Cancer Death Rate Higher in Rural Areas, CDC Says

New report shows that people in rural areas of the United States are less likely to develop cancer but more likely to die of it.

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People living in nonmetropolitan rural areas were slightly less likely to be diagnosed with invasive cancer (cancer that has spread to surrounding healthy tissue) than people in metropolitan urban areas, but they were more likely to die of it. There were notable rural-urban differences for lung cancer, colorectal (large intestine) cancer and cervical cancer, suggesting that lifestyle factors and less access to health care may contribute to these disparities.

“While geography alone can’t predict your risk of cancer, it can impact prevention, diagnosis and treatment opportunities—and that’s a significant public health problem in the U.S.,” CDC acting director Anne Schuchat, MD, said in a press release. “Many cancer cases and deaths are preventable, and with targeted public health efforts and interventions, we can close the growing cancer gap between rural and urban Americans.”

CDC researchers analyzed data on newly diagnosed invasive cancer, known as incidence, from the National Program of Cancer Registries (NPCR) and the National Cancer Institute’s Surveillance, Epidemiology, and End Results (SEER) program from 2004 through 2013. Data from the CDC’s National Vital Statistics System were used to calculate death rates for 2006 through 2015.

The average annual incidence rate for all cancers combined was a bit lower in rural areas (442 cases per 100,000 people), compared with metropolitan areas with a population of at least a million (457 cases per 100,000 people). Overall cancer incidence rates fell to a similar extent in the rural and urban groups, by 0.8 percent and 1.0 percent per year, respectively, between 2004 and 2013.

But people living in rural areas were more likely than urban residents to be newly diagnosed with certain types of cancer. These include tobacco-related cancers, such as lung and larynx cancers, and cancers that can be detected and treated early with regular screening, such as cervical and
colon cancers.

In contrast, rural residents were less likely than urban residents to be diagnosed with breast cancer and prostate cancer. People in rural areas also had the lowest rates of stomach, bladder, thyroid, pancreas and liver cancers. (Liver cancer rates could potentially increase, however, as hepatitis C rates rise in conjunction with the ongoing opioid crisis in rural communities.)

Although cancer-related mortality has fallen in recent years, the decline has been slower in rural counties. Overall cancer death rates decreased by 1.0 percent per year in rural areas, compared with 1.6 percent per year in urban areas between 2006 and 2015. This means that the rural-urban gap is widening.

The average annual death rate from all cancers combined during the most recent five-year period was higher in rural areas compared with large urban areas: 180 versus 158 deaths per 100,000 people, respectively. But again, not all cancers followed the same trend. Mortality was higher in rural areas for lung, colorectal, cervical and prostate cancers.

“Differences between nonmetropolitan and metropolitan counties in cancer incidence might reflect differences in risk factors such as cigarette smoking, obesity and physical inactivity, whereas differences in cancer death rates might reflect disparities in access to health care and timely diagnosis and treatment,” the report authors concluded.

The researchers listed several strategies that could help reduce disparities in new cancer cases and cancer-related deaths, including promotion of healthy behaviors such as smoking cessation, avoiding excess sun exposure and maintaining a healthy weight.

In addition, getting vaccinated against hepatitis B can prevent liver cancer. Vaccines given during adolescence or young adulthood can prevent cervical, anal and oral cancers caused by human papillomavirus (HPV). Regular screening, including Pap tests for cervical cancer and colonoscopies for colorectal cancer, can allow for early treatment to prevent cell abnormalities or growths from progressing to invasive cancer.

To read a CDC press release summarizing the findings, click here.

To read the full MMWR report, click here.