HEART DISEASE IN THE CITY OF CLEVELAND

What is Heart Disease?

The term "heart disease" is actually a blanket term for many types of heart conditions. The most common type of heart condition in the United States is coronary artery disease (CAD) (CDC, 2015). CAD affects blood flow to the heart; decreased blood flow to the heart can put an individual at risk for a heart attack. Heart disease is the leading cause of death for both men and women. In the United States, 610,000 individuals die from heart disease every year (CDC, 2016). Heart disease is also the leading cause of death for most racial/ethnic groups in the United States; however, minorities seem to be disproportionately affected. Heart disease also costs the United States $207 billion dollars annually for health care, medicine, and loss of productivity (CDC, 2016).

Coronary Artery Disease (CAD)

CAD is caused by a buildup of plaque in the coronary arterial walls (these are the blood vessels that supply blood to the heart) and in other arteries throughout the body. This plaque is mainly composed of cholesterol deposits. This plaque buildup can cause the arteries to narrow and harden over time in a process called atherosclerosis, which can block the flow of blood or cause stroke. This decreased blood flow can cause chest pain (also known as angina); this is the most common symptom of CAD. All of these events over time weaken the heart muscle, leading to heart failure.

Prevention Measures

Preventing or managing heart disease is fairly simple. Eating healthy, getting plenty of exercise, reducing alcohol consumption, and ceasing tobacco smoking are all excellent measures to prevent or reduce the risk of heart disease. Managing cholesterol and glucose levels and maintaining a healthy blood pressure are also good ways to reduce the risk for heart disease.

Risk Factors

There are several risk factors for heart disease including other health conditions, lifestyle choices, age and family history. The main risk factors for heart disease are:

- High blood pressure
- High LDL cholesterol
- Diabetes
- Smoking
- Unhealthy diet
- Lack of physical activity
- Obesity
- Drinking too much alcohol

Fortunately, many of these risk factors can be controlled.

CDPH
Cleveland Department of Public Health

Which Neighborhoods had the Highest Rates of Heart Disease Mortality in 2010-2014?

Crude Rate of Heart Disease Mortality, 2010-2014

Rate Higher than the City Rate (265.8 per 100,000)

Insufficient Data

41.4 - 213.3

213.4 - 269.0

269.1 - 328.3

328.4 - 400.4

The 14 neighborhoods outlined in red have higher heart disease mortality rates than the city average of 265.8 per 100,000. Lee-Seville have the highest heart disease mortality rate of 400.4persons per 100,000.

Neighborhood	Rate	Neighborhood	Rate	Neighborhood	Rate
Bellaire-Puritas	356.2	Edgewater	345.3	Mount Pleasant	264.4
Broadway-Slavic Village	261.2	Euclid-Green	263.9	North Shore Collinwood	366.6
Brooklyn Centre	205.5	Fairfax	368.6	Ohio City	242.7
Buckeye-Shaker Square	247.0	Glenville	304.4	Old Brooklyn	261.8
Buckeye-Woodhill	213.3	Goodrich-Kirtland Pk	269.0	St.Clair-Superior	241.4
Central	149.5	Hough	319.0	Stockyards	231.4
Clark-Fulton	187.2	Jefferson	230.8	Tremont	201.3
Collinwood-Nottingham	178.5	Kamm's	282.1	Union-Miles	285.2
Cudell	236.9	Kinsman	277.7	University	328.3
Detroit Shoreway	300.9	Lee-Harvard	369.9	West Boulevard	208.6
Downtown	126.8	Lee-Seville	400.4	Total	265.1

Crude Rate of Heart Disease Mortality in African Americans, 2010-2014

Rates Higher than the Cities Average (249.0 per 100,000)

Insufficient Data

1 - 154

155 - 265

266 - 408

409 - 670

North Shore Collinwood
Collinwood-Nottingham
Euclid-Green
Glenville
St.Clair-Superior
Goodrich-Kirtland Pk
Hough
University
Downtown
Fairfax
Central
Buckeye-Woodhill
Buckeye-Shaker Square
Kinsman
Mount Pleasant
Edgewater
Detroit Shoreway
Ohio City
Cuyahoga Valley
Cudell
Tremont
Clark-Fulton
West Boulevard Stockyards
Broadway-Slavic Village
Brooklyn Centre
Union-Miles
Lee-Harvard
Jefferson
Lee-Seville
Kamm's
Old Brooklyn
Bellaire-Puritas
Hopkins

The 14 neighborhoods outlined in red have higher heart disease mortality rates among African Americans than the city average of 249.0 per 100,000 for African Americans. University had the highest rate of 669.6 persons per 100,000.

