

# Task Force on Health Care Disparity in the African American Community Moral Imperative

Presently in the City of Buffalo, we have a significant health and healthcare problem that negatively impacts Erie County, Western New York and the State of New York. The resolution of this problem is a matter of justice and to ignore it is injustice. "Injustice anywhere is a threat to justice everywhere"- MLK.

The extent to which the leadership of the City of Buffalo, Erie County, and the State of New York are willing to make the resolution of the problem of healthcare disparities in the African American community in the city of Buffalo a priority, directly indicates the extent to which they are willing to make Buffalo, the 5<sup>th</sup> most segregated city in the United States, a just community.

In a just community, race should not be a determining factor of health. As Americans, we believe that race cannot be a determining factor in the health care of its citizens. We believe that the "One Buffalo" ideal is a call to remembrance of Martin Luther King's "Beloved Community." We realize in order for that to become a reality all distractions separating people must be eliminated. We call on all citizens, especially the privileged powerful to commit themselves to making sure that One Buffalo is the focus of their work.

Philosopher Immanuel Kant describes "moral imperative" as a compelling principle from within. It is based on the moral and ethical requirement "to do the right thing". The imperative is a command, such as a law (The Stanford Encyclopedia of Philosophy, 2012).

Health care disparities exemplify historic moral injustices. Research demonstrates that variations in health care delivery, particularly among racial/ethnic minority populations are important determinants of health attributed to alarming disparities (Center for Disease Control and Prevention [CDC], 2013 & Dartmouth Atlas of Health Care, 2012).

The highest level of health is an inclusive human right that encompasses timely and appropriate health care and includes the social determinants of health, such as access to health-related education and information (United Nations Office of the High Commissioner of Human Rights, 2008)

According to the United Nations Office of the High Commissioner of Human Rights 2008; the right to health contains both freedoms and entitlements. Freedoms include; the right to control one's health. The entitlements include the following:

• The right to a health system's protection of providing equality for everyone to enjoy the highest attainable health;

- The right to prevention, treatment and control of diseases;
- Access to essential medicines;
- Maternal, child and reproductive health;
- Equal and timely access to basic health services;
- The provision of health-related education and information;
- Participation of the population in health-related decision making at the national and community levels;

This document is a "call to action" for health care providers, policy makers, community leaders, and academics; to make a commitment toward raising the standard of care that serves to eliminate moral/ethical health disparities among minorities in the Greater Buffalo Region.

#### INTRODUCTION

The **Mission** of the African American Task Force on Health Care Disparity is to eliminate race/ethnicity based health disparities among communities of color in the Greater Buffalo Region. This task forced formed for the specific purpose of changing public policy that impacts health outcomes.

A Vision that calls for the **Elimination** of health care delivery inequity and the resulting social injustice of racial health disparity.

- The Identification of specific areas of heath care practices where racial / ethnic health disparities exist,
- The Creation of solutions on a community level which serve to improve health and health care in the Greater Buffalo Region
- To **Influence** public policy to improve the health and health care of our community.

We have formed as a task force to provide insight into the most pressing issues facing African Americans in the Greater Buffalo Region; to shed light on the fact that African Americans suffer disproportionately from a cluster of co-existing health problems that contribute to the onset of serious chronic life limiting illnesses and are aware that interventions vary greatly from that of other populations.

#### **BACKGROUND**

## **Health Disparity**

The term health disparities refers to population-specific differences in disease incidence, health outcomes, quality of health care and access to health care services that exist across racial and ethnic groups. Disparities may result from inadequate access to care, poor quality of care, community features (such as poverty and violence) and personal behaviors. <sup>1</sup>

## What are Health Disparities and Inequalities?

Health disparities and inequalities are gaps in health or health determinants between segments of the population. For example: differences in disease rates, receipt of preventive vaccinations, and risky behaviors are all examples of disparities. Health inequities are avoidable, unfair differences in health status seen within and between populations. According to the World Health Organization, the social determinants of health (the conditions in which persons are born, grow, live, work, and age) are mostly responsible for health inequities.<sup>2</sup>

Despite ongoing efforts to reduce health disparities in the United States, racial and ethnic disparities in both health and health care persist. Even when income, health insurance and access to care are accounted for, disparities remain. Low performance on a range of health indicators—such as infant mortality, life expectancy, prevalence of chronic disease, and insurance coverage—reveal differences between racial and ethnic minority populations and their white counterparts.

- Infants born to black women are 1.5 to 3 times more likely to die than those born to women of other races/ethnicities and American Indian and Alaska Native infants die from SIDS at nearly 2.5 times the rate of white infants.<sup>3</sup>
- Cancer is the second leading cause of death for most racial and ethnic minorities. African American men are more than twice as likely to die from prostate cancer as whites. Hispanic women are more than 1.5 times as likely to be diagnosed with cervical cancer.<sup>4</sup>
- African Americans, American Indians and Alaska Natives are twice as likely to have diabetes
  as white individuals; diabetes rates among Hispanics are 1.5 times higher than those for
  whites.<sup>5</sup>

## **Cost of Health Disparities**

Snatcher et al reported that using 2002 data, an estimated 83,570 excess deaths each year could be prevented in the United States if this black-white mortality gap could be eliminated.<sup>6</sup> Disparities represent a lack of efficiency within the health care system and therefore account for unnecessary costs. According to a 2009 study by the Joint Center for Political and Economic Studies, eliminating health disparities for minorities would have reduced direct medical care expenditures by \$229.4 billion annually between 2003 and 2006. <sup>7</sup> There is also a less direct financial burden of healthcare disparities. As an example, the annual national economic impact of cardiovascular disease is estimated at \$259 billion.<sup>8</sup> Cardiovascular disease has known modifiable risk factors that include but are not limited to high blood pressure, high blood cholesterol, cigarette smoking, excessive body weight, and physical inactivity. Of note, prevention of these risk factors have provided an opportunity to reduce cardiovascular mortality and morbidity.<sup>9</sup> Compared with Whites, cardiovascular mortality is 40% higher for Blacks;<sup>10</sup> therefore, the disparate cardiovascular health significantly contributes to the overall economic burden of cardiovascular disease.

# **Health Disparity Erie County NY**

Regarding Erie County, there is an abundance evidence that the burden of poor health is not equally shared across our region.<sup>11</sup> Health disparities are evident in many areas of Erie County for a variety of contributing factors. Specifically, African American men, women, and children who reside in five ZIP codes within the City of Buffalo experience many of the worst health outcomes in Erie County. They are more likely to have serious, chronic, and often preventable diseases, and they have a rate of premature mortality that is almost 300% higher than Whites who live outside of these areas. To illustrate this historically, 73% of the Erie County Department of Health Clinic patients come from five zip codes in the City of Buffalo. These five zip codes are 14204, 14206, 14211, 14212, and 14215.<sup>12</sup>



Figure# 1: City of Buffalo Zip Codes Experiencing Worst Health Outcomes in Erie County

(GIS Mapping Erie County, 2015)

Unemployment is significantly higher in these zip codes than in the County, New York State, and the nation. Median household income and per capita income are about half of Erie County income levels in three of five of these zip codes. Race and ethnicity distributions are also very different in these zip codes as compared to Erie County, state, and national percentages. These are all leading indicators looked at when assessing for health disparities.<sup>13</sup>

High school graduation rates are also much lower in these five zip codes as compared to the County as a whole. The largest public school system in the county, the Buffalo Public School System serves as the primary source of education for residents residing within these zip codes. The Buffalo Public School system as a whole has one of the lowest graduation rates in the state which is also another contributing factor to poorer health outcomes for residents in these zip codes.<sup>14</sup>

## **Demographics: Population**

From 2000-2010, the minority share of the population grew in both the Buffalo metro and the nation as a whole, largely due to generally higher birth rates among minority groups. However, the Buffalo metro continues to be much less diverse than the U.S., with whites representing much larger proportion of the population (79.5% vs. 63.7%). The Buffalo metro is relatively segregated, with the great majority of the region's minority population residing in the City of Buffalo. In 2010, only

46% of the City of Buffalo's population was white compared to over 90% of the metro's suburban population.<sup>15</sup>

Table#1: Racial Composition US, Buffalo Niagara MSA, City of Buffalo and Buffalo Suburbs\*

	US		Buffalo	Niagara MSA		
(Percent Share)	2000	2010	2000	2010	City of Buffalo	Buffalo
YAYI '.	60.1	60.7	00.5	70.5	(2010)	Suburbs (2010)
White	69.1	63.7	82.5	79.5	45.8	90.4
Black	12.3	12.6	11.7	12.2	38.6	3.5
Asian	3.6	4.8	1.3	2.3	3.2	2.3
Other	3.4	4.0	2.0	2.6	4.7	2.1
Hispanic	12.5	16.3	2.9	4.1	10.5	2.2

Source: U.S.Census Bureau, Decennial Census, 2000&2010; Partnership for the Public Good analysis.\*Erie County only.

