

Diabetes in Duval County

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Diabetes is a serious disease that is a major concern in public health. It is a leading cause of death and disability in Duval County, the state, and the nation. There are two common ways to measure diabetes deaths: 1) deaths where diabetes is listed as the primary cause on the death certificate, and 2) deaths where diabetes is listed as a primary cause plus deaths which list diabetes as a contributing cause or other significant condition.¹ These deaths are also called diabetes-related deaths and are primarily related to cardiovascular and kidney related diseases.¹ In Duval County, the rate for diabetes deaths as the primary cause was 32.4 per 100,000 in 2005, (48% higher than all of Florida) and the rate for diabetes related deaths was 78 per 100,000, (53% higher than the entire state).²

Health disparities are common between the black and white populations in Duval County across many diseases, especially diabetes. In 2005, blacks were more likely to die from diabetes and diabetes-related diseases than whites. Blacks also had more Years of Potential Life Lost (YPLL) due to diabetes deaths. The YPLL rate for diabetes-related deaths was 733.5 per 100,000 for blacks, 41.6% higher than the white rate of 518.1 per 100,000.² Blacks have remained consistently higher than whites over time, with little decrease in the gap.

In terms of gender disparities, in 2005, men were more likely to die from diabetes or from diabetes-related diseases. The age-adjusted rate for diabetes deaths for men was 39.8 per 100,000 compared to 32.8 per 100,000 for women. The disparity is much larger for diabetes-related deaths. The rate for men (99.2 per 100,000) was 29% higher than women (76.7 per 100,000).²

Geographical disparities in diabetes also exist in Duval County. Specifically, Health Zone 5, the north outer rim, had the highest rate of diabetes deaths and Health Zone 1, the urban core of Jacksonville, had the highest rate of diabetes-related deaths. Health Zone 1 also has the highest rate of poverty and the lowest education level in Duval County.³

Disparities around diabetes are present in the prevention stage as well as the treatment stage. They exist for race and gender in regard to risk factors for diabetes, such as proper nutrition, diet, and exercise, as well as those receiving formal diabetes education once diagnosed.³

Hospital and emergency room data provide important additional insights about the impact of diabetes on the community. Comparison of these data for Duval County to data for Hillsborough County, Orange County (similarly sized counties with distinct urban areas) and the state of Florida shows the extent of the personal, economic and health care system burdens in our community.³

For diabetes and diabetes-related hospitalizations, Duval County had a higher rate than the comparison counties and Florida. The rate for hospitalizations due to diabetes in Duval County (228.4 per 100,000) was 40% higher than the rate in Florida (162.7 per 100,000) in 2005. For specific diabetes complications, Duval County rates were higher than comparison counties for diabetes with ketoacidosis, diabetes with neurological manifestations, diabetes with peripheral circulatory disorders, and diabetes with unspecified complications. Of Duval County diabetes hospitalizations, 23.3% were due to ketoacidosis, 23.2% were due to other specified manifestations, and 22.0% were due to neurological manifestations.⁴

For emergency room (ER) visits due to diabetes, Duval County had a rate of 174 per 100,000, higher than the comparison counties (135.9 and 148.2 per 100,000 for Hillsborough and Orange counties respectively) and Florida. Over half of all diabetes ER visits (54.5%) were admitted for diabetes without complications. The rate for this diagnosis in Duval County was 93.2 per 100,000. As with diabetes, diabetes-related ER visits were also higher than the comparison counties and Florida.⁴ These preventable ER visits and hospitalizations disproportionately affect people without insurance or the ability to pay for care, stressing local health care institutions and community service delivery systems.

Diabetes and its causes can be prevented or controlled through comprehensive efforts that include education, environmental and policy changes. Prevention of diabetes should start as early as childhood since childhood obesity is a major threat that increases risk for chronic diseases into adulthood, including but not limited to diabetes and cardiovascular diseases. Effective primary and secondary prevention, as well as, controlled care for those diagnosed with diabetes cannot only improve the quality of life for people with the disease, but it can substantially reduce some of the high costs of care that the local community inevitably absorbs.

Resources: 1. McEwen, LN., Kim, C, Haan, M., Ghosh, D, Lantz, PM, Mangione, CM, Safford, MM, Marrero, D, Thompson, TJ, Herman, WH, and the TRIAD Study Group. "Diabetes Reporting as a Cause of Death." *Diabetes Care* 29 (2006): 247-253; 2. Florida Department of Health, Office of Vital Statistics, Death Files, 2005; 3. Institute for Health, Policy and Evaluation Research, Center for Health Statistics Report on Diabetes. Volume 6, Issue 3, 2007. 3, 9, 11,12; 4. Agency for Health Care Administration, Hospital and Emergency Room Data Files, 2005.

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