Why Place Matters

This report is an update to the 2008 “Health: Place Matters” report which examined the differences between Duval County’s Health Zones and the intersection of the social determinants of health (SDOH) and health outcomes.

Health is dependent on many factors, some changeable and some not. Changeable factors are referred to as the Social Determinants of Health (SDOH). The SDOH are illustrated below demonstrating the interconnection between the general conditions which surround us (society) and individual characteristics and behaviors; all of which influence the health of the population.

Community attributes most closely tied to health outcomes include the distribution of wealth and income, employment, education, and other socio-economic opportunities. These community attributes are not randomly distributed across the community. Poverty or wealth determine where you live, what you eat, where your children go to school, your access to medical care, and ultimately how long you will live and how healthy you will be as you age.

Although wealth/poverty often drive health outcomes, there are many other factors interacting with the cycle of opportunity, disadvantage, and health outcomes. Some examples are listed below.

The physical environment
- environmental toxins & contaminants
- planning and development of neighborhoods, parks and recreation
- location of industry
- safe food, water, air

Life-style choice and behaviors
- Nutrition/diet, access to healthy food
- Exercise, access to parks and safe places to play
- Hand washing
- Risk taking behaviors (unprotected sex, smoking, alcohol and drug use)

Social and Community Networks
- Social support & social capital
- Discrimination
- Resilience

Health Care
- Access to quality health care including dental, medical, and mental health services
- Linguistically and culturally competent health care providers
## Duval County Report Card

### Indicators

<table>
<thead>
<tr>
<th>Population</th>
<th>HZ1</th>
<th>HZ2</th>
<th>HZ3</th>
<th>HZ4</th>
<th>HZ5</th>
<th>HZ6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population (2011 extrapolation)</td>
<td>110,427</td>
<td>268,950</td>
<td>146,095</td>
<td>184,230</td>
<td>102,312</td>
<td>59,152</td>
</tr>
<tr>
<td>% White</td>
<td>18.9%</td>
<td>66.7%</td>
<td>76.3%</td>
<td>58.1%</td>
<td>57.7%</td>
<td>84.2%</td>
</tr>
<tr>
<td>% Black</td>
<td>78.0%</td>
<td>20.5%</td>
<td>11.6%</td>
<td>31.0%</td>
<td>36.3%</td>
<td>8.5%</td>
</tr>
<tr>
<td>% Other</td>
<td>3.1%</td>
<td>12.8%</td>
<td>12.1%</td>
<td>10.9%</td>
<td>6.0%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Population Density/sq mile (2010)</td>
<td>2516.4</td>
<td>2541.3</td>
<td>1301.4</td>
<td>1758.4</td>
<td>261.8</td>
<td>2598.2</td>
</tr>
</tbody>
</table>

### Income (people 25 years +)

<table>
<thead>
<tr>
<th>Income</th>
<th>HZ1</th>
<th>HZ2</th>
<th>HZ3</th>
<th>HZ4</th>
<th>HZ5</th>
<th>HZ6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Household Income</td>
<td>$27,759</td>
<td>$31,170</td>
<td>$62,878</td>
<td>$48,333</td>
<td>$54,688</td>
<td>$57,544</td>
</tr>
<tr>
<td>Median Income Males working Full-time</td>
<td>$26,325</td>
<td>$40,006</td>
<td>$48,485</td>
<td>$39,095</td>
<td>$40,344</td>
<td>$41,720</td>
</tr>
<tr>
<td>Median Income Females working Full-time</td>
<td>$23,555</td>
<td>$30,322</td>
<td>$34,904</td>
<td>$26,418</td>
<td>$30,756</td>
<td>$25,660</td>
</tr>
</tbody>
</table>

### Poverty

<table>
<thead>
<tr>
<th>Poverty</th>
<th>HZ1</th>
<th>HZ2</th>
<th>HZ3</th>
<th>HZ4</th>
<th>HZ5</th>
<th>HZ6</th>
</tr>
</thead>
<tbody>
<tr>
<td>% People Living in Poverty</td>
<td>31.2%</td>
<td>12.9%</td>
<td>7.8%</td>
<td>16.3%</td>
<td>12.3%</td>
<td>10.5%</td>
</tr>
<tr>
<td>% Children living in Poverty</td>
<td>43.4%</td>
<td>18.1%</td>
<td>7.6%</td>
<td>26.2%</td>
<td>17.2%</td>
<td>16.4%</td>
</tr>
<tr>
<td>% People 65+ living in Poverty</td>
<td>19.6%</td>
<td>7.0%</td>
<td>5.5%</td>
<td>7.3%</td>
<td>11.0%</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

