## **Health Disparities in New Orleans**



New Orleans is a city facing significant health challenges. New Orleans' health-related challenges include a high rate of obesity, a high rate of people without health insurance, a high percentage of babies born with low birth weights, and a high violent crime rate.<sup>1</sup> largely been unsuccessful, suggesting that they may be caused primarily by social factors.<sup>5</sup>

Precisely which social factors are the primary cause of racial and ethnic health disparities is the subject of ongoing research. Discrimination and stereotypes may play a role; an association has been found between

However, everyone in New Orleans does not experience these health challenges equally. Large disparities in health exist between different groups of people in New Orleans. These differences systematically place socially disadvantaged groups at further disadvantage on health, compounding the significant challenges these groups already face. Health disparities also

have a direct financial cost; research estimates that almost a third of direct medical costs faced by African Americans, Hispanics, and Asian Americans between 2003 and 2006 were excess costs resulting from health disparities.<sup>3</sup>

Reducing health disparities and achieving health equity is a guiding principle of *Healthy People 2020*, the nation's health agenda.<sup>4</sup> Addressing health disparities is also a priority for the New Orleans Health Department. This report will review health disparities in New Orleans based on three factors: race, place, and poverty. These choices were guided by the availability of data and recent research in the field of health disparities.

#### Race

Health disparity research in the United States has focused on racial and ethnic health disparities, largely because of data availability and the history of race- and ethnicity-based discrimination in the US.<sup>5</sup> National studies have found significant and long-standing health disparities between racial and ethnic groups.<sup>5</sup> Attempts to find biological explanations for these disparities have

Health disparities or health inequities can be defined as potentially avoidable differences in health (or in health risks that policy can influence) between groups of people who are more and less advantaged socially.<sup>2</sup> experiencing the stress of discrimination and poor mental and physical health.<sup>6</sup> Recently, the psychological phenomenon of stereotype threat (anxiety or fear that one's behavior will conform to a negative stereotype) has been hypothesized to play a role in racial and ethnic health disparities.<sup>7</sup> It has been proposed that race may be a proxy for class; given the complexities of the relationship between

the two factors, researchers advocate paying attention to both race and ethnicity and socioeconomic factors (including income, wealth, education, and occupation) when studying health disparities.<sup>5,8</sup>

#### **Measuring Racial Health Disparities**

In 2010, about 60% of people in New Orleans identified as African American and about 30% as Non-Hispanic white.<sup>9</sup> While about 3% of New Orleans residents identified as Asian and 5% as Hispanic, the small size of these groups means that data on health outcomes for these groups in New Orleans is unavailable or statistically unreliable. Because of this, this report will examine racial health disparities between African Americans and whites only.

Rate ratios are used in this report to compare health outcomes between groups. They are calculated by dividing the rate of an event for the less advantaged group by the rate for the more advantaged group.<sup>2</sup> The resulting ratio is how much more likely a member of the less advantaged group is to experience the event compared to the more advantaged group.

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#### Racial health disparities vary between different causes of death.

Different levels of disparities exist between African Americans and whites in New Orleans depending on the underlying cause of death. The chart at right contains the rate ratios for the top ten causes of death in New Orleans between 2008 and 2010. The rate ratios were calculated by dividing the age-adjusted rate for African Americans by the age-adjusted

rate for whites, and the top ten causes of death list was drawn from the ICD-10 List of 113 Causes of Death and mortality data for Orleans Parish.<sup>13, 11</sup>

- African Americans were eight times more likely to die of homicide than whites in Orleans Parish during this period.
- African Americans were three times more likely to die of diabetes and twice as likely to die of kidney disease and HIV.
- A rate ratio below 1 means that African Americans were less likely to die of that particular cause than whites; this was true for accidents, chronic lower respiratory disease and Alzheimer's disease.

