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Questions about this report may be addressed to:

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Introduction

Dear Clermont County Community Member,

The information in this Community Health Assessment (CHA) is the start of a collaborative effort to improve the Health of Clermont County. In 2012, numerous partners in the public health system came together to look at how well the system works using the National Public Health Performance Standards. The public health system is comprised of numerous public and private entities that provide health and health related services to the community members of the county. The two main objectives that came out of that process were 1) we needed to have a comprehensive picture of the health status of the county and 2) we needed to work towards development of an improvement plan.

The Community Health Assessment provides an analysis of the health of the county. The assessment provides a snap shot of our health and will be conducted every five years to examine trends, improvements, or areas of concern. The CHA can also be used as a measurement tool for progress when data is compared over years and compared to state and national data. The results of the assessment will be used to collaboratively work with system partners, stakeholders and the community to collectively develop a Community Health Improvement Plan (CHIP). The CHIP will be used to guide partners in selecting programs and strategies and developing policy, systems or environmental change that work towards improving the health of the county. Clermont County is a great place to live, work, and raise a family and through the collaborative efforts of the CHA and the CHIP it can become an even healthier place. It is important for the CHIP to include priorities and objectives that reflect a shared vision and commitment of policymakers, stakeholders and community members.

Many of the health concerns outlined in the CHA are related to health behaviors such as lack of physical activity, diet, and tobacco and drug use. Individual, family and community change is necessary to make a positive difference. I encourage everyone to take a look at the CHA and join us in the upcoming year as we work on the CHIP and begin our journey to make Clermont County healthier. Additional information about the Improvement Plan process will be posted at www.clermonthealthdistrict.org under Community Health Improvement.

Sincerely,

Julianne Nesbit, RS, MPH
Health Commissioner
Overview

The Clermont County General Health District, in conjunction with the Public Health Steering Committee, is pleased to provide the residents of Clermont County with this comprehensive Community Health Assessment (CHA). This report is the result of the collaborative efforts of multiple agencies and organizations within Clermont County to provide a snapshot of the current state of health of the residents of this community. Additionally, this document is intended to provide the basis for identifying the health needs of the residents of Clermont County which will be incorporated in the Community Health Improvement Plan (CHIP).

Utilizing the Public Health Accreditation Board (PHAB) Standards and Measures for development of a CHA, the Mobilizing for Action through Planning and Partnerships (MAPP) process was selected. Within this framework are specific steps to guide completion of the assessment, which include creation of a steering committee, determination of health indicators, collection of data, assimilation and presentation of findings, ongoing monitoring of indicators, and future development of a CHIP to address identified community health status issues.

The CHA Steering Committee was formed as an extension of the public health system partners who participated in the National Public Health Performance Standards (NPHPS) assessment process in the fall of 2012. The NPHPS partners reconvened in the spring of 2013, at which time the health indicator matrix for the CHA was established. Committee members continued to contribute to the development of the CHA, providing subject matter expertise, data and feedback throughout the MAPP process. A draft CHA was released for review in July of 2013. The final version of the CHA was published in August 2013.

The health indicators selected for the Clermont County CHA follow the recommendation of the MAPP framework, and include the following: demographic and socioeconomic characteristics, health resource availability, quality of life, behavioral risk factors, environmental health indicators, maternal and child health, mental and social health, death/illness/injury, and infectious disease indicators. Primary and secondary data sources were used to present information on the CHA indicators. Specific data sources incorporated into this CHA include, among others, the Centers for Disease Control and Prevention, U.S. Census Bureau, the Clermont County General Health District 2009 Health Needs Assessments, and the Ohio Department of Health Center for Public Health Statistics and Informatics.

The CHA data is organized in terms of the selected health indicators, demonstrating the strengths, weaknesses, opportunities and threats with regard to our community’s health. With input from steering committee members and the general public, the data presented in this CHA will be utilized to create the next steps in the MAPP process. The CHA will be conducted on a five-year cycle to examine health trends, evaluate progress on identified issues, and provide guidance for continuing improvement in these areas.
Acknowledgements

Clermont County Community Health Assessment Steering Committee:

Batavia Nursing and Convalescent Care Center
Boys and Girls Club of Clermont County
Child Focus, Inc.
Clermont County Board of Commissioners
Clermont County Board of Developmental Disabilities
Clermont County Board of Health
Clermont County Chamber of Commerce
Clermont County Community Services
Clermont County Coroner’s Office
Clermont County Department of Job and Family Services
Clermont County Educational Service Center
Clermont County Emergency Management Agency
Clermont County Fire/Emergency Medical Services Association
Clermont County General Health District
Clermont County Mental Health and Recovery Board
Clermont County Office of Environmental Quality
Clermont County Park District
Clermont County Police Chief’s Association
Clermont County YMCA
Clermont Recovery Center
Clermont Transportation Connection
Mercy Hospital Clermont
Ohio State University Extension Office
SEM Haven Health and Residential Care Center
United Way of Greater Cincinnati
University of Cincinnati, College of Nursing and Health, East Campus
YWCA of Greater Cincinnati—Eastern Area
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Executive Summary

Presented in this summary are key findings identified throughout the 2013 Clermont County Community Health Assessment. Categorized by indicator, these points emphasize the attributes, issues, behaviors and resources that contribute to the health of residents in Clermont County. Moving forward, the community can utilize the data highlighted here, and throughout the assessment, to identifying specific areas in which to focus our collective efforts. This will be accomplished through completion of the M.A.P.P. Forces of Change and Community Themes and Strengths Assessments and, ultimately, the Community Health Improvement Plan.

Demographic Indicators:
- The total population of Clermont County is 197,363;
- 96.1% of the county population is white, with black and Hispanic/Latino residents comprising 1.4% and 1.6% of the population respectively;
- 88.2% of the county population has health insurance coverage.

Health and Wellness Indicators:
- Clermont County has one hospital with a 166 bed capacity;
- 82.9% of residents report having a primary health care provider, and 75.8% visited a provider for routine care;
- 27.6% of residents in Clermont County are smokers; of these, 58.3% report having tried to stop smoking for one or more days in the past 12 months;
- Greater than 60% of adults in the county are either overweight or obese;
- 54.2% of adults do not think they get enough exercise.

Maternal and Child Health Indicators:
- The infant mortality rate in Clermont County is lower than the state at 6.1 and 7.7 per 1,000 live births respectively;
- 22.2% of women report smoking during their pregnancy;
- 37.2% of third grade students in the county are overweight/obese;
- 44% of Clermont County’s children are enrolled in public health insurance, 35.8% are receiving free/reduced price lunches, and 19% receive SNAP benefits, which are all lower that the percentage of children receiving the same benefits across the state.
Social Health Indicators:

- The rate of children under 18 years of age in placement in Clermont County is 5.98 which is higher than the state rate of 4.53 (rate per 1,000);
- The leading cause of death due to injury in Clermont County is unintentional poisoning, occurring at a rate of 24 per 100,000, compared to the state rate at 14 per 100,000;
- Rates for drug poisoning deaths, hospitalizations and emergency department visits are all higher in Clermont County than in Ohio.

Death and Illness Indicators:

- The leading causes of death in Clermont County are cancer and heart disease, followed by chronic lower respiratory disease, stroke, unintentional injury and Alzheimer’s disease;
- High cholesterol and hypertension are the top two chronic disease indicators in Clermont County;
- The number of acute Hepatitis B cases reported in Clermont County has increased steadily over the past five years.

Environmental Health Indicators:

- Clermont County has opportunities for outdoor activities and recreation, including parks, bike trails, and nature preserves;
- Air quality, based on measurement of ozone, falls within the “good” or “moderate” range on the majority of monitored days.
Demographic Indicators
Demographic Information

The total population of Clermont County is 197,363. More than 62% of the population is between the ages of 18-64, which is comparable to the percentages in Ohio and the United States. The majority of Clermont County residents are white (96.1%). The percentage of non-majority races are lower than the state and national percentages. Only 1.6% of Clermont County residents are Hispanic or Latino, which is significantly lower than the national percentage (16.7%). Similar to Ohio and the United States, 50.7% of residents are females and 49.3% are males (Table 1).

Table 1: Demographic Information

<table>
<thead>
<tr>
<th></th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>197,363</td>
<td>11,536,504</td>
<td>308,745,538</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 5 Years</td>
<td>6.6%</td>
<td>6.2%</td>
<td>6.5%</td>
</tr>
<tr>
<td>5-17 Years</td>
<td>18.5%</td>
<td>17.1%</td>
<td>17.2%</td>
</tr>
<tr>
<td>18-64 Years</td>
<td>62.6%</td>
<td>62.4%</td>
<td>63.0%</td>
</tr>
<tr>
<td>65 years and Over</td>
<td>12.3%</td>
<td>14.3%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>96.1%</td>
<td>83.6%</td>
<td>78.1%</td>
</tr>
<tr>
<td>Black</td>
<td>1.4%</td>
<td>12.4%</td>
<td>13.1%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>0.2%</td>
<td>0.3%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Asian</td>
<td>1.0%</td>
<td>1.7%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Native Hawaiian/Other Pacific Islander</td>
<td>Z</td>
<td>Z</td>
<td>0.2%</td>
</tr>
<tr>
<td>Person Reporting Two or More Races</td>
<td>1.2%</td>
<td>1.9%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>1.6%</td>
<td>3.2%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>50.7%</td>
<td>51.2%</td>
<td>50.8%</td>
</tr>
<tr>
<td>Male</td>
<td>49.3%</td>
<td>48.8%</td>
<td>49.2%</td>
</tr>
</tbody>
</table>

1) Source: U.S Census Bureau, 2011
Z—value greater than zero but less than half the unit of measure shown.
Household Information

Of the 73,189 total households located in Clermont County, nearly 72% are family households, composed of a householder and one or more individuals related to the householder by birth, marriage or adoption (U.S. Census Bureau, 2009-2011). Of the non-family households (28.1%), most were individuals living alone, but some are composed of multiple people living together who are unrelated. The majority of Clermont County residents (96.2%) speak English as their primary language, which is higher than the percentage of residents in the United States. More than 55% of residents 15 years and over are married (Table 2).

Table 2: Household Information

<table>
<thead>
<tr>
<th></th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Household Size</strong>²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Households</td>
<td>73,189</td>
<td>4,545,642</td>
<td>114,931,864</td>
</tr>
<tr>
<td>Family Households</td>
<td>71.9%</td>
<td>65.1%</td>
<td>66.5%</td>
</tr>
<tr>
<td>Non-Family Households</td>
<td>28.1%</td>
<td>34.9%</td>
<td>33.5%</td>
</tr>
<tr>
<td>Average Household Size</td>
<td>2.68</td>
<td>2.47</td>
<td>2.62</td>
</tr>
<tr>
<td>Average Family Size</td>
<td>3.16</td>
<td>3.06</td>
<td>3.21</td>
</tr>
<tr>
<td><strong>Grandparents as Caregivers</strong>²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grandparents Living with Grandchildren (Under 18 Years Old)</td>
<td>3,921</td>
<td>212,824</td>
<td>6,961,807</td>
</tr>
<tr>
<td>Grandparents Responsible for Grandchildren</td>
<td>36.2%</td>
<td>46.6%</td>
<td>39.5%</td>
</tr>
<tr>
<td>**Language Spoken at Home (5 Years and Over)**³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Only</td>
<td>96.2%</td>
<td>93.4%</td>
<td>79.4%</td>
</tr>
<tr>
<td>Language Other than English</td>
<td>3.8%</td>
<td>6.6%</td>
<td>20.6%</td>
</tr>
<tr>
<td><strong>Marital Status</strong>³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never Married</td>
<td>24.9%</td>
<td>30.5%</td>
<td>32.0%</td>
</tr>
<tr>
<td>Married</td>
<td>55.8%</td>
<td>49.1%</td>
<td>49.0%</td>
</tr>
<tr>
<td>Separated</td>
<td>1.7%</td>
<td>1.9%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Widowed</td>
<td>5.5%</td>
<td>6.7%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Divorced</td>
<td>12.1%</td>
<td>11.9%</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

² Source: U.S. Census Bureau, American Community Survey, 2009-2011

The average household size in Clermont County is comparable to the state and national averages.
Income, Poverty, and Homelessness

The median household income in Clermont County is $58,765 per year, however 9% of households have an income below $15,000 a year and 9% have an income over $150,000 or more. The median income for females in Clermont County is $38,031 a year, while the median income for males is $49,759 (U.S. Census Bureau, 2009-2011).

Homelessness data is collected using a point-in-time count, which is a count of all the homeless persons in sheltered or unsheltered locations during one day of the year. For the purpose of the point-in-time count, sheltered locations include emergency shelters, transitional housing programs, or safe havens while unsheltered locations include streets, cars, or other places not meant for human habitation. The point-in-time count does not represent the total number of people homeless during the entire course of the year (Ohio Homelessness Report, 2011). Clermont Community Services’ James Sauls Homeless Shelter served a total of 452 individuals during 2011 (Clermont Community Services Inc., 2011).

