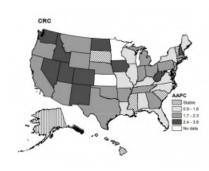
Early Onset Colorectal Cancer Rising Fastest in the West

Surprising finding suggests obesity epidemic may not fully explain increasing rates



Early-onset colorectal cancer —cancer occurring before age 50—is rising most rapidly in Western states, where healthy behaviors are prominent, according to a new study. The authors of the study, which appears in the <u>Journal of the National Cancer Institute</u>, say the findings indicate the need for further etiologic studies to explore early-life colorectal carcinogenesis.

Early-onset colorectal cancer (CRC) has been on the rise for several decades in the United States for unknown reasons. Because geographic differences could help uncover potential causes for the trend, investigators at the American Cancer Society and The Ohio State University analyzed changes in CRC incidence and risk factors among adults under 50 during 1995-2015 by state and race/ethnicity.

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Based on cancer registries representing 95% of the US population, the study found early-onset CRC incidence increased over the most recent ten data years (2006-2015) by 1.1% per year. Rates rose faster for rectal tumors (1.7% per year) than for colon tumors (0.7% per year).

The increase was mostly confined to whites, among whom rates rose in 40 out of 47 states (with available data) and were otherwise stable. The rise varied in magnitude across states, with average increases exceeding 2.5% per year in ten states, six of which are in the West. For example, over the past two decades CRC incidence increased by 73% in Washington, from 6.7 (per 100,000) during 1995-1996 to 11.5 during 2014-2015, and by 57% in Colorado, from 6.0 to 9.5. Increases were generally steeper for rectal than for colon cancer, with rates doubling in some states (e.g. in Colorado, from 1.9 to 4.2), converging with rates for colon cancer.

"Although early-onset colorectal cancer incidence is currently lowest in Western states and highest in Southern states, consistent with the prevalence of established risk factors, like obesity, physical inactivity, and smoking, this pattern may change because the steepest increases are in Western states," said Rebecca L. Siegel, MPH, American Cancer Society scientific director of surveillance research and lead author of the study. "This finding suggests that early life exposures in addition to the 'usual suspects' may be contributing to the rise in early onset disease. Future studies should explore novel risk factors for colorectal cancer in young adults."

Article: State variation in early-onset colorectal cancer in the United States, 1995-2015, RL Siegel, GA Medhanie, SA Fedewa, A Jemal; J Nat Can Inst 2019 doi: 10.1093/jnci/djz098

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