2023 NPCR ALASKA SUCCESS STORY

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Collaborative Analysis on Colorectal Cancer in Alaska

National Program of Cancer Registries SUCCESS STORY

SUMMARY

Subject matter and analytic experts from the Alaska Cancer Registry (ACR) and our tribal partners at the Alaska Native Tribal Health Consortium (ANTHC) collaborated on an analytic project to evaluate the early onset of colorectal cancer, by sex and race, in Alaska from 1996–2019. This analysis found that the incidence of early onset colorectal cancer (EOCRC) in Alaska adults aged 20–49 years has increased by more than 90% since 1996, with incidence rates being considerably higher among the Alaska Native people compared to the White population. Colorectal cancer was the 4th highest ranked cancer in Alaska for incidence (41.3 per 100,000) and mortality (14.9 per 100,000) among all ages and sexes in 2016-2020 diagnosis years.

CHALLENGE

- Nationally, incidence of EOCRC has been increasing among persons less than 50 years old, rising 2% per year since the 1990s.

SOLUTION

- Subject matter and analytic experts from ACR and ANTHC came together to design a plan to share local data of EOCRC among health care providers to increase awareness.
- This analysis aimed to evaluate trends in EOCRC in Alaska and identify which populations are disproportionately affected to help improve prevention efforts.
- The authors wanted to tailor their messaging to the health care community to improve CRC screening practices. They published the results in the State of Alaska Epidemiology Bulletin, a local publication distributed to health care providers in Alaska that presents data in a one-page format that can be read quickly and is easy to understand.

RESULTS

- Using ACR data from diagnosis year 1996-2019, CRC annual incidence rates were calculated for adults aged 20-49 years (n=841) and for adults aged ≥50 years (n=5,139) and stratified by sex and race (restricted to Alaska Native and White due to small counts of other races). Linear models were fit to smooth out annual variation and generate annual estimates and average percent change over the observation period.
- CRC rates decreased by 2.0% annually among adults aged ≥50 years (from 226 to 117 cases per 100,000 people), but EOCRC rates increased by 3.9% annually among adults aged 20–49 years (from 7 to 18 cases per 100,000 people).
- Among Alaska Native people, CRC rates decreased by 1.6% annually among adults aged ≥50 years (from 380 to 239 cases per 100,000 people), but EOCRC rates increased by 5.2% annually among adults aged 20–49 years (from 16 to 34 cases per 100,000 people).
- Among adults aged ≥50 years, females consistently had lower CRC incidence rates than males. Among adults aged 20-49 years, estimated CRC incidence was similar among men and women.
- Causes for the increase in EOCRC were not explored in this analytic study, but based on the literature, the increase in EOCRC rates is likely being driven by changes in several modifiable factors including diet, overweight/obesity, alcohol consumption, and smoking.

SUSTAINING SUCCESS

- This analysis supported recommendations that have been made by national and tribal organizations: 1) The US Preventative Services Task Force (USPSTF) recommends screening for colorectal cancer in adults aged 45 to 49 years. Additionally, the USPSTF recommends screening for colorectal cancer in all adults aged 50 to 75 years.; 2) The Alaska Native Medical Center recommends that Alaska Native people be screened for CRC starting at age 40 years.
- Our goal was for the health care community to be aware of the increasing incidence of EOCRC when evaluating younger adults experiencing CRC symptoms (blood in stool, diarrhea, or constipation >2 days, prolonged abdominal pain, or unexplained weight loss), and consider CRC testing. This bulletin was also easily shared to various partners in the community.
- This analysis helped build support for efforts to continue monitoring incidence and mortality trends in EOCRC, and trends in screening practices for colorectal cancer.

STORY QUOTE

"The increase of EOCRC incidence is problematic because "Younger people and their providers might not automatically think of colorectal cancer if the younger person is experiencing symptoms, because they aren't yet at screening age."

– Diana Redwood, an epidemiologist with the Alaska Native Tribal Health Consortium, co-author, and subject matter expert

REGISTRY CONTACT

https://health.alaska.gov/dph/VitalStats/Pages/cancer/registry.aspx

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