

Kalamazoo County Health and Community Services Department Epidemiology Unit

Health Statistics Update 2017

For more information or questions about this report, contact hcsdata@kalamazoo.com.



KALAMAZOO COUNTY GOVERNMENT

In the Pursuit of Extraordinary Governance

Health and Community Services Department

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Kalamazoo County Health & Community Services is committed to providing equitable, culturally competent care to all individuals served, regardless of race, age, sex, color, national origin, religion, height, weight, marital status, political

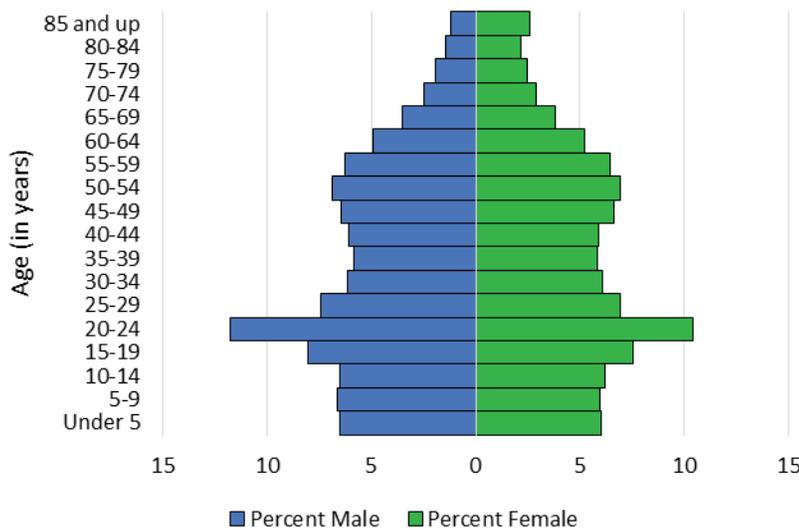
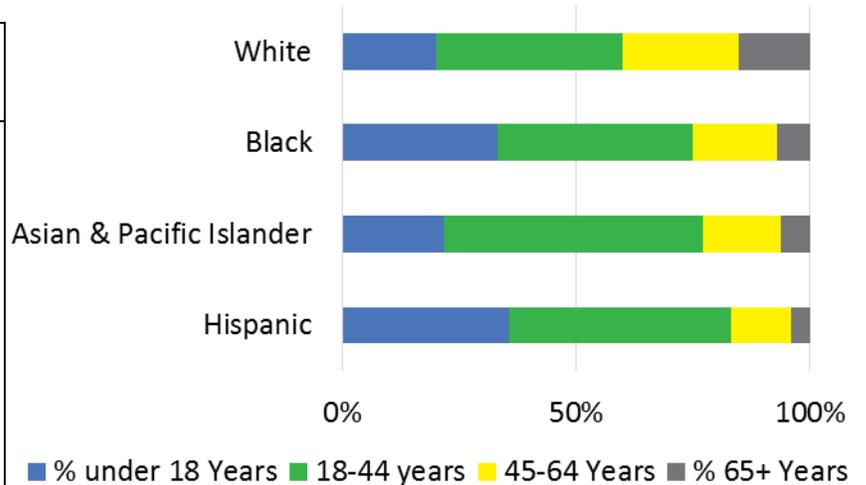
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Total Population (July 1, 2016)

261,654

Live Births (2015)	3,179
Deaths (2015)	2,088

	Population in 2015	%
White	216,960	83.4%
Black	33,626	12.9%
Native American	1,763	0.7%
Asian & Pacific Islander	7,914	3.0%
Hispanic	11,603	4.5%

