



United States Cancer Statistics (USCS)

Gastrointestinal Cancer in American Indian and Alaska Native People

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Incidence rates for gastrointestinal (GI) cancers among non-Hispanic American Indian and Alaska Native (NH-AIAN) people varied by geographic region. Five sites, including colorectal, esophagus, liver, pancreas, and stomach, made up 90% of GI cancers reported among NH-AIAN people. Among NH-AIAN females and males, some of the highest incidence rates for these five cancers were seen in colorectal and liver cancer while the lowest incidence rates were observed in esophageal cancer.

Purchased/Referred Care Delivery Areas (PRCDA) are counties that contain federally recognized tribal lands or are adjacent to tribal lands. Race classification for NH-AIAN people is more accurate in these counties. Approximately two-thirds of NH-AIAN people live in these areas, which are often described as six regions: Alaska, East, Northern Plains, Pacific Coast, Southern Plains, and Southwest.¹

GI cancers include colon and rectum, liver and intrahepatic bile duct, pancreas, stomach, esophagus, other biliary, gallbladder, small intestine, anus, anal canal, anorectum, retroperitoneum, peritoneum, omentum, mesentery, and other digestive organs. Previous studies have shown differences in the occurrence of certain GI cancers among NH-AIAN people.^{2,3} Although there are etiologic differences between individual GI cancers, many of these cancers share risk factors including occupational exposure to carcinogens, obesity, cigarette smoking, diabetes, alcohol use, hepatitis B and C infection, human papillomavirus (HPV) infection, and infection by *H. pylori* bacteria.^{2,4-6} Regional differences in incidence rates could be due to other factors such as built environment and access to health care which should also be considered in interpreting cancer incidence among NH-AIAN populations.⁷

This data brief analyzes the percent distribution and incidence rates of the five most common GI cancers among NH-AIAN people in PRCDA counties across the United States.

Figure 1. Percent Distribution of Common GI^a Cancers Among NH-AIAN^b People by Sex, Purchased/Referred Care Delivery Areas, 2016–2020

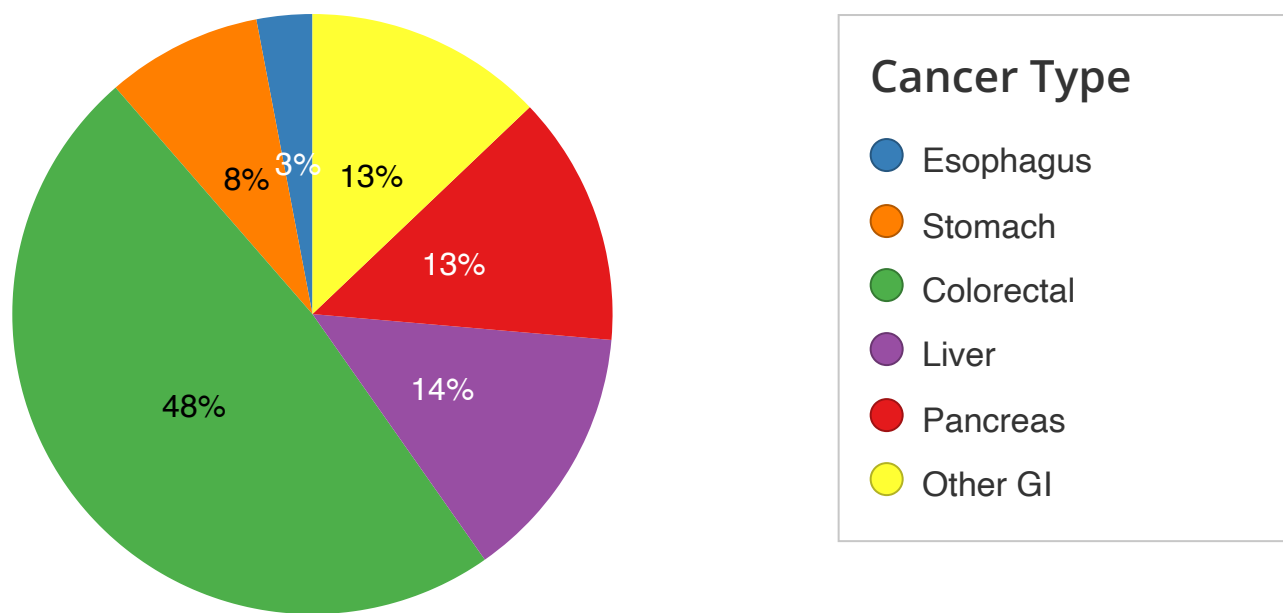
During 2016 to 2020, among NH-AIAN people in Purchased/Referred Care Delivery Areas counties:

- 7,865 GI cancer cases were reported, including 4,350 among males and 3,515 among females.
- The five most common GI cancer sites for both males and females were esophagus, stomach, colon and rectum, liver, and pancreas.
- These five cancers make up around 90% of all GI cancers in the United States.