Neighborhood	Rate	Neighborhood	Rate	Neighborhood	Rate
Bellaire-Puritas	218.7	Edgewater	244.1	Mount Pleasant	265.1
Broadway-Slavic Village	111.4	Euclid-Green	251.4	North Shore Collinwood	288.3
Brooklyn Centre	148.9	Fairfax	377.9	Ohio City	294.3
Buckeye-Shaker Square	259.4	Glenville	310.8	Old Brooklyn	109.3
Buckeye-Woodhill	212.8	Goodrich-Kirtland Pk	491.2	St.Clair-Superior	184.1
Central	153.9	Hough	319.5	Stockyards	121.8
Clark-Fulton	98.5	Jefferson	106.6	Tremont	175.1
Collinwood-Nottingham	129.5	Kamm's	122.8	Union-Miles	285.3
Cudell	145.7	Kinsman	280.3	University	669.6
Detroit Shoreway	189.4	Lee-Harvard	375.4	West Boulevard	110.9
Downtown	201.7	Lee-Seville	408.1	Total	249.6

Crude Rate of Heart Disease Mortality in Caucasians, 2010-2014

Legend:
- Rates Higher than the Cities Average (350.6 per 100,000)
- Insufficient Data
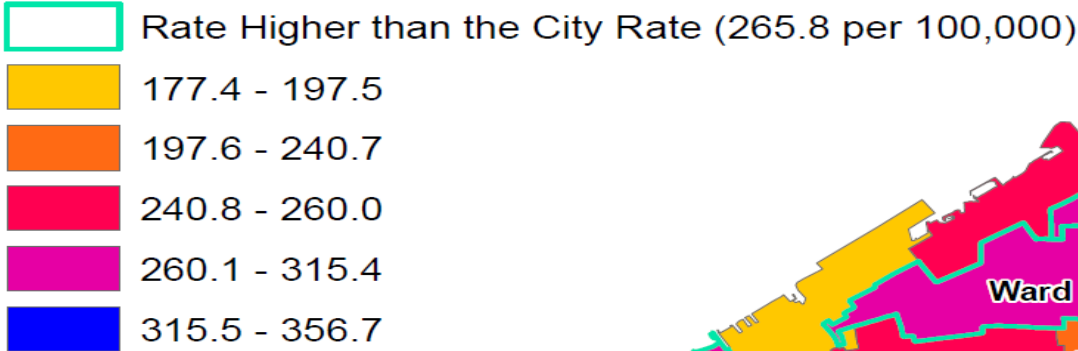- 81.6 - 327.6
- 327.7 - 415.1
- 415.2 - 489.2
- 489.3 - 736.8

The 12 neighborhoods outlined in red have a higher heart disease mortality rate among Caucasians than the city average among Caucasians of 350.6 per 100,000. Union-Miles had the highest rate of 736.8 persons per 100,000.

Neighborhood	Rate	Neighborhood	Rate	Neighborhood	Rate
Bellaire-Puritas	488.2	Downtown	81.6	Ohio City	273.8
Broadway-Slavic Village	489.2	Edgewater	415.1	Old Brooklyn	304.8
Brooklyn Centre	305.6	Euclid-Green	481.9	St.Clair-Superior	581.3
Buckeye-Shaker Square	283.6	Goodrich-Kirtland Pk	278.3	Stockyards	368.4
Clark-Fulton	321.1	Hough	608.7	Tremont	264.2
Collinwood-Nottingham	640.7	Jefferson	297.0	Union-Miles	736.8
Cudell	390.2	Kamm's	327.6	University	316.8
Detroit Shoreway	448.9	North Shore Collinwood	564.6	West Boulevard	314.0
				Total	349.4

Which Wards had the Highest Rates of Heart Disease Mortality?

