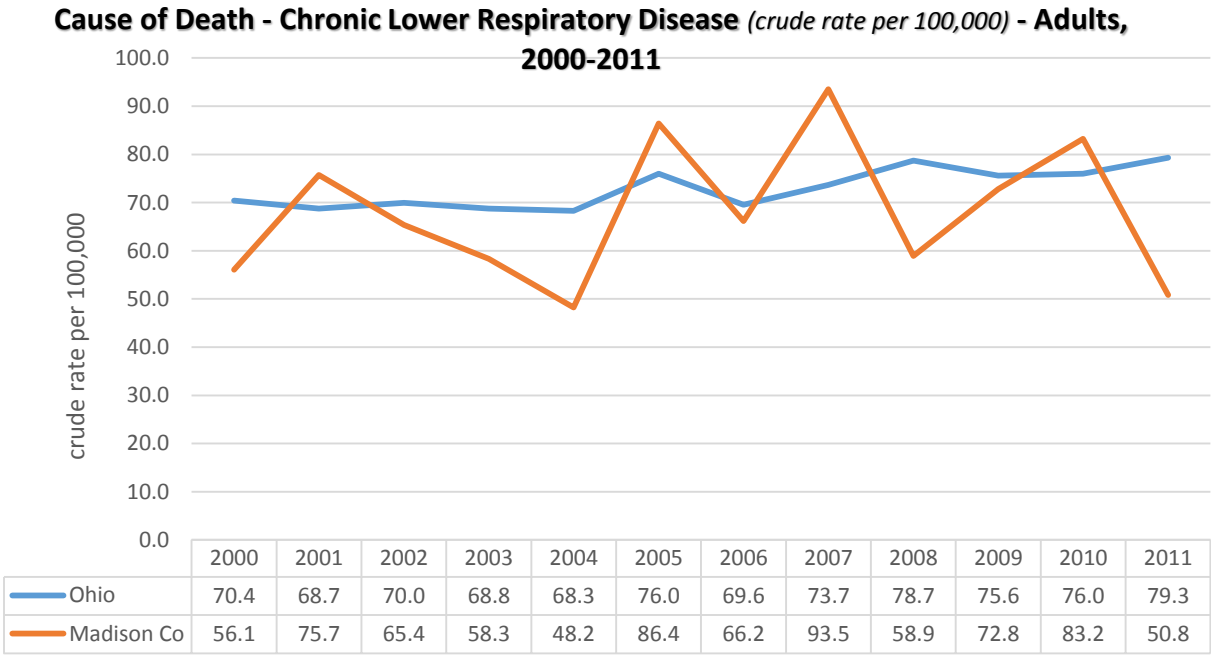
Figure 49: Alzheimer's Disease, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	27.1	27.8	30.1	33.7	33.9	40.2	41.1	42.0	49.0	44.0	46.6	45.8
Madison Co	23.1	9.9	16.3	29.2	19.3	28.8	28.4	18.7	24.8	30.3	44.6	50.8

Source: Ohio Department of Health Ohio Vital Statistics, 2000-2011, last updated Sept. 2013.

Figure 50: Chronic Lower Respiratory Disease, 2000-2011



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ohio	70.4	68.7	70.0	68.8	68.3	76.0	69.6	73.7	78.7	75.6	76.0	79.3
Madison Co	56.1	75.7	65.4	58.3	48.2	86.4	66.2	93.5	58.9	72.8	83.2	50.8

Source: Ohio Department of Health Ohio Vital Statistics, 2000-2011, last updated Sept. 2013.