Make a selection from the filters to change the visualization information.

Sex

Female ▼



Data Table		
Cancer Type	Percentage	Count
Esophagus	3%	104
Stomach	8%	296
Colorectal	48%	1,701
Liver	14%	487
Pancreas	14%	473
Other GI	13%	454

Source: National Program of Cancer Registries and Surveillance, Epidemiology, and End Results SEER*Stat Database: U.S. Cancer Statistics American Indian and Alaska Native Incidence Analytic Database, 1999–2020. U.S. Human Services, Centers for Disease Control and Prevention. Released June 2023, based on the 2022 submission.

Abbreviations: GI: gastrointestinal; NH-AIAN: non-Hispanic American Indian/Alaskan Native.

Note: The COVID-19 pandemic disrupted health services, leading to delays and reductions in cancer screening, diagnosis, and reporting to some central cancer registries. This may have contributed to an observed decline in 2020 incidence for most cancer sites.

Note: The “Other GI” category includes the gallbladder, small intestine, anus, anal canal, anorectum, retroperitoneum, peritoneum, omentum, mesentery, and other digestive organs.

^aThe most common GI cancers are based on rates in NH-AIAN people living in PRCDAs in the US overall and include esophagus, stomach, colon and rectum, liver, and pancreas.

^bNH-AIAN refers to non-Hispanic American Indian and Alaska Native people living in Purchased Referred Care Delivery Areas counties. Due to a coding issue, state- and county-specific Hispanic ethnicity data alone or in combination with any race category are not presented for North Dakota and Wisconsin and therefore Hispanic ethnicity could not be determined.

Rates by Sex and Region

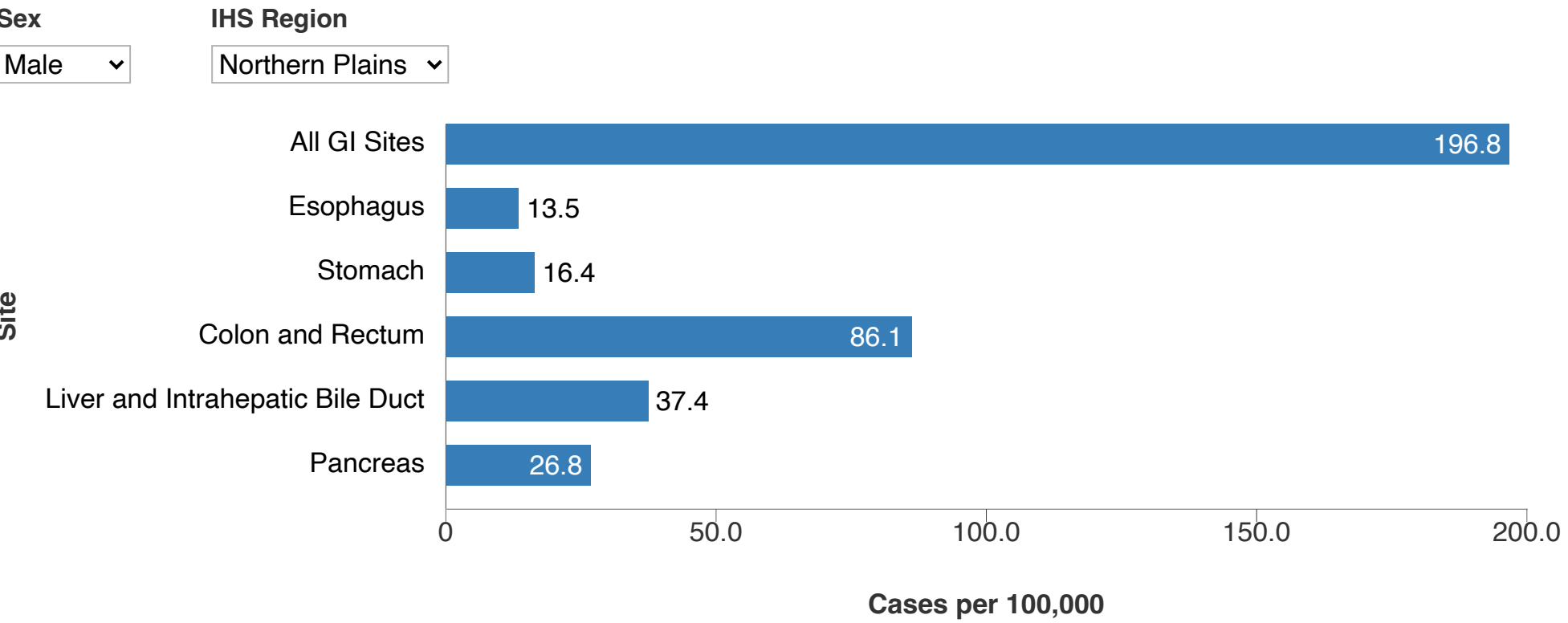
Figure 2. Age-adjusted Incidence Rates^a per 100,000 NH-AIAN^b People of Common GI Cancers^c by Sex and Region, Purchased/Referred Care Delivery Areas, 2016–2020