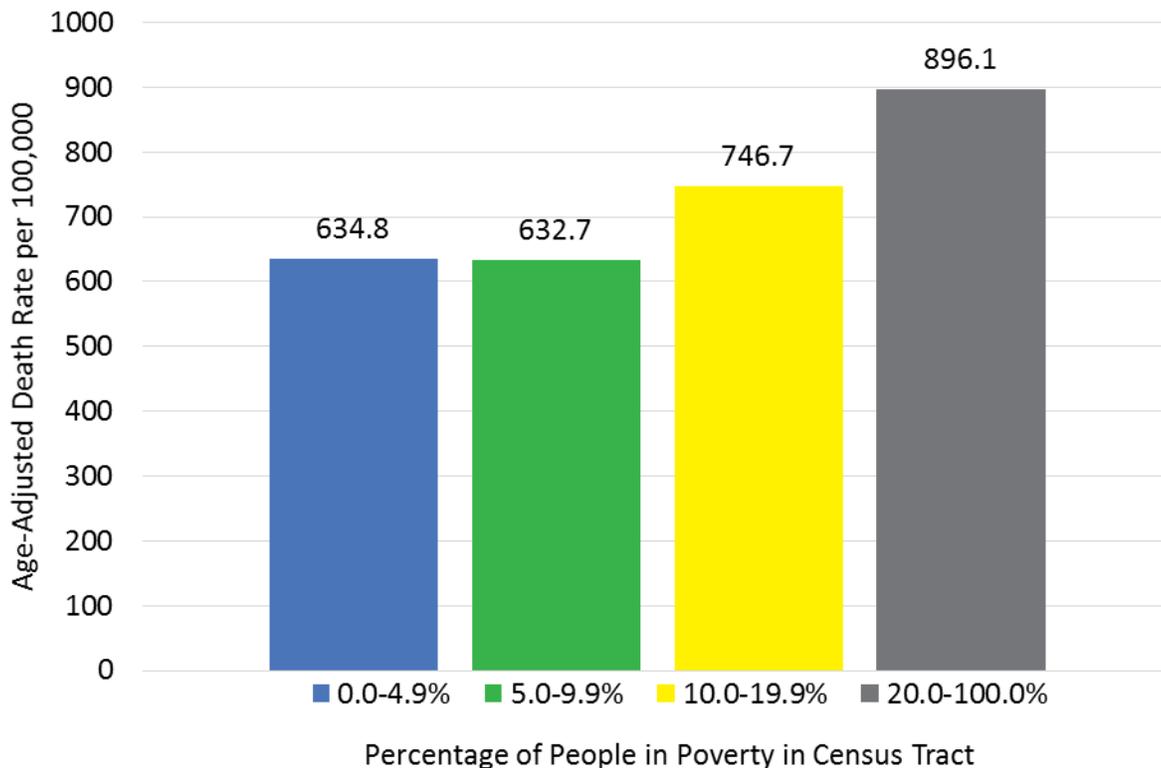


This population pyramid shows the age-gender structure of Kalamazoo County's population. The largest group is persons aged 20-24 years, likely representing the college population.

Data Sources:
 Michigan Department of Health and Human Services
[Profile of Kalamazoo County Human Services Department, 2015](#)
 United States Census Bureau
[Census Quick Facts](#)

Poverty by Race/Ethnicity and Age Group Kalamazoo County 2015

	Population for whom poverty status is determined	% Below Poverty Level
Total	248,202	18.3%
Race/Ethnicity		
White	202,990	14.9%
Black	26,927	38.2%
Hispanic	11,183	28.1%
Age Group		
Under 18 years	55,820	20.7%
18-64 years	159,563	19.6%
65+ years	32,819	8.3%



The mortality rate by census tract shows the relationship between the percentage of poverty in a census tract and the age-adjusted death rate. With a higher proportion of people in poverty, there is a higher death rate—the age-adjusted death rate was 40% higher in the poorest areas than in the most affluent.