The population of Erie County has been fluctuating over the past decade. The City of Buffalo had a population decline of 6.9% from 2000 to 2007. It is interesting to note that in 2005 there was a shift in population from the City of Buffalo to the suburbs, but by 2007 the population was also decreasing in the suburbs. The population of the City of Buffalo has continued to decrease by an additional 4.3% from 2007 to 2011. <sup>16</sup>

In Erie County 50.7% of the population is female and 49.3% of the population is male. This distribution is very similar to the United States distribution, but the New York State distribution is 48.4% male and 51.6% female. In the City of Buffalo there is a higher percentage of females (52.1%) and lower percentage of males (47.9%). 77.7% of the Erie County population is non-Hispanic Whites, 13.0% non-Hispanic African Americans, 4.5% Hispanic, 0.6% American Indian/Alaska Native, and 2.6% Asian. <sup>17</sup>

**Population** 90.0% Buffalo 80.0% 70.9% 80.7% Erie County 70.0% 60.0% New York State 50.0% 40.0% 17.5% 50.4% 30.0% 13.9% 38.6% 20.0% 10.0% 2.5% 0.0% 3.2% White Black Asian Erie County Other Department of Source: 2013 US Census Health

Figure#2: Population Comparison by Race

(Poloncarz & Burstein, 2014)

# **Health Disparity: Why Place Matters**

According to the Center for Disease Control and Prevention health disparity is a type of difference in health that is closely linked with social or economic disadvantage. Health disparities negatively affect groups of people who have systematically experienced greater social or economic obstacles to health. These obstacles stem from characteristics historically linked to discrimination or exclusion such as race or ethnicity, religion, socioeconomic status, gender, mental health, sexual orientation, or geographic location. <sup>18</sup>

Most experts on the health effects of social factors agree that where you live can shape your health. The physical features, social relationships, services and opportunities available in neighborhoods can either enhance or constrain an individual's choices benefiting health and well-being. Although the links between neighborhoods and health are not simple, the overwhelming weight of evidence indicates that both features of neighborhoods and characteristics of individual residents influence health. Both places and people matter. <sup>19</sup>

#### The Determinants of Health

Many factors combine together to affect the health of individuals and communities. Whether people are healthy or not, is determined by their circumstances and environment. To a large extent, factors such as where we live, the state of our environment, genetics, our income and education level, and our relationships with friends and family all have considerable impacts on health, whereas the more commonly considered factors such as access and use of health care services often have less of an impact.<sup>20</sup>

#### The determinants of health include:

- the social and economic environment,
- the physical environment, and
- the person's individual characteristics and behaviors.

The context of people's lives determine their health, and so blaming individuals for having poor health or crediting them for good health is inappropriate. Individuals are unlikely to be able to directly control many of the determinants of health. These determinants—or things that make people healthy or not—include the above factors, and many others:

- Health services access and use of services that prevent and treat disease influences health
- Income and social status higher income and social status are linked to better health. The
  greater the gap between the richest and poorest people, the greater the differences in
  health.
- Education low education levels are linked with poor health, more stress and lower selfconfidence.
- Physical environment safe water and clean air, healthy workplaces, safe houses,
   21communities and roads all contribute to good health. Employment and working conditions: people in employment are healthier, particularly those who have more control over their working conditions.
- Social support networks greater support from families, friends and communities is linked to better health. Culture, customs and traditions, and the beliefs of the family and community all affect health.<sup>22</sup>

As described by the World Health Organization, health determinants or the social determinants of health (SDOH) are conditions in the environments in which people are born, live, learn, work, play,

worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been referred to as "place."<sup>23</sup>



#### Social Determinants of Health

Health inequities are *avoidable* inequalities in health between groups of people. Social and economic conditions and their effects on people's lives determine their risk of illness and the actions taken to prevent them becoming ill or treat illness when it occurs.<sup>24</sup>

A "place-based" organizing framework, reflecting five (5) key areas of social determinants of health (SDOH), was developed by Healthy People 2020.

- i. Health and Health Care
- ii. Economic Stability
  - 1. Poverty
  - 2. Employment
- iii. Education
- iv. Neighborhood and Built Environment
- v. Social and Community Context \_ Community Perception<sup>25</sup>

In addition to the more material attributes of "place," the patterns of social engagement and sense of security and well-being are also affected by where people live. Resources that enhance quality of life can have a significant influence on population health outcomes. Each of these determinant areas reflects a number of critical components/key issues that make up the underlying factors in the arena of the social determinants of health. <sup>26</sup>

## Social Determinant of Health



These five key areas (determinants) include:

- I. Health and Health Care
- II. Economic Stability
  - i. Poverty
  - ii. Employment
- III. Educational Attainment
- IV. Neighborhood and Built Environment
- V. Social and Community Context \_ Community Perception

Analysis of demographic trends as they relate to poor health and need for public health services indicates that where poverty is the highest, poor health outcomes are the greatest. Disparities in the community, whether we look at race, ethnicity, education, or socioeconomic statuses are all evident within the indicated 5 zip codes. As expected, in those neighborhoods health outcomes are significantly poorer than those of the county as a whole.<sup>27</sup>

Erie County Health Indicators for 2009 to 2011 illustrate that all of the categories for health conditions: respiratory/cardiac disease/diabetes/cancer are all higher for African-Americans than for Whites. Mortality rates are significantly higher for African Americans (746 v. 1006). Diabetes mortality is twice the rate. Premature deaths are almost double that of the white population. Infant mortality in the African-American community is almost three times the rate of the White community. Disparity causes untoward consequences one of which is premature death.<sup>28</sup>

Cancer, heart disease, diabetes, obesity, HIV, and chronic obstructive pulmonary disorder (COPD) are serious and chronic conditions hurting African Americans. These conditions have a significant impact on quality of life and years of potential life lost (YPLL.) While they affect individuals of all races and ethnicities, the impact on African Americans is more profound.<sup>29</sup>

Table # 2: Erie County Health Indicators by Race/Ethnicity, 2009-2011

	Non-Hispanic				
Health Indicator	White	Black	Asian/Pacific Islander	Hispanic	Total
Socio-Demographic Indicators					
Population (2011)	718,110	124,894	25,880	43,364	918,028
Percent of Population (2011)	78.2%	13.6%	2.8%	4.7%	100.0%
Median Annual Household Income in US Dollars~	54,198	23,347	44,528	22,807	48,473
Percent of Families Below Poverty~	5.9%	33.5%	16.7%	38.7%	11.0%
General Health Indicators					
Total Mortality per 100,000, Age-adjusted	746.7	1,005.9	252.3	646.0	776.5
Percent Premature Deaths (< 75 Years)	33.5%	61.3%	S	65.4%	37.5%
Years of Potential Life Lost per 100,000, Age-adjusted	6,560	12,437	2,043	6,580	7,374
Birth-Related Indicators					
Number of Births per Year (3 Year Average)	6,463	1,815	399	715	9,749
Percent Births with Early (1st Trimester) Prenatal Care	75.2%	60.5%	65.0%	65.9%	71.0%
Percent Adequate Prenatal Care (Kotelchuck Index)	66.4%	49.5%	56.7%	55.5%	61.8%
Percent Premature Births (< 37 Weeks Gestation)	9.9%	16.8%	10.5%	12.1%	11.4%
Percent Low Birth weight Births (< 2.5 Kg)	6.8%	13.2%	7.1%	9.3%	8.2%
Teen (Age 15-17) Pregnancy Rate per 1,000	11.8	67.4	10.3	55.6	27.3
Total Pregnancy Rate per 1,000 Age 15-44 Females	62.7	119.0	72.8	97.6	78.6
Fertility Rate per 1,000 (All Births/Female Population 15-44)	49.0	66.1	62.1	74.7	55.2
Infant Mortality per 1,000 Live Births	5.6	15.2	5.0*	12.6	8.1
Injury-Related Indicators					
Motor Vehicle-Related Mortality per 100,000, Age-adjusted	6.0	6.9	S	S	6.0
Unintentional Injury Mortality per 100,000, Age-adjusted	26.4	24.0	S	23.3	26.3
Unintentional Injury Hospitalizations per 10,000, Ageadjusted	54.6	60.8	12.8	29.9	56.4
Poisoning Hospitalizations per 10,000, Age-adjusted	8.5	16.4	1.5	6.6	9.4
Fall hospitalizations per 10,000, Aged 65+ Years	210.5	93.9	29.6	59.7	199.5
Respiratory Disease Indicators					
Asthma Hospitalizations per 10,000, Age-adjusted	8.0	33.8	7.2	29.2	13.2
Asthma Hospitalizations per 10,000, Aged 0-17 Years	12.1	51.6	13.7	36.9	23.2
Chronic Lower Respiratory Disease Mortality per 100,000, Age-adjusted	39.4	33.1	0.0*	17.7*	38.5