### Education (people 25 years +)

<table>
<thead>
<tr>
<th>Education</th>
<th>HZ1</th>
<th>HZ2</th>
<th>HZ3</th>
<th>HZ4</th>
<th>HZ5</th>
<th>HZ6</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with High School Diploma (only)</td>
<td>36.3%</td>
<td>27.8%</td>
<td>22.6%</td>
<td>33.0%</td>
<td>36.4%</td>
<td>23.4%</td>
</tr>
<tr>
<td>% with Bachelor's or Higher Degree</td>
<td>12.3%</td>
<td>28.0%</td>
<td>39.2%</td>
<td>18.5%</td>
<td>15.9%</td>
<td>35.4%</td>
</tr>
<tr>
<td>Income Difference Bachelor's Degree Compared to High School Diploma</td>
<td>$13,789</td>
<td>$17,183</td>
<td>$18,670</td>
<td>$9,325</td>
<td>$11,319</td>
<td>$19,327</td>
</tr>
</tbody>
</table>

### Unemployment (people 16 years +)

<table>
<thead>
<tr>
<th>Unemployment</th>
<th>HZ1</th>
<th>HZ2</th>
<th>HZ3</th>
<th>HZ4</th>
<th>HZ5</th>
<th>HZ6</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Unemployed</td>
<td>19.5%</td>
<td>8.4%</td>
<td>7.0%</td>
<td>11.2%</td>
<td>10.3%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

### Health and Well-Being

<table>
<thead>
<tr>
<th>Health and Well-Being</th>
<th>HZ1</th>
<th>HZ2</th>
<th>HZ3</th>
<th>HZ4</th>
<th>HZ5</th>
<th>HZ6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Expectancy for Infants born 2009-11</td>
<td>71.1</td>
<td>78.4</td>
<td>80.5</td>
<td>76.1</td>
<td>75.5</td>
<td>79.1</td>
</tr>
<tr>
<td>Life Expectancy Black</td>
<td>70.9</td>
<td>77.3</td>
<td>77.0</td>
<td>75.2</td>
<td>77.3</td>
<td>76.6</td>
</tr>
<tr>
<td>Life Expectancy White</td>
<td>71.6</td>
<td>78.1</td>
<td>80.3</td>
<td>75.6</td>
<td>74.5</td>
<td>79.1</td>
</tr>
<tr>
<td>Life Expectancy Male</td>
<td>67.7</td>
<td>75.7</td>
<td>78.4</td>
<td>73.5</td>
<td>72.7</td>
<td>76.7</td>
</tr>
<tr>
<td>Life Expectancy Female</td>
<td>74.4</td>
<td>81.0</td>
<td>82.2</td>
<td>78.4</td>
<td>78.2</td>
<td>81.6</td>
</tr>
</tbody>
</table>

### Death Rates/100,000, 2011

<table>
<thead>
<tr>
<th>Death Rates</th>
<th>HZ1</th>
<th>HZ2</th>
<th>HZ3</th>
<th>HZ4</th>
<th>HZ5</th>
<th>HZ6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer Deaths</td>
<td>227.3</td>
<td>177.1</td>
<td>159.1</td>
<td>246.4</td>
<td>210.0</td>
<td>173.6</td>
</tr>
<tr>
<td>Diabetes Deaths</td>
<td>58.3</td>
<td>27.3</td>
<td>18.9</td>
<td>32.9</td>
<td>30.8</td>
<td>22.0</td>
</tr>
<tr>
<td>Heart Disease Deaths</td>
<td>248.5</td>
<td>154.0</td>
<td>180.3</td>
<td>203.8</td>
<td>241.3</td>
<td>154.7</td>
</tr>
<tr>
<td>Homicide</td>
<td>32.6</td>
<td>5.4</td>
<td>3.8</td>
<td>8.6</td>
<td>11.4</td>
<td>7.9</td>
</tr>
</tbody>
</table>