Data Sources:

United States Census Bureau

[American Fact Finder](#)

[Death Rates by Census Tract Poverty](#)

Total Births 2015

3,179

Race and Ethnicity of Mother	Number of Live Births
White	2478
Black	555
Asian & Pacific Islander	98
All Other Races	47
Hispanic	184

Teen Pregnancy Rates* Kalamazoo County, Michigan, and United States 2015

	Kalamazoo	Michigan	United States
Total	21.5	19.4	22.3
White	16.7	15.0	16.0
Black	46.1	37.1	31.8

*Births per 1,000 women aged 15-19

Maternal Characteristics Kalamazoo County and Michigan 2015

	Kalamazoo	Michigan
Received prenatal care during first trimester	64.3%	73.4%
Smoked while pregnant	19.1%	17.3%
Received WIC during pregnancy	38.3%	41.6%

Level of Prenatal Care — Kotelchuck Index Kalamazoo County 2015

	Total		White		Black		Hispanic	
Adequate Plus	1697	54%	1337	55%	311	52%	112	56%
Adequate	356	11%	264	11%	64	11%	25	12%
Intermediate	330	10%	272	11%	39	7%	19	9%
Inadequate	763	24%	541	22%	182	31%	45	22%

Data Sources:

Michigan Department of Health and Human Services

[Birth Statistics](#)
[Maternal Characteristics](#)
[Level of Prenatal Care](#)

Centers for Disease Control
[Teen Pregnancy](#)

Prematurity and Low Birthweight Rates* by Race Kalamazoo County 2015

	Very Preterm	Mid Preterm	Late Preterm	Very Low Birthweight	Low Birthweight
Total	19.5	9.4	58.2	17.6	76.8
Race					
White	17.8	8.5	55.3	14.9	67.4
Black	28.8	14.4	73.9	30.6	120.7
Hispanic	—	—	54.3	—	65.2

*Rate per 1,000 live births

Infant Mortality Rate* Kalamazoo County 2009-2015

	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Total	7.6	6.4	6	6.4	6.5
White	4.8	3.9	3.9	4.7	4.7
Black	18.3	17.6	15.5	14.2	15.3

*Rate per 1,000 live births

Black/White Infant Mortality Disparity Kalamazoo County 2009-2015

	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Kalamazoo County	3.8	4.5	4.0	3.0	3.3
Michigan	2.8	2.6	2.5	2.4	2.5

Causes of Infant Death Kalamazoo County 2010-2015

		Number of Deaths	Percent
Non-Natural	Sleep-related	31	25.6%
	Accident	3	2.5%
	Homicide	2	1.7%
Natural	Prematurity	49	40.5%
	Congenital Anomalies	25	20.7%
	Infection/Disease	9	7.4%
	Complications of Pregnancy/Delivery	2	1.7%

Data Sources:

Michigan Department of Health and Human Services

[Birth Statistics](#)

[Three Year Average Infant Death Rates](#)

[Infant Mortality Trend Analysis](#)

Age-Adjusted Mortality Rates* Kalamazoo County, Michigan, and United States, 2015

	Kalamazoo Co	MI	US
All Causes	729.4	772.8	733.1
Heart Disease	164.1	195.5	168.5
Cancer	156.9	164.9	158.5
Chronic Lower Respiratory Diseases	48.0	46.7	41.6
Unintentional Injuries	36.7	42.9	43.2
Stroke	32.3	36.8	37.6
Alzheimer's Disease	25.1	29.7	29.4
Diabetes	24.4	22.2	21.3
Pneumonia/Influenza	17.0	15.0	15.2
Kidney Disease	11.5	15.4	13.4
Suicide	10.9	13.6	13.3

*Rate per 100,000 population

Death Rates* by Age and Race Kalamazoo County 2015

Age in years	Total	White	Black
Under 1	626.8	361.7	1950.4
1-14	13.6	—	—
15-24	46.7	39.2	63.7
25-34	125.7	95.2	298.5
35-44	175.8	163.0	239.9
45-54	401.1	367.1	731.7
55-64	838.2	779.5	1436.3
65-74	1730.5	1720.1	2058.4
75-84	4811.0	4869.1	4736.8
Over 85	13454.6	13660.1	10245.9
Age-Adjusted Rate	729.4	713.8	851.0