Chronic Lower Respiratory Disease Hospitalizations per 10,000, Age-adjusted	22.3	54.5	10.7	42.8	28.1
Heart Disease and Stroke Indicators					
Diseases of the Heart Mortality per 100,000, Age-adjusted	186.8	238.8	82.8	143.2	192.0
Diseases of the Heart Hospitalizations per 10,000, Age- adjusted	92.2	132.5	24.0	80.4	98.0
Cerebrovascular Disease (Stroke) Mortality per 100,000, Age-adjusted	39.6	57.8	S	37.6	41.6
Cerebrovascular Disease (Stroke) Hospitalizations per 10,000, Age-adjusted	24.9	41.0	12.0	20.0	27.0
Coronary Heart Disease Mortality per 100,000, Age-adjusted	129.1	161.5	49.9	95.1	131.7
Coronary Heart Disease Hospitalizations per 10,000, Ageadjusted	35.0	37.2	12.0	33.8	36.0
Congestive Heart Failure Mortality per 100,000, Age-adjusted	19.0	22.7	s	15.9*	19.5
Congestive Heart Failure Hospitalizations per 10,000, Ageadjusted	22.7	49.2	3.9	25.3	26.2
Diabetes Indicators					
Diabetes Mortality per 100,000, Age-adjusted	19.5	41.6	s	25.1	22.1
Diabetes Hospitalizations per 10,000 (Primary Dx ICD9 250), Age-adjusted	11.3	44.2	2.9	24.3	15.8
Diabetes Hospitalizations per 10,000 (Any Dx ICD9 250), Age-adjusted	156.1	365.6	58.2	274.4	185.7
Diabetes Short-term Complications Hospitalizations per 10,000, Aged 6-17 Years	3.7	4.2	S	5.1	4.0
Diabetes Short-term Complications Hospitalizations per 10,000, Aged 18+ Years	4.5	21.8	0.0*	10.6	6.9
Cancer Indicators					
Lung Cancer Incidence per 100,000, Age-adjusted (2008-2010)	74.5	89.9	27.1*	42.2	75.0
Colorectal Cancer Mortality per 100,000, Age-adjusted (2008-2010)	14.3	19.8	S	11.1*	14.8
Female Breast Cancer Mortality per 100,000, Age-adjusted (2008-2010)	23.8	43.8	S	s	25.2
Cervix Uteri Cancer Mortality per 100,000, Age-adjusted (2008-2010)	1.1	3.5*	S	S	1.5
Percent Early Stage Colorectal Cancer (2008-2010)	44.3%	50.3%	s	38.5%	44.6%
Percent Early Stage Female Breast Cancer (2008-2010)	68.6%	47.8%	56.5%	44.0%	66.1%
Percent Early Stage Cervical Cancer (2008-2010)	49.1%	33.3%*	S	S	43.5%
Substance Abuse and Mental Health-Related Indicators					
Drug-related Hospitalizations per 10,000, Age-adjusted	24.1	46.4	1.2	40.2	27.4
Suicide Mortality Rate per 100,000, Age-adjusted	11.0	7.2	S	S	10.1
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## Chronic Conditions Illustrated: The Erie County NY Community Health Assessment

#### **Heart Disease and Stroke:**

Cardiovascular Disease is the leading cause of death in Erie County. The rate of stroke death in this region is higher than the national rate and nearly 60% higher than the aggregate New York State rate. Erie County residents experience 33% more heart disease death than the average U.S. citizen. 31

Risk factors that can contribute to stroke and heart disease, such as high blood pressure and overweight/obesity, are seen at elevated rates in this region. For example, only 58% of Buffalo and surrounding area residents (compared to 75% nationally) report visiting their doctors routinely to have their blood pressure and cholesterol checked. This may mean that more people in this region are going undiagnosed with dangerous conditions such as high blood pressure. <sup>32</sup>

The rates of congestive heart failure hospitalization are higher in Erie County than New York State and the nation. To further break down these numbers, the largest proportion of the population based in race/ethnicity criteria to suffer the effects of heart disease as indicated by these hospitalization numbers is that of the Black population. This indicator runs true with the rest of the disparity issues affecting the Health of Erie County residents.<sup>33</sup>

Figure#3: Erie County Congestive Heart Failure

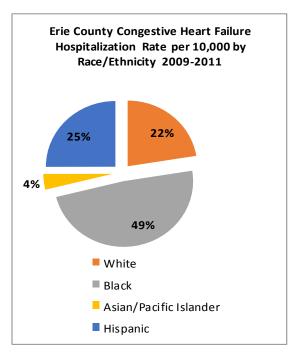
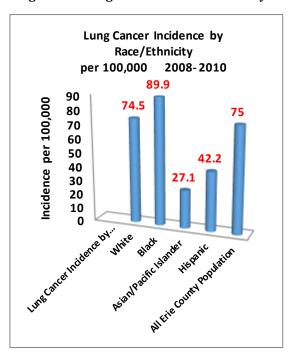


Figure #4: Lung Cancer Incidence County

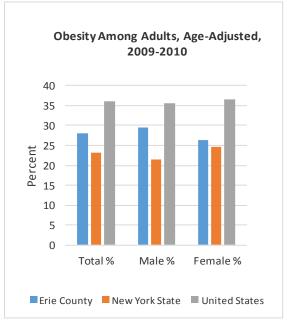


## **Obesity and Related Illnesses**

The percentages of Erie County adults who are overweight or obese are 64.8%, which is higher than the New York State rate (60%). The following chart illustrates Erie County's placement in the obesity arena, our rates in the adult population are higher than in New York state but lower than in the rest of the country.

The health disparity apparent among adults in the region is also seen among children and adolescents starting at a very early age. School districts in many surrounding suburbs of Buffalo report around 22% of children as obese compared to the national rate of childhood obesity of 16.9%. In Buffalo Public Schools, the rate of obesity is

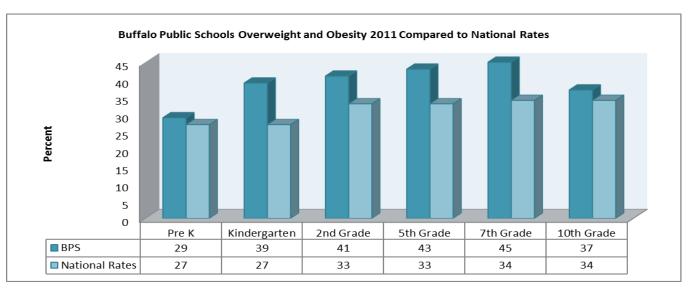
Figure # 5: Obesity Among Adults



(Poloncarz & Burstein, 2014)

as high as 28% among 7th grade students; as many as 45% of students are overweight or obese in that age group. The City of Buffalo has recently been designated the third poorest in the nation once again and the expected health issues that go along with that label are apparent. <sup>34</sup>

Figure#6: Buffalo Public Schools Overweight and Obesity 2011



(Poloncarz & Burstein, 201

#### **Diabetes**

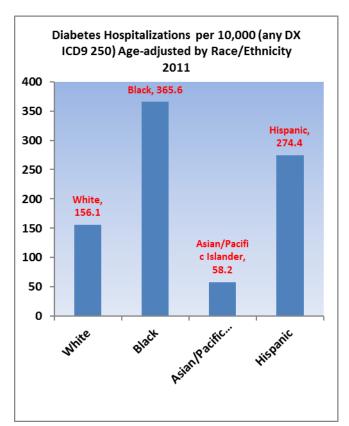
Erie County has higher diabetes prevalence than the state and nation. Both males and females are presenting with the disease but males are significantly higher that the state prevalence numbers where females are slightly below the state but much higher than national incidence.<sup>35</sup>

Within Erie County, Blacks and Hispanics have disproportionately high hospital admissions rates relative to the expected rates for diabetes-related conditions; 356.6 and 274.4 per 10,000 respectively.<sup>36</sup>

Figure#7: Diabetes in Erie County

Adults Diagnosed with Diabetes in Erie County, New York State and the United States - 2011 12 10 8 6 4 2 0 Total % Males % **Females** % ■ Erie County 11.3 11.9 10.7 NYS 9.3 7.5 11 6.4 6.9 5.9 United States

Figure#8: Diabetes Hospitalizations Erie County



(Poloncarz & Burstein, 2014)

(Poloncarz & Burstein, 2014)

Both of these rates are double or more than that of the White population further supporting the disparities affecting the minority residents of the county. These staggering rates of hospital admissions for diabetes and previously mentioned circulatory related conditions indicate a lack of access to comprehensive primary preventive care that could have potentially prevented the need for hospitalization.<sup>37</sup>

## Health Disparities Exist: Factors Utilized in Determining Community health

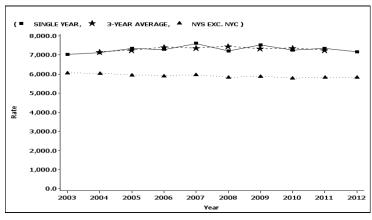
Several factors are used to determine the health of a population and whether or not they have adequate access to quality health care.

- a. Years of Potential Life Lost
- b. Infant Mortality
- c. Hospitalization Rates
- d. Low Birth Weight<sup>38</sup>

## a. Years of Potential Life Lost (YPLL)

Tied to the notion that place matters, health disparities have a clear impact on premature death, or "years of potential life lost." Life expectancy is influenced by residency, with people from the poorest neighborhoods living shorter lives, on average, than other residents. These premature deaths are most often caused by heart disease, cancer, homicide, mental health issues, accidents, chronic pulmonary obstructive disorder, and HIV.<sup>39</sup>

Years of Potential Life Lost is the total years of life lost from a premature death. A premature death is any death occurring prior to the age of 75 years old. YPLL is calculated by subtracting the age at death from 75. The YPLL is higher in the indicated five zip codes than in the balance of Erie County.<sup>40</sup>



Figure#9: Erie County Years of potential life lost per 1,000

(NYS Department of Health, 2014)

## b. Hospitalization Rates

When patients seek prompt attention from primary care providers, hospitalization can often be avoided. Hospitalizations that better primary care could have prevented.

Data from the Community assessment show that in area codes 14211 and 14215; hospital admissions were almost four times the rate for African Americans as for whites.

