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## Early Onset Colorectal Cancer, by Sex and Race — Alaska, 1996–2019

### Introduction

Colorectal cancer (CRC) screening can prevent CRC.<sup>1</sup> Implementation of national screening recommendations for US adults aged  $\geq 50$  years have contributed to a substantial decline in CRC incidence and mortality in this age group.<sup>2</sup> Nationally there has been an increasing incidence of early onset CRC (EOCRC) among those aged  $< 50$  years, rising 2% per year since the 1990s.<sup>1</sup> This led to national CRC guidelines lowering the screening age from 50 to 45 years in 2021.<sup>3</sup> This *Bulletin* describes the CRC and EOCRC trends in Alaska and stratifies by two population demographics to better understand the need for focused health promotion efforts to prevent EOCRC.

### Methods

Using data from the Alaska Cancer Registry, CRC annual incidence rates during 1996–2019 in Alaska were calculated for adults aged 20–49 years ( $n=841$ ) and for adults aged  $\geq 50$  years ( $n=5,139$ ) overall 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. Model-fitted annual estimates and average percent change over the observation period are presented.

### Results

During 1996–2019, CRC rates decreased 1.6% annually, from an estimated 62 to 39 cases per 100,000 people. CRC rates decreased by 2.0% annually among adults aged  $\geq 50$  years (from an estimated 226 to 117 cases per 100,000 people), but EOCRC rates increased by 3.9% annually among adults aged 20–49 years (from an estimated 7 to 18 cases per 100,000 people). During this period, 14% of all Alaska CRC cases were EOCRC.

Among adults aged  $\geq 50$  years, females consistently had lower CRC incidence rates than males. CRC rates among females in this age group decreased by 1.9% annually from an estimated 187 to 104 cases per 100,000 women. CRC rates among males in this age group decreased by 2.2% annually from an estimated 240 to 120 cases per 100,000 men. Among adults aged 20–49 years, estimated CRC incidences were similar between men and women.

The estimated incidence of CRC by race was higher for Alaska Native people compared to Whites in both age groups (Figures 1 and 2). For the younger age group (Figure 1), rates among Alaska Native people increased 5.2% annually from an estimated 16 to 34 cases per 100,000 people. Among Whites, an annual increase of 3.8% was observed from an estimated 7 to 13 cases per 100,000 people. For the older age group (Figure 2), rates among Alaska Native people decreased 1.6% annually from an estimated 380 to 239 cases per 100,000 people. Among Whites, an annual decrease of 2.0% was observed from an estimated 180 to 99 cases per 100,000 people.

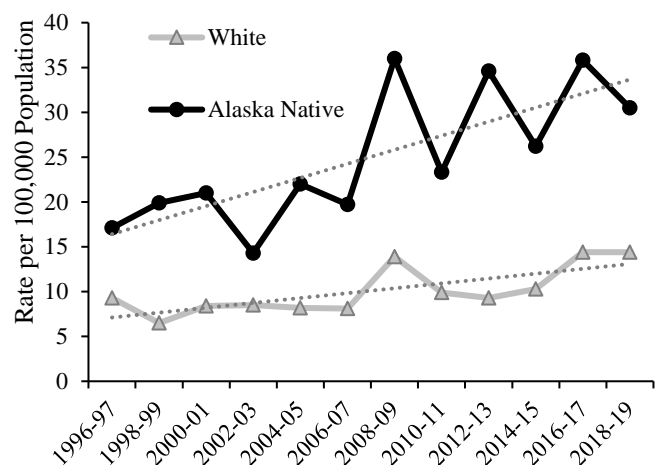
### Discussion

Consistent with national trends, despite an annual decrease in CRC incidence among Alaska adults aged  $\geq 50$  years during 1996–2019, the incidence of EOCRC in Alaska adults aged 20–49 years has increased by more than 90%. Causes for the increase in EOCRC are unknown, but is likely being driven by changes in several modifiable factors, including diet, overweight/obesity, alcohol consumption, and smoking in this age group.<sup>2</sup>

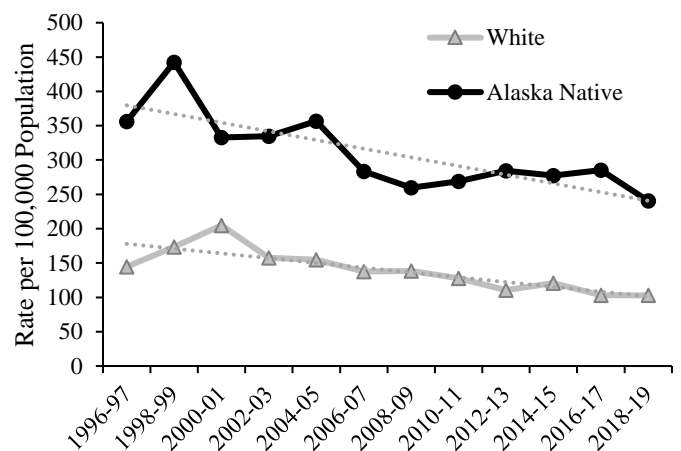
Female EOCRC rates are consistently lower than male rates nationally;<sup>1</sup> however, no EOCRC rate difference was observed in Alaska between the sexes. The incidence of EOCRC among Alaska Native people was considerably higher than Whites and appears to be increasing at a faster pace.

Although the incidence of CRC is lower among the younger population, with the sustained rise in EOCRC incidence over the observed 24-year period, efforts to promote screening and access to high-quality treatment among the young population will be critical for future CRC prevention in Alaska.

**Figure 1. Colorectal Cancer Incidence among Younger Alaskans (Aged 20–49 Years) by Race — Alaska, 1996–2019**



**Figure 2. Colorectal Cancer Incidence among Older Alaskans (Aged  $\geq 50$  Years) by Race — Alaska, 1996–2019**



### Recommendations

1. The American Cancer Society recommends that adults aged 45–75 years should be regularly screened for CRC.<sup>1</sup>
2. The Alaska Native Medical Center recommends that Alaska Native people be screened for CRC starting at age 40 years.<sup>4</sup>
3. Clinicians should be aware of the increasing incidence of EOCRC when evaluating younger adults experiencing CRC symptoms (e.g., blood in stool, diarrhea or constipation  $> 2$  days, prolonged abdominal pain, or unexplained weight loss), and consider CRC testing.

### References

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