*Rate per 100,000 population

Data Sources:

Michigan Department of Health and Human Services

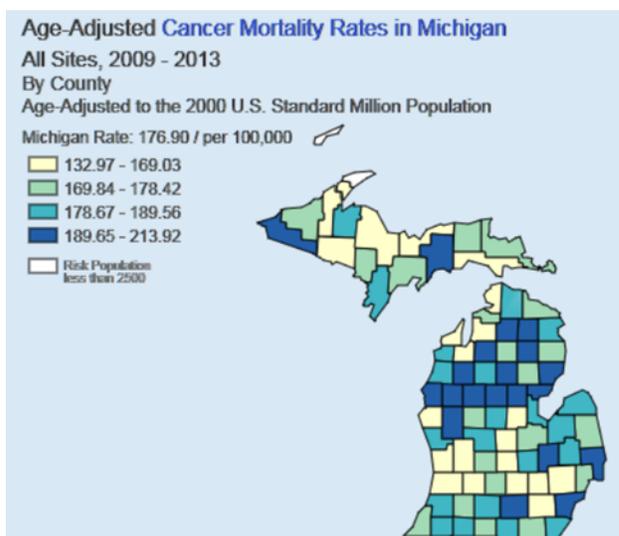
[Community Health Information—Mortality](#)

Incidence Rate of Invasive Cancer Kalamazoo County and Michigan 2006-2013

	2006-2010	2007-2011	2008-2012	2009-2013
Kalamazoo	496.2	488.1	478	459.5
Michigan	497.1	493.3	481.2	470.9

Invasive Cancer Mortality Rate Kalamazoo County and Michigan 2006-2013

	2006-2010	2007-2011	2008-2012	2009-2013
Kalamazoo	186.1	185.6	178.3	171.2
Michigan	184.7	182.0	179.6	176.9



Invasive Cancer Incidence and Mortality Rates by Type

Kalamazoo County and Michigan 2011-2015

	Prostate	Breast	Lung & Bronchus	Colon & Rectum	Bladder	Melanoma	Oral Cavity & Pharynx	Cervix
Incidence (2011-2013)								
Kalamazoo	116.5	122.0	59.8	35.5	22.2	18.9	10.6	6.2
Michigan	125.5	124.7	65.6	39.7	22.4	18.6	11.4	6.7
Mortality (2013-2015)								
Kalamazoo	18.3	22.5	40.8	12.9	4.5	3.2	2.2	—
Michigan	18.7	21.3	47.0	14.9	4.7	2.4	2.6	2.0

Data Sources:

Michigan Department of Health and Human Services

[Five-Year Incidence and Mortality Trends—Kalamazoo](#)

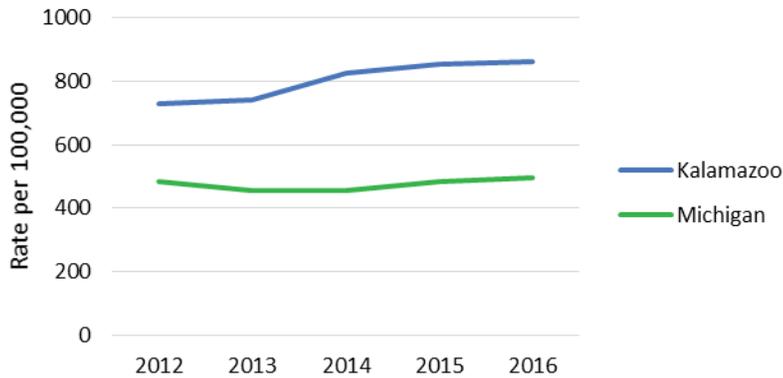
[Five-Year Incidence and Mortality Trends—Michigan](#)

[Kalamazoo Cancers by Type](#)

[Michigan Cancers by Type](#)

[Michigan Cancer Surveillance Program](#)

