

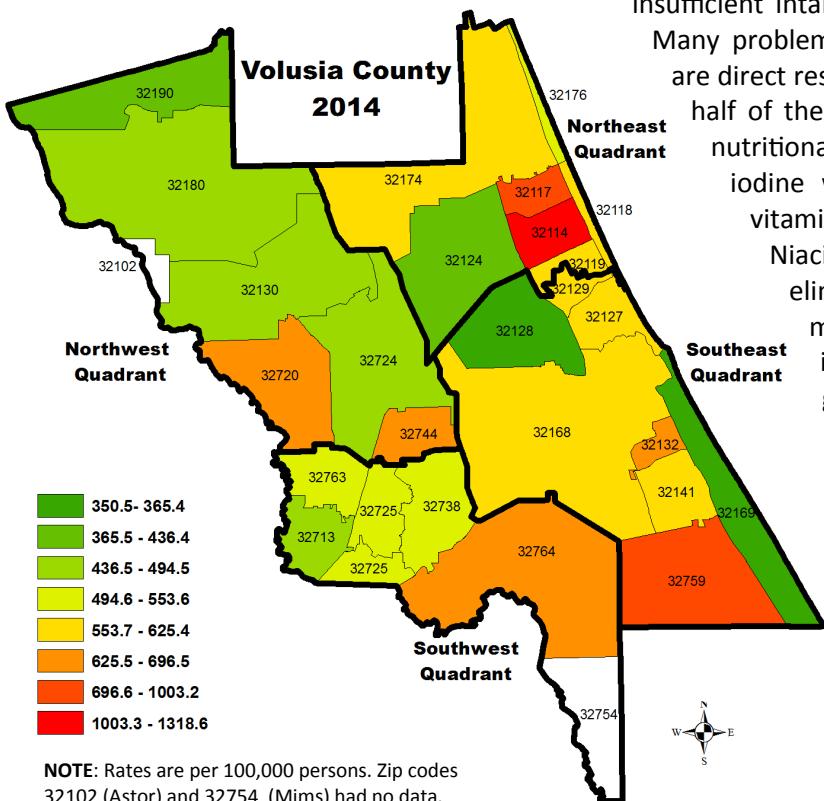


## PUBLIC HEALTH DATA BRIEF

**HealthyVolusia**  
www.healthyvolusia.org

### HOSPITALIZATIONS WITH NUTRITIONAL DEFICIENCIES IN VOLUSIA COUNTY

#### Age-adjusted Rate of Hospitalizations with Nutritional Deficiencies by Zip Code



The Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) define nutritional deficiency as the insufficient intake of nutrients for the body's normal functioning.

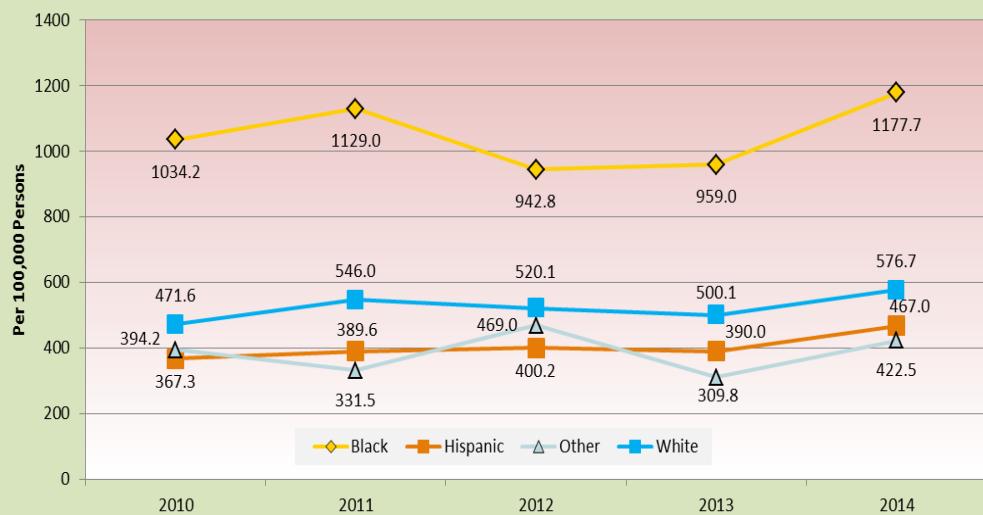
Many problems such as malnutrition, anemia, and dyslipidemia are direct results of nutritional deficiencies. The focus of the first half of the 1900s in the U.S. was preventing and controlling nutritional deficiency diseases. CDC notes that in 1924, iodine was added to salt to prevent goiter. Milk with vitamin D was crucial in controlling rickets in the 1940s.