### Maternal and Infant Health Indicators, 2011

<table>
<thead>
<tr>
<th>Maternal and Infant Health Indicators</th>
<th>HZ1</th>
<th>HZ2</th>
<th>HZ3</th>
<th>HZ4</th>
<th>HZ5</th>
<th>HZ6</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Low Birth Weight</td>
<td>13.7%</td>
<td>8.6%</td>
<td>6.8%</td>
<td>8.8%</td>
<td>9.5%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Teen (15-19 years old) Birth rate/1,000</td>
<td>68.1</td>
<td>25.3</td>
<td>18.5</td>
<td>45.0</td>
<td>30.9</td>
<td>25.4</td>
</tr>
</tbody>
</table>


Since the last Place Matters report in 2008, Duval County has changed in population distribution, characteristics, and socioeconomic opportunities. Duval County’s population has grown by approximately 23,000 people and the distribution of people has changed significantly; residents are moving out of HZ1 (urban core) & HZ6 (Beaches) while populations are increasing in HZ2 (Greater Arlington), HZ3 (Southeast), HZ4 (Southwest) and HZ5 (Outer Rim). There has been a 10% shift in the percent of minority residents in HZ4 & 5 rising from about 30% minority to 40%. There has also been a 5% increase in minorities in HZ3 rising to almost 24%. Minorities have decreased in HZ1, 2 & 6 by about 3%. Incomes have increased overall but income differences have increased with more residents living in poverty; especially children and older adults. HZ1 has the highest levels of poverty with 43% of children and almost 20% of residents over 65 living in poverty. Unemployment is also highest in HZ1, increasing from 7% in 2006 to 19.5% in the years 2007-11 as reported by Census. Unemployment has increased in all HZ except HZ2. HZ3 & HZ6 have the highest percentage of college educated people, highest income levels, and the most difference in income between those with degrees and those without ($18-19,000/year). Life expectancy has improved, as have mortality and morbidity indicators, each of which will be discussed later in this report. Overall, Duval County’s population has increased more slowly than the overall State of Florida (11.0% vs. 17.6% 2000-2010).

Figure 1

Population data from the US Census is used for 2000 and 2010 with linear extrapolation between the two points. NEFL Counts’ (Claritas) data was used for 2011/12.

...For further details see page 15: Reference and Data & Statistical Information
These factors often have a far greater affect on health than age, gender, race, ethnicity and inherited conditions.

The SDOH are influenced and supported by those around us. They are also based on the geography of where we live.

Within Duval County, the physical environment, its resources and characteristics, strongly influence health. Consider:

- The distribution of businesses and industry
- The number of grocery stores with affordable and available healthy food
- The location of fast food restaurants
- Bus routes and public transportation
- The location and availability of childcare
- The location, hours and access to affordable, quality dental, medical, and mental health care
- The location and distribution of churches and religious services
- Community gardens, parks, and recreation facilities
- High quality schools and programs to encourage school choice
- Human service agencies and programs

The infrastructure to support a healthy community is not equally distributed throughout the county. Although there have been some improvements in health since 2008 (reduced mortality rates, lower teen birth rate, and more people with higher than a high school education) there are still many challenges.

“Food deserts” as they have been termed, exist within the County where healthy food is either not available or too expensive to purchase. Neighborhoods without access to healthy food have higher rates of chronic conditions like diabetes, heart disease, and hypertension.

Economic opportunities such as good paying jobs, safe work environments, and upward mobility, often based on educational opportunities, are more available in some areas than others. The infrastructure to achieve economic stability and advantage is also challenging with a difficult public transportation system, inadequate school funding and continued reductions to funding for post-secondary education and training at an affordable cost.

Social factors such as social support and social capital (who you can count on to help in times of need), family, stress and resilience, discrimination, and language barriers are also associated with health outcomes.

Although one single factor of SDOH cannot be identified as the cause of a specific health problem, health problems are closely associated with geographic areas where environmental, economic and social inequities occur, building layer upon layer of advantage or disadvantage. (Figure 2)

As in Figure 2, there is direct relationship between SDOH and life expectancy. As the percent of residents with a Bachelor’s degree or higher increases, so does the life expectancy regardless of gender or race. According to the Centers for Disease Control and Prevention (CDC), “Life expectancy at age 25 in the U.S. is positively associated with education for both men and women.”