Chlamydia Rate Kalamazoo County and Michigan 2012-2016



	Kalamazoo	Michigan
2012	730	482
2013	741	456
2014	824	457
2015	854	485
2016	864	496

Rate per 100,000 population

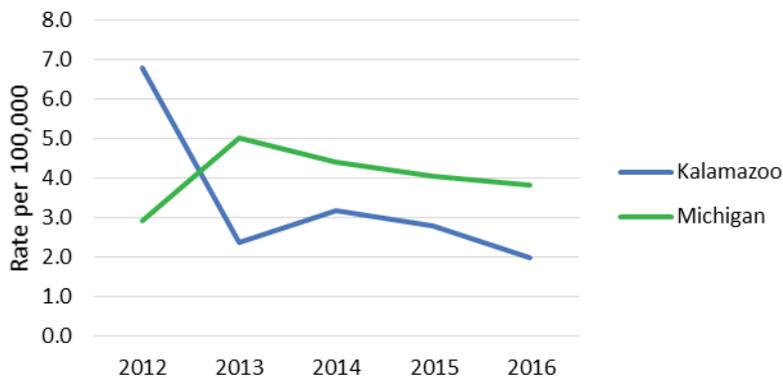
Gonorrhea Rate Kalamazoo County and Michigan 2012-2016



	Kalamazoo	Michigan
2012	104	482
2013	115	109
2014	263	98
2015	261	108
2016	258	131

Rate per 100,000 population

Primary and Secondary Syphilis Rate Kalamazoo County and Michigan 2012-2016



	Kalamazoo	Michigan
2012	6.8	2.9
2013	2.4	5.0
2014	3.2	4.4
2015	2.8	4.1
2016	2.0	3.8

Rate per 100,000 population

HIV Counts (All Stages) Kalamazoo County 2012-2016

	2012	2013	2014	2015	2016
New HIV Diagnoses	21	15	20	15	9
Deaths	7	3	4	2	1
Prevalence	319	331	347	360	368

Data Sources:

Michigan Department of Health and Human Services
Michigan Disease Surveillance System
HIV Surveillance Unit

Health Outcomes for Adults Kalamazoo County and Michigan 2013-2015

	Kalamazoo	Michigan
Healthy Weight	34.0%	32.4%
Overweight	31.9%	34.9%
Obese	32.1%	31.1%
General Health Status, Fair or Poor	16.1%	17.4%
Poor Physical Health on at least 14 days in the past month	11.3%	12.8%
Poor Mental Health on at least 14 days in the past month	10.3%	12.2%
Arthritis	29.6%	31.1%
Current Asthma	11.8%	10.9%
Depression	18.5%	20.5%
Diabetes	8.3%	10.5%
High Blood Pressure	28.9%	33.9%
High Cholesterol	35.1%	39.4%

Health Outcomes for Youth Kalamazoo County and Michigan 2015

	Kalamazoo Middle Schoolers	Kalamazoo High Schoolers	Michigan High Schoolers
Overweight	15.2%	15.2%	16.0%
Obese	12.2%	13.5%	14.3%
Current Asthma	68.8%	54.5%	—

Prevalence of High Lead Levels in Tested Children Less than Age 6

Kalamazoo, Calhoun, and Kent Counties, Michigan 2015

	% Pre-1978 Housing	Children Less than Six Years of Age	Number of Children Tested	% Blood Lead Level ≥ 5 micrograms/dL (Venous & Capillary)
Michigan	64.8%	701,063	140,857	3.4%
Kalamazoo County	62.6%	18,545	3,383	3.4%
Calhoun County	75.3%	10,075	1,918	4.6%
Kent County	59.2%	53,229	9,780	6.2%

Data Sources:

Michigan Department of Health and Human Services

[BRFS Results 2013-2015](#)

[2015 Data Report on Childhood Lead Testing](#)