Figure#10: Hospital Admissions 14215

**Hospital Admissions in Selected Area: 14215** Area Population (age 18 and older, average of 2008 29,185 and 2009) **Admissions for Condition** 616 **Area Rate** 2,111 150% Admissions as % Expected **Statewide Rate** 1,563 Area Rate Adjusted for Age & Sex 2,341 Admissions as % Expected by Race/Ethnicity **Population** Admissions as % Expected Overall 150% 55% White Hispanic Population below threshold **African** Asian Population below threshold Population below threshold Other **Population in Selected Area** 14215 2%. 2% White Hispanic 2% African Asian 72% Other

Figure#11: Hospital Admissions 14211

Area Population (age and 2009)	18 and older, average of	<b>2008</b> 18,050				
Admissions for Condi	tion	421				
Area Rate		2,335				
Admissions as % Expe	cted	153%				
Statewide Rate		1,563				
Area Rate Adjusted fo	or Age & Sex	2,395				
Admissions as % Expe	cted by Race/Ethnicity					
Population	Admissions as %	Expected				
Overall	153%					
White	88%	88%				
Hispanic	· ·	Population below threshold				
African	201%	201%				
Asian	Population below					
Other	Population below	threshold				
Population in Selecte	d Area					
14211 2%	2%					
		White				
	26%	<ul><li>Hispanic</li></ul>				
	= A					
	69%	<ul><li>Asian</li></ul>				
`	3370	Other				

(Prevention Quality Indicators in New York State, 2011)

Figure#12: Hospital Admissions 14212

Hospital Admissions in Selected Area: 14212					
Area Population (age 18 an 2009)	d older, average of 2008 and	9,797			
Admissions for Condition		208			
Area Rate		2,128			
Admissions as % Expected		132%			
Statewide Rate		1,563			
Area Rate Adjusted for Age	& Sex	2,066			
Admissions as % Expected I	by Race/Ethnicity				
Population	Population Admissions as % Expected				
Overall	132%				
White	95%				
Hispanic	Population below threshold				
African	213%				
Asian	Population below threshold				
Other	Population below threshold				
Population in Selected Area	3				
14212 2%. 45%	2%  White  Hispa  Africa  Asian  Other	nic an			

Disparities in the community, whether we look at race, ethnicity, education, or socioeconomic statuses are all evident within the referenced five zip codes. As expected, health outcomes in these zip codes are significantly poorer than those of the county as a whole.<sup>42</sup>

The Prevention Quality Indicators (PQIs) are a set of measures developed to assess the quality of outpatient care for conditions where good outpatient care potentially prevents the need for hospitalization, or early intervention can prevent complications or more severe disease.<sup>43</sup>

(Prevention Quality Indicators in New York State, 2011)

Prevention Quality Indicators (PQIs) at the ZIP code level in New York serve as a screening tool rather than as definitive measures of quality problems. They can provide initial information about potential problems in a community that may require further, more in-depth analysis.<sup>44</sup> The PQI data for zip code 14215 (Figure #:11) shows that hospital admissions are 150% of what would normally be expected in that zip code. Additionally, another significant racial disparity exists, with African Americans' hospital admissions in zip code 14215 at 210% of what is expected for this population.<sup>45</sup>

Figure#13: Hospital Admissions 14204

**Hospital Admissions in Selected Area: 14204** Area Population (age 18 and older, average of 2008 and 6,814 2009) **Admissions for Condition** 173 Area Rate 2,539 Admissions as % Expected 155% **Statewide Rate** 1,563 Area Rate Adjusted for Age & Sex 2,420 Admissions as % Expected by Race/Ethnicity **Population** Overall 155% White 150% Population below threshold Hispanic African 164% Population below threshold Asian Other Population below threshold **Population in Selected Area** 1%-2% 14204 White Hispanic African 71% Asian Other

Figure# 14: Hospital Admissions 14206

Hospital Admission	s in Selected Area: 14206				
Area Population (age 18 and older, average of 2008 and 2009)					
Admissions for Condition 319					
Area Rate		1,966			
Admissions as % Ex	pected	104%			
Statewide Rate		1,563			
Area Rate Adjusted	l for Age & Sex	1,624			
Admissions as % Ex	pected by Race/Ethnicity				
Population					
Overall	104%				
White	94%				
Hispanic	Population below threshold				
African	205%				
Asian	Population below thresh	old			
Other	Population below thresho	old			
Population in Selec	ted Area				
14206 1%	9% 1% 1%	<ul><li>White</li><li>Hispanic</li><li>African</li><li>Asian</li><li>Other</li></ul>			

(Prevention Quality Indicators in New York State, 2011)

#### c. Infant Mortality:

Infant Mortality is widely used as a measure of population health, because many factors can affect the health of a newborn. These include the quality of and access to health care. 46

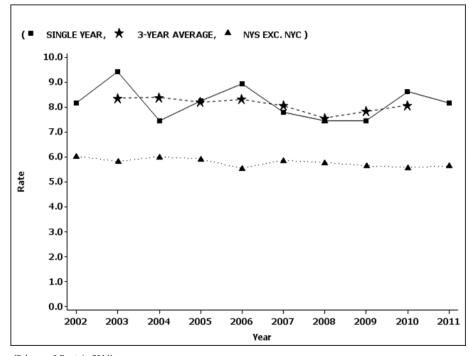


Figure #15: Erie County mortality rate per 1,000 live births Infant <1year) 2002-2011

(Poloncarz & Burstein, 2014)

As above, data show that African Americans experience 16.5 deaths per 1,000 live births (almost three times the national benchmark), compared to 3.9 per 1,000 births among Whites and 12.5 deaths per 1,000 births among Latinos.

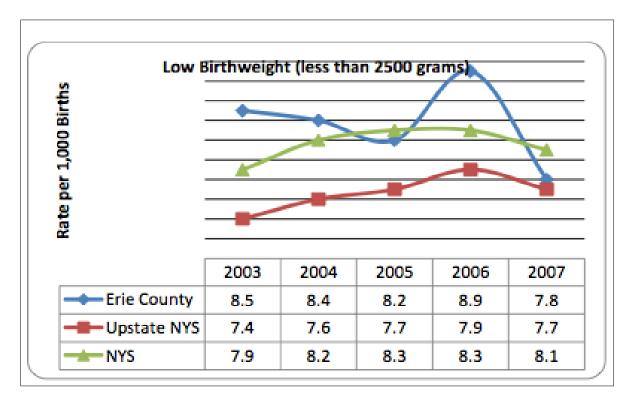
In 2007 Erie County had higher rates per 1,000 of infant deaths (7.8), neonatal deaths (5.2) and post neonatal deaths (2.6) than reported in the State as a whole. Erie County having higher rates for these occurrences is consistent with data through 2003.

This trend continues through 2011 and is consistently higher than the reported state averages. Any slight inroads to decrease the rates that are noted year to year reversed continually for no gain on the problem as of 2014.  $^{49}$ 

#### d. Low birth weight

Low birth rate is the number one risk factor for death in the first year of life and for life-long health issues.

Figure#16: Low Birth Rate per1,000 Births Comparative Demographic 2003-2007



(Gale R Bursteiv, 2014)

Statewide, early prenatal care within the first trimester is more common for white non-Hispanic women (77%) than for Black Non-Hispanic women (60.9%) and Hispanic women (64.4%). Black, non-Hispanic women and Hispanic women are more likely to seek prenatal care later in the pregnancy after the first trimester or not receive any pre-natal care than White non-Hispanic women. New York State lags behind the nation with 75.4% receiving early pre-natal care as compared to 83.9% for the US as a whole.<sup>50</sup>

## **Leading Causes of Premature Deaths in Adults**

Leading Causes of Death Erie County and New York State have the same four leading causes of death including, heart disease, cancer, chronic lower respiratory disease, and stroke. While stroke is the fourth highest cause of death for New York State, it is the third highest for Erie County. The top two causes of death, heart disease and cancer, are more frequently the cause of death for men than women. According to a research study from Harvard School of Public Health, the leading causes of death can be attributed to preventable causes including smoking, high blood pressure, obesity, physical inactivity, and poor nutrition.<sup>51</sup> As noted in figure #4 on p. 17 in this report: Congestive Heart Failure Hospitalization rates for the African Americans is twice the rate as it is for Whites.

Cardiovascular Disease is the leading cause of death among residents of Erie County and New York State. Residents of Erie County report having diseases of the heart at a higher rate than those in New York State and the nation. Heart disease is often preventable through reducing risk factors such as obesity, high blood pressure and inactivity. <sup>52</sup>

Erie County has a higher rate of congestive heart failure hospitalizations than New York State. The Black and White populations also are admitted to the hospital at a higher rate than their counterparts across New York State. Hospital admission of Black patients in Erie County for congestive heart failure is 56% higher than admission of White patients.<sup>53</sup>

Black males and black females have a disproportionately higher rate of death from all cancers than white males and white females respectively when the statistics are broken down by gender. Black males have the highest incidence rate for lung, prostate, colorectal and oral cancer. Lung cancer incidence rates for Erie County females have been rising steadily since the late 1970's, while the incidence for males has fallen. 54

#### Social Determinant of Health



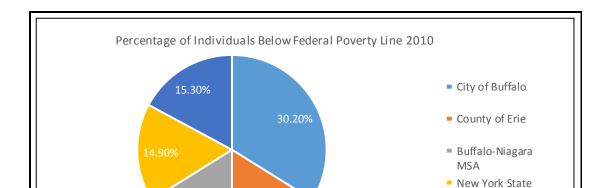
These five key areas (determinants) include:

- I. Health and Health Care
- II. Economic Stability
  - i. Poverty
  - ii. Employment
- III. Educational Attainment
- IV. Neighborhood and Built Environment
- V. Social and Community Context \_ Community Perception

As social determinants of health, poverty rates and employment status define community economic wellbeing. Our health is determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality and safety of our workplaces.<sup>55</sup> Health disparities in the community, whether we look at race, ethnicity, education, or socioeconomic status are all evident within the City of Buffalo and are significantly poorer than those of the county as a whole.<sup>56</sup>