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*Life Expectancy and Education by Health Zone, Race, & Gender*

Scatterplot of the % of residents in each HZ who have a bachelor’s degree or higher education and the life expectancy of each HZ by gender, race, and overall.
Duval County’s population is significantly different than that of Florida and the Nation (FL Charts). Fifty eight percent of Duval County’s population is between 15 and 54 years of age. (See Figure 3) In socio-demographic terms, Duval has a high ratio of young, working age, healthy people. Often, societies are wealthier if they have more people who are working age to support others who, due generally to age, cannot work. This is certainly the case in Duval County.

Unfortunately, it is also associated with other problems, as those who are younger tend to have riskier behaviors. This manifests in higher injury rates, STD/HIV rates, and increased alcohol and drug use. These issues can be compounded if there is a lack of educational or economic opportunities.

In addition, if there is a sustained decrease in birth rates, over time there will be a larger number of elderly to support and a limited number of working age people to support them.

Duval, as with the U.S., continues to see a decrease in births (15.5/1,000 in 2000 to 14.3/1,000 in 2011). But, Duval’s, as with Florida’s, population change is mostly based on migration (83.5%) and not natural increase (births). In Duval County, about 1/3 of the population was born in the county and 2/3 migrated into the area (1970-2010 population data). Migration to Duval is most likely due to the economic opportunities in the area, along with the climate.

Florida has the largest proportion of residents over 65 (17.6%) (See Figure 4) compared to the U.S. (13.3%); Duval is lower than the Nation at 11.4%. Florida has fewer children (21%) than Duval (23.3%) or the Nation (23.7%).
Socioeconomic Profile of Duval County

According to the Census Bureau, Duval County residents’ median household income has increased by about $30,000 in the wealthiest areas and $18,000 in the least wealthy areas. Although households are receiving more money compared to 2005 Census findings, Duval County’s median household income ($49,555) remains below the national average ($50,502). Zip codes in HZ1 have the lowest household incomes with little to no improvements since 2005. This is particularly concerning in light of the “migration” out of the urban core by families, presumably those who can afford housing in other areas (HZ5 & HZ2). The zip codes with the highest median household incomes are not as easily categorized into Health Zones as there is a growing diversity in wealth as the population continues to expand to the north, southeast, and southwest.

Wealth within Duval County has changed with areas of HZ3, 4, and 2 making gains, while HZ1 (urban core) residents continue to have the lowest incomes.

Map 1

Median Household Income by Zipcode, Duval County 2007-2011

Education is strongly linked to health status and social well being. Education influences health behaviors, quality of life, and opportunities for employment and wealth. Duval County has a lower percentage of people with a Bachelor’s degree or higher (25.1%) than both Florida (26%) and the U.S. (28.2%). The Saint Johns River seems to be an educational divider; fewer residents west of the river obtain higher education compared to those to the east. Although higher education does not have a one-to-one relationship to income, on average, those with degrees earn more. In 20 years of work, the average difference in income between those with college degrees would be over $280,000. But, there are many business owners, skilled workers, tradespersons, and others who obtain wealth without a degree, which can be seen in the data for HZ5 where incomes are higher, fewer people live in poverty, but the percent of people with college degree(s) is lower.

Map 2

Percent of Residents with a Bachelor’s Degree or higher by Zip Code Duval County, Florida 2007-2011

Education is strongly linked to health status and social well being. Education influences health behaviors, quality of life, and opportunities for employment and wealth. Duval County has a lower percentage of people with a Bachelor’s degree or higher (25.1%) than both Florida (26%) and the U.S. (28.2%). The Saint Johns River seems to be an educational divider; fewer residents west of the river obtain higher education compared to those to the east. Although higher education does not have a one-to-one relationship to income, on average, those with degrees earn more. In 20 years of work, the average difference in income between those with college degrees would be over $280,000. But, there are many business owners, skilled workers, tradespersons, and others who obtain wealth without a degree, which can be seen in the data for HZ5 where incomes are higher, fewer people live in poverty, but the percent of people with college degree(s) is lower. 