<table>
<thead>
<tr>
<th>Table 3: Income, Poverty, and Homelessness</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Household Income (Dollars)</td>
<td>58,765</td>
<td>46,595</td>
<td>51,484</td>
</tr>
<tr>
<td>Mean Household Income (Dollars)</td>
<td>74,296</td>
<td>62,045</td>
<td>70,909</td>
</tr>
<tr>
<td>Per Capita Income (Dollars)</td>
<td>28,202</td>
<td>25,020</td>
<td>27,158</td>
</tr>
<tr>
<td><strong>Poverty Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Families Below Poverty Level</td>
<td>7.9%</td>
<td>11.5%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Individuals Below Poverty Level</td>
<td>10.0%</td>
<td>15.8%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Under 18 Years</td>
<td>14.3%</td>
<td>23.1%</td>
<td>21.4%</td>
</tr>
<tr>
<td>18 to 64 Years</td>
<td>9.2%</td>
<td>14.8%</td>
<td>14.0%</td>
</tr>
<tr>
<td>65 Years and Over</td>
<td>5.0%</td>
<td>8.0%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Individuals Below 50% of Poverty Level</td>
<td>4.6%</td>
<td>7.3%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Individuals Below 200% of Poverty Level</td>
<td>25.7%</td>
<td>34.2%</td>
<td>34.1%</td>
</tr>
<tr>
<td><strong>Homeless Persons, 2011 Point In Time Count</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Homeless Persons</td>
<td>98</td>
<td>13,003</td>
<td>—</td>
</tr>
<tr>
<td>Sheltered Homeless Persons</td>
<td>48.0%</td>
<td>86.0%</td>
<td>—</td>
</tr>
<tr>
<td>Unsheltered Homeless Persons</td>
<td>52.0%</td>
<td>14.0%</td>
<td>—</td>
</tr>
<tr>
<td>Homeless Person in Families</td>
<td>34.0%</td>
<td>40.0%</td>
<td>—</td>
</tr>
<tr>
<td>Homeless Individuals</td>
<td>66.0%</td>
<td>60.0%</td>
<td>—</td>
</tr>
</tbody>
</table>

2) Source: U.S. Census Bureau, American Community Survey, 2009-2011
3) Source: Coalition on Homelessness and Housing in Ohio, 2011 Ohio Homelessness Report, 2011
— Denotes data unavailable or not applicable.
Food Assistance

The percent of the population in Clermont County receiving food assistance is less than that for the state. However, the total number of recipients and the average monthly recipients rose from 2011 to 2012 for both Clermont County and the state (Table 4).

In 2012, 32,526 Clermont County residents received food assistance.

<table>
<thead>
<tr>
<th>Table 4: Food Assistance</th>
<th>Clermont County</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SFY 2011</td>
<td>SFY 2012</td>
<td>SFY 2011</td>
<td>SFY 2012</td>
</tr>
<tr>
<td>Food Assistance4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Monthly Adult Recipients</td>
<td>17,040</td>
<td>18,462</td>
<td>1,377,173</td>
<td>1,472,746</td>
</tr>
<tr>
<td>Average Monthly Child Recipients</td>
<td>12,633</td>
<td>14,064</td>
<td>953,014</td>
<td>1,029,621</td>
</tr>
<tr>
<td>Total # of Recipients (Annual Unduplicated)</td>
<td>29,673</td>
<td>32,526</td>
<td>2,330,187</td>
<td>2,502,367</td>
</tr>
<tr>
<td>Percent of Population</td>
<td>14.9%</td>
<td>16.3%</td>
<td>20.2%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Average Annual FA Payment per Recipient</td>
<td>$1,131</td>
<td>$1,055</td>
<td>$1,270</td>
<td>$1,247</td>
</tr>
</tbody>
</table>

4) Source: Ohio Department of Job and Family Services, Clermont County Profile, Statistical and Demographic Data, 2009-2012

Health Insurance

The number of residents in Clermont County with health insurance coverage is comparable to the percentages in the state and nation. Slightly more than 75% of people in Clermont County with health insurance have private health insurance and 24.2% have public coverage (Table 5).

<table>
<thead>
<tr>
<th>Table 5: Health Insurance</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance Status2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian Non-Institutionalized Population:</td>
<td>196,548</td>
<td>11,359,620</td>
<td>304,085,860</td>
</tr>
<tr>
<td>With Health Insurance Coverage</td>
<td>88.2%</td>
<td>88.0%</td>
<td>84.8%</td>
</tr>
<tr>
<td>With Private Health Insurance</td>
<td>75.1%</td>
<td>69.8%</td>
<td>66.2%</td>
</tr>
<tr>
<td>With Public Coverage</td>
<td>24.2%</td>
<td>30.4%</td>
<td>29.5%</td>
</tr>
<tr>
<td>No Health Insurance Coverage</td>
<td>11.8%</td>
<td>12.0%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Civilian Non-Institutionalized Population Under 18 Years:</td>
<td>50,507</td>
<td>2,716,747</td>
<td>73,901,825</td>
</tr>
<tr>
<td>No Health Insurance Coverage</td>
<td>5.9%</td>
<td>6.0%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Civilian Non-Institutionalized Population 18 to 64 Years:</td>
<td>123,150</td>
<td>7,085,670</td>
<td>190,999,705</td>
</tr>
<tr>
<td>No Health Insurance Coverage</td>
<td>12.3%</td>
<td>13.3%</td>
<td>17.6%</td>
</tr>
</tbody>
</table>

2) Source: U.S. Census Bureau, American Community Survey, 2009-2011
Employment Status

Among Clermont County residents in the labor force 16 years of age and over, 61.9% are employed which is slightly higher than the percentages for Ohio and the United States (Table 6).

![Table 6: Employment Status](image)

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population 16 Years of Age and Older</td>
<td>153,362</td>
<td>9,139,124</td>
<td>243,829,392</td>
</tr>
<tr>
<td>In Labor Force:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian Labor Force</td>
<td>67.5%</td>
<td>64.1%</td>
<td>64.1%</td>
</tr>
<tr>
<td>Employed</td>
<td>61.9%</td>
<td>57.1%</td>
<td>57.5%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>5.6%</td>
<td>7.0%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Armed Forces</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Not in Labor Force</td>
<td>32.3%</td>
<td>35.8%</td>
<td>35.5%</td>
</tr>
</tbody>
</table>

2) Source: U.S. Census Bureau, American Community Survey, 2009-2011

Mode of Commute

Among Clermont County residents commuting to work, 85% drove alone, while only 7.9% carpooled. The majority of households (95%) have at least one vehicle available, which is slightly higher than the percentages for Ohio (91%) and the United States (90%). Of the households in Clermont County with at least one vehicle available, 43% had two vehicles and 28.7% had three or more (US Census Bureau, 2009-2011). In Clermont County, very few people utilize public transportation or walk as their mode of commute in comparison to the state and nation (Table 7).

![Table 7: Mode of Commute](image)

<table>
<thead>
<tr>
<th>Mode of Commute</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers 16 Years and Over</td>
<td>93,787</td>
<td>5,115,230</td>
<td>138,076,928</td>
</tr>
<tr>
<td>Car, Truck, or Van -- Drove Alone</td>
<td>85.3%</td>
<td>83.3%</td>
<td>76.4%</td>
</tr>
<tr>
<td>Car, Truck, or Van -- Carpooled</td>
<td>7.9%</td>
<td>8.1%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Public Transportation (Excluding Taxicab)</td>
<td>0.7%</td>
<td>1.7%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Walked</td>
<td>1.0%</td>
<td>2.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Other Means</td>
<td>0.4%</td>
<td>1.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Worked at Home</td>
<td>4.8%</td>
<td>3.6%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Mean Travel Time to Work (Minutes)</td>
<td>27.5</td>
<td>22.9</td>
<td>25.3</td>
</tr>
</tbody>
</table>

2) Source: U.S. Census Bureau, American Community Survey, 2009-2011
Occupation and Industry

According to the Clermont Chamber of Commerce, the top three employers in the county in 2012 were Clermont County Government, Total Quality Logistics (TQL), and American Modern Insurance Group, each with more than 1,000 employees. West Clermont Local School District and Milford Exempted Village School District complete the top five county employers, with greater than 800 employees each (Clermont Chamber of Commerce, 2012).

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian Employed Population 16 Years and Over</td>
<td>94,943</td>
<td>5,217,288</td>
<td>140,145,661</td>
</tr>
<tr>
<td>Management, Business, Science, and Arts Occupations</td>
<td>35.8%</td>
<td>34.2%</td>
<td>35.9%</td>
</tr>
<tr>
<td>Service Occupations</td>
<td>16.0%</td>
<td>18.0%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Sales and Office Occupations</td>
<td>25.4%</td>
<td>24.8%</td>
<td>24.9%</td>
</tr>
<tr>
<td>Natural Resources, Construction, and Maintenance Occupations</td>
<td>9.2%</td>
<td>7.8%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Production, Transportation, and Material Moving Occupations</td>
<td>13.6%</td>
<td>15.3%</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian Employed Population 16 Years and Over</td>
<td>94,943</td>
<td>5,217,288</td>
<td>140,145,661</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing and Hunting, and Mining</td>
<td>0.5%</td>
<td>1.0%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Construction</td>
<td>6.6%</td>
<td>5.2%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>15.9%</td>
<td>15.0%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>2.5%</td>
<td>2.8%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>12.5%</td>
<td>11.8%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Transportation and Warehousing, and Utilities</td>
<td>4.3%</td>
<td>4.8%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Information</td>
<td>1.5%</td>
<td>1.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Finance and Insurance, and Real Estate and Rental and Leasing</td>
<td>8.8%</td>
<td>6.5%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Professional, Scientific, and Management, and Administrative and Waste Management Services</td>
<td>10.6%</td>
<td>9.1%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Educational Services, and Health Care and Social Assistance</td>
<td>20.7%</td>
<td>24.6%</td>
<td>23.1%</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation, and Accommodation and Food Services</td>
<td>8.3%</td>
<td>8.7%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Other Services, except Public Administration</td>
<td>5.2%</td>
<td>4.6%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Public Administration</td>
<td>2.6%</td>
<td>4.1%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

2) Source: U.S. Census Bureau, American Community Survey, 2009-2011
Educational Attainment

The total school enrollment in Clermont County is 51,000 students, including nursery schools, kindergarten, elementary or high schools, and college or graduate schools. A total of 87.5% of residents 25 years and over are high school graduates, which is comparable to the state and nation at 88.1% and 85.6% respectively (U.S. Census Bureau, 2009-2011).

<table>
<thead>
<tr>
<th>Table 9: Educational Attainment</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Level2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population 25 Years and Over</td>
<td>131,725</td>
<td>7,718,074</td>
<td>204,348,469</td>
</tr>
<tr>
<td>No High School</td>
<td>3.9%</td>
<td>3.3%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Some High School</td>
<td>8.6%</td>
<td>8.6%</td>
<td>8.3%</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>35.8%</td>
<td>35.0%</td>
<td>28.4%</td>
</tr>
<tr>
<td>Some College</td>
<td>19.3%</td>
<td>20.8%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Associate's Degree</td>
<td>7.1%</td>
<td>7.6%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>16.8%</td>
<td>15.5%</td>
<td>17.7%</td>
</tr>
<tr>
<td>Graduate or Professional Degree</td>
<td>8.5%</td>
<td>9.1%</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

2) Source: U.S. Census Bureau, American Community Survey, 2009-2011

Disability Status

Among the population 65 years and older in Clermont County, 35.2% of individuals have a disability, which is defined by the U.S. Census as difficulty with hearing, vision, cognition, ambulation, self-care, or independent living as reported by survey respondents (U.S. Census Bureau, 2013; Table 10).

<table>
<thead>
<tr>
<th>Table 10: Disability Status</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability Status of the Civilian Non-institutionalized Population2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Total Civilian Non-institutionalized Population:</td>
<td>196,548</td>
<td>11,359,620</td>
<td>304,085,860</td>
</tr>
<tr>
<td>With a Disability</td>
<td>12.0%</td>
<td>13.3%</td>
<td>12.0%</td>
</tr>
<tr>
<td>• Under 18 years:</td>
<td>50,507</td>
<td>2,716,747</td>
<td>73,901,825</td>
</tr>
<tr>
<td>With a Disability</td>
<td>4.4%</td>
<td>4.8%</td>
<td>4.0%</td>
</tr>
<tr>
<td>• 18 to 64 years:</td>
<td>123,150</td>
<td>7,085,670</td>
<td>190,999,705</td>
</tr>
<tr>
<td>With a Disability</td>
<td>10.7%</td>
<td>11.4%</td>
<td>10.0%</td>
</tr>
<tr>
<td>• 65 years and over:</td>
<td>22,891</td>
<td>1,557,203</td>
<td>39,184,330</td>
</tr>
<tr>
<td>With a Disability</td>
<td>35.2%</td>
<td>36.5%</td>
<td>36.8%</td>
</tr>
</tbody>
</table>

2) Source: U.S. Census Bureau, American Community Survey, 2009-2011
Veteran Status

Consistent with the state and national percentages of veterans, the highest percentage of veterans in Clermont County served during the Vietnam era (38.6%). The majority of veterans in Clermont County are men (95.5%). The rate of unemployment among veterans in Clermont County (8.0%) is lower than the unemployment rate among veterans in Ohio (10.7%) and the United States (9.3%) (Table 11).