Crude Rate of Heart Disease Mortality, 2010-2014

- ☐ Rate Higher than the City Rate (265.8 per 100,000)
- 🟨 177.4 - 197.5
- 🟧 197.6 - 240.7
- 🟥 240.8 - 260.0
- 🟪 260.1 - 315.4
- 🟦 315.5 - 356.7

Ward 8
Ward 10
Ward 9
Ward 7
Ward 6
Ward 3
Ward 5
Ward 15
Ward 4
Ward 11
Ward 14
Ward 12
Ward 2
Ward 1
Ward 13
Ward 16
Ward 17
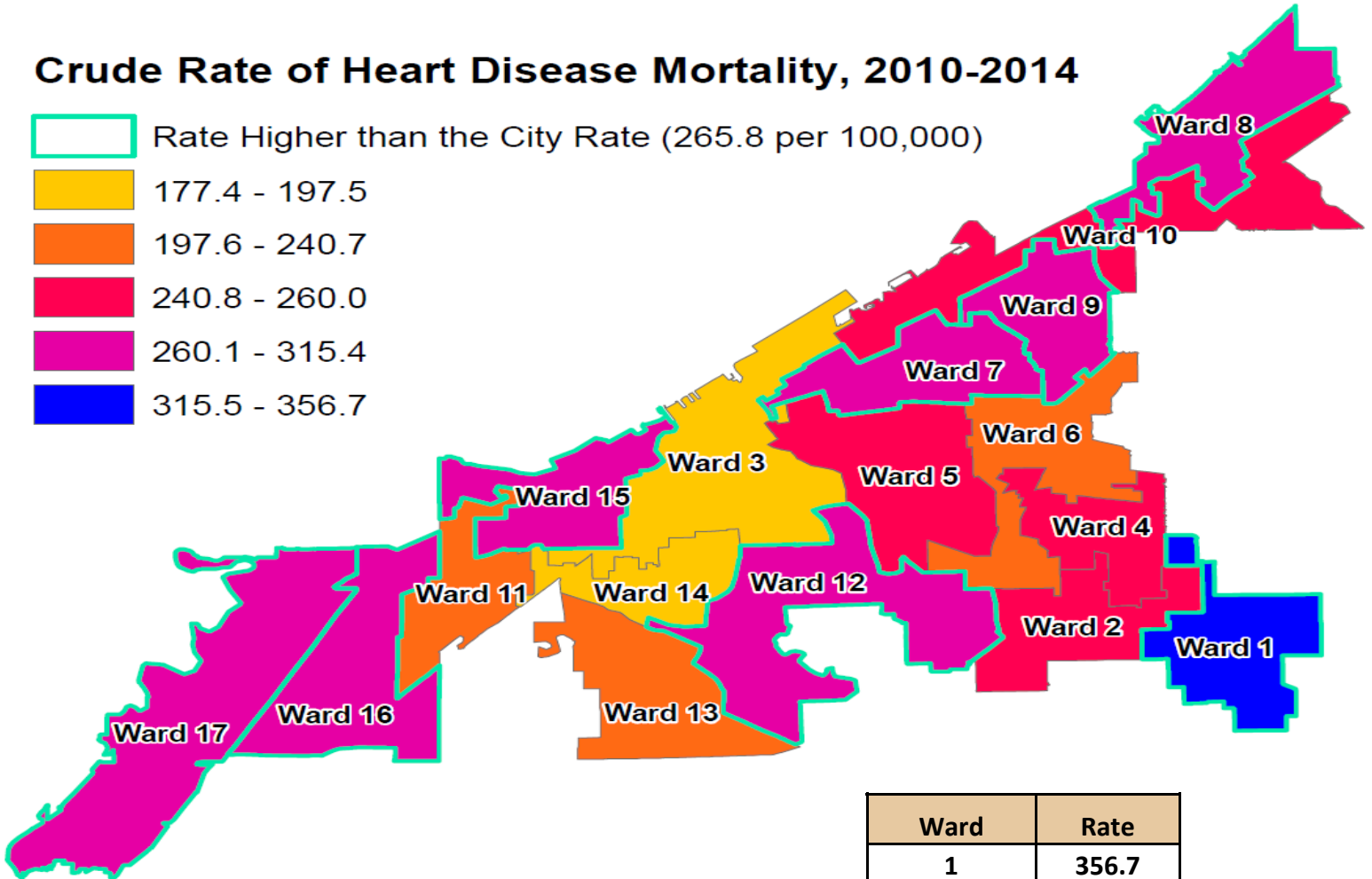
The 8 Wards outlined in teal have higher heart disease mortality rates than the city average of 265.8 per 100,000. Ward 1 had the highest heart disease mortality rate of 356.7 persons per 100,000.

