Sharla Rahman

M.P.H. Candidate, Epidemiology Track sharla.rahman@vanderbilt.edu

Practicum Site: Tennessee Department of Health

Practicum Site Supervisors: Elizabeth Berardi, M.P.H., B.S.N., R.N. and Emilee Bauer

Tennessee County Cancer Profile

Introduction: The Tennessee Cancer County profile provides a comprehensive analysis of cancer incidence and mortality rates

comprehensive analysis of cancer incidence and mortality rates across all counties in Tennessee. This profile evaluates cancer screening rates and behavioral risk factors in each county, comparing them against statewide averages. Counties were ranked based on the incidence rate of breast, colorectal, lung, prostate, and skin cancer, offering a clear picture of the cancer burden across the state.

Methods: The descriptive analysis considered various demographic and socioeconomic factors, including the total population of each county, the percentage of residents living below the poverty level, the uninsured population, those older than 65 years, and racial or ethnic minority status. Data sources included the US Census 2022, the Tennessee Cancer Registry (2015-2019), and the Behavioral Risk Factor Surveillance System (BRFSS) from the CDC.

Results: The study covered all 95 counties in Tennessee, revealing variations in cancer incidence and mortality rates across the state. Trousdale County had the highest cancer incidence rate of 567.1 and Lincoln County had the lowest incidence rate of 361.8 per 100K. The highest mortality rate of 243.0 per 100K was found in Overton County and the lowest rate of 122.1 per 100K in Williamson County.

Conclusions: The findings underscore the importance of targeted public health interventions and resource allocation to address disparities in cancer incidence and outcomes. By identifying counties with the highest cancer burdens, the Tennessee Cancer County Profile serves as a critical tool for guiding future cancer prevention and control efforts in the state.