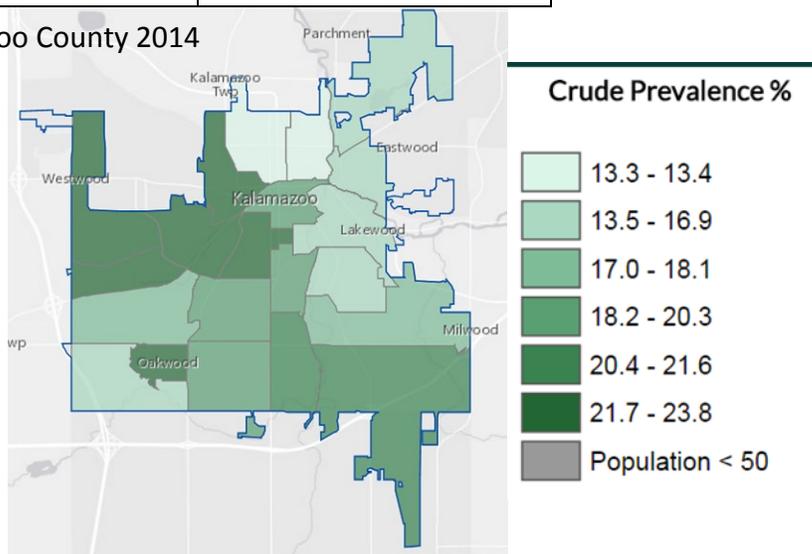
Michigan Department of Education

[MiPHY Results](#)

Health Behaviors for Adults Kalamazoo County and Michigan 2013-2015

	Kalamazoo	Michigan
No Health Care Coverage Among Those Aged 18-64 Years	9.8%	14.0%
Consumed \leq 5 Fruit/Vegetables per day	83.8%	85.1%
No Routine Check-up in Past Year	30.7%	28.8%
No Dental Check-up in Past Year	—	31.4%
Inadequate Physical Activity	79.7%	80.5%
Current Smoking	14.8%	21.1%
Binge Drinking	18.6%	18.8%
Flu Vaccine in Past Year, Adults Aged 65 and Older	57.8%	57.4%

Binge Drinking for Adults Kalamazoo County 2014



Health Behaviors for Youth Kalamazoo County and Michigan 2015

	Kalamazoo Middle Schoolers	Kalamazoo High Schoolers	Michigan High Schoolers
Consumed \leq 5 Fruit/Vegetables per day	33.8%	26.4%	—
No Physical Check-Up or Exam in past 12 months	69.5%	70.3%	—
No Dental Check-up in past 12 months	76.4%	77.4%	73.7%
Not Physically Active 60 min per day in 5 of past 7 days	37.7%	54.3%	54.0%
Smoked Cigarettes during the past 30 days	1.9%	3.6%	10.0%
Drank Alcohol in Past 30 days	5.2%	19.9%	25.9%
Binge Drinking	2.1%	9.1%	12.5%
Used an electronic vapor product during the past 30	5.0%	16.1%	23.0%

Data Sources:

Michigan Department of Health and Human Services

[BRFS Results 2013-2015](#)

Michigan Department of Education

[MiPHY Results](#)

Centers for Disease Control

[500 Cities Project—Interactive Map](#)

Age-Adjustment – Age-adjustment is used to compare risks of two or more populations at one point in time or one population at two or more points in time. Age-adjusted rates should be viewed as relative indexes rather than actual measures of risk. Age-adjusted rates are computed by the direct method by applying age-specific rates in a population of interest to a standardized age distribution, in order to eliminate differences in observed rates that result from age differences in population composition.

Incidence – The number of cases of disease having their onset during a prescribed period of time. It is often expressed as a rate. Incidence is a measure of morbidity or other events that occur within a specified period of time. Only new cases are counted as incident cases.

Prevalence – The number of cases of a disease, infected persons, or persons with some other attribute present during a particular interval of time. It is often expressed as a rate (for example, the prevalence of diabetes per 1,000 persons during a year). Prevalence is influenced by the incidence (number of new cases), the duration of disease (how long the disease lasts), and the case fatality/survival rate (the proportion of people who have the disease that will die from it).