The rate of unemployment among veterans in Clermont County is lower than the state and national rates.

<table>
<thead>
<tr>
<th>Table 11: Veteran Status</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veteran Status&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian Population</td>
<td>147,109</td>
<td>8,805,064</td>
<td>234,063,189</td>
</tr>
<tr>
<td>Civilian Veterans</td>
<td>14,349</td>
<td>892,492</td>
<td>21,797,348</td>
</tr>
<tr>
<td>Period of Service&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gulf War (9/2001 or later) Veterans</td>
<td>4.9%</td>
<td>6.9%</td>
<td>10.2%</td>
</tr>
<tr>
<td>Gulf War (8/1990 to 8/2001) Veterans</td>
<td>12.4%</td>
<td>12.9%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Vietnam Era Veterans</td>
<td>38.6%</td>
<td>35.2%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Korean War Veterans</td>
<td>11.0%</td>
<td>11.8%</td>
<td>11.9%</td>
</tr>
<tr>
<td>World War II Veterans</td>
<td>8.1%</td>
<td>10.2%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Sex&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>95.5%</td>
<td>94.2%</td>
<td>92.9%</td>
</tr>
<tr>
<td>Female</td>
<td>4.5%</td>
<td>5.8%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Rate of Unemployment for Veterans&lt;sup&gt;2&lt;/sup&gt;</td>
<td>8.0%</td>
<td>10.7%</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

2) Source: U.S. Census Bureau, American Community Survey, 2009-2011
* Unemployment rate for veterans aged 18 to 64 years.
Health and Wellness Indicators
# Resource Availability

Clermont County has one registered hospital, Mercy Hospital Clermont, which has a total of 166 staffed beds (120 adult medical/surgical, 16 adult special care ICU/CCU and 30 psychiatric). In 2012, Mercy Hospital Clermont had 7,126 admissions, of which 5,880 were treated and admitted to the hospital through the Emergency Room (Ohio Department of Health, 2012). There are no birthing facilities within the county.

Health Professional Shortage Areas (HPSAs) are designated by the Health Resources and Services Administration based on demonstration that the area meets the criteria for having too few health professionals to meet the needs of the population. Currently there are 5,920 primary medical care HPSAs and 4,662 dental HPSAs in the United States. Clermont County is designated as a medical HPSA, however Rural Health Clinics that provide access to care regardless of ability to pay receive automatic facility HPSA designation (Health Resource and Services Administration, 2013).

<table>
<thead>
<tr>
<th>Table 12: Resource Availability</th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Ratio</td>
</tr>
<tr>
<td><strong>Staffed Beds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Beds (^{5,6})</td>
<td>166</td>
<td>1,189:1</td>
</tr>
<tr>
<td>Nursing Home Beds (^{7,8})</td>
<td>988</td>
<td>200:1</td>
</tr>
<tr>
<td><strong>Dental</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Safety Net Dental Clinics</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Dental Health Professional Shortage Area (HPSA)(^{9})</td>
<td>0</td>
<td>—</td>
</tr>
<tr>
<td><strong>Medical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Community Health Centers</td>
<td>6</td>
<td>—</td>
</tr>
<tr>
<td>Health Professional Shortage Area (HPSA)(^{10})</td>
<td>yes</td>
<td>—</td>
</tr>
</tbody>
</table>

5) Source: Ohio Department of Health, Annual Hospital Registration and Planning Report, 2012
6) Source: Ohio Hospital Association, Ohio Hospital Facts, 2011
7) Source: Ohio Department of Health, State of Ohio License Information, 2011
10) Source: Ohio Department of Health, 2013 Child and Family Health Services and Family Planning Health Status Profile, 2013

* Correctional facilities and community health centers without dental clinics can be designated as dental health professional shortage areas, however they were not calculated in the presented surveillance data.

** Federally Qualified Health Centers and Rural Health Clinics that provide access to care regardless of ability to pay receive automatic facility HPSA designation.

— Denotes data unavailable or not applicable.
Healthcare Providers

In Ohio, information about the number of dental and medical providers is available through the Ohio State Dental Board and the State Medical Board of Ohio, respectively. The addresses collected by these boards for each provider are utilized when determining the number of providers in a specific geographic area (e.g., county, state). A limitation of this data, however, is that the address given to the board by each provider may be a personal, practice or correspondence address; therefore, counts of providers derived from these addresses should be taken as estimates only and not as a true reflection of the actual number of providers available to residents as a source of care in the county or state.

Of the 207 physicians in Clermont County, approximately half are primary care physicians.

### Table 13: Health Care Providers

<table>
<thead>
<tr>
<th></th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Ratio</td>
</tr>
<tr>
<td><strong>Dentists</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Licensed Dentists*</td>
<td>49</td>
<td>4,007:1</td>
</tr>
<tr>
<td>Primary Care Dentists (General and Pediatric)</td>
<td>45</td>
<td>—</td>
</tr>
<tr>
<td>Dentists who Treat Medicaid Patients**</td>
<td>17</td>
<td>2,028:1</td>
</tr>
<tr>
<td>1-50 Dental Patients</td>
<td>5</td>
<td>—</td>
</tr>
<tr>
<td>51-249 Dental Patients</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>250+ Dental Patients</td>
<td>11</td>
<td>—</td>
</tr>
<tr>
<td>OPTIONS Dentists***</td>
<td>11</td>
<td>4,025:1</td>
</tr>
<tr>
<td><strong>Physicians</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physicians (MD, DO)</td>
<td>207</td>
<td>953:1</td>
</tr>
<tr>
<td>Primary Care Physicians</td>
<td>104</td>
<td>1,902:1</td>
</tr>
</tbody>
</table>

---

* Ratio of population (2010 U.S. Census) per dentist
** Ratio of Medicaid population (2010 Ohio Department of Job and Family Services) per dentist who treats Medicaid patients
*** Ratio of low-income patients per OPTIONS dentist
— Denotes data unavailable or not applicable

---

11) Source: State of Ohio Medical Board; “Roster of Registered Physicians” and “Roster of Registered Osteopathic Physicians”, 2010
12) Source: County Health Rankings and Roadmaps, 2013
* Ratio of population (2010 U.S. Census) per dentist
** Ratio of Medicaid population (2010 Ohio Department of Job and Family Services) per dentist who treats Medicaid patients
*** Ratio of low-income patients per OPTIONS dentist
— Denotes data unavailable or not applicable
Routine Care

The 2009 Clermont County Health Needs Assessment asked residents about their access to and utilization of health care resources. The majority of residents (82.9%) indicated that they had a personal doctor or healthcare provider. Of the remaining 17%, one quarter reported having more than one healthcare provider, while the remaining 75% indicated having no personal physician (Clermont County Health Needs Assessment, 2009).

Expense of services was not an issue for most residents (86.2%), although 13.8% of survey respondents indicated that there was a time when they needed to see a doctor but could not due to cost (Clermont County Health Needs Assessment, 2009).

When asked about visits to their healthcare provider for routine care, 75.8% of Clermont County residents indicated that they had visited a provider in the past year, and less than 2% reported never having visited a provider (Figure 1).

![Figure 1: Percent of Respondents Visiting Provider for Routine Check-Up](image)

13) Source: Clermont County Health Needs Assessment, 2009
Cancer Screenings

Cancer screenings can help find cancer at an early stage when it may be easier to treat or cure. Estimates of cancer screening prevalence rates are calculated through the Ohio Behavioral Risk Factor Surveillance System (BRFSS). Due to small sample size, data obtained on Clermont County residents through the Ohio BRFSS is aggregated with Butler, Clinton and Warren counties.

According to the United States Preventative Services Task Force (USPSTF) women 50-74 years should have a mammogram every two years to screen for breast cancer, although mammography may be appropriate for some women before age 50 (2010). Among women age 40 and older in the four county area, 70.9% had a mammogram within the past two years (Table 14). USPSTF recommends screening for cervical cancer in females every three years beginning at age 21 (2012). More than three-quarters of females 18 and older in the four county area have had a Pap Smear test within the past three years (Table 14). Sigmoidoscopy and colonoscopy tests screen for colorectal cancer and are recommended for adults ages 50-75 by the USPSTF (2008). Approximately one-half of adults in the four county area have had a sigmoidoscopy or colonoscopy within the past five years which is similar to the prevalence for the state (Table 14). Although the USPSTF recommends against PSA testing for prostate cancer, they also recommend informed decision making when individually deciding if screening is the best option. This recommendation from the USPSTF has changed in recent years (U.S. Preventative Services Task Force, 2012). In the four county area, 52.1% of men age 50 and older have had a PSA test in the past year, which is slightly higher than the state prevalence of PSA testing (Table 14).

<table>
<thead>
<tr>
<th>Table 14: Prevalence of Cancer Screenings</th>
<th>Four County Area*</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mammogram</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female 40+, Past 2 Years</td>
<td>70.9%</td>
<td>74.2%</td>
</tr>
<tr>
<td><strong>Pap Smear</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female 18+, Past 3 Years</td>
<td>76.9%</td>
<td>78.4%</td>
</tr>
<tr>
<td><strong>Sigmoidoscopy/Colonoscopy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults 50+, Past 5 Years</td>
<td>51.4%</td>
<td>52.5%</td>
</tr>
<tr>
<td><strong>PSA Test</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males 50+, Past 1 Year</td>
<td>52.1%</td>
<td>45.5%</td>
</tr>
</tbody>
</table>

14) Source: Ohio Department of Health, Bureau of Healthy Ohio, Chronic Disease and Behavioral Epidemiology, Ohio Behavioral Risk Factor Surveillance System, 2012

* Four county area includes Butler, Clermont, Clinton, and Warren Counties in Ohio.
Cigarette and Alcohol Use

Excessive alcohol consumption is a risk factor for many adverse health outcomes. Excessive drinking includes binge drinking (consuming more than four (women) or five (men) alcoholic beverages on a single occasion in the past 30 days), or heavy drinking, defined as drinking more than one (women) or two (men) drinks per day on average (County Health Rankings and Roadmaps, 2013). Excessive alcohol use has numerous immediate health effects, most often as a result of binge drinking, including unintentional injuries, violence, risky sexual behaviors, miscarriage and stillbirth, alcohol poisoning and loss of consciousness. Additionally, over time excessive alcohol consumption can also cause long-term health outcomes such as dementia, stroke, cardiovascular problems, depression, social and family problems, various cancers, disease of the liver and other gastrointestinal problems (Centers for Disease Control and Prevention, 2012). In Clermont County, 13% of respondents reported excessive drinking, which is slightly lower than the percentages for Ohio and the United States (Table 15).

Smoking cigarettes has been identified as a cause of various cancers, cardiovascular disease and other adverse health outcomes (Centers for Disease Control and Prevention, 2013). Half of Clermont County residents have reported being a smoker during their lifetime, which is defined as having smoked at least 100 cigarettes, and more than a quarter of residents report being a current smoker (smokes every day or “most days” and has smoked at least 100 cigarettes in their lifetime) (Table 15). Among current smokers in Clermont County, 58.3% report they have stopped smoking for one day or longer within the past 12 months because they were trying to quit (Table 15).

<table>
<thead>
<tr>
<th>Table 15: Behavioral Risk Factors</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarette Use&lt;sup&gt;13&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoker During Lifetime</td>
<td>50.2%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Current Smoker</td>
<td>27.6%</td>
<td>23.1%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Stopped Smoking for One Day or Longer in Past 12 Months</td>
<td>58.3%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Alcohol Use&lt;sup&gt;12&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excessive Drinking</td>
<td>13.0%</td>
<td>18.0%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

<sup>12</sup> Source: County Health Rankings and Roadmaps, 2013 (National data presented is the median value of all counties included in the ranking measure.)

<sup>13</sup> Source: Clermont County Health Needs Assessment, 2009

— Denotes data unavailable or not applicable
Adult Body Mass Index

Body Mass Index (BMI) is a number calculated using a person’s height and weight. Although BMI does not measure body fat directly, research shows BMI correlates to direct measures of body fat and serves as a method of screening for weight categories (Centers for Disease Control and Prevention, 2011). BMI results for the OH-KY-IN Metropolitan Statistical Area (MSA) are included in Table 16.