#### Rate Ratio for Top Ten Causes of Death in Orleans Parish (2008-2010)<sup>11</sup>





#### Age Adjusted Death Rate Per 100,000 (2008-2010)<sup>11</sup>

The figure above compares the age-adjusted death rate per 100,000 for each cause of death for non-Hispanic African Americans and non-Hispanic whites. This figure suggests that while the disparities are greater for causes of death like homicide and diabetes, disparities in deaths due to more common diseases are responsible for more (potentially preventable) deaths.



\* Indicates a significant difference between African Americans and whites

These findings can be compared to data on the prevalence of certain chronic conditions by race from a 2010 survey of adults in New Orleans, above.<sup>14</sup> This survey, conducted by the Kaiser Family Foundation, found that African Americans in Orleans Parish were significantly more likely than whites to have any chronic condition. In the survey, African Americans were 1.6 times more likely to have diabetes than whites; the disparity in death resulting from diabetes, however, is almost twice that. This suggests that racial disparities in mortality resulting from specific conditions may not be fully explained by different rates of the conditions across populations, as African-Americans with diabetes may be more likely to die from the condition than whites with diabetes.

# In 2008-2010, an African American person in New Orleans was 1.37 times more likely to die than a white person in New Orleans.

The chart at right shows the all-cause mortality rate ratios for African American people compared to white people in New Orleans, Louisiana and the United States between 2008 and 2010. The rate ratios are calculated using age-adjusted death rates.

 The rate ratio for this measure in New Orleans is 1.37; this means that an African American person in New Orleans was 1.37 times more likely to die than a white person in New Orleans over this period.

The ratio for this measure was higher in New

All-Cause Mortality Rate Ratio, African Americans Compared to Whites (2008-2010)<sup>10</sup>



Orleans over this period than in Louisiana and Corleans Parish Louisiana OS the United States as a whole, which means that New Orleans has a more severe disparity in all-cause mortality between whites and African Americans than both the state and the nation.

#### Disparities in all-cause mortality are not constant across age groups.

The figure to the right has the rate ratios for all-cause mortality by age group (data is not available for age groups younger than 15).

- Between 2008 and 2010, a 15-24 year old African American person in New Orleans was more than four times more likely to die from any cause than a white person in the same age group.
- The rate ratios are largest for the younger age groups and generally decrease over time, with an African American person 85 or older actually slightly less likely to die in 2008-2010 than a white person of the same age.

All-Cause Mortality Rate Ratio by Age Group (2008-2010)<sup>10</sup>



#### **Avertable Deaths**

Calculating avertable deaths is another way to measure disparities in all-cause mortality. Avertable deaths are calculated by applying the death rate of the more advantaged population to the less advantaged population; the difference between this number and the actual number of deaths in the less advantaged population is the number of deaths that would have been prevented if both groups had the death rate of the more advantaged group.<sup>12</sup>

The chart at right contains avertable deaths expressed as a percent of total deaths for African Americans in New Orleans between 2008 and 2010 by age group, using the white death rate as the reference.

- 75% of deaths among African American 15-24 year olds between 2008 and 2010 in New Orleans could have been averted, a total of almost 200 deaths.
- Among African Americans 15 and older in New Orleans, 30% of deaths between 2008 and 2010 were avertable.

Avertable Deaths by Age (2008-2010)<sup>10</sup>



# A significant disparity in health insurance coverage exists between African Americans and whites in New Orleans.

Lack of health insurance coverage is a barrier to accessing health care.