The noted significant differences in the racial composition of the City of Buffalo as compared to the rest of Erie County are characterized by a higher percentage of African Americans (34.7%) and Hispanic (10.5%) than the county as a whole.<sup>57</sup> The majority of African Americans live in neighborhoods that have environmental hazards, high rates of violent crime, high concentrations of liquor and tobacco outlets, and comparatively fewer grocery stores that sell affordable, nutritious food options. Together, these determinants create daunting barriers to a healthy and productive life for African Americans in our community. <sup>58</sup>

## i Poverty



United States

Figure#17: Percentage of Individuals below Federal Poverty Line 2010

Persons of color are disproportionately found among those experiencing poverty in each of the geographies listed below. Among the largest population groups across all three geographies for whom poverty status is determined, African Americans had consistently high percentages of persons living in poverty (23.1% in New York State, 36.4% in Erie County, and 38.7% in the City of Buffalo).<sup>59</sup>

Table#3: Poverty Status Race/Ethnicity: New York State; County of Erie; and City of Buffalo: 2010

	New York % Poverty	Erie County % Poverty	City Buffalo % Poverty
White	10.9%	9.4%	20.9%
Black	23.1%	36.4%	38.7%
Hispanic	25.1%	37.6%	53.0%

(United Way of Buffalo & Erie County, 2012)

US Census Bureau, American Community Survey 2010

http://www.uwbec.org/documents/needs%20assessment/2011 12%20needs%20assessment%20full.pdf

The median household income in Erie County is \$49,977 which is less than that of New York State but significantly higher than that of the City of Buffalo. Disparities associated with low socioeconomic status are apparent even without the comorbidities of minority ethnicity, lack of education and inadequate housing. 60

\$30,502 \$30,502 Median Household Buffalo Erie County New York State Income 2008-2012

Figure#18: Household Income Comparison

(Gale R Burstein, 2014)

As previously noted these health disparities are particularly evident in five zip codes: 14204, 14206, 14211, 14212, and 14215, all found within City boundaries. Race and ethnicity distributions are different in these zip codes as compared to all of Erie County. Analysis of demographic trends as they relate to poor health and need for public health services indicates that where poverty is the highest, poor health outcomes are the greatest. <sup>61</sup>



Figure#19: City of Buffalo Boundary / Zip codes 14204, 14206,14211,14212,14215

Figure#20: Income Comparison: High Poverty Zip Codes City of Buffalo

Characteristic	US	NYS	Erie	Buffalo	14204	14206	14211	14212	14215
% In labor									
force	64.8%	63.8%	63.3%	59.9%	55.9%	60.0%	55.0%	53.9%	59.3%
Median									
Household	\$	\$	\$	\$	\$	\$	\$	\$	\$
Income	52,762	56,951	48,805	30,230	20,355	32,777	23,949	26,677	31,383
Per Capita	\$	\$	\$	\$	\$	\$	\$	\$	\$
Income	27,951	31,796	27,366	20,072	17,251	19,494	14,686	15,014	17,048
% Families									
Below									
Poverty	10.5%	11.0%	10.5%	26.1%	42.5%	16.1%	31.4%	27.6%	27.2%
% Individuals									
Below									
poverty	14.3%	14.5%	14.2%	29.9%	40.4%	20.9%	37.3%	34.5%	28.6%
% Black	13.6%	17.2%	14.5%	40.6%	76.9%	11.7%	79.1%	43.9%	82.5%
% Hispanic	16.3%	17.6%	4.5%	10.5%	9.1%	4.6%	3.6%	2.6%	3.3%
% White	74.8%	67.9%	81.5%	52.8%	20.3%	86.7%	18.8%	51.3%	16.0%
Not High									
School									
Graduate %	14.6%	19%	11.1%	19%	22.4%	19.4%	23.7%	27.2%	15.5%

(Gale R Burstein, 2014)

# ii Unemployment:

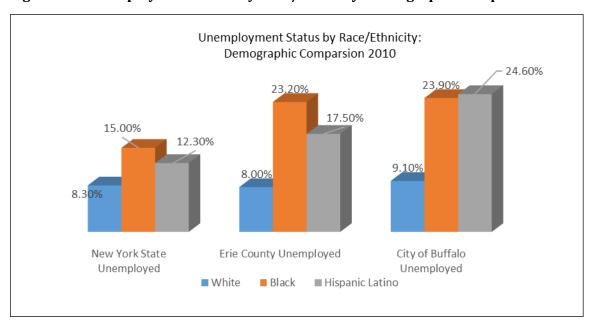
Persons of color are disproportionately represented among the unemployed locally. While unemployment among White or Caucasian individuals is comparable at 8.3% in New York State, 8.0% in Erie County, and 9.1% in the City of Buffalo, unemployment is much higher among Black or African American individuals in Buffalo (23.9%), Erie County (23.2%) and New York State (15.0%). Finally, unemployment among Hispanic or Latino populations is higher in the City of Buffalo (24.6%) versus the County of Erie (17.5%) and New York State (12.3%).

Table#4: Unemployment Status by Race/Ethnicity: New York State; Erie County; Buffalo 2010

	New York State Unemployed	Erie County Unemployed	City of Buffalo Unemployed
White	8.3%	8.0%	9.1%
Black	15.0%	23.2%	23.9%
Hispanic Latino	12.3%	17.5%	24.6%

(United Way of Buffalo & Erie County, 2012)

Figure#21: Unemployment Status by Race/Ethnicity: Demographic Comparison 2010



(United Way of Buffalo & Erie County, 2012)

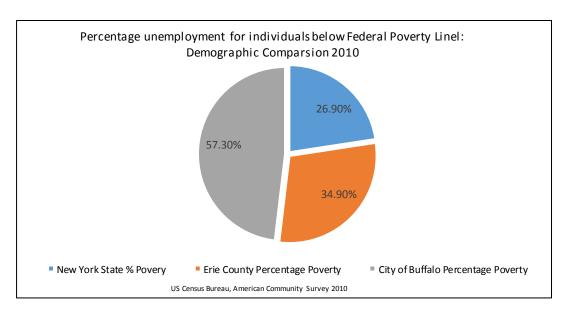
There is also a clear connection between unemployment and poverty status among those for whom a population fell below the federal poverty line with 24% of males and 31% of females experiencing poverty. These percentages are even higher locally with 28.9% of unemployed males and 42.5% of unemployed females experiencing poverty in Erie County and 45.0% of unemployed males and 69.5% of unemployed females experiencing poverty in Buffalo. 69

Table#5: Unemployment Status by Poverty/Gender: New York State; Erie County; Buffalo 2010

	New York State % Poverty	Erie County Percentage Poverty	City of Buffalo Percentage Poverty
Unemployed	26.9%	34.9%	57.3%
Male	24.0%	28.9%	45.0%
Female	30.5%	42.5%	69.5%

(United Way of Buffalo & Erie County, 2012)

Figure#22: Percentage Unemployment for Individuals below Federal Poverty Level



(United State Census Bureau DATA, 2010)

Similarly, (table#6) persons living in the City of Buffalo with limited educational attainment have higher rates of unemployment than their peers in Erie County and New York State. Nearly 35% of Buffalo residents with less than a high school degree are unemployed compared to 27% in Erie County residents with a high school diploma (15%) and some college (12.4%) compared to Erie County (12.0% and 8.5%) and New York State residents (9.8% and 8.9%).<sup>64</sup>

Table#6: Unemployment Status by Educational level: New York State; Erie county; Buffalo 2010

	New York State Unemployed	Erie County Unemployed	City of Buffalo Unemployed
Less than High School	14.8%	26.5%	34.7%
High School Diploma or Equivalent	9.8%	12.0%	15.0%
Some College or Associates Degree	8.9%	8.5%	12.4%
Bachelor's Degree	5.4%	4.3%	4.1%

(United Way of Buffalo & Erie County, 2012)

#### Social Determinant of Health



The five key areas (determinants) include:

- I. Health and Health Care
- II. Economic Stability
  - i. Poverty
  - ii. Employment

### III. Educational Attainment

- IV. Neighborhood and Built Environment
- V. Social and Community Context \_ Community Perception

A person's level of educational attainment is strongly related to his or her well-being and health status. <sup>66</sup> Educational concerns are present for the general population – particularly those 25 years and older living in the City of Buffalo. When compared to their peers in Erie County and New York State, a larger percentage of City of Buffalo residents had less than a high school education (17.5% compared to 10.4% in Erie County and 15.1% in New York State). Additionally, Buffalo residents

were less likely to have a bachelor's (14.0% compared to 16.9% in Erie County and 18.6% in New York State) or graduate or professional degree (9.9% compared to 13.1% in Erie County and 14.0% in New York State). <sup>66</sup>

Table#7: Educational Attainment Population 25 Years+: NYS, Erie County, Buffalo 2010

	New York State %	Erie County%	City of Buffalo%
Less than High School	15.10%	10.40%	17.50%
High School Diploma or Equivalent	27.70%	29.70%	28.90%
Some College or Associates Degree	24.60%	30%	29.50%
Bachelor's Degree	18.60%	16.90%	14%

(United Way of Buffalo & Erie County, 2012)

The disparity in the level of education among racial and ethnic groups in the Buffalo Niagara metro is noteworthy. In 2000, non-Hispanic whites and Asian/Pacific Islanders were much more likely to have earned a high school diploma or bachelor's degree than were blacks and Hispanics in the region. <sup>67</sup>

Within the city of Buffalo there were approximately 78,868 students enrolled in local schools in 2011. In 2013 the graduation rate for the Buffalo Public Schools was 54%. Among African American males it was less than 30%. This statistic both reflects and predicts poor social and emotional health and well-being in this subpopulation.<sup>68</sup>

Table#8: Educational Attainment Buffalo & Niagara MSA, 2000 Diversity data.org, Harvard School of Public Health

	Share of Adults with High School Diploma Or Equivalency		Share of Adults with Bachelor's Degree Or Higher	
	Male	Female	Male	Female
Asian/ Pac.Islander	88%	80%	69%	56%
White, Non- Hispanic	86%	84%	26%	23%
Black	68%	73%	10%	12%
Hispanic	56%	68%	15%	16%

(Good, 2010)

#### Social Determinant of Health



These five key areas (determinants) include:

- A. Health and Health Care
- B. Economic Stability
  - i. Poverty
  - ii. Employment
- C. Educational Attainment
- D. Neighborhood and Built Environment
- E. Social and Community Context \_ Community Perception

The concept of "place" is very important to health. Just as conditions in our homes affect our health, the places surrounding our homes also have a relationship with our health. Research shows that even after accounting for other differences, the characteristics of a neighborhood can be proven to impact the health of its residents. These characteristics are usually divided into three categories: physical, social, and service. The physical environment is composed of the "built environment" constructed by people, as well as the natural environment such as open fields or waterways. The social environment is the result of individual behavior and the quality of relationships between the service environments which includes resources for education, employment, transportation, health care, food, and recreation.