<table>
<thead>
<tr>
<th>Table 16: Adult Body Mass Index (BMI)</th>
<th>Clermont County (OH-KY-IN MSA*)</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight (BMI 12.0-18.4)</td>
<td>1.9%</td>
<td>1.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Normal Weight (BMI 18.5-24.9)</td>
<td>34.4%</td>
<td>32.4%</td>
<td>34.5%</td>
</tr>
<tr>
<td>Overweight (BMI 25.0-29.9)</td>
<td>36.1%</td>
<td>36.2%</td>
<td>35.7%</td>
</tr>
<tr>
<td>Obese (BMI 30.0-99.8)</td>
<td>27.7%</td>
<td>29.7%</td>
<td>27.8%</td>
</tr>
</tbody>
</table>


* Cincinnati-Middletown, OH-KY-IN Metropolitan Statistical Area (MSA) includes Brown, Butler, Clermont, Hamilton, and Warren Counties in Ohio, Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton Counties in Kentucky, and Dearborn, Franklin, and Ohio Counties in Indiana.

The 2009 Clermont County Health Needs Assessment found adult BMIs comparable to those of the 2011 Behavioral Risk Factor Surveillance System (BRFSS). When asked, adult reports of their weight perception varied in comparison to their calculated BMI, with those of normal weight most closely matching their perception with their BMI. All other weight categories demonstrated either an over- or under-estimation of perceived weight as compared to calculated BMI (Figure 2).

13) Source: Clermont County Health Needs Assessment, 2009
Physical Activity

According to the Clermont County Health Needs Assessment (2009), 27.3% of individuals who report participating in moderate physical activity, defined as activity causing some increase in breathing or heart rate such as walking, bicycling, vacuuming or gardening, do so three days per week. Of those who participate in vigorous activities, which cause large increases in breathing or heart rate, such as running, aerobics, or heavy yard work, 33.4% do so three days per week (Clermont County Health Needs Assessment, 2009).

Although 79.0% of residents indicate that they are aware of safe, convenient and affordable places to go for physical activity, 54.2% report that they do not think they get enough exercise (Clermont County Health Needs Assessment, 2009). Reasons given for not getting enough physical activity include lack of time, motivation and access, as well as physical limitations and concerns about safety (Figure 3). Physical inactivity, or no leisure time physical activity, was reported among 27% of adults 20 years and older (Table 17).

Table 17: Physical Activity and Nutrition

<table>
<thead>
<tr>
<th>Physical Activity and Nutrition</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Inactivity (Age 20 Years and Older)</td>
<td>27.0%</td>
<td>25.0%</td>
<td>28.0%</td>
</tr>
<tr>
<td>Any Physical Activity in Past 30 Days</td>
<td>66.6%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Moderate Activity for 10 Minutes or More in a Typical Week</td>
<td>72.6%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Vigorous Activity for 10 Minutes or More in a Typical Week</td>
<td>35.8%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consume Less Than 5 Fruits / Vegetables per Day</td>
<td>78.5%</td>
<td>78.4%</td>
<td>—</td>
</tr>
<tr>
<td>Aware of Local Farmer's Markets in the County</td>
<td>71.0%</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

12) Source: County Health Rankings and Roadmaps, 2013. (National data is the median value of all counties included in the ranking measure.)
13) Source: Clermont County Health Needs Assessment, 2009
16) Source: Ohio Department of Health, Healthy Ohio Community Profiles, 2008
— Denotes data unavailable or not applicable
Nutrition

In Clermont County, 70.9% of residents consume fast food one time or more per week and 40.4% consume at least one soft drink per day (Figure 4, Figure 5). Obese individuals in Clermont County are more likely than overweight and normal individuals to consume at least one soda daily (Clermont County Health Needs Assessment, 2009).

Foods high in sugar, fat, and salt, such as fast food and sugary drinks or sodas, contribute to weight gain and obesity, especially when people are not participating in adequate amounts of physical activity. Obesity has been identified as a national epidemic that causes higher medical costs and lowers quality of life for those affected. Fast food restaurants, snack shops, and vending machines provide convenience but at the cost of high calorie and low nutritional quality foods and drinks. Obesity and overweight are contributing factors to many adverse health outcomes including heart disease, stroke, diabetes, certain cancers, sleep apnea, and breathing problems (Centers for Disease Control and Prevention, 2010).
Average Seat Belt Use

In Clermont County, the Safe Communities Coalition conducts biannual seat belt surveys to assess the rate of seat belt usage throughout the county. Data presented in Figure 6 depicts the locations utilized and the average rates of seat belt usage at each location from 2008-2012. Surveys are conducted in the spring and fall of the year, on the same day and time for comparison purposes. Survey data gathered includes age, gender, race, and if all occupants in the front seat are wearing a seat belt. Vehicles are observed as they pass the checkpoint for one hour.

Townships in the southern portion of Clermont County have lower average seat belt use than the remaining townships. Highest rates of seat belt use are in Batavia township, followed by Miami township. The average rate of seat belt use for the entire county from 2008-2012 was 77.1% (Clermont County Safe Communities Coalition, 2013).

Figure 6: Average Seat Belt Usage
Clermont County 2008—2012

Batavia Township has the highest average rate of seat belt use for the county.

Source: Clermont County Safe Communities Coalition, 2013
Adult Immunizations

Pneumococcal disease, caused by the *Streptococcus pneumoniae* bacteria, is a leading cause of vaccine preventable illness and death in the United States. Individuals who acquire pneumococcal disease may experience serious infections of the lungs (pneumonia), blood (bacteremia) and covering of the brain (meningitis). To reduce the risk of illness, the CDC recommends pneumococcal polysaccharide vaccine (PPSV) for all adults age 65 and older, as well as for individuals ages 2-64 years with certain health conditions. Adults 19-64 years who have asthma or are a smoker should also receive PPSV (Centers for Disease Control and Prevention, 2009). All individuals 6 months of age and older should receive an annual influenza vaccine to prevent seasonal influenza.

<table>
<thead>
<tr>
<th>Table 18: Adult Immunizations</th>
<th>Clermont County (OH-KY-IN MSA*)</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults aged 65+ who have had a flu shot within the past year</td>
<td>61.4%</td>
<td>61.4%</td>
</tr>
<tr>
<td>Adults aged 65+ who have ever had a pneumonia vaccination</td>
<td>72.3%</td>
<td>69.9%</td>
</tr>
</tbody>
</table>


* Cincinnati-Middletown, OH-KY-IN Metropolitan Statistical Area (MSA) includes Brown, Butler, Clermont, Hamilton, and Warren Counties in Ohio, Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton Counties in Kentucky, and Dearborn, Franklin, and Ohio Counties in Indiana.
Maternal and Child Health Indicators
Maternal Health Indicators

The infant mortality rate (the number of infant deaths within the first year of life per 1,000 live births) for Clermont County is lower than the rate for the state, at 6.1 and 7.7 respectively (Table 19). The crude birth rate, which is the number of births per 1,000 population, and the fertility rate, which is the number of births to females per 1,000 females, aged 15-44 years, are both higher in Clermont County than the state rates. More than 81% of live births in Clermont County received prenatal care during the first trimester (calculated as a percentage of births where it is known when care began). The percentage of Clermont County females who report smoking during pregnancy (22.2%) is higher than the state percentage (17.8%) (Table 19).

![The infant mortality rate in Clermont County is slightly lower than the rate statewide.]

<table>
<thead>
<tr>
<th>Maternal Health Indicators</th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant Mortality Rate</td>
<td>6.1</td>
<td>7.7</td>
</tr>
<tr>
<td>Total Number of Births</td>
<td>2,468</td>
<td>139,034</td>
</tr>
<tr>
<td>Crude Birth Rate (per 1,000 population)</td>
<td>12.5</td>
<td>12.1</td>
</tr>
<tr>
<td>Fertility Rate (per 1,000 females, age 15-44 years)</td>
<td>65.7</td>
<td>62.2</td>
</tr>
<tr>
<td>Low Birth Weight (percent of total births)</td>
<td>8.1%</td>
<td>8.6%</td>
</tr>
<tr>
<td>First Trimester Prenatal Care (percent of births where it is known when care began)</td>
<td>81.4%</td>
<td>73.0%</td>
</tr>
<tr>
<td>Smoking During Pregnancy (percent of total births)</td>
<td>22.2%</td>
<td>17.8%</td>
</tr>
<tr>
<td>Abortion Total</td>
<td>233</td>
<td>23,250</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teen Pregnancy Rate (per 1,000 females)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10-19 Years</td>
<td>23.0</td>
<td>29.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teen Birth Rate (per 1,000 females)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10-19 Years</td>
<td>15.0</td>
<td>17.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teen Abortions (total among females)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10-19 Years</td>
<td>31</td>
<td>3,406</td>
</tr>
</tbody>
</table>

19) Source: Ohio Department of Health, Center for Public Health Statistics and Informatics, Infant Deaths and Mortality Rates, 2006-2010
20) Source: Ohio Department of Health, Center for Public Health Statistics and Informatics, Annual County Birth Summary, 2010
21) Source: Ohio Department of Health, Center for Public Health Statistics and Informatics, Induced Abortions in Ohio, 2011
22) Source: Ohio Department of Health, Center for Public Health Statistics and Informatics, Estimated Teen Pregnancies and Rates, 2010
23) Source: Ohio Department of Health, Center for Public Health Statistics and Informatics, Fertility Rates and Birth Rates, 2010

* Rate per 1,000 per live births; 5 year average 2006-2010
**Child Health Indicators**

Evidence reveals that breastfeeding has numerous health benefits for both mother and child including a reduced risk of diabetes, asthma, childhood cancer, and obesity in children. Mothers who breastfeed their children have been found to have lower body weight, blood pressure, LDL cholesterol, and a reduced risk of type-2 diabetes and depression (U.S. Department of Health and Human Services, 2010). Approximately half of mothers in Clermont County have ever breastfed their child (Table 20).

In respect to elevated lead levels in children, Clermont County has a lower rate than the state. In 2011, there were no cases of elevated blood lead levels within the county (Table 20). Lead exposure is especially harmful for growing children since the lead replaces iron and calcium in the body. Lead poisoning in young children can cause lower IQ, delayed growth, poor hearing, Attention Deficit Hyperactivity Disorder, mental retardation, convulsions, coma, and death (Ohio Department of Health, 2011).

<table>
<thead>
<tr>
<th>Table 20: Child Health Indicators</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overweight/Obese</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children aged 2-5 years on WIC who are overweight&lt;sup&gt;24&lt;/sup&gt;</td>
<td>14.7%</td>
<td>15.7%</td>
<td>16.1%</td>
</tr>
<tr>
<td>Children aged 2-5 years on WIC who are obese&lt;sup&gt;24&lt;/sup&gt;</td>
<td>13.4%</td>
<td>12.4%</td>
<td>14.4%</td>
</tr>
</tbody>
</table>
| Third Grade Children Who Are Overweight/Obese<sup>25</sup> | 37.2%<sup>*</sup> | 34.7%<sup>**</sup> | 35.5%<sup>***</sup> |<br>
| **Breastfeeding (Children < 5 years of age)<sup>24</sup>** | | | |
| Ever Breastfed | 53.6% | 53.1% | 63.2% |
| Breastfed at least 6 months | 12.7% | 14.9% | 25.1% |
| Breastfed at least 12 months | 6.3% | 10.0% | 16.9% |
| Breastfed exclusively at least 3 months | 13.6% | 13.6% | 10.7% |
| Breastfed exclusively at least 6 months | 10.7% | 11.4% | 6.1% |
| **Lead levels (Children less than 6 years of age)<sup>26</sup>** | | | |
| Total Elevated Blood Lead Levels | 0.0% | 1.1% | — |
| **Oral Health, Third Grade Students, 2009-2010<sup>27</sup>** | | | |
| Dental Visit in Past Year | 81.0% | 80.1% | — |
| **Physical Health, Fourth Grade Students, 2009<sup>17</sup>** | | | |
| Well Check-Up in Past Year | 53.1% | — | — |

<sup>17</sup> Source: Clermont County General Health District Youth Health Assessment, 2009
<br><sup>24</sup> Source: Ohio Department of Health, Data reported by Ohio to PedNSS is from the Ohio Women, Infants and Children (WIC) Program, Pediatric Nutrition Surveillance, 2011
<br><sup>26</sup> Source: Ohio Department of Health, Childhood Lead Poisoning, 2011
<br><sup>27</sup> Source: Ohio Department of Health, Oral Health Isn’t Optional! A Report on the Oral Health of Ohioans and Their Access to Dental Care, 2011
<br>* 2009-2010 Clermont County data, ** 2004-2010 Ohio data, *** 2007-2008 National data
<br>— Denotes data unavailable or not applicable
Child Physical Activity and Nutrition

In order to reduce the prevalence of overweight and obesity in children, it is important for families to establish healthy eating habits and active lifestyles. Recommendations for promoting healthy weights and healthy children suggest maintaining regular meal and snack times, consuming junk food or fast food in moderation, and setting healthy limits on screen entertainment such as television and video games (Academy of Nutrition Dietetics, 2012).