- African American children under 18 in New Orleans are about three and a half times more likely to be uninsured than white children.<sup>15</sup>
- African Americans ages 18-64 were close to twice as likely to be uninsured than white adults.<sup>15</sup>



#### Percent Without Health Insurance (2009-2011)<sup>15</sup>

#### Place

A growing body of public health research has found that place (i.e., where you live) may contribute to racial health disparities. New Orleans, like many US cities, is highly geographically segregated by race; a study using 2005-2009 American Community Survey data ranked it 34th out of 100 metro areas for black-white segregation.<sup>16</sup> Segregation may help explain racial health disparities because it can lead to increased concentration of poverty in neighborhoods with fewer resources and poorer environmental quality.<sup>3</sup>

Food deserts, places where people have limited access to healthy foods, have been found to be more common in areas with lower income and those with a higher proportion of African American residents.<sup>17</sup> In New Orleans, a 2010 survey found that African Americans are statistically significantly less likely than whites to report that their neighborhoods have enough restaurants, grocery stores, and places where children can play outside.<sup>14</sup> Taken together, this research suggests that where you live may strongly affect your health.

# There is a 25.5 year difference between the ZIP codes in New Orleans with the highest and lowest life expectancies.

A 2012 study published by the Joint Center for Political and Economic Studies' Place Matters project examined the impact of place on health in Orleans Parish.<sup>16</sup> They collected ZIP code level data and calculated life expectancies for each area, finding a 25.5 year disparity between the ZIP codes with the highest and lowest life expectancies. ZIP code 70112, containing parts of the Tulane, Gravier, Iberville and Treme neighborhoods, had a life expectancy of 54.5.<sup>16</sup> This is lower than the Democratic Republic of the Congo.<sup>18</sup>

ZIP code 70124, containing the Lakeshore, Lake Vista, Lakeview, West End, Lakewood and Navarre neighborhoods, had a life expectancy of 80, similar to the UK and higher than the US average in 2012.<sup>18</sup> A comparison table and map showing these two ZIP codes is below.



### ZIP Code Comparison

#### Poverty

High concentrations of poverty may be the link between place and poor health. Research has found, for example, that living in a high poverty neighborhood may have a negative impact on your health regardless of your own income.<sup>3</sup> Data from New Orleans may support this research. ZIP code life expectancy is more closely related to the percentage of residents in that ZIP code living below 150% of the Federal Poverty Level than the percentage of residents who are people of color or the percentage with less than a high school degree.<sup>16</sup>

#### African American median income is half the median income for whites in New Orleans.

- In New Orleans, poverty is not evenly distributed across racial and ethnic groups.
- A 2012 report<sup>19</sup> found that whites in New Orleans had a median income almost twice that of African Americans. African Americans were also far likelier than whites to live in asset poverty (not having enough assets to live at 100% of the Federal Poverty Level for three months without other income) and income poverty (households with income below 100% of the Federal Poverty Level).<sup>19</sup> The chart below illustrates these differences.



A 2010 survey of New Orleans residents asked how well their health needs were being met.<sup>14</sup> On this question, there was a greater divide between those who were earning above and below 200% of the Federal Poverty Line and those who were insured and uninsured than between African Americans and whites.<sup>14</sup> This suggests that disparities by income may be even greater than disparities by race in New Orleans.



#### Health Needs Met "Very Well" (2010)<sup>14</sup>

#### Reducing Disparities and Reaching Health Equity

While ensuring equitable access to health care is essential, these data indicate that social, environmental and economic factors are closely related to health outcomes. Therefore, approaches that seek to strengthen neighborhoods and increase access to economic opportunities (including health insurance) are critical to addressing health disparities.

The City of New Orleans takes a comprehensive approach to improving the quality of life for all New Orleanians, emphasizing economic development, sustainable communities, public safety, and public health approaches targeting children and families, all of which impact social determinants of health. In addition, the New Orleans Health Department has joined with community partners to implement a community health improvement plan,<sup>20</sup> which includes as one of its priority areas addressing the social determinants of health that contribute to health disparities. Ultimately, achieving health equity in New Orleans will require focused coordination and collaboration across disciplines.