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In Duval County, almost 18% of residents are living below poverty. This has increased from an estimated 10% of residents living below poverty in 2006. The current rate is comparable to Florida (17.0%) but higher than the Nation (15.9%). Zip codes located in HZ1 represent the highest poverty rates with some zip codes having as many as 44.6% of residents living in poverty.

Comparing the maps of median income, education, and poverty, there is a relationship between all three indicators within many areas. There are also areas of medium wealth and low poverty (zip codes 32220, 32212, 32277, 32225, 32256, 32257) which may indicate homogeneous wealth within these areas leading to more stability within the community.

Children and older adults are at increased risk due to poverty for poor health outcomes.

The percent of children living below poverty in Duval County (25.5%) is similar to the state (25.1%) and is higher than the U.S. (22.5%). Within Duval County, 43% of the children in HZ1 live below poverty with most of those children located in zip codes 32202, 32209, and 32254. Some areas in the southwestern zip codes (HZ4) also have a higher percent of children living in poverty (16.2%). The lowest percent of children in poverty (7.6%) is in HZ3 although there are also low levels in zip codes 32223, 32258, 32212, 32221, and 32226.

Poverty is also extensive among people 65+ in HZ1 (19.6%) and HZ5 (11%). Nine percent (9.4%) of Duval’s 65+ live in poverty, which is comparable to Florida and the U.S. In February, 2013, there were 600 seniors on a waiting list for Meals on Wheels in the area, and these issues are expected to worsen...
Life expectancy from birth is a summary measure of mortality that is used to measure geographic inequalities. Life expectancy is calculated by predicting the risk of dying at each age based on the actual number of deaths that occurred in the area at each age. (For a more detailed discussion refer to page 15.)

Although life expectancy can be calculated for various ages, this report calculates life expectancy based on deaths that occurred in 2009-2011 and is reported as an average for infants born in 2010. Life expectancy is compared between Health Zones with 95% confidence intervals provided as a test of statistical significance.

Between Health Zones:
- HZ1 has 4-9 years shorter life expectancy than all other HZs.
- HZ 2, 3, and 6 have the longest life expectancies overall.

By & Between Races
- Blacks have the same life expectancy across all HZs except HZ1.
- Whites have the longest life expectancy in HZ3 and HZ6.
- Whites have a shorter life expectancy in HZ5 than Blacks.
- Blacks have a shorter life expectancy in HZ3 than Whites.

By Gender
- Females in HZ1 have the shortest life expectancy compared to other females.
- Females in HZ2, 3 and 6 have the longest life expectancy, approaching that of Florida’s females.
- Male infants in HZ1 have the lowest life expectancy, almost 5 years less than the next lowest, HZ5 & HZ4.
- Males in HZ2 & 6 have approximately the same life expectancy.
- Males in HZ3 have a longer life expectancy than all other males.

Between Genders
- There are large gender differences in life expectancy that are not genetically based, but more likely due to SDOH.
- Males have shorter life expectancy than females in Duval County, Florida and the United States.
- Males in HZ1 (shortest life expectancy) may live 13 to 15.8 years less than females in HZ3 (highest life expectancy).
- Males in HZ3 have a longer life expectancy than females in HZ1.
- Males in HZ3 have the same life expectancy as females born in HZ 4 & 5.
- Females in HZ2, 3 and 6 still have a longer life expectancy than males, even those born in HZ3.

...continued on next page
If trends continue, female infants born in HZ3 are expected to live up to 15.8 years longer than male infants born in HZ1.

Figure 5

Life Expectancy of Infants Born in Duval County
By Race and Health Zone, 2010

Figure 6

Life Expectancy of Infants Born in Duval County
By Gender and Health Zone, 2010

County, State and Nation
- Duval County has a shorter life expectancy than Florida by an average of 2.6 years and the U.S. by 1.5 years.
- Blacks in Duval County have the same life expectancy as Blacks in the U.S.
- Whites, males and females in Duval County have a slightly lower life expectancy than those in the U.S.

Life Expectancy is improving in Duval County (see page 16). Infants born in Duval County in 2010 can expect to live 2.3 years longer than those born in 2000, but improvements are not equally distributed. We have seen slight improvements (less than 6 months) in life expectancy in HZ1, 2, & 3. Most of the increase in life expectancy came from HZ5 & 6 with an increase of 2 years. There was no change in HZ4’s life expectancy in the past 10 years.