During 2016 to 2020, among NH-AIAN people in Purchased/Referred Care Delivery Areas counties:

- Colorectal cancer was the most common GI cancer. The highest rates of colorectal cancer were in Alaska for both males (94.0) and females (87.2). The lowest rates of colorectal cancer were in the East for males (31.3) and in the Southwest for females (30.7).

- Liver cancer was the second most common GI cancer. The highest rates were in the Northern Plains for both males (37.4) and females (19.0) while the East had the lowest rates for both males (17.2) and females (5.5).
- Rates of stomach, pancreatic, and esophageal cancers ranged from 5.3 to 26.8 for males and from 0.5 to 21.8 for females and varied by geographic region.

Make a selection from the filters to change the visualization information.



[Download Data \(CSV\)](#)

Data Table	
Cancer Site	Rate
All GI Sites	196.8
Esophagus	13.5
Stomach	16.4
Colon and Rectum	86.1
Liver and Intrahepatic Bile Duct	37.4
Pancreas	26.8

Source: National Program of Cancer Registries and Surveillance, Epidemiology, and End Results SEER*Stat Database: U.S. Cancer Statistics American Indian and Alaska Native Incidence Analytic Database, 1999–2020. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Released June 2023, based on the 2022 submission.

Abbreviations: GI: gastrointestinal; NH-AIAN: non-Hispanic American Indian/Alaskan Native.

Note: The COVID-19 pandemic disrupted health services, leading to delays and reductions in cancer screening, diagnosis, and reporting to some central cancer registries. This may have contributed to an observed decline in 2020 incidence for most cancer sites.

^aRates are per 100,000 persons and are age-adjusted to the 2000 U.S. standard population.

^bNH-AIAN refers to non-Hispanic American Indian and Alaska Native people living in Purchased Referred Care Delivery Area counties. Due to a coding issue, state- and county-specific Hispanic ethnicity data alone or in combination with any race category are not presented for North Dakota and Wisconsin and therefore Hispanic ethnicity could not be determined.

^cThe most common GI cancers are based on rates in NH-AIAN people living in PRCDA counties in the US overall and include esophagus, stomach, colon and rectum, liver, and pancreas.

Data Source

Data in this brief come from [U.S. Cancer Statistics](#), the official federal cancer statistics.

Data are from the [U.S. Cancer Statistics American Indian and Alaska Native Incidence Analytic Database](#). This database includes data from cancer registries participating in CDC’s National Program of Cancer Registries or the National Cancer Institute’s Surveillance, Epidemiology, and End Results program that have been linked with the Indian Health Service Patient Registration Database. These linkages address racial misclassification of the NH-AIAN people in the central cancer registries. These data met quality criteria for 1999 to 2020.

References

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More Information

- [American Indian and Alaska Native People and Cancer](#)
- [U.S. Cancer Statistics Data Visualizations Tool](#)
- [Cancer within Native American and Alaska Native Populations](#)

Suggested Citation

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