Ward	Rate
1	356.7
2	258.3
3	177.4
4	260.0
5	253.9
6	222.6
7	282.5
8	315.4
9	302.0
10	255.9
11	240.1
12	293.3
13	240.7
14	197.5
15	286.1
16	293.4
17	283.7
Total	265.8

Crude Rate of Heart Disease Mortality in Females, 2010-2014

Legend:
- Rate Higher than the City Rate (238.9 per 100,000)
- 146.9 - 174.8
- 174.9 - 226.4
- 226.5 - 255.6
- 255.7 - 279.6
- 279.7 - 294.4

The 9 Wards outlined in teal have higher heart disease mortality rate among Females than the city average among Females of 238.9 per 100,000. Ward 1 had the highest rate of 294.4 persons per 100,000.
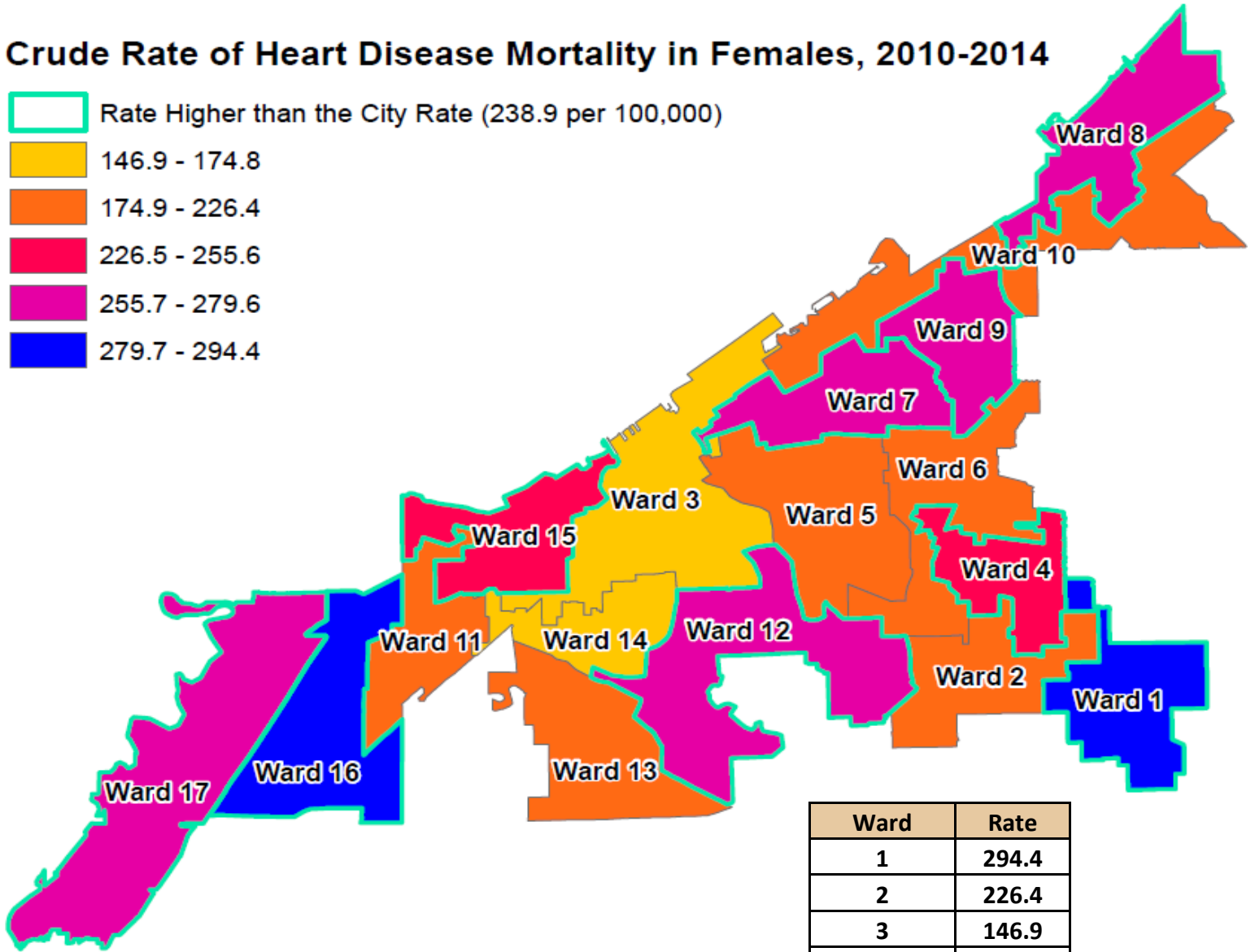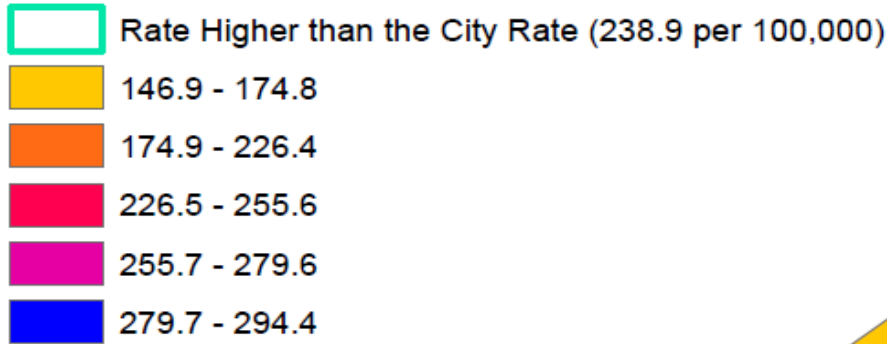
Ward	Rate
1	294.4
2	226.4
3	146.9
4	255.6
5	215.4
6	200.6
7	273.2
8	274.9
9	269.3
10	214.3
11	197.3
12	279.6
13	204.4
14	174.8
15	253.2
16	290.8
17	271.1
Total	238.9