Poor neighborhood conditions have been linked to higher rates of mortality, disability, chronic diseases and their risk factors, mental health issues, injuries, and violence. Besides having immediate, short-term effects on health and our ability to make healthy choices, neighborhoods also have longer-term effects. Accumulated stress, poor environmental quality, and limited resources wear down individual health and make one more likely to die from a number of diseases. Poorer neighborhoods lack well-maintained parks, sporting facilities, and walking or jogging trails. Half of the preventable deaths in the U.S. are related to behaviors such as poor diet and lack of physical activity. The existence of litter, vandalism, graffiti, and crime is an obstacle to physical activity, as are traffic and noise on the streets. <sup>70</sup>

Physical and social environments in neighborhoods can be overtly hazardous due to pollution and crime. Studies have shown that a neighborhood's socioeconomic conditions can affect whether its residents smoke, have healthy diets, and practice safe reproductive behaviors. Aspects of neighborhood environments—such as the presence of sidewalks and playgrounds, after-school physical activity programs for children and youth, and availability of affordable nutritious food—can promote health by encouraging healthy behaviors and making it easier to adopt and maintain them. People are more likely to receive recommended medical care when facilities are accessible from where they live, either because they are located nearby or because safe, convenient transportation is available.<sup>71</sup>

Social and economic conditions in neighborhoods can also influence health by affecting access to employment opportunities and public resources including efficient transportation, an effective police force, and good schools. Strong ties and trust among people within neighborhoods have been associated with better health. Not all neighborhoods enjoy these opportunities and resources equally, however, and access to neighborhoods with health-promoting conditions varies by household's economic and social resources; housing discrimination has limited the ability of many blacks and Hispanics to live in health-promoting neighborhoods. The concentration of substandard housing in less-advantaged neighborhoods further compounds racial and ethnic as well as socioeconomic disparities in health. 72

#### Social Determinant of Health



These five key areas (determinants) include:

- A. Health and Health Care
- B. Economic Stability
  - i. PovertyEmployment
- C. Educational Attainment
- D. Neighborhood and Built Environment
- E. Social and Community Context Community Perception

Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be. 73

By working to establish policies that positively influence social and economic conditions and those that support changes in individual behavior, we can improve health for large numbers of people in ways that can be sustained over time.<sup>74</sup> Improving the conditions in which we live, learn, work, and play and the quality of our relationships will create a healthier population, and society.<sup>75</sup>

## Recommendations

In order to eliminate the race based health disparities in the region we are recommending the following action steps:

- 1. Establish an <u>African-American Health Disparities Task Force</u>. This task force will be charged to develop a strategic plan on how to reduce and eventually eliminate health disparities. This task force will be comprised of leaders from the following:
  - Clergy Pastoral leaders from some of the area's most influential congregations
  - Medical Professionals leaders from the major health systems, insurers and medical school
  - Government the Mayor of the city of Buffalo as well as leaders from federal, state, county and city government
  - Business leaders from the corporate community who influence policy and programming in the region
  - Community based organizations leaders from CBO's who work directly on issues related to community health and disparities
- 2. Establish the <u>Office of African-American Health Disparities</u> within the work plan for the medical corridor. This would be led by an expert on health disparities and on how to address them. This office would do research on root causes of health disparities. In addition they would develop and implement research based initiatives to address specific problems. This office would engage and coordinate with community partners to develop comprehensive outcome based program.
- 3. Develop a comprehensive prevention strategy designed to address barriers of good health. This would include the fact that the inner city is a "food desert" for quality affordable fruits and vegetables. In addition the lack of safe venues for outdoor fitness and recreation activities. This strategy would include a marketing and public information campaign to educate the community about behavioral changes that are needed to enhance community health.

- 4. Examine the relationship between health disparities and other social problems such as:
  - The connection between poor health and academic achievement.
  - Impact of poverty on health disparities
  - Connection of Employment status and health status
  - Housing stock in African-American neighborhoods and health status
  - Connection between mental and physical health
  - Impact of health on crime

#### **Final Statement**

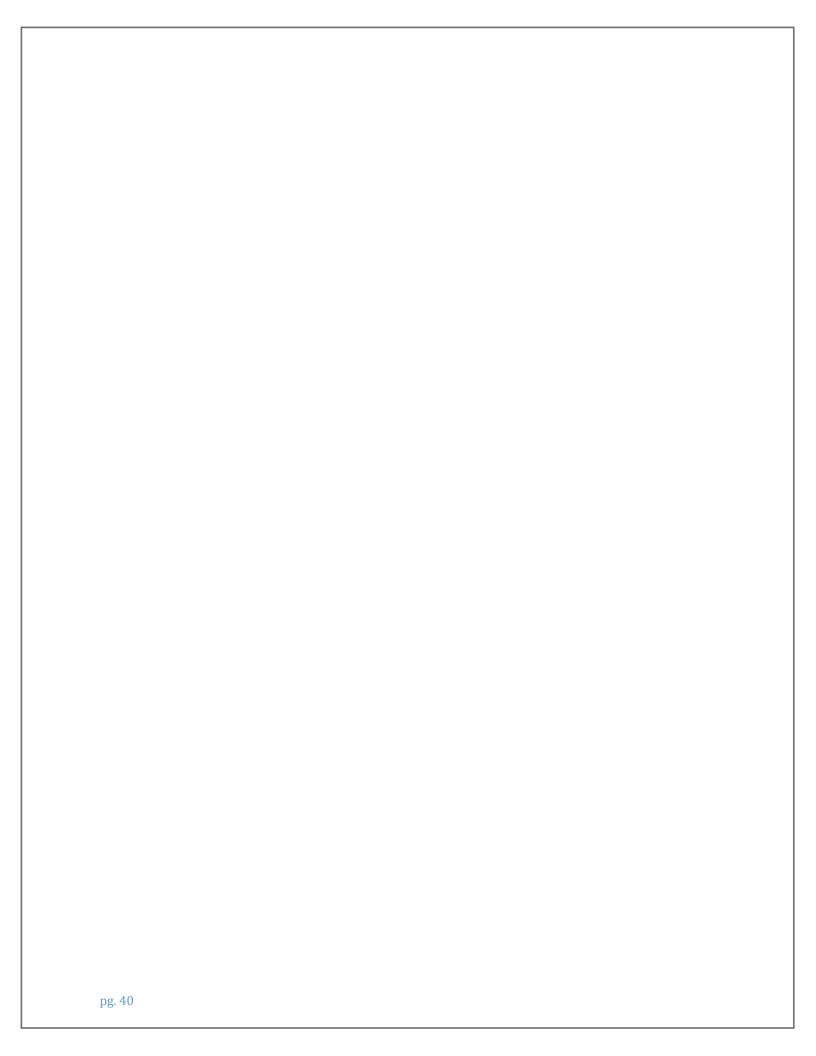
**Health** is a state of complete physical, mental, and social well-being and not just the absence of sickness or frailty.