Niacin enriched flour contributed to the near elimination of Pellagra by the end of the 1940s. The most recent food fortification program was initiated in 1998 when folic-acid was added to cereal and grain products to prevent neural tube defects. Despite these efforts, some deficiencies persist. WHO reports over 30 percent of the world's population suffers from iron deficiency. In Volusia County, 34.2 percent of all hospitalizations with nutritional deficiencies in 2014 were attributed to insufficient iron.

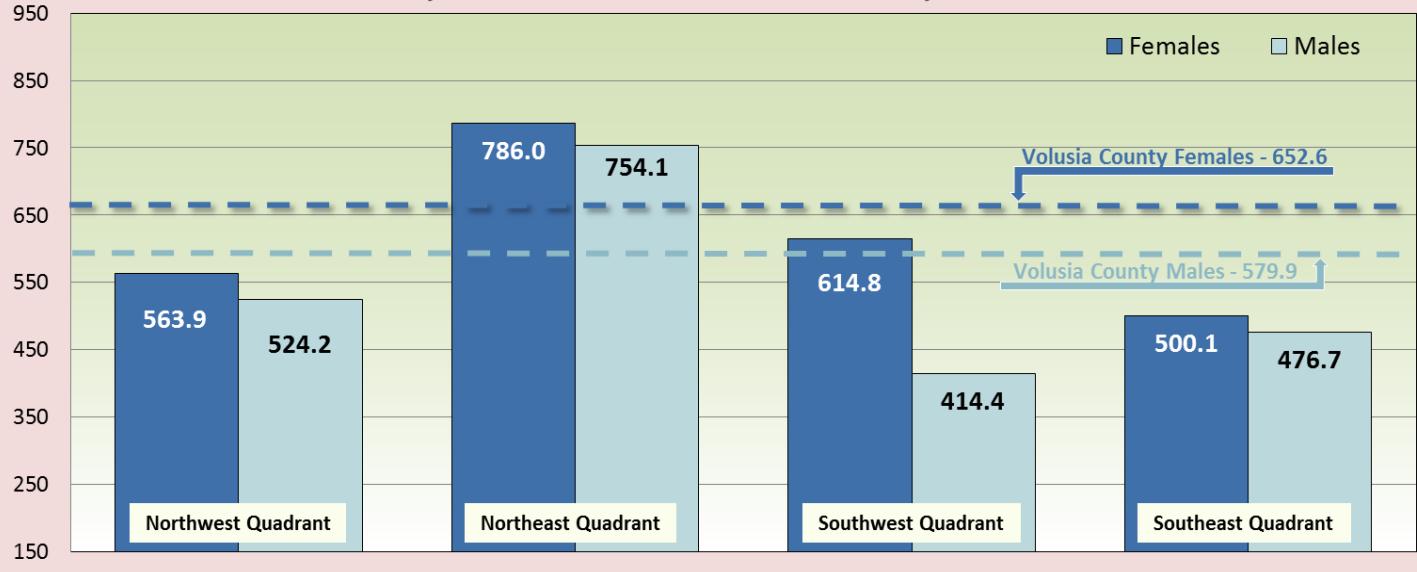
- Hospitalizations with nutritional deficiencies appear most prominent in the eastern quadrants of the county
- The southwest quadrant had the lowest rates of hospitalizations with nutritional deficiencies