Crude Rate of Heart Disease Mortality in Males, 2010-2014

Rate Higher than the City Rate (294.9 per 100,000)

- 201.3 - 221.3
- 221.4 - 278.1
- 278.2 - 318.9
- 319.0 - 363.1
- 363.2 - 435.5
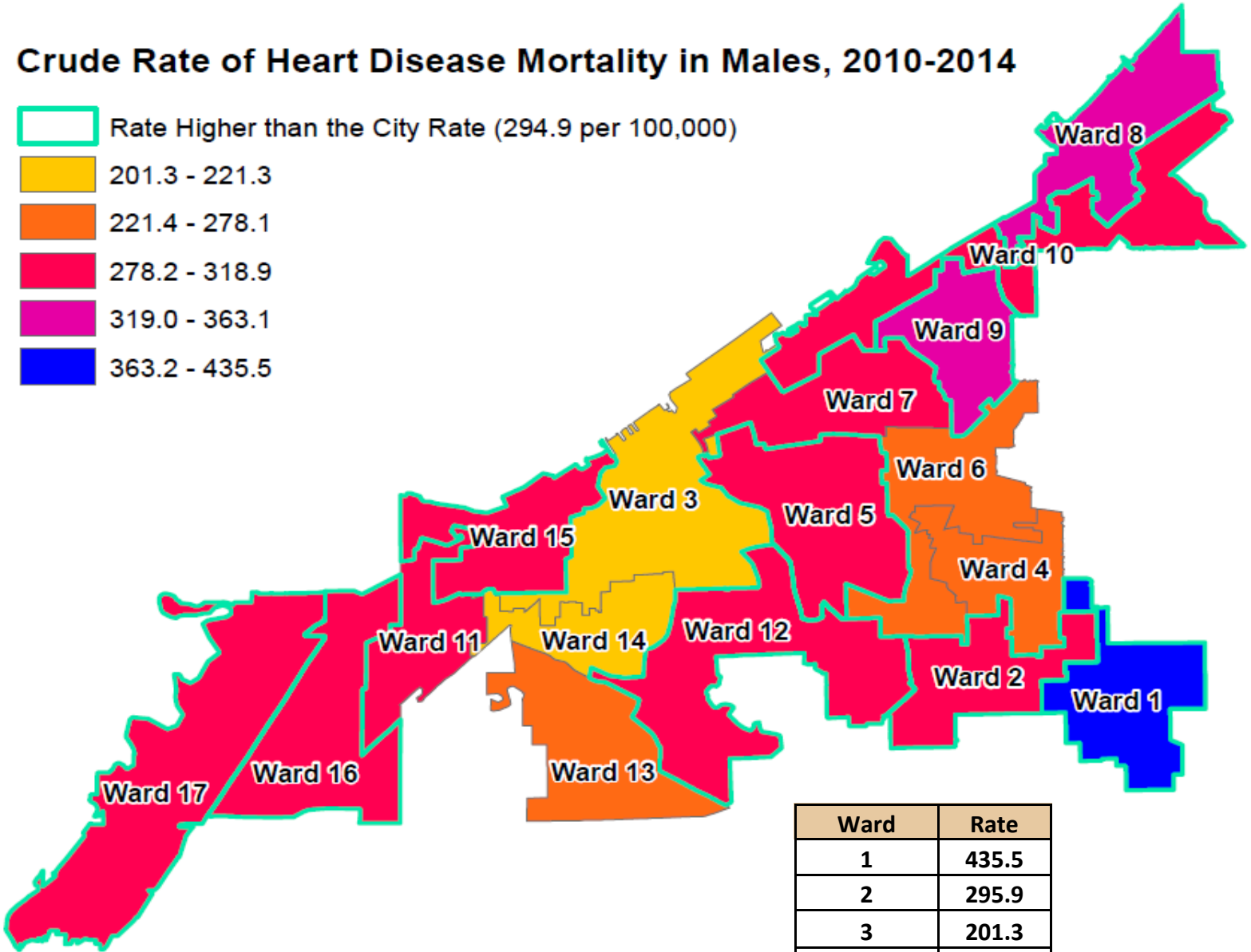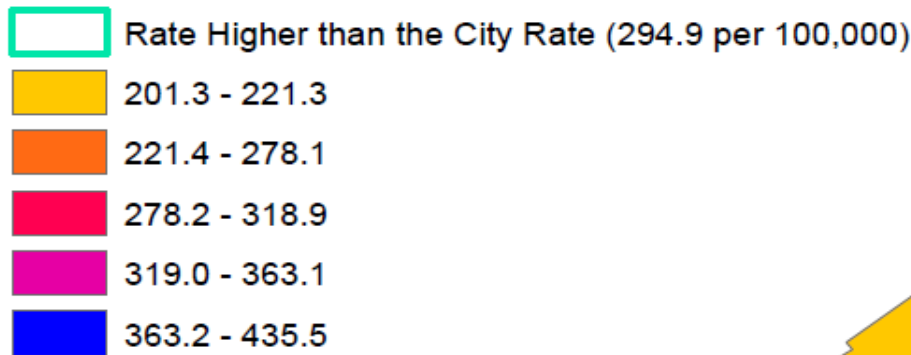
The 10 Wards outlined in teal have higher heart disease mortality rate among Males than the city average among Males of 294.9 per 100,000. Ward 1 had the highest rate of 435.5 persons per 100,000.

Ward	Rate
1	435.5
2	295.9
3	201.3
4	265.0
5	304.7
6	247.3
7	291.7
8	363.1
9	340.0
10	304.8
11	284.5
12	307.7
13	278.1
14	221.3
15	318.9
16	296.0
17	297.5
Total	294.9

About the Minority Health Office

The goal of the Cleveland Office of Minority Health (COMH) is to identify local health disparity needs with an emphasis on informing, educating and empowering minority populations. The office is responsible for activating efforts to educate citizens and professionals on imperative health care issues and seeks to provide minority health data and technical assistance to local agencies working to improve the health status of minority populations. COMH diligently advocates and promotes equity. The Cleveland Local Office works with private and public partners to improve the effectiveness and efficiency of our collective efforts.

Health Resources

The Healthy People 2020 goals are: to improve cardiovascular health and quality of life through prevention, detection, and treatment of risk factors for heart attack and stroke; early identification and treatment of heart attacks and strokes; prevention of repeat cardiovascular events; and reduction in deaths from cardiovascular disease.

Sources:

About Heart Disease. (2015, August 10). Retrieved June 20, 2016, from http://www.cdc.gov/heartdisease/about.htm

Heart Disease Fact Sheet. (2016, June 16). Retrieved June 20, 2016, from http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_heart_disease.htm

Heart Disease and Stroke. (n.d.). Retrieved November 1, 2016, from https://www.healthypeople.gov/2020/topics-objectives/topic/heart-disease-and-stroke

*Neighborhood and Ward Level Population Data were provided by Cleveland City Planning Commission. Data is from United States Census Bureau 2010 Decennial Census

Cleveland Department of Public Health

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Version Date: November 2016