Life expectancy is closely correlated to wealth/poverty and education (see page 4). Overall, education is a strong predictor of life expectancy with the more educated the population of an area the fewer deaths predicted for each age group, yielding a longer life expectancy. ✶
Cancer is the second leading cause of death in the U.S. but the leading cause of death in Duval County. The cancer mortality rate in Duval County surpassed both the state and national cancer rates (194.0 vs. 159.0 and 168.6 respectively). Most of these deaths (26.3%) are from lung cancer. Lung cancer kills more people than breast, prostate, and colon cancers combined (23% combined). HZ4 has the highest age adjusted cancer death rate, followed closely by HZ1 & HZ5. Deaths from cancer can be attributed to many factors, especially access to screening and treatment for early diagnosis and better survival rates. For example, breast cancer, if found early has a survival rate ranging from 15% for Stage IV to 93% at Stage 0 (earliest detection).  

Stroke is a leading cause of death in the U.S. with over 130,000 Americans dying each year. The risk of stroke varies by race, ethnicity, age, and geography. African Americans have the highest risk for stroke compared to Whites and Hispanics, and the southeastern U.S. has the highest stroke mortality rate in the country.

Duval County has a higher mortality rate than the state (39.0 vs. 31.5). HZ1 has the highest rate. HZ4, the next highest, is 28% lower. HZ3, which typically has higher incomes and education levels and therefore better health status, has high rates of death from stroke. Uncontrolled hypertension is most closely associated with having a stroke. Bystanders, especially family members and co-workers, recognizing the signs of a stroke early and calling 911 is key to survival. Learn more: www.strokeassociation.org.
Heart disease is the leading cause of death in the U.S. causing over 600,000 deaths per year, or 1 in every 4 deaths. For Duval County, it was the second leading cause of death (188.4), slightly behind Cancer (194.0), which was the leading cause. Duval County’s heart disease mortality rate is higher than both Florida (153.0) and the U.S (173.7). HZ1 & 5 have the highest heart disease mortality rates. HZ2 & 6 are 38% lower than HZ1 for heart disease mortality.

Uncontrolled hypertension, high LDL cholesterol and smoking are risk factors for heart disease. Unhealthy behaviors sustained over a lifetime contribute to high rates of heart disease. To improve heart health, residents will need to be more active, eat healthier, quit smoking, and have access to health care for medications when needed to lower blood pressure and cholesterol.

Infant mortality is highest in the first 28 days after birth and is often based on the mother’s health before conception.
Preventable diabetes hospitalizations are higher in Duval County (202.3) than in the State (129.1). Within Duval County rates vary; HZ1 has 80% more preventable diabetes hospitalizations than HZ3. HZ1 has 54% more than the next highest rate of HZ4.

Between HZ1 and HZ3, the two areas with the largest difference in rates, the payer mix for Medicaid, (HZ1=32.7% vs. HZ3=14.4%) and private insurance (HZ1=16.4% vs. HZ3=36.3%) showed the most inequities (Medicare or no/unknown insurance were the same). Preventable diabetes hospitalizations are lower when private insurance is the most common payer, suggesting better diabetes management, treatment, and follow-up. When Medicaid is common, there are the highest rates of preventable diabetes hospitalizations.6

Left untreated, STDs can cause young women to lose their ability to have children later in life.

Sexually Transmitted Diseases (STD) rates for teens 15-19 years of age in Duval County are 40% above the State rate. HZ1 teens suffer disproportionately from STDs with a rate 2.5 times higher than the next highest in HZ4. Female teens in all areas are at increased risk; for every adolescent male with an STD, there are three adolescent females (1:3 ratio). In some areas, such as HZ6, it is a 1:6 ratio.

The most effective prevention method for STDs is not engaging in sexual behavior. Safe Sexual Practices (condom use) can protect teens who are having sex but many do not utilize protection. Sexually active high school students reported not using a condom 45.4%-36.4% the last time they had sex. Half of all new STDs and 18% of all new HIV cases are diagnosed in adolescents and young adults 15-24.
Duval county’s ER visit rate for mental health disorders (685.3) is lower than Florida’s (871.9). Geographic differences are pronounced; HZ1 had 45% more mental health ER visits than the next highest, HZ6. HZ6 was still 1.5 times higher than the lowest, HZ3.