The United States Department of Agriculture (USDA) recommends children ages 6-17 participate in 60 minutes or more of physical activity each day (2013). Additionally, physical activity should include muscle and bone-strengthening exercises at least three days per week (Academy of Nutrition Dietetics, 2012). When fourth grade students who took part in the 2009 Clermont County Youth Health Needs Assessment were asked how many days per week they participated in physical activity for at least one hour, 56.1% of students reported 6-7 days per week (Table 21).

The American Academy of Pediatrics (2001) recommends that children limit screen time, including television, computers and video games, to 1-2 hours per day of quality programming. In the Youth Health Needs Assessment the majority of students surveyed (90.1%) reported that they watch television daily, and most (84.7%) reported playing video or computer games each day (Table 21).

As part of a well-balanced diet, the USDA Dietary Guidelines for Americans recommend children consume 1 ½ to 2 cups of fruit and 2 to 3 cups of vegetables per day (USDA, 2013). Table 21 shows that 36.8% of fourth grade students reported consuming fruit at least once per day, and 29.3% ate vegetables at a minimum of 1-2 times daily.

Students were also asked how they describe their weight and responded by indicating underweight, right weight, or overweight. Students’ weights were then assessed based on their Body Mass Index (BMI). Fewer children perceived themselves as overweight than the actual percentage of children whose calculated BMIs indicated they were overweight or obese. Alternatively, more children perceived themselves as underweight than the actual percentage of underweight children according to BMI (Figure 7).
Table 21:  
Physical Activity and Nutrition,  
Fourth Grade Students, 2009

<table>
<thead>
<tr>
<th></th>
<th>Clermont County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physically Active at Least 1 Hour per Day(^{17,8})</td>
<td></td>
</tr>
<tr>
<td>0 Days per Week</td>
<td>1.9%</td>
</tr>
<tr>
<td>1-2 Days per Week</td>
<td>13.0%</td>
</tr>
<tr>
<td>3-5 Days per Week</td>
<td>29.0%</td>
</tr>
<tr>
<td>6-7 Days per Week</td>
<td>56.1%</td>
</tr>
<tr>
<td>Hours Watching TV on School Days(^{17})</td>
<td></td>
</tr>
<tr>
<td>0 Hours per Day</td>
<td>9.9%</td>
</tr>
<tr>
<td>Less Than 1 Hour per Day</td>
<td>31.9%</td>
</tr>
<tr>
<td>1-2 Hours per Day</td>
<td>35.0%</td>
</tr>
<tr>
<td>3 or More Hours per Day</td>
<td>23.1%</td>
</tr>
<tr>
<td>Hours Playing Video or Computer Games on School Days(^{17})</td>
<td></td>
</tr>
<tr>
<td>0 Hours per Day</td>
<td>15.3%</td>
</tr>
<tr>
<td>Less Than 1 Hour per Day</td>
<td>38.9%</td>
</tr>
<tr>
<td>1-2 Hours per Day</td>
<td>27.5%</td>
</tr>
<tr>
<td>3 or More Hours per Day</td>
<td>18.3%</td>
</tr>
<tr>
<td>Fruit Consumption(^{17,8})</td>
<td></td>
</tr>
<tr>
<td>None in Past Week</td>
<td>12.1%</td>
</tr>
<tr>
<td>1-3 Times in Past Week</td>
<td>26.6%</td>
</tr>
<tr>
<td>4-6 Times in Past Week</td>
<td>24.5%</td>
</tr>
<tr>
<td>1-2 Times per Day</td>
<td>21.4%</td>
</tr>
<tr>
<td>3 or More Times per Day</td>
<td>15.4%</td>
</tr>
<tr>
<td>Vegetable Consumption(^{17,8})</td>
<td></td>
</tr>
<tr>
<td>None in Past Week</td>
<td>17.4%</td>
</tr>
<tr>
<td>1-3 Times in Past Week</td>
<td>31.9%</td>
</tr>
<tr>
<td>4-6 Times in Past Week</td>
<td>21.4%</td>
</tr>
<tr>
<td>1-2 Times per Day</td>
<td>19.5%</td>
</tr>
<tr>
<td>3 or More Times per Day</td>
<td>9.8%</td>
</tr>
<tr>
<td>Junk Food Consumption(^{17})</td>
<td></td>
</tr>
<tr>
<td>Everyday</td>
<td>17.0%</td>
</tr>
<tr>
<td>Almost Every Day</td>
<td>19.0%</td>
</tr>
<tr>
<td>3-4 Days per Week</td>
<td>17.8%</td>
</tr>
<tr>
<td>1-2 Days per Week</td>
<td>23.8%</td>
</tr>
<tr>
<td>On Special Occasions</td>
<td>20.7%</td>
</tr>
<tr>
<td>Never</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

\(^{17}\) Source: Clermont County General Health District Youth Health Assessment, 2009  
\(^{8}\) Based on self-reported activity and fruit and vegetable consumption in the last seven days.
Child Immunizations

The Ohio Department of Health Immunization Program measures childhood immunization rates through the Centers for Disease Control and Prevention National Immunization Survey (NIS). While statewide childhood immunization rates are reported, complete county level data is not available. In Ohio 76.4% of children 19-35 months of age received the full series of immunizations in 2011 (Table 22). The Healthy People 2020 immunization rate goal is 80% for this age group (Healthy People 2020). The immunization series required for school entry in Ohio includes the following vaccines: DTP or DTaP (Diphtheria, Tetanus, and Pertussis), Poliovirus, MMR (Measles, Mumps, and Rubella), Hib (Haemophilus Influenzae Type b), Hepatitis B, and Varicella (chickenpox) (Ohio Department of Health, 2004-2001).

Table 22: Child Immunizations

<table>
<thead>
<tr>
<th>Percent of Children Vaccinated</th>
<th>Ohio</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4:3:1:3:1:4 Series</td>
<td>71.5%</td>
<td>68.8%</td>
<td>73.8%</td>
<td>76.4%</td>
</tr>
</tbody>
</table>

* 4:3:1:3:1:4 vaccine series: 4 doses DTaP, 3 doses Polio, 1 dose MMR, 3 doses Hib, 3 doses Hepatitis B, 1 dose Varicella, and 4 doses PCV7 vaccine.

Child Economic Indicators

Throughout the United States, more than one out of five children live in a food insecure household where they lack regular access to adequate amounts of nutritious food to live a healthy life. In Clermont County, estimated program eligibility for food assistance, including free and reduced price school lunch, school breakfast, and summer food, WIC and SNAP among food insecure children, is 55%, while statewide 68% of food insecure children are eligible (Feeding America, 2013).

Table 23: Child Economic Indicators

<table>
<thead>
<tr>
<th>Child Economic Indicators</th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children Enrolled in Public Health Insurance, 2011</td>
<td>44.0%</td>
<td>52.7%</td>
</tr>
<tr>
<td>Children Receiving Free or Reduced Price Lunch, 2011</td>
<td>35.8%</td>
<td>45.3%</td>
</tr>
<tr>
<td>Children receiving SNAP benefits (Food Stamps), 2011</td>
<td>19.0%</td>
<td>28.0%</td>
</tr>
<tr>
<td>Food Insecure Children, 2011</td>
<td>21.2%</td>
<td>25.7%</td>
</tr>
</tbody>
</table>

29) Source: The Annie E. Casey Foundation Kids Count Data Center, 2013
30) Source: Feeding America, Map the Meal Gap, 2013
* Percentage of children receiving health insurance through Medicaid or the State Children’s Health Insurance Program (SCHIP).
** Estimated percentage of children that participated in the free/reduced-price lunch program in Ohio schools in October of each school year.
*** Percentage of children eligible to receive Supplemental Nutrition Assistance Program (SNAP) benefits in July of each year.
Free and Reduced Price Lunch Eligibility

Each October schools participating in the National School Lunch Program (NSLP) report the current enrollment and the number of students eligible for free and reduced price school meal benefits. A student is considered eligible for free meal benefits if the household income is at or less than 130% of the USDA established poverty guidelines or if the student receives food stamps or Ohio Works First (OWF) benefits. A student is considered eligible for reduced price meal benefits if the household income is at or less than 185% of the USDA established poverty guidelines (Ohio Department of Education, 2013).

Figure 8 shows the percent of students eligible for free and reduced price school meal benefits for each school district in Clermont County. Blanchester and Loveland School Districts cross into adjacent counties and are therefore not included in this calculation.

Felicity and Goshen schools have the highest percentage of students eligible for the school lunch program.

Social Health Indicators
Perception of Health

According to the County Health Rankings and Roadmaps (2013), a higher number of unhealthy days within a county may be linked to higher unemployment, poverty, percentage of adults who did not complete high school, mortality rates and disabilities. The percentage of Clermont County residents reporting poor or fair health is comparable to the state and national percentages (Table 24). The number of poor mental and physical health days in the past 30 days reported by Clermont County residents is slightly higher than the number of days reported for Ohio and the United States (Table 24).

### Table 24: Health Perception

<table>
<thead>
<tr>
<th>Self-Reported Health Status</th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor or Fair Health*</td>
<td>15%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Poor Physical Health Days**</td>
<td>4.3</td>
<td>3.6</td>
<td>3.7</td>
</tr>
<tr>
<td>Poor Mental Health Days***</td>
<td>4.0</td>
<td>3.8</td>
<td>3.4</td>
</tr>
</tbody>
</table>

* Percent of adults reporting fair or poor health (age-adjusted to 2000 U.S. population)
** Average number of days respondents reported physical health is not good within the past 30 days (age-adjusted to the 2000 U.S. population)
*** Average number of days respondents reported their mental health was not good within the past 30 days (age-adjusted to the 2000 U.S. population).

Alcohol-Related Crashes

According to the CDC, alcohol impaired driving claimed 11,000 lives across the nation in 2009, including more than 180 children. Efforts to eliminate these preventable deaths include use of sobriety checkpoints, enforcement of the legal drinking age and zero tolerance laws, and implementation of ignition interlocks (in-car breathalyzers) (Centers for Disease Control and Prevention, 2012). The Ohio Department of Public Safety reported 210 alcohol-related crashes in Clermont County in 2011 (Table 25).

### Table 25: Alcohol-Related Crashes

| Alcohol-Related Crashes, 2011 |
|-------------------------------|----------------|-----|
| Total Alcohol-Related Crashes | 210            | 12,639 |
| Alcohol-Related Fatal Crashes | 9              | 342  |
| Alcohol-Related Injury Crashes| 84             | 5,219 |

Source: Ohio Department of Public Safety, Traffic Crash Facts, 2012
Domestic Violence and Child Abuse

Child abuse and neglect, also referred to as child maltreatment, can include physical, sexual and emotional abuse as well as neglect of a child by a parent, caregiver or another person in a custodial role. Children who are abused are at risk for health related problems that can extend into adulthood including depression, obesity, substance abuse, suicide and some chronic diseases. Those at highest risk of injury and death as a result of abuse are children less than four years of age, children living in poverty, and children of families with a history of violence, drugs, or alcohol problems (National Center for Injury Prevention and Control, 2012). Table 26 shows the number of new reports of child abuse and neglect by type in 2011.