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#### Works Cited

- 1. Orleans (OR) County, Louisiana. (2012). Retrieved from County Health Rankings & Roadmaps: http://www.countyhealthrankings.org/app/louisiana/2012/orleans/county/1/overall
- 2. Braveman, P. (2006). Health Disparities and Health Equity: Concepts and Measurement. Annual Review of Public Health, 27, 167-194.
- 3. LaVeist, T. A., Gaskin, D., & Trujillo, A. J. (2011). Segregated Spaces, Risky Places: The Effects of Racial Segregation on Health Inequalities. Washington, DC: Joint Center for Political and Economic Studies.
- 4. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/about/default.aspx. Accessed February 5, 2013.
- 5. Adler, N. E., & Rehkopf, D. H. (2008). U.S. Disparities in Health: Descriptions, Causes, and Mechanisms. Annual Review of Public Health, 29, 235-252.
- 6. Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/Ethnic Discrimination and Health: Findings From Community Studies. American Journal of Public Health, 93(2), 200-208.
- 7. Aronson, J., Burgess, D., Phelan, S. M., & Juarez, L. (2013). Unhealthy Interactions: The Role of Stereotype Threat in Health Disparities. American Journal of Public Health, 103(1), 50-56.
- 8. Kawachi, I., Daniels, N., & Robinson, D. E. (2005). Health Disparities By Race And Class: Why Both Matter. Health Affairs, 24(No. 2), 343-352.
- 9. U.S. Census Bureau, 2010 Census data
- Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2010 on CDC WONDER Online Database, released 2012. Data for year 2010 are compiled from the Multiple Cause of Death File 2010, Series 20 No. 2P, 2012, Data for year 2009 are compiled from the Multiple Cause of Death File 2009, Series 20 No. 2O, 2012, data for year 2008 are compiled from the Multiple Cause of Death File 2008, Series 20 No. 2N, 2011
- 11. United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Underlying Cause of Death 1999-2010 on CDC WONDER Online Database, released 2012. Data for year 2010 are compiled from the Multiple Cause of Death File 2010, Series 20, No. 2P, 2012. Data for year 2009 are compiled from the Multiple Cause of Death File 2009, Series 20, No. 2O, 2012. Data for year 2008 are compiled from the Multiple Cause of Death File 2008, Series 20, No. 2N, 2011.
- 12. Woolf, S. H., Jones, R. M., Johnson, R. E., Phillips, R. L., Oliver, M. N., Bazemore, A., & Vichare, A. (2010). Avertable Deaths Associated With Household Income in Virginia. American Journal of Public Health, 100(4), 750-755.
- 13. Anderson, R., Miniño, A., Hoyert, D., & Rosenberg, H. (2001). Comparability of cause of death between ICD–9 and ICD–10: Preliminary estimates. Hyattsville, Maryland: National Center for Health Statistics.
- 14. The Kaiser Family Foundation. (2010). New Orleans Five Years After the Storm: A New Disaster Amid Recovery. Menlo Park, CA.
- 15. U.S. Census Bureau. 2009-2011 American Community Survey.
- 16. Orleans Parish Place Matters Team. (2012). Place Matters for Health in Orleans Parish: Ensuring Opportunities for Good Health for All. Washington, DC: Joint Center for Political and Economic Studies.
- 17. Beaulac, J., Kristjansson, E., & Cummins, S. (2009). A Systematic Review of Food Deserts, 1966-2007. Preventing Chronic Disease, 6(3), A105.
- 18. Country Comparison: Life Expectancy at Birth. (2012). Retrieved from CIA World Factbook: <u>https://www.cia.gov/library/publications/the-world-factbook/rankorder/2102rank.html</u>
- 19. Corporation for Enterprise Development. (2012). Assets & Opportunity Profile: New Orleans. Retrieved from <a href="http://www.gnof.org/wp-content/uploads/2012/12/NewOrleans">http://www.gnof.org/wp-content/uploads/2012/12/NewOrleans</a> asset-study-CFED.pdf
- 20. City of New Orleans Health Department. (2013) New Orleans Community Health Improvement Report. Retrieved from http://new.nola.gov/nola/media/Health-Department/Publications/NOLA-Community-Health-Improvement-Final-Report.pdf