The most common reason for ER visits was Anxiety (28%), Non-dependent Alcohol/Drug abuse (19%), Depression (12%), and Alcohol/Drug abuse (12%); accounting for 71% of all mental health ER visits. Twenty one percent (21%) were seen multiple times with some seen up to five times in 2011. Multiple visits were most common for schizophrenia, anxiety, and drug/alcohol issues. Males and females use the ER equally for mental health with 25-34 year olds having the highest use.

Lack of access to mental and preventive healthcare increases ER use resulting in higher costs.

Injury rates in Duval County are higher than the state. The highest rate of injuries occurred in HZ1 and the fewest in HZ3. The most common injuries were sprains/strains (28%) especially to the back (13% of all visits). Open wounds (19%), bruises without a fracture (16%) and fractures (11%) accounted for 46% of all injuries. The cause of injuries was often due to falls (21%), motor vehicle crashes (10.8%), or unintentionally being struck by an object or person (10.7%). Twenty six percent (26%) of people were seen multiple times for injuries.

Emergency room use indicates a lack of access to primary care, especially for the types of injuries described above (sprains/strains from repetitive movement, bruises, etc.). The number of injuries due to falls should also be addressed through effective injury prevention programs.
Eliminating Inequities

Health: Place Matters 2013 highlights changes that have taken place in Duval County in the past five years. In that time, the U.S. has faced many economic, political, and social challenges, many of which have influenced and changed the landscape of Florida and Duval County. During these challenges, Duval residents have shown resilience with continued improvements in life expectancy and a slowing of the rates of deaths from some of the most common chronic conditions - Heart Disease, Stroke, Diabetes, & Cancer.

Challenges still remain. Although the economic health of Duval County continues to improve, it is important to focus on educational attainment, skill development, and supporting the workforce of 2020. The youth and young adults, who today suffer disproportionately from sexually transmitted diseases, injuries (both unintentional and intentional: suicide/homicide), and mental health disorders resulting in emergency room visits and hospitalizations, will become the Duval County workforce of 2020. Their health and well-being is important to the future of the county.

Access to care is a challenge for all ages but especially those between 18-34 who may not have insurance or a primary care physician (medical home). Access is difficult for all residents, especially Medicaid and uninsured residents, to dentists, physicians, rehabilitation and mental health services. The growing diversity of Duval County requires culturally and linguistically appropriate care focused on quality and improved health outcomes through care coordination and chronic disease management.

The economic, political, and social challenges faced by the county have also illuminated the vulnerabilities of different geographies. Health Zone 1 (HZ1) has long been the focus of resources and concern for the health of residents of this area. HZ1 has higher levels of poverty, lower level of educational attainment, and higher rates of many conditions. Much of the disparity seen results from a combination of lack of access to coordinated, appropriate healthcare, health literacy (or the ability to navigate a complex health care system with knowledge and understanding), and health behaviors (risk taking, violence, built environment, etc.). Although HZ1 has many challenges, it also has evolved into a vibrant downtown community, with historically tight-knit neighborhoods, community gardens, successful small businesses, and the lowest smoking rate for high school students in the county.

HZ1, in many ways, has shown the greatest resilience/improvement in the face of the challenges faced in the past years.

Other health zones have shown the vulnerability of their residents. HZ3 and HZ6, both of which are generally considered areas with the highest income and educational attainment, are disproportionately affected by mental health problems, sometimes resulting in suicide, and by injuries. Youth in HZ3 have the lowest condom use while adults die from heart disease and stroke at rates higher than HZ2. HZ6 has the highest rates of ER visits for mental disorders and injuries after HZ1, and has the highest percent of teenage smokers. HZ6 and HZ5 have seen the best improvements in life expectancy with a two year increase in the past decade; all other HZs have seen little to no improvement. HZ5 has seen a dramatic shift in demographics increasing from 30% to 40% minority and having one of the wealthiest zip codes in the county. HZ5 has the highest mortality due to lung cancer and the second highest percent of teenage smokers. HZ4 has also seen a 10% rise in minority population from 30% to 40%. HZ4 has the highest cancer mortality rate in the county. In addition, it has the second highest STD rate among teens and the second lowest condom use reported among teens.