<table>
<thead>
<tr>
<th>Table 26: Domestic Violence and Child Abuse</th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number/Percent</td>
<td>Number/Percent</td>
</tr>
<tr>
<td>Domestic Violence, 2012&lt;sup&gt;33&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim with Injury</td>
<td>408</td>
<td>25,167</td>
</tr>
<tr>
<td>Victim with no Injury</td>
<td>618</td>
<td>30,941</td>
</tr>
<tr>
<td>Victim with Fatal Injury</td>
<td>1</td>
<td>38</td>
</tr>
<tr>
<td>Total Incidents</td>
<td>1,027</td>
<td>56,146</td>
</tr>
<tr>
<td>Child Abuse and Neglect (children under age 18 years), 2011&lt;sup&gt;34&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>433 / 25%</td>
<td>27,542 / 27%</td>
</tr>
<tr>
<td>Neglect</td>
<td>373 / 21%</td>
<td>29,553 / 30%</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>165 / 9%</td>
<td>10,581 / 10%</td>
</tr>
<tr>
<td>Emotional Maltreatment</td>
<td>41 / 2%</td>
<td>1,804 / 2%</td>
</tr>
<tr>
<td>Multiple Allegations of Abuse/Neglect</td>
<td>65 / 4%</td>
<td>12,128 / 12%</td>
</tr>
<tr>
<td>Family in Need of Services/Dependency/Other</td>
<td>670 / 39%</td>
<td>19,196 / 19%</td>
</tr>
<tr>
<td>Total Incidents</td>
<td>1,747 / 100%</td>
<td>100,804 / 100%</td>
</tr>
<tr>
<td>Child and Custody Profiles (under 18 years) on 1/1/2012&lt;sup&gt;34&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary Custody</td>
<td>223</td>
<td>9,128</td>
</tr>
<tr>
<td>Permanent Custody</td>
<td>50</td>
<td>2,412</td>
</tr>
<tr>
<td>Planned Permanent Living Arrangement</td>
<td>26</td>
<td>1,264</td>
</tr>
<tr>
<td>Total</td>
<td>299</td>
<td>12,804</td>
</tr>
<tr>
<td>Children in Placement (rate per 1,000), 2011</td>
<td>5.98</td>
<td>4.53</td>
</tr>
</tbody>
</table>

Injury Rates

According to the Ohio Department of Health Violence and Injury Prevention Program (2010), injuries account for four deaths, 21 hospitalizations, and 469 emergency department visits each week in Clermont County. Additionally, fatal and non-fatal injuries cost $250 million in medical care and work loss in 2010 (Ohio Department of Health, 2012).

The suicide rate in Clermont County (16.0) is higher than the rate statewide (11.9), however the homicide rate in Clermont County (1.0) is lower than the rate for the state (5.5). Clermont County rates for unintentional injury deaths (43.0), hospitalizations (333.0), and emergency department visits (10,226.0) are higher than the rates statewide (Table 27).

In 2010, injuries cost an average of $1,276 per Clermont County resident.35

### Table 27: Injury Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Injury Death Rate, 2008-2010</strong>35†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homicide Rate</td>
<td>1.0**</td>
<td>5.5</td>
</tr>
<tr>
<td>Suicide Rate</td>
<td>16.0</td>
<td>11.9</td>
</tr>
<tr>
<td>Unintentional Injury</td>
<td>43.0</td>
<td>40.9</td>
</tr>
<tr>
<td><strong>Injury Hospitalization Rate, 2010</strong>35*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assault</td>
<td>3.0**</td>
<td>21.0</td>
</tr>
<tr>
<td>Self-Harm</td>
<td>72.0</td>
<td>52.0</td>
</tr>
<tr>
<td>Unintentional Injury</td>
<td>333.0</td>
<td>286.0</td>
</tr>
<tr>
<td><strong>Injury Emergency Department Visit Rate, 2010</strong>35*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assault</td>
<td>284.0</td>
<td>444.0</td>
</tr>
<tr>
<td>Self-Harm</td>
<td>50.0</td>
<td>85.0</td>
</tr>
<tr>
<td>Unintentional Injury</td>
<td>10,226.0</td>
<td>8,378.0</td>
</tr>
</tbody>
</table>


* Rates per 100,000 population

** Rates are based on fewer than 20 deaths or hospitalizations and should be interpreted with caution.

† Clermont County data from 2009-2010, Ohio data from 2008-2010
Leading Causes of Injury

Table 28 shows the leading causes of injury resulting in death, hospitalization and emergency department visits in the county and state. The highest rate of death from injury in Clermont County and throughout Ohio occurred as a result of unintentional poisoning (Ohio Department of Health, 2009-2010). The majority of these deaths were caused by drugs or medicinal substances; however, other non-drug substances, such as gases and vapors, are included as agents of unintentional poisoning.

Falls made up the highest rate of injury hospitalizations in Clermont County and Ohio (Table 28). The majority of fatal and non-fatal injuries due to falls occurred among adults age 65 or older as a result of slipping or tripping on an object (Burden of Injury in Ohio, 2000-2010).

<table>
<thead>
<tr>
<th>Table 28: Leading Causes of Injury by Outcome</th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Injury Death Rate, 2009-2010</strong>&lt;sup&gt;35a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suffocation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Motor Vehicle Traffic Crashes</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Falls</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Suicide</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Poisoning</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td><strong>Injury Hospitalization Rate, 2010</strong>&lt;sup&gt;35a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Struck</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Poisoning</td>
<td>45</td>
<td>24</td>
</tr>
<tr>
<td>Motor Vehicle Traffic Crashes</td>
<td>51</td>
<td>41</td>
</tr>
<tr>
<td>Self-Harm</td>
<td>72</td>
<td>52</td>
</tr>
<tr>
<td>Falls</td>
<td>192</td>
<td>189</td>
</tr>
<tr>
<td><strong>Injury Emergency Department Visit Rate, 2010</strong>&lt;sup&gt;35a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cut, Pierce</td>
<td>669</td>
<td>657</td>
</tr>
<tr>
<td>Motor Vehicle Traffic Crashes</td>
<td>1,225</td>
<td>928</td>
</tr>
<tr>
<td>Overexert</td>
<td>1,620</td>
<td>1,075</td>
</tr>
<tr>
<td>Struck</td>
<td>1,652</td>
<td>1,305</td>
</tr>
<tr>
<td>Falls</td>
<td>3,323</td>
<td>2,711</td>
</tr>
</tbody>
</table>

<sup>35a</sup> Rates per 100,000 population
Drug Poisoning

Every month in Clermont County unintentional drug poisonings account for three deaths, seven hospitalizations, and 12 emergency department visits (Ohio Department of Health, 2012). Rates for unintentional drug poisoning deaths, hospitalizations, and emergency department visits in Clermont County are all higher than the state average, with hospitalizations reaching two times the state average (Table 29).

<table>
<thead>
<tr>
<th>Table 29: Drug Poisoning</th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Poisoning Deaths, 2009-2010</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Drug Poisoning Hospitalizations, 2010</td>
<td>44</td>
<td>22</td>
</tr>
<tr>
<td>Drug Poisoning Emergency Department Visits, 2010</td>
<td>75</td>
<td>64</td>
</tr>
</tbody>
</table>


The number of drug-related deaths has increased each year since 2006, with the exception of a small decrease in 2009 (Figure 9). According to the Clermont County Coroner’s Office, the majority of these drug-related deaths are accidental in nature. Polysubstance abuse (where two or more drugs are employed) has been a factor in many of these accidental drug-related deaths, ranging from 34.6% to 71.9% within the past seven years (Clermont County Coroner’s Office, 2013).

The Clermont County Narcotics Unit, operating through the Sheriff’s Office, investigates cases involving illegal drug manufacture, use and distribution. In 2012, 38% of arrests (79 of 209) made through the Narcotics Unit were heroin/opiate-related. This percentage increased to 52% of arrests (40 of 77) made between January and July of 2013 (Clermont County Sheriff’s Office, 2013).

36) Source: Clermont County Coroner’s Office, 2013

* Deaths in which intent is undetermined are included in the accidental death category.
Suicide

Between 2007 and 2012, hanging and use of a firearm were the predominant mechanisms of suicide in Clermont County, as documented by the Coroner’s office (2013). Use of drugs was determined in a small percentage of suicide deaths with the exception of an increase in 2008 (Figure 10).

Analysis of the mechanism of suicide by age group shows that firearms are used in less than one-third of suicides committed by individuals 19 years of age and younger, but increases steadily by age group, becoming the predominant mechanism for older adults (Figure 11). Hanging is the primary mechanism of suicide among adolescents and younger adults (29 years of age and younger). Drug use is more typically a cause of accidental death, making up only a small percentage of suicide deaths among adults 30-69 years of age (Figure 11).
Death and Illness Indicators
Leading Causes of Death

Risks for the leading causes of death may include age, gender, ethnicity, genetic makeup, or having a close family member with the same illness. Health conditions such as hypertension/high blood pressure, high cholesterol, and diabetes may also contribute to the development of these conditions. While many risk factors cannot be changed, individuals can reduce their risks of illness by not smoking, maintaining a healthy weight, eating a well balanced diet, staying physically active, and avoiding excessive use of alcohol (Centers of Disease Control and Prevention, 2013).

The leading causes of death in Clermont County in 2010 were cancer, heart disease, chronic lower respiratory disease, stroke, unintentional injury, and Alzheimer’s disease. Although the mortality rate from heart disease (191.7) is highest for the state, it is the second leading cause of death among Clermont County residents (161.3) following cancer (185.6) (Table 30).

Clermont County has higher mortality rates for chronic lower respiratory disease, stroke, and unintentional injury, but lower mortality rates for heart disease, cancer, and Alzheimer’s disease compared to Ohio rates (Table 30).

<table>
<thead>
<tr>
<th>Leading Causes of Death, 2010[^37]</th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>161.3</td>
<td>191.7</td>
</tr>
<tr>
<td>Cancer</td>
<td>185.6</td>
<td>187.3</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>57.4</td>
<td>50.4</td>
</tr>
<tr>
<td>Stroke</td>
<td>53.6</td>
<td>42.4</td>
</tr>
<tr>
<td>Unintentional Injury (Accident)</td>
<td>49.8</td>
<td>41.6</td>
</tr>
<tr>
<td>Alzheimer's Disease</td>
<td>29.3</td>
<td>29.7</td>
</tr>
</tbody>
</table>

[^37]: Source: Ohio Department of Health, Center for Public Health Statistics and Informatics, Death Data and Statistics, 2010

[^*]: Age-adjusted death rate per 100,000 population
Mortality Rates

The adult death rate (ages 18 and over) is lower for Clermont County than for Ohio (Table 31). The mortality rate in Clermont County is higher than the mortality rate in Ohio for unintentional injury, suicide, cancer (all sites), stroke, chronic lower respiratory disease, and pneumonia/influenza, but lower than the mortality rate in Ohio for homicide, cardiovascular disease, coronary heart disease, and chronic liver disease and cirrhosis. Mortality rates are similar for Clermont County and Ohio for motor vehicle traffic related deaths, stroke, and diabetes (Table 31).

### Table 31: Mortality Rates

<table>
<thead>
<tr>
<th>Mortality Rate, 2006-2008</th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Death Rate (Age 18 and Over)</td>
<td>1,060.4</td>
<td>1,148.5</td>
</tr>
<tr>
<td>Unintentional Injury Deaths</td>
<td>45.0</td>
<td>40.6</td>
</tr>
<tr>
<td>Motor Vehicle Traffic Related deaths</td>
<td>10.8</td>
<td>10.9</td>
</tr>
<tr>
<td>Assault (Homicide) Deaths</td>
<td>1.5</td>
<td>5.6</td>
</tr>
<tr>
<td>Intentional Self-harm (Suicide) Deaths</td>
<td>14.0</td>
<td>11.3</td>
</tr>
<tr>
<td>Cancer Deaths (All Sites)</td>
<td>204.2</td>
<td>195.9</td>
</tr>
<tr>
<td>Lung Cancer Deaths</td>
<td>73.4</td>
<td>58.3</td>
</tr>
<tr>
<td>Breast Cancer Deaths (Females)</td>
<td>24.4</td>
<td>25.6</td>
</tr>
<tr>
<td>Cervical Cancer Deaths (Females)</td>
<td>2.5</td>
<td>2.7</td>
</tr>
<tr>
<td>Colorectal Cancer Deaths</td>
<td>15.0</td>
<td>18.9</td>
</tr>
<tr>
<td>Cardiovascular Disease Deaths</td>
<td>235.3</td>
<td>272.8</td>
</tr>
<tr>
<td>Coronary Heart Disease Deaths</td>
<td>114.5</td>
<td>157.3</td>
</tr>
<tr>
<td>Stroke Deaths</td>
<td>46.8</td>
<td>44.1</td>
</tr>
<tr>
<td>Diabetes Deaths</td>
<td>28.4</td>
<td>28.6</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Diseases (CLRD) ages 45 and over</td>
<td>177.8</td>
<td>143.2</td>
</tr>
<tr>
<td>Pneumonia/Influenza Deaths</td>
<td>17.5</td>
<td>14.7</td>
</tr>
<tr>
<td>Chronic Liver Disease and Cirrhosis Deaths</td>
<td>7.8</td>
<td>9.0</td>
</tr>
</tbody>
</table>

Source: Ohio Department of Health, Data Warehouse, 2010

* Age-adjusted death rate per 100,000 population
** Age-adjusted death rate per 100,000 female population
Cancer Mortality Rates

Cancer mortality rates of the five leading sites/types of invasive cancer are lower for Clermont County than for Ohio and the United States in all sites except for lung and bronchus cancers (Table 32).

Female mortality rates in Clermont County for colon and rectum cancer and breast cancer are lower than the mortality rates for Ohio and the United States. The Clermont County mortality rate among men for lung and bronchus cancer is higher than the mortality rate for both Ohio and the United States (Table 32).