- Black patients had statistically significantly higher rates of hospitalizations with nutritional deficiencies than all other groups from 2010 to 2014
- The rates of hospitalizations with nutritional deficiencies increased for all races and ethnicities from 2010 to 2014
- Other race patients had the largest percent increase (27.1 percent) from 2010 to 2014 among all racial/ethnic groups

#### Age-adjusted Rate of Hospitalizations with Nutritional Deficiencies by Race/Ethnicity in Volusia County, 2010 - 2014

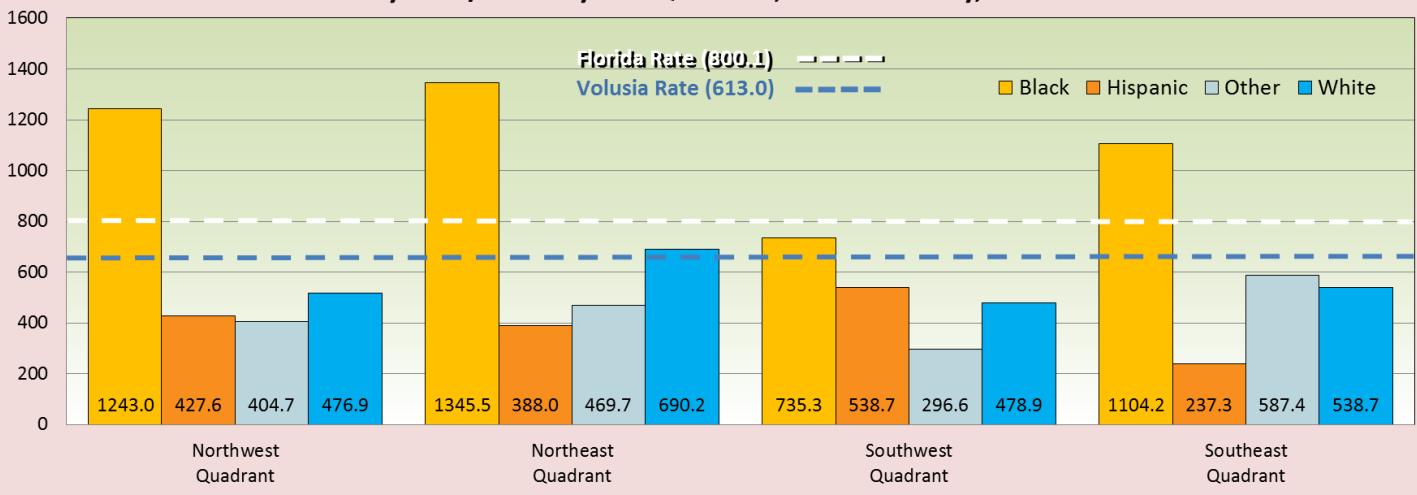


### Age-adjusted Rates of Hospitalizations with Nutritional Deficiencies by Quadrant and Gender, Volusia County, 2014



- Females had higher rates of hospitalization with nutritional deficiencies than males in Volusia County and within each quadrant
- Northeast quadrant females (786.0) had higher rates of hospitalizations with nutritional deficiencies than all other females and males in Volusia County
- Rates of hospitalizations with nutritional deficiencies for males from the southern quadrants were lower than rates for males from the northern quadrants
- Males in the southwest quadrant (414.4) had the lowest rate of hospitalizations with nutritional deficiencies

### Age-adjusted Rates of Hospitalizations with Nutritional Deficiencies by Race/Ethnicity and Quadrant, Volusia County, 2014



- Blacks in each quadrant had higher rates of hospitalizations with nutritional deficiencies than the Volusia County rate (613.0) and had the highest rates of hospitalizations among all races/ethnicities
- The hospitalization rate for whites in the northeast quadrant was higher than whites, Hispanics and other races in Volusia County
- Blacks in the northwest, northeast and southeast quadrants had rates higher than Florida
- Hispanics in the southeast quadrant had the lowest rate of hospitalizations with nutritional deficiencies in the county