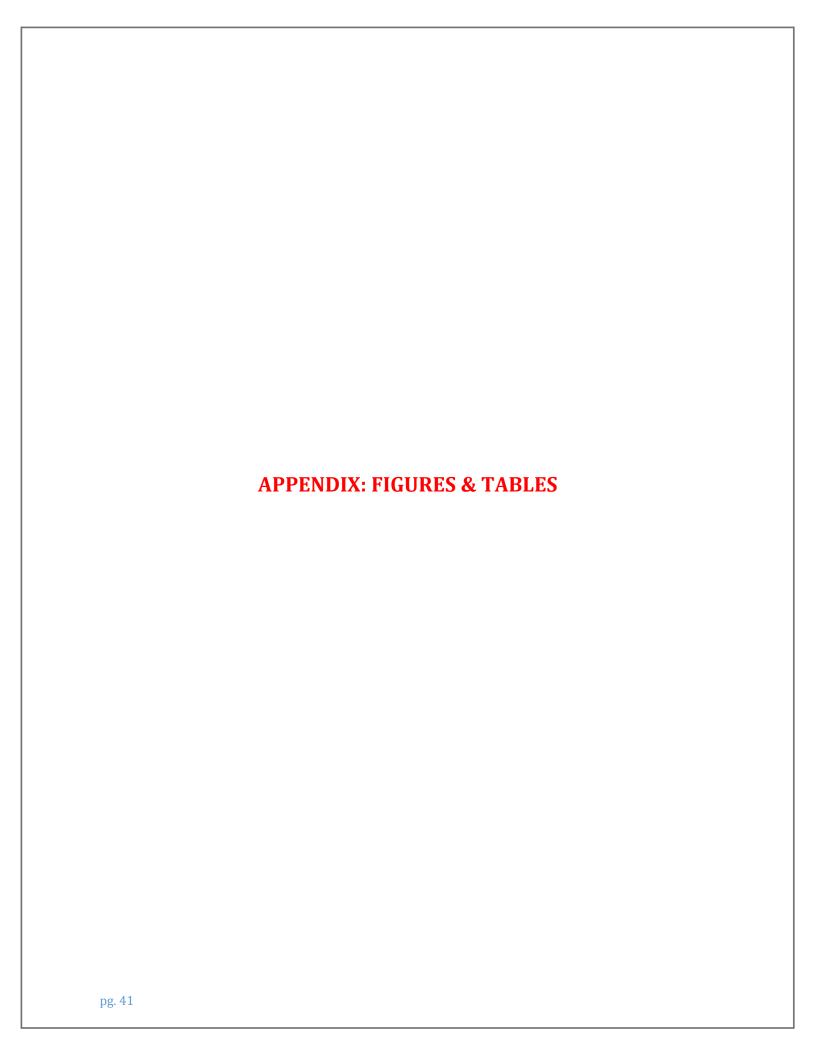
**Health Disparity** is a type of difference in health that is closely linked with social or economic disadvantage. Health disparities negatively affect groups of people who have systematically experienced greater social or economic obstacles to health. These obstacles stem from characteristics historically linked to discrimination or exclusion such as race or ethnicity, religion, socioeconomic status or geographic location.

**Health Equity** is achieved when all people have "the opportunity to 'attain their full health potential' and no one is 'disadvantaged from achieving this potential because of their social position or other socially determined circumstance'"<sub>76</sub>

Healthy People 2020 highlights the importance of addressing the social determinants of health by including "Create social and physical environments that promote good health for all" as one of the four overarching goals for the decade. This emphasis is shared by the World Health Organization, whose Commission on Social Determinants of Health in 2008 published the report, *Closing the gap in a generation: Health equity through action on the social determinants of health*. The emphasis is also shared by other U.S. health initiatives such as the National Partnership for Action to End Health Disparities and the National Prevention and Health Promotion Strategy."

### As a taskforce we support these statements.



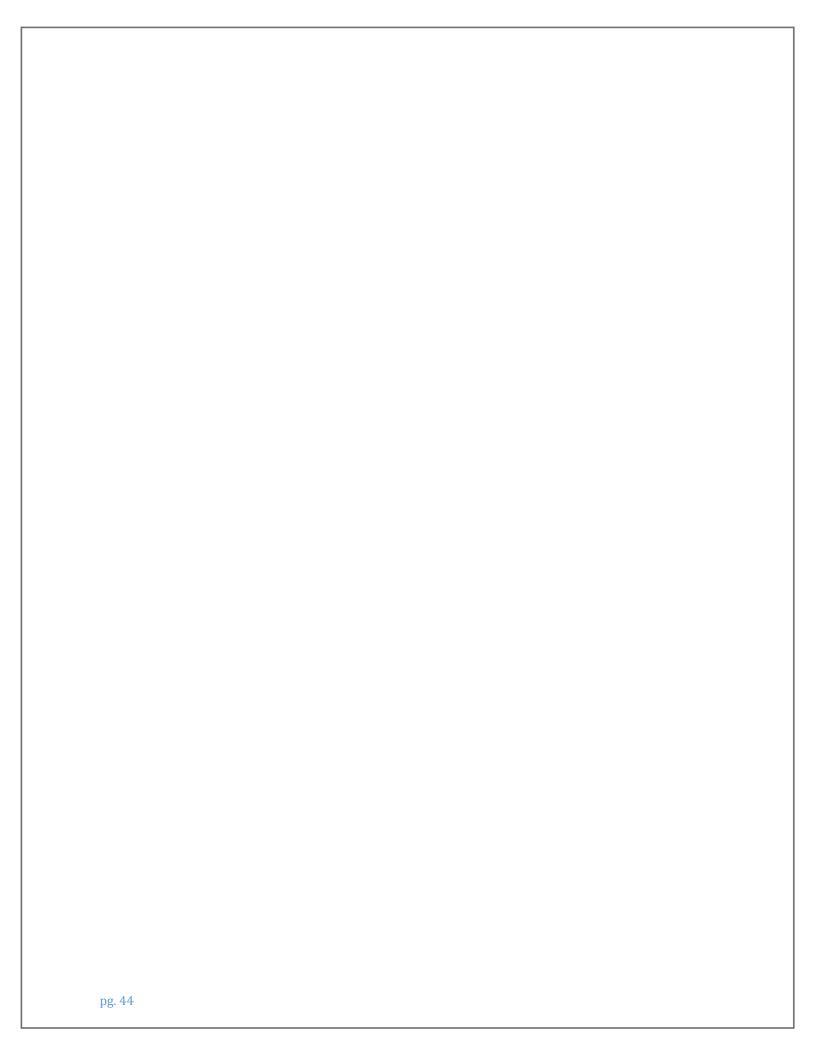


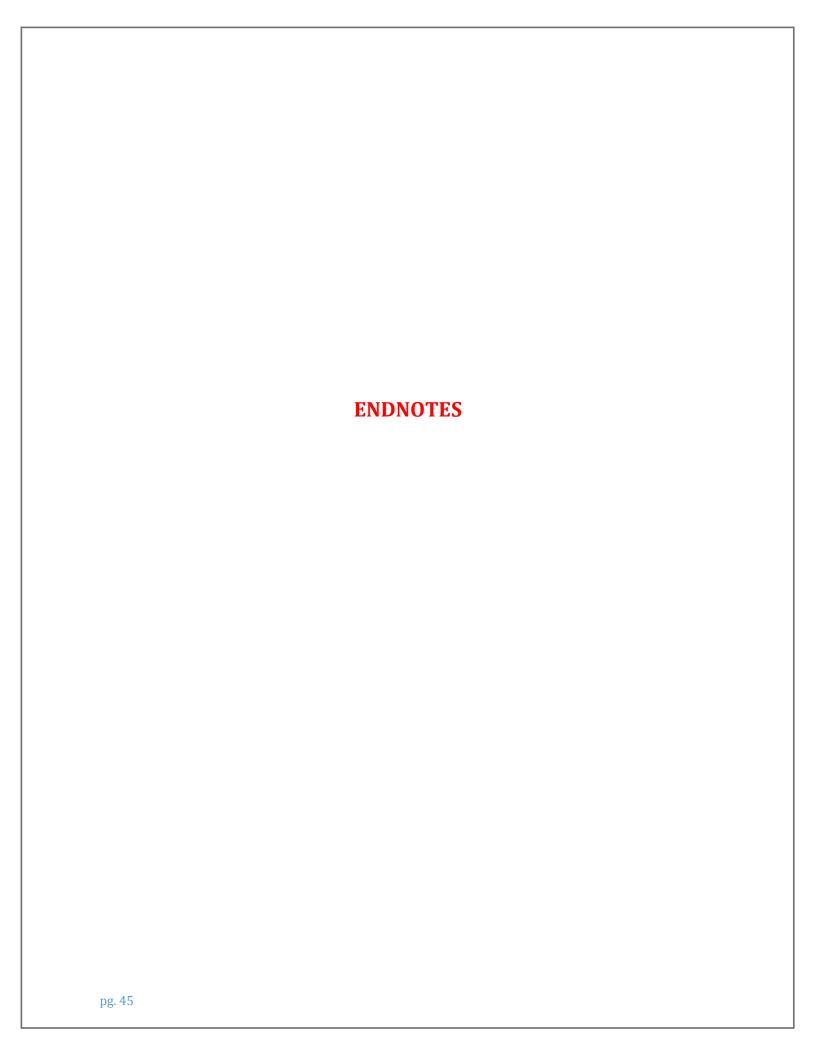
# Appendix:

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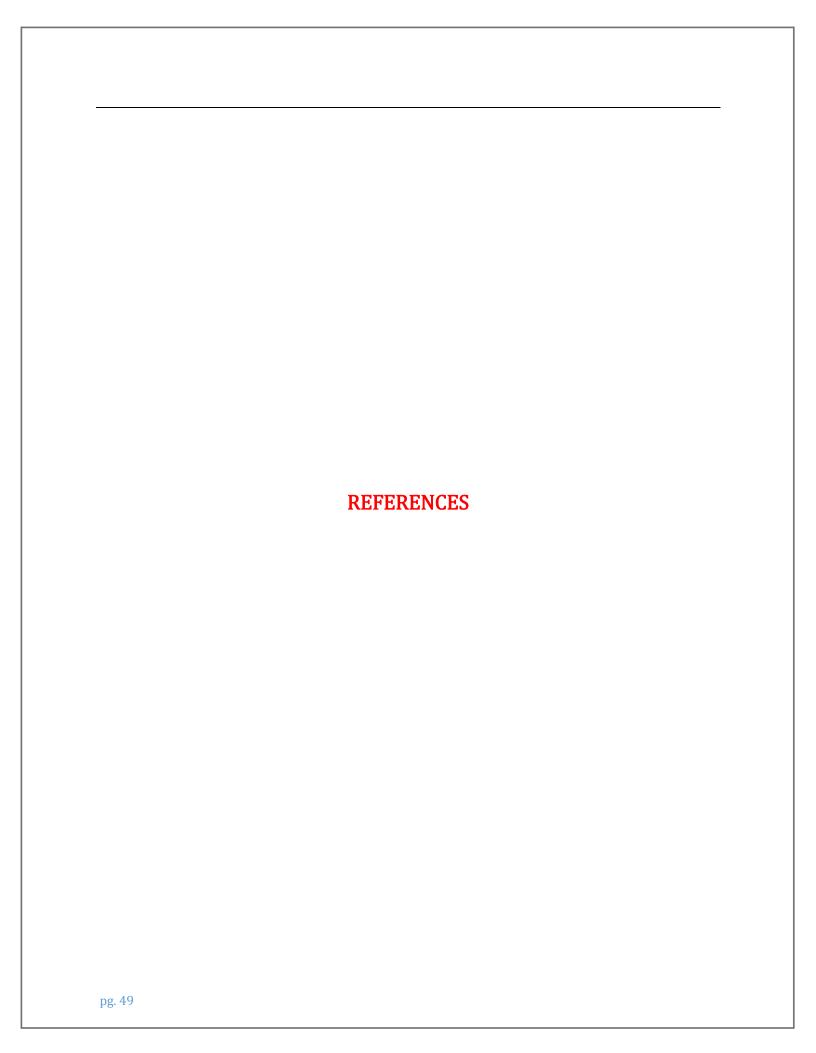
#### **END NOTES:**