Infant Mortality Rate – Calculated by dividing the number of infant deaths during a calendar year by the number of live births reported in the same year. It is expressed as the number of infant deaths per 1,000 live births.

Poverty – Individuals or families are "poor" if their annual pretax cash income falls below a dollar amount, or poverty threshold, that the Census Bureau determines using a federal measure of poverty that is recalculated each year. (For more information on the definition of poverty, please visit the [Institute for Research on Poverty website](#).)

High Lead Levels – *The Michigan Blood Testing Plan* uses three criteria for determining if a child should be tested for lead poisoning: 1. Living in one of Michigan's 14 target communities. 2. Enrollment in Medicaid or WIC. 3. Score on a screening questionnaire.

The data in this report are for tested children less than age 6. Each child was counted once each year, even if they had more than one test that year. The counts of children by blood lead level were based on the value representing the highest blood lead level obtained from a venous blood draw, or a capillary blood test if there was no venous test that calendar year. Blood lead levels (BLL) equal or greater than five micrograms per deciliter of blood ($\geq 5 \mu\text{g/dL}$) are considered elevated. In addition to data on numbers of children tested and numbers with elevated BLLs, the county-level data tables include data on the numbers of children in each county and the percent of older homes, based on data from the U.S. Census, because older homes are a risk factor for lead exposure.

Kotelchuck – An index that uses a combination of when prenatal care began and the number of prenatal visits to classify the adequacy of prenatal care. A ratio of observed to expected visits is then calculated and grouped into four categories: Inadequate

(received less than 50% of expected visits), Intermediate (50%-79%), Adequate (80%-109%), and Adequate Plus (110% or more).

Healthy Weight – In adults, a body mass index (BMI) between 18.5 and 24.9 kg/m^2 .

Overweight – In adults, a BMI between 25.0 and 29.9 kg/m^2 . In youth, a BMI between the 85th percentile and 95th percentile for height and weight.

Obese – In adults, a BMI greater than 30.0 kg/m^2 . In youth, BMI at or above the 95th percentile for age and sex.

Arthritis – The proportion who reported ever being told by a health care professional that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

Asthma – The proportion who reported that they currently have asthma.

Depression – The proportion who reported ever being told by a doctor that they had a depressive disorder including depression, major depression, dysthymia, or minor depression.

Diabetes – The proportion who reported that they were ever told by a doctor that they have diabetes. Women who had diabetes only during pregnancy and adults who were diagnosed with pre-diabetes were not included.

High Blood Pressure – The proportion who reported that they were ever told by a doctor that they had high blood pressure (HBP). Women who had HBP only during pregnancy and adults who were borderline hypertensive were considered not included.

High Cholesterol – The proportion who ever had their blood cholesterol checked and reported that a doctor, nurse, or other health professional had told them that their cholesterol was high.

No Healthcare Coverage – Among adults 18-64 in survey population, the proportion who reported having no healthcare coverage, including health insurance, prepaid plans such as HMOs, or government plans, such as Medicare.

Consume ≤ 5 Servings of Fruits/Vegetables Per Day – The proportion who reported not consuming more than or equal to the recommended five servings of fruits (including juice) and vegetables per day.

Adequate Physical Activity – The proportion who reported that they do either moderate physical activities for at least 150 minutes per week, vigorous physical activities for at least 75 minutes per week, or an equivalent combination of moderate and vigorous physical activities and also participate in muscle strengthening activities on two or more days per week.

Current Cigarette Smoker – The proportion of adults who reported that they had ever smoked at least 100 cigarettes (five packs) in their life and that they smoke cigarettes now, either every day or on some days.

Binge Drinking – In adults, those who reported consuming five or more drinks per occasion (men) or 4 or more drinks per occasion (women) at least once in the previous month. In youth, those who had five or more drinks of alcohol in a row, that is, within a couple of hours, during the past 30 days.