Table 32: Cancer Mortality Rates

<table>
<thead>
<tr>
<th></th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Age-Adjusted Mortality Rates of the Five Leading Sites/Types of Invasive Cancer</strong>&lt;sup&gt;39,40&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Cancer Sites/Types</td>
<td>186.7</td>
<td>186.5</td>
<td>171.8</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>15.1</td>
<td>17.2</td>
<td>15.5</td>
</tr>
<tr>
<td>Lung and Bronchus</td>
<td>64.8</td>
<td>54.9</td>
<td>47.4</td>
</tr>
<tr>
<td>Female Breast</td>
<td>18.5</td>
<td>23.9</td>
<td>21.9</td>
</tr>
<tr>
<td>Prostate</td>
<td>10.4</td>
<td>21.5</td>
<td>21.8</td>
</tr>
</tbody>
</table>

**Male Age-Adjusted Mortality Rates**<sup>39,40</sup>

<table>
<thead>
<tr>
<th></th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cancer Sites/Types</td>
<td>231.5</td>
<td>228.9</td>
<td>208.8</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>19.8</td>
<td>21.1</td>
<td>18.8</td>
</tr>
<tr>
<td>Lung and Bronchus</td>
<td>85.6</td>
<td>71.0</td>
<td>60.1</td>
</tr>
<tr>
<td>Female Breast</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Prostate</td>
<td>10.4</td>
<td>21.5</td>
<td>21.8</td>
</tr>
</tbody>
</table>

**Female Age-Adjusted Mortality Rates**<sup>39,40</sup>

<table>
<thead>
<tr>
<th></th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cancer Sites/Types</td>
<td>154.6</td>
<td>157.6</td>
<td>145.8</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>11.5</td>
<td>14.2</td>
<td>13.0</td>
</tr>
<tr>
<td>Lung and Bronchus</td>
<td>49.4</td>
<td>42.9</td>
<td>38.0</td>
</tr>
<tr>
<td>Female Breast</td>
<td>18.5</td>
<td>23.9</td>
<td>21.9</td>
</tr>
<tr>
<td>Prostate</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

<sup>39</sup> Source: Ohio Department of Health, Ohio Cancer Incidence Surveillance System, Surveillance, Epidemiology, and End Results, 1975-2010, National Cancer Institute, 2013

<sup>40</sup> Rates were calculated using vintage 2011 postcensal estimates for July 1, 2010 (U.S. Census Bureau, 2010)

<sup>41</sup> Average annual rate per 100,000, age-adjusted to the 2000 US standard population

— Denotes data unavailable or not applicable.
Cancer Incidence Rates

Cancer incidence rates are calculated based on new cases of cancer, not the total number of individuals with a cancer diagnosis. The incidence rates of colon and rectum and lung and bronchus cancers among Clermont County residents are higher than the rates for Ohio and the United States (Table 33).

The incidence rate of female breast cancer in Clermont County is 117.0, which is higher than the state incidence rate of 112.7, but lower than the national incidence rate of 126.0. The same trend follows for prostate cancer: Clermont County’s incidence rate is higher than the state rate but lower than the national rate (Table 33).

Table 33: Cancer Incidence Rates*

<table>
<thead>
<tr>
<th></th>
<th>Clermont County</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Age-Adjusted Incidence Rates of the Five Leading Sites/Types of Invasive Cancer</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Cancer Sites/Types</td>
<td>478.8</td>
<td>425.2</td>
<td>457.5</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>41.8</td>
<td>39.4</td>
<td>40.6</td>
</tr>
<tr>
<td>Lung and Bronchus</td>
<td>91.3</td>
<td>66.6</td>
<td>56.7</td>
</tr>
<tr>
<td>Female Breast</td>
<td>117.0</td>
<td>112.7</td>
<td>126.0</td>
</tr>
<tr>
<td>Prostate</td>
<td>124.3</td>
<td>115.9</td>
<td>145.1</td>
</tr>
</tbody>
</table>

| **Male Age-Adjusted Incidence Rates** |
| All Cancer Sites/Types | 525.8 | 476.9 | 519.3 |
| Colon and Rectum       | 48.9  | 45.7  | 46.6  |
| Lung and Bronchus       | 96.9  | 81.1  | 66.8  |
| Female Breast           | —     | —     | —     |
| Prostate                | 124.3 | 115.9 | 145.1 |

| **Female Age-Adjusted Incidence Rates** |
| All Cancer Sites/Types  | 447.0 | 390.5 | 413.3 |
| Colon and Rectum        | 35.7  | 34.4  | 35.7  |
| Lung and Bronchus        | 89.3  | 55.9  | 49.2  |
| Female Breast            | 117.0 | 112.7 | 126.0 |
| Prostate                 | —     | —     | —     |


* Rates were calculated using vintage 2011 postcensal estimates for July 1, 2010 (U.S. Census Bureau, 2010)

** Average annual rate per 100,000, age-adjusted to the 2000 US standard population

— Denotes data unavailable or not applicable.
Chronic Disease Indicators

Chronic diseases, such as those in Table 34, are among the most costly and preventable health problems in the United States (Centers for Disease Control and Prevention, 2011). Five of the seven leading causes of death in Ohio in 2009 were attributed to chronic diseases. The Centers for Disease Control and Prevention has identified four modifiable behaviors responsible for the illness and suffering related to chronic disease: lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption (2011).

Approximately 8% of residents in the Ohio, Kentucky, Indiana Metropolitan Statistical Area (MSA) have been told by a doctor that they had diabetes, which is slightly lower than the percentages in Ohio and the United States. Fewer than 3% of adults in the OH-KY-IN MSA have been told they had a stroke. While this is slightly lower than the state percentage (3.1%), it is slightly higher than the national percentage (2.4%). The percentage of people in the OH-KY-IN MSA who have been told by a doctor that they have hypertension (29.3%) and the percentage who have been told that they have high cholesterol (37.4%) are comparable to the state and national percentages (Table 34).

Table 34: Chronic Disease Indicators

<table>
<thead>
<tr>
<th>Chronic Disease Indicators, 2009</th>
<th>Clermont County (OH-KY-IN MSA)</th>
<th>Ohio</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>7.9%</td>
<td>10.1%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Asthma</td>
<td>13.0%</td>
<td>15.0%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Heart Attack</td>
<td>5.5%</td>
<td>5.4%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>29.3%</td>
<td>31.7%</td>
<td>28.7%</td>
</tr>
<tr>
<td>High Cholesterol</td>
<td>37.4%</td>
<td>39.6%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Arthritis</td>
<td>27.5%</td>
<td>30.8%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Stroke</td>
<td>2.8%</td>
<td>3.1%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Angina/Coronary Heart Disease</td>
<td>4.2%</td>
<td>4.2%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention, Cincinnati-Middletown, OH-KY-IN Metropolitan Statistical Area, 2009

*Cincinnati-Middletown, OH-KY-IN Metropolitan Statistical Area (MSA) includes Brown, Butler, Clermont, Hamilton, and Warren Counties in Ohio, Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton Counties in Kentucky, and Dearborn, Franklin, and Ohio Counties in Indiana.
Incidence of Infectious Diseases

The incidence rates in Clermont County for chlamydia, gonorrhea, and syphilis are lower than incidence rates statewide. Pertussis and varicella incidence rates are the same for Clermont County and Ohio. Clermont County has higher incidence rates for cryptosporidiosis, E-coli, giardiasis, and shigellosis, but lower incidence rates for campylobacteriosis and salmonellosis (Table 35).

Table 35: Incidence of Selected Infectious Diseases

<table>
<thead>
<tr>
<th></th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cases</td>
<td>Rate</td>
</tr>
<tr>
<td><strong>Sexually Transmitted Infections, 2012</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlamydia</td>
<td>474</td>
<td>240.2</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>80</td>
<td>40.5</td>
</tr>
<tr>
<td>Syphilis</td>
<td>6</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Prevalence HIV/AIDS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons living with HIV diagnosis</td>
<td>69</td>
<td>35.0</td>
</tr>
<tr>
<td><strong>Vaccine Preventable Diseases, 2011</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza-Associated Hospitalization</td>
<td>24</td>
<td>12.1</td>
</tr>
<tr>
<td>Meningococcal Disease</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Mumps</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Pertussis</td>
<td>12</td>
<td>6.0</td>
</tr>
<tr>
<td>Varicella</td>
<td>18</td>
<td>9.0</td>
</tr>
<tr>
<td><strong>Enteric Diseases, 2011</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campylobacteriosis</td>
<td>14</td>
<td>7.0</td>
</tr>
<tr>
<td>Cryptosporidiosis</td>
<td>50</td>
<td>25.1</td>
</tr>
<tr>
<td><em>Escherichia coli</em> (STEC)</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td>Giardiasis</td>
<td>20</td>
<td>10.0</td>
</tr>
<tr>
<td>Salmonellosis</td>
<td>16</td>
<td>8.0</td>
</tr>
<tr>
<td>Shigellosis</td>
<td>16</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Tuberculosis, 2012</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

41) Source: Ohio Department of Health, STD Surveillance Program, Data reported through 5/5/2013.
42) Source: Ohio Department of Health, HIV/AIDS Surveillance Program, Data reported through September 30, 2012
43) Source: Ohio Department of Health, Annual Summary of Infectious Diseases, 2011
* Rates calculated per 100,000 based on the 2010 U.S. Census
** Rates calculated per 100,000 using 2011 U.S. Census estimates
† Living with a diagnosis of HIV infection represents all persons ever diagnosed and reported with HIV or AIDS who have not been reported as having died as of December 31, 2011.
Hepatitis B

Hepatitis, by definition, means “inflammation of the liver”. The name hepatitis also refers to a viral illness, two major types of which are B and C. The Centers for Disease Control and Prevention report an estimated 4.4 million people in the U.S. are asymptptomatically infected with chronic hepatitis and are, therefore, unaware of their condition. Hepatitis infection is the leading cause of liver cancer and need for liver transplantation (Centers for Disease Control and Prevention, 2009).

Hepatitis B is a form of liver disease that is transmitted from one person to another through blood and bodily fluids. Modes of transmission may include sexual contact, blood exposure through shared needles and injection equipment, at birth from an infected mother to her infant, or through use of shared items, such as razors. Individuals who are newly infected with Hepatitis B may experience acute illness with symptoms including jaundice, abdominal pain, nausea and vomiting, fatigue, and fever 60-150 days after their exposure; however, some individuals will not have any symptoms. Chronic Hepatitis B infection will develop in 15%-25% of cases (Centers for Disease Control and Prevention, 2009).

A vaccine for Hepatitis B was licensed in 1990, and rates of Hepatitis B infection have decreased nationally since that time, according to the Centers for Disease Control and Prevention (2009). In Clermont County an upward trend in the number of reported acute Hepatitis B cases has been noted in the past several years (Figure 12). It is important to note that the reason for this increase in cases is unknown, but may be due to increased testing of individuals based on identified signs and symptoms, reporting of risk factors during health screening, or as a reflection of a true increase in disease incidence.

45) Source: Ohio Disease Reporting System, Ohio Department of Health
Hepatitis C

Hepatitis C is transmitted primarily through percutaneous (through the skin) exposure to blood from an infected person. Injection drug use, needlestick injuries, and birth of an infant to an infected mother are the predominant modes of transmission. Hepatitis C can also be spread less frequently through sexual contact or through contaminated items such as nail clippers. Of those who become infected, only 20%-30% will have symptoms of acute illness, which are similar to those of acute Hepatitis B infection. Chronic infection with Hepatitis C will occur in 75%-85% of cases. Prevalence of Hepatitis C infection is high among injection drug users, with one-third of young (18-30 years of age) users and up to 90% of older users infected (CDC, 2013).

There is currently no vaccine for Hepatitis C. Treatment is available for those who are infected, although successful treatment rates are variable. Current guidelines recommend Hepatitis C testing for certain individuals including: those born between 1945-1965, current and former injection drug users, individuals with known exposure to Hepatitis C, blood and organ transplant (before 1992) and clotting factor recipients (before 1987), those with HIV, and children born to Hepatitis C positive mothers (testing of children should be done after 18 months of age) (CDC, 2013).

Figure 13 depicts the number of Hepatitis C positive lab tests reported to the Clermont County Health District between 2007-2012. A rise in reports has occurred in the 20-29 year old and 30-39 year old age groups over the past several years. As with Hepatitis B, reasons for these increases in reports may be due to a general increase in testing due to patient signs and symptoms, identification of health risk screening factors, or an increase in disease. Positive test results should be interpreted with caution, as results are not always definitive, and may indicate either past or present infection.