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<sup>1</sup> (NCSL, 2014)
<sup>2</sup> (Center for Doisease Control Division of Survelliance, 2013)
<sup>3</sup> (NCSL, 2014)
<sup>4</sup> (NCSL, 2014)
<sup>5</sup> (NCSL, 2014)
<sup>6</sup> (David Satcher, 2005)
<sup>7</sup> (NCSL, 2014)
<sup>8</sup> (Satcher, 2001)
<sup>9</sup> (Satcher, 2001)
<sup>10</sup> (Satcher, 2001)
11 ("Whats Goin On", 2014)
12 (Gale R Burstein, 2014)
13 (Poloncarz & Burstein, 2014)
<sup>14</sup> (Poloncarz & Burstein, 2014)
15 (Good, 2010)
<sup>16</sup> (Poloncarz & Burstein, 2014)
  (Poloncarz & Burstein, 2014)
18 (Social Determinants of Health, 2014)
19 (Johnson, 2008)
   (World Health Organization, 2015)
<sup>21</sup> (Healthy People 2020)
<sup>22</sup> (World Health Organization, 2015)
<sup>23</sup> (World Health Organization, 2015)
<sup>24</sup> (Social Determinants of Health: Key Factors, 2015)
  (Healthy People 2020)
<sup>26</sup> (Healthy People 2020)
<sup>27</sup> (Poloncarz & Burstein, 2014)
<sup>28</sup> (Poloncarz & Burstein, 2014)
29 ("Whats Goin On", 2014)
   (Gale R Burstein, 2014)
31 (Poloncarz & Burstein, 2014)
32 (Poloncarz & Burstein, 2014)
  (Poloncarz & Burstein, 2014)
<sup>34</sup> (Poloncarz & Burstein, 2014)
35 (Poloncarz & Burstein, 2014)
<sup>36</sup> (Poloncarz & Burstein, 2014)
37 (Poloncarz & Burstein, 2014)
<sup>38</sup> ("Whats Goin On", 2014)
39 ("Whats Goin On", 2014)
   ("Whats Goin On", 2014)
41 (Gale R Burstein, 2014)
   (Gale R Burstein, 2014)
<sup>43</sup> (Prevention Quality Indicators in New York State, 2011)
44 (Prevention Quality Indicators in New York State, 2011)
<sup>45</sup> (Prevention Quality Indicators in New York State, 2011)
46 (Gale R Burstein, 2014)
<sup>47</sup> (Gale R Burstein, 2014) (World Health Organization, 2015)
48 (Gale R Burstein, 2014)
49 (Gale R Burstein, 2014)
50 (Gale R Burstein, 2014)
   (Catholic Health System, 2013)
<sup>52</sup> (Catholic Health System, 2013)
  (Catholic Health System, 2013)
54 (Gale R Burstein, 2014)
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55 (World Health Organization, 2015)
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- <sup>56</sup> (Gale R Burstein, 2014)
- 57 (Gale R Burstein, 2014)
- $^{58}$  ("Whats Goin On" , 2014)
- <sup>59</sup> (United Way of Buffalo & Erie County, 2012)
- 60 (Gale R Burstein, 2014)
- 61 (Poloncarz & Burstein, 2014)
- 62 (United Way of Buffalo & Erie County, 2012)
- 63 (United Way of Buffalo & Erie County, 2012)
- 64 (United Way of Buffalo & Erie County, 2012)
- 65 (NCIOM, 2009)
- 66 (United Way of Buffalo & Erie County, 2012)
- 67 (Good, 2010)
- 68 (Good, 2010)
- <sup>69</sup> (Johnson, 2008)
- 70 (Johnson, 2008)
- 71 (Johnson, 2008)
- 72 (Johnson, 2008)
- <sup>73</sup> (Office of Disease Prevention and Health Promotion, 2014)
- <sup>74</sup> (Office of Disease Prevention and Health Promotion, 2014)
- <sup>75</sup> (Johnson, 2008)
- <sup>76</sup> (Social Determinants of Health, 2014)
- 77 (Healthy People 2020)

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- (2014). "Whats Goin On". Rochester NY: Finger Lakes Health System Agency Africian American Health Coalition. Retrieved from Finger Lakes Health System Agency: http://www.flhsa.org/2014-disparity-reports
- (2014, 10). Retrieved from NYS Department of Health: https://www.health.ny.gov/statistics/chac/mortality/d34\_14.htm
- *Areas with Concentrated Poverty: 2006–2010.* (2010). Retrieved from American Communuty Survey Brief: http://www.census.gov/prod/2011pubs/acsbr10-17.pdf
- Association, A. H. (2009). *Health Information and Promotion for Multicultural or Minority Health.*Retrieved from Health Power for Minorities:
  http://healthpowerforminorities.com/cities/Buffalo-NY.html
- Catholic Health System. (2013). *Community Health Needs Assessment & Community Service Plan 2013 Assessment.* Buffalo NY: Catholic Health System .
- Center for Doisease Control Division of Survelliance, E. a. (2013, November). *CDC Dispaarity Analytics.* Retrieved from Center for Disease Control and Prevention: http://www.cdc.gov/DisparitiesAnalytics/Docs/CHDIR13\_factsheet\_nov\_20\_2013\_final\_50 8.pdf
- David Satcher, G. E. (2005). What if We were Equal? A Comparsion Of The Black White Mortality Gap In 1960 And 2000. *Health Affairs, 24, no.2,* 459-464.
- Gale R Burstein, M. M. (2014). *Community Health Assessment.* Retrieved from Erie County Government Homepage: http://www2.erie.gov/health/sites/www2.erie.gov.health/files/uploads/pdfs/CHA.pdf
- GIS Mapping Erie County. (2015). Retrieved from Erie County.Gov: http://gis2.erie.gov/gc/eriecountyny/PublicLaunchPage.aspx
- Good, P. f. (2010, 6). *Open Buffalo Profile of Buffalo and it's Region.* Retrieved from PArtnership for the Public Good: http://www.ppgbuffalo.org/wp-content/uploads/2010/06/Buffalo\_Profile.pdf
- *Healthy People 2020.* (n.d.). Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health
- Johnson, R. W. (2008). Where We Live Matters for Our Health:. *Commission to Build a Healthier America*, 11.
- NCIOM. (2009). *Expanding Access to Health Care A Report of the NCIOM Health Access Study Group.* Morrisville, NC: North Carolina Institute of Medicine.
- *NCSL.* (2014, January 23). Retrieved from National Council of State Legislators: (http://www.ncsl.org/issues-research/health/health-disparities-overview.aspx)
- *North Carolina Institute of Medicine.* (n.d.). Retrieved from http://www.nciom.org/publications/

- Office of Disease Prevention and Health Promotion. (2014, October ). Retrieved from Healthy People 2020: https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health
- Poloncarz, M., & Burstein, M. M. (2014). *Erie County New York Community Health Assessment 2014-2017.* BuffaloNY: Erie County Department of Public Health.
- Poverty in the United States 2013. (n.d.).
- Prevention Quality Indicators in New York State. (2011, October ). Retrieved from Healthy NY.Gov: https://apps.health.ny.gov/statistics/prevention/quality\_indicators/start.map
- Satcher, D. (2001). "Our Commitment to Eliminate Racial and Ethnic Health Disparities," . *Yale Journal of Health Policy, Law, and Ethics: Vol 1 :Iss 1, Article 1*.
- Social Determinants of Health. (2014, 3 21). Retrieved from CDC.gov: http://www.cdc.gov/socialdeterminants/Definitions.html
- Social Determinants of Health: Key Factors. (2015). Retrieved from World Health Organization: http://www.who.int/social\_determinants/thecommission/finalreport/key\_concepts/en/
- *United State Census Bureau DATA*. (2010, October 26). Retrieved from United State Census Bureau: http://www.census.gov/
- United Way of Buffalo & Erie County. (2012). 2011-2012 Community Needs Assessment. Buffalo NY: United Way of Buffalo & Erie County. Retrieved from http://www.uwbec.org/
- US Department of Health & Human Services . (2014). Retrieved from Agency for Health Care Research & Quality: http://www.qualityindicators.ahrq.gov/modules/pqi\_overview.aspx
- World Health Organization. (2015). *Health Impact Assessment (HIA)*. Retrieved from World Health Organization: http://www.who.int/hia/evidence/doh/en/