The residents of each Health Zone face specific challenges yet demonstrate their own strengths. Addressing disparities and inequalities in health status includes working with community partners to also address inequalities in education and economic opportunities. It means advocating for policies that support health, for example equal access to nutritious foods, a safe physical environment to work and play, quality health care that is accessible and affordable, and community support for mental health services.

What will success in eliminating health inequities look like? Success will be measured by tracking health inequities within different geographies (HZ, zip code, neighborhood) and populations. One area will always be higher than another area, but those differences should not be disproportionate; rates of preventable diabetes hospitalizations should not be 80% higher in HZ1 than in HZ3 and there should not be double the percent of teenage smokers in HZ6 than HZ1. Ending health inequalities will require the community working together to identify strengths and challenges to improve the health of all residents in all areas.
Mapping Health: Geographic Surveillance

The Florida Department of Health Duval County, Public Health Statistics, Assessment and Research (PHSAR) monitors and investigates the health of our residents to inform health policy and program planning. Geographic surveillance is a useful tool to look spatially at differences in disease burden, medical care and utilization, behavioral patterns and social and economic conditions that contribute to health. Health zones were created in 2002 as a response to the growing need for sub-county analysis. Duval is a large, diverse county affording comparisons between geographic areas for community specific planning. Health zones are built from zip codes and consider the boundaries of Public Schools, the Sheriff's office, and City Planning areas. They also consider geographic locations and barriers (rivers, ocean) and similar demographics (urban/rural). As Duval County has grown in population, zip code data is sometimes available and reliable to allow for smaller spatial analysis. When possible, this data is presented, along with health zone data, to highlight changes in Duval County on key indicators.

References and Sources
1. http://www.cdc.gov/nchs/data/hus/hus11.pdf#fig32
4. http://www.heart.org/HEARTORG/General/Heart-and-Stroke-Association-Statistics_UCM_319064_SubHomePage.jsp#

Data Sources
- **FDOH Vital Statistics**: birth and death records, fetal/infant death records, marriage and divorce records
- **Florida Agency for Health Care Administration**: hospital and emergency room records
- **Florida Cancer Data System**: registry of cancer records from hospitals, care providers, and death records
- **Youth Risk Behavior Survey**: a school based survey on the health of middle and high school students including healthy behaviors, risky behaviors, and the prevalence of health and disease
- **Behavioral Risk Factor Surveillance Survey**: a telephone based survey (landline and cell) on the health of adults including healthy behaviors, risky behaviors, and the prevalence of health and disease
- **Specialized datasets**: datasets from clinical practices, programs, and community based organizations are also used to monitor the health of specific populations
- **National Data and Healthy People 2020** indicators provided through www.HealthPeople.gov/2020
- **Florida Department of Health, Florida Vital Statistics and Florida CHARTS**.

Data & Statistical Information

**Age Adjusted Rate** is a way to examine geographic areas which may have different demographics (i.e., FL has an older and larger population than Duval County). Age Adjusting standardizes the rates to the 2000 U.S. standard population (11 age groups, Census P25–1130) for more accurate comparisons.

**Incidence Rate** is the risk of developing a specific disease during a given period. It is created by dividing the number of new cases by the number of people who could get the disease (the population at risk).

**Prevalence Rate** is the number of people in a population with a specific disease during a given period. It is created by dividing the total number of cases by the total population at risk.

**DSU**: Data is Statistically Unreliable (DSU) is provided when numbers are <25 within a geographic area.

**Life Expectancy**: Rate are calculated per NCHS guidelines (http://www.cdc.gov/nchs/fastats/lifexpct.htm) and are based on the death rates by age group for a specific area.

**Additional Data**: Life Tables, population data, and additional data tables are available on-line at http://duval.floridahealth.gov/programs-and-services/community-health-planning-and-statistics/index.html. Data can also be request for specific analysis through Public Health Statistics, Assessment and Research.

Suggested citation for this report
Life Expectancy is calculated for infants born 2009–2011 & 2000-2001 in Duval County with confidence intervals (95%). (See page 8 and 16 for more detail)