American Indians/Alaska Natives and Cancer

We are among the estimated 4.5 million people who are classified as American Indian and Alaska Natives. As a group we comprise 1.5 percent of the total U.S. population but are scattered over 560 federal and over 100 State recognized tribes, of which each has its own unique culture. Not surprisingly, there are great diversities within our communities with regard to political, social, cultural, and spiritual beliefs and customs.

While we continue to live on designated lands or reservations, over the past three decades, many of us have increasingly relocated from rural communities and reservations into urban centers. Our “invisible” urban population now makes up more than half of all American Indians and Alaska Natives living in the United States.

There are well-documented differences that exist between urban American Indians, Alaska Natives, and the rest of the American Indian population as a whole in terms of access to our healthcare, our health risk behaviors, threats to our health, and our health outcomes.

As American Indians and Alaska Natives, we also suffer from greater health disparities compared with the general population. These disparities include higher rates of tobacco use, infant mortality, delayed prenatal care, violence, attempted suicide, and deaths due to diabetes, accidents and chronic liver disease. Because of our higher mortality rate, we are younger as a group than the rest of the U.S. population. Likewise, as American Indians and Alaska Natives and US citizens we continue to be among the poorest, with 1 in 4 living below the poverty level compared with 1 in 10 of the non-Hispanic/Latino whites in the general United States population.

Causes/Etiology

- Skin cancer is relatively rare in American Indians, but when it does occur, it often has an atypical presentation leading to delays in diagnosis and treatment and a higher mortality rate.

- In 2005, 32% of American Indian adults smoked more than any other ethnic group. However, these smoking rates vary by region and state. They are highest in Alaska (45.1%) and the Northern Plains (44.2%) and are lowest in the Southwest.

- American Indians, but not Alaska Natives, have a high incidence rate of HPV most often triggered by high-risk oncogenic serotypes not covered by the new HPV vaccine.

- Not only does gall bladder carcinoma begin earlier in American Indians (age 55) than Hispanics (age 60) and non-Hispanic whites (age 65), American Indians led all ethnicities in incidence rate among both male (7.8 per 100,000) and female (14.5 per 1000,000) categories.

Screening

- Screening rates for breast, colorectal, prostate, and cervical cancers are lower among American Indians/Alaska Natives than non-Hispanic/Latino whites.

- Hispanic/Latinos and American Indians/Alaska Natives are the least likely ethnic groups to have a college education, most likely to have family incomes below 200% of the poverty level, and most likely to have no health insurance coverage, all of which are factors associated with low rates of cancer screening.

- American Indians/Alaska Natives are less likely to receive PAP smears, which contributes to their having the highest cervical cancer mortality of any population in the United States.

- The highest proportion of men receiving no treatment for prostate cancer was observed in Native Americans (40%) when compared to non-Hispanic/Latino whites (25%).

- Of the American Indian/Alaska Native women aged 18 and over in California, 91% have had at least one Pap test, and 83% reported a Pap test within the past three years.

- More than 68% of American Indian/Alaska Native women aged 40