Figure 13: Hepatitis C Reports by Age, Clermont County, 2007-2012

45) Source: Ohio Disease Reporting System, Ohio Department of Health, 2013
Environmental Health Indicators
Recreational Opportunities

The Clermont County Park District offers a wide variety of recreational activities through each of its six parks, three nature preserves, and five green spaces. Comprised of over 550 acres, the Park District has doubled in size since 2000. Recreational activities available within the parks and preserves focus primarily on passive activities, and include fishing, walking, hiking, biking, bird watching, and picnicking among many other opportunities. The naturalist program within the Park District offers educational programs for children and adults to encourage exploration and utilization of all of the park facilities (Clermont County Park District, 2013).

Construction recently began on the Williamsburg to Batavia Hike/Bike Trail, which uses old roads that were abandoned during the construction of William Harsha Lake. When complete, the Hike/Bike Trail will connect the villages of Williamsburg and Batavia, covering 13.5 miles and traveling through portions of East Fork State Park (Figure 14). Phase I of the proposed 13.5 mile trail is open, spanning 2.5 miles from Broadway Road in Williamsburg to East Fork State Park. The trail is intended for hikers, joggers, walkers, and bicyclists (Clermont County Park District, 2013).

In addition to the recreational facilities available through the Park District, Clermont County is home to three State Parks (East Fork Lake, Stonelick Lake, and the Little Miami Scenic Bike Trail), the Cincinnati Nature Center, and numerous township and village parks. Active recreational amenities are located at many of these sites, and include soccer fields, basketball courts, baseball fields and playgrounds. Beach access for swimming and opportunities for boating are also available.
The Clermont Coalition for Activity and Nutrition (Clermont CAN) is comprised of county residents and representatives from local agencies who are concerned about the high rates of preventable diseases related to obesity in Clermont County. Clermont CAN created a guide to local parks and nutrition programs to help Clermont County residents find free and low cost opportunities to participate in physical activity. Figure 15 highlights locations which offer a number of recreational activities, including nature preserves, playgrounds, fishing, canoeing, walking, bicycling, and hiking trails (Clermont Coalition for Activity and Nutrition, 2011).

The rate of access to recreational facilities is higher for Clermont County than the state.

**Recreational Facilities**

The rate of access to recreational facilities is the number of recreational facilities per 100,000 population. Recreational facilities are defined as business establishments primarily engaged in operating fitness and recreational sports facilities, featuring exercise and other active physical fitness conditioning or recreational sports activities such as swimming, skating, or racquet sports (County Health Rankings and Roadmaps, 2013).

<table>
<thead>
<tr>
<th>Table 36: Recreational Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rate of Access to Recreational Facilities</strong>&lt;sup&gt;12&lt;/sup&gt;</td>
</tr>
<tr>
<td>Access to Recreational Facilities</td>
</tr>
</tbody>
</table>

<sup>12</sup> Source: County Health Rankings and Roadmaps, 2013
Harmful Algal Blooms

Algae blooms commonly occur in all bodies of water. Although most blooms are comprised of green algae and not harmful to humans, certain cyanobacteria, known as blue-green algae, can cause harmful algae blooms, which have the ability to produce liver and neuro toxins (cyanotoxins). Factors that contribute to harmful algal blooms include sunlight, low-water or low-flow conditions, calm water, warmer temperatures, and excess phosphorus or nitrogen (Ohio Department of Health (ODH), Ohio Environmental Protection Agency (OEPA), Ohio Department of Natural Resources (ODNR)).

Depending on which cyanotoxin is present, exposure to harmful algal blooms can cause rashes, hives, blisters, sore throat, asthma-like symptoms, runny eyes and noses, and allergic reactions. Swallowing water contaminated with harmful algal blooms can cause severe diarrhea and vomiting, liver toxicity, kidney toxicity, and neurotoxicity (ODH, OEPA, ODNR). Pets are highly susceptible to cyanotoxins as they will readily drink lake water and lick their fur after swimming; therefore pets should not swim in a harmful algae bloom.

There are two levels of advisories for water containing elevated levels of cyanotoxins (Figure 17). A Recreational Public Health Advisory is issued when cyanotoxin levels are equal to or greater than the designated threshold. During a Recreational Public Health Advisory an orange placard is displayed warning members of the public and recommending against swimming and wading for those who are old, young, or with compromised immune systems. A No Contact Advisory is issued when cyanotoxin levels exceed the Recreational No Contact Advisory thresholds and there are one or more probable cases of human illness or pet deaths attributable to the cyanotoxins. A red placard is displayed advising members of the public to avoid all contact with the water. Both advisories remain in effect until the bloom has receded and supplemental samples reveal cyanotoxin levels below the threshold levels (ODH, OEPA, ODNR).

Figure 16: East Fork State Park Beach Locations

46) Source: Clermont County Park District, 2013
In June and July of 2013, routine testing of water at East Fork Lake (campground beach and main beach) resulted with microcystin levels above the advisory threshold (Table 39). Recreation Public Health Advisories were posted after results were obtained to inform the public of the increase risk with these water sources. Although levels of microcystin exceeded the designated threshold, this did not warrant a No Contact Advisory posting because there were no associated cases of human illness or pet deaths at that time.

In addition to testing water for cyanotoxin, testing for fecal bacteria (E. coli) is performed in multiple water sources and tributaries throughout the county. It has been noted that levels of fecal bacteria typically rise and remain elevated for several days following a rain; therefore, persons accessing these waters should exercise care in these conditions to avoid the potential for illness (Clermont County Office of Environmental Quality, 2013).
Air Quality

In Clermont County, air quality monitoring and regulation of industrial air emissions is conducted by the Southwest Ohio Air Quality Agency. Through this agency, air quality in Clermont County is assessed by monitoring for ozone, a colorless gas that is found in the air we breathe. Ozone in the upper atmosphere is beneficial, shielding the earth from the sun’s rays. However, ground-level ozone is a harmful pollutant which can negatively impact health, especially in children and the elderly. Ozone, a secondary pollutant, is not directly emitted, but forms when nitrogen oxides from industry emissions combine with volatile organic compounds from vehicle exhaust in the presence of sunlight and heat. Air quality, and especially ozone, is very weather dependent, often forming downwind as the air moves (Southwest Ohio Air Quality Agency, 2013).

Currently, the Southwest Ohio Air Quality Agency conducts ozone monitoring in Clermont County from April 1 through October 31 at a monitoring site located in Batavia. Results of this monitoring are presented in the Air Quality Index (AQI) Report. The AQI provides a summary of the air quality, which is color-coded to correlate to a defined concentration for a particular pollutant and its subsequent impact on the public’s health (Southwest Ohio Air Quality Agency, 2013). Figure 18 depicts the Air Quality Index (measured by the amount of ozone present) in Clermont County for 2012. Of the 214 days in which air quality was monitored, air quality was considered “Good” on 150 days (70%) and “Moderate” on 51 days (24%). It is important to note that air pollution levels at a particular monitoring site are not necessarily representative of the air quality for the entire county (U.S. EPA AirData, 2013).

While national air quality standards are becoming more strict, the levels of air pollutants are decreasing. According to the Southwest Ohio Air Quality Agency (2013), the overall air quality in Clermont County has improved over the years.
Water Quality

Safe drinking water is important in the prevention of many types of illness and other adverse health events. The County Health Rankings and Roadmaps (2013) measures drinking water safety as a percentage of the population receiving water through public water systems with at least one health-based violation (Maximum Contaminant Level, Maximum Residual Disinfectant Level, and Treatment Technique violations) during the past year. In 2012, none of the population in Clermont County on public water systems were exposed to water exceeding a violation limit (Table 38).

Eight out of the ten water systems within Clermont County have an optimally fluoridated water supply. The optimum level of fluoride in drinking water in Ohio to prevent tooth decay is 1.0 part per million (Ohio Department of Health, 2012). The public water systems of the Villages of Felicity and New Richmond both fluoridate their water, but levels were below the optimal level for good dental health (Table 38).

<table>
<thead>
<tr>
<th>Water Quality</th>
<th>Clermont County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Population Exposed to Water Exceeding a Violation Limit, 201212</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Optimally Fluoridated Water Systems51</td>
<td>8 of 10</td>
<td>—</td>
</tr>
</tbody>
</table>

12) Source: County Health Rankings and Roadmaps, 2013
— Denotes data unavailable or not applicable
References

1) U.S. Census Bureau, 2011.
   - Clermont County Demographic Data [http://quickfacts.census.gov/qfd/states/39/39025.html]
   - Ohio and US Demographic Data [http://quickfacts.census.gov/qfd/states/39000.html]
2) U.S. Census Bureau, American Community Survey, 2009-2011.
   - Household Information (Table 2) [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_3YR_DP02&prodType=table]
   - Income (Table 3), Health Insurance Status (Table 5), Families below poverty level (Table 3), Employment Status (Table 6), Mode of Commute (Table 7), Occupation and Industry (Table 8) [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_3YR_DP03&prodType=table]
   - Poverty Status (Table 3) [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_3YR_S1701&prodType=table]
   - Educational Attainment (Table 9) [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_3YR_S1501&prodType=table]
   - Disability Status (Table 10) [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_3YR_S1810&prodType=table]
4) Ohio Department of Job and Family Services, Clermont County Profile, Statistical and Demographic Data, 2009-2012. [http://jfs.ohio.gov/County/cntypro/pdf12/Clermont.stm]
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12) County Health Rankings and Roadmaps, 2013.
   - Primary Care Physicians (Table 13) http://www.countyhealthrankings.org/app/#/ohio/2013.Measure/factors/4/data/sort-0
   - Excessive Drinking (Table 15) http://www.countyhealthrankings.org/app/#/ohio/2013.Measure/factors/49/data/sort-0
   - Physical Inactivity (Table 17) http://www.countyhealthrankings.org/app/#/ohio/2013.Measure/factors/70/data/sort-0
   - Health Perception (Table 24) http://www.countyhealthrankings.org/app/#/ohio/2013/clermont.County/outcomes/overall/snapshot/by-rank
   - Access to Recreational Facilities (Table 36) http://www.countyhealthrankings.org/app/#/ohio/2013.Measure/factors/68/data/sort-0
   - Percent of Population Exposed to Water Exceeding a Violation Limit (Table 38) http://www.countyhealthrankings.org/app/#/ohio/2013.Measure/factors/124/data/sort-0


   - OH-KY-IN MSA Adult BMI (Table 16) http://apps.nccd.cdc.gov/BRFSS-SMART/MMSARiskChart.asp?yr=2011&MMSA=19&cat=OB&qkey=8261&grp=0
   - Ohio Adult BMI (Table 16) http://apps.nccd.cdc.gov/BRFSS/display.asp?cat=OB&yr=2011&qkey=8261&state=OH
   - OH-KY-IN MSA Adult 65+ Flu Shot (Table 18) http://apps.nccd.cdc.gov/BRFSS-SMART/MMSARiskChart.asp?yr=2011&MMSA=19&cat=IM&qkey=8341&grp=0
   - Ohio Adult 65+ Flu Shot (Table 18) http://apps.nccd.cdc.gov/BRFSS/display.asp?cat=IM&yr=2011&qkey=8341&state=OH
   - OH-KY-IN MSA Pneumonia Vaccine (Table 18) http://apps.nccd.cdc.gov/BRFSS-SMART/MMSARiskChart.asp?yr=2011&MMSA=19&cat=IM&qkey=8351&grp=0
   - Ohio Pneumonia Vaccine (Table 18) http://apps.nccd.cdc.gov/BRFSS/display.asp?cat=IM&yr=2011&qkey=8351&state=OH


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18) Clermont County Safe Communities Coalition, 2013.
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37) Ohio Department of Health, Center for Public Health Statistics and Informatics, Death Data and Statistics, 2010. [Link]

38) Ohio Department of Health, Data Warehouse, 2010. [Link]

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   - OH-KY-IN MSA (Table 34) [Link]
   - State and National (Table 34) [Link]

41) Ohio Department of Health, STD Surveillance Program, Data reported through 5/5/2013. [Link]

42) Ohio Department of Health, HIV/AIDS Surveillance Program, Data reported through September 30, 2012. [Link]

43) Ohio Department of Health, Annual Summary of Infectious Diseases, 2011. [Link]

44) Ohio Department of Health, TB Registry, February 11, 2013. [Link]


46) Clermont County Park District, 2013. [Link]


48) Ohio Department of Health, Ohio Environmental Protection Agency (OEPA), Ohio Department of Natural Resources (ODNR)), State of Ohio Harmful Algal Bloom Response Strategy for Recreational Waters. [Link]

49) Ohio Environmental Protection Agency, HABs Algal Toxin Results, Accessed 7/10/2013. [Link]


51) Ohio Department of Health, Ohio Public Water System Fluoride Levels, Clermont County, 2012 [Link]
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- Clermont Chamber of Commerce, 2012 http://www.clermontchamber.com/Major-Employers.129.0.html
- U.S. Preventative Services Task Force,
- Centers for Disease Control and Prevention
References, continued

- U.S. Department of Health and Human Services
- Clermont County Office of Environmental Quality, 2013. (E-Coli information)
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