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Background: Cancer is one of the leading disease-related causes of death among individuals aged <20 years in the United States. Recent evaluations of national trends of pediatric cancer used data from before 2010, or covered $\leq 28\%$ of the US population. This study describes incidence rates and trends using the most recent and comprehensive cancer registry data available in the US.

Methods: 2001–2014 data from US Cancer Statistics were used to evaluate cancer incidence rates and trends among individuals aged <20 years. Data were from 48 states and covered 98% of the US population. We assessed trends by calculating average annual percent change (AAPC) using joinpoint regression (maximum of two joinpoints). Rates and trends were stratified by sex, age, race/ethnicity, census region, county-based economic status, rural/urban status, and cancer type.

Results: We identified 196,200 cases of pediatric cancer during 2001–2014. The overall cancer incidence rate was 173.0 per

1 million; incidence rates were highest for leukemia (45.6), brain tumors (30.8), and lymphoma (26.0). Rates were highest among males, aged 0–4 years, non-Hispanic whites, the Northeast US Census region, the top 25% of counties by economic status, and metropolitan counties. The overall pediatric cancer incidence rate increased (AAPC=0.7, 95% CI, 0.5–0.8) during 2001–2014 and contained no joinpoints. Rates increased across sex, age, race/ethnicity, region, economic status, and rural/urban status. Rates of brain, renal, hepatic, and thyroid cancers increased, and rates of melanoma decreased.

Conclusions: This study documents increased rates of pediatric cancer during 2001–2014. Increased overall rates of brain and hepatic cancer and decreased rates of melanoma are novel findings using data since 2010. Next steps in addressing changing rates could include investigation of diagnostic and reporting standards, host biologic factors, or environmental exposures. Increasing rates may necessitate changes related to treatment and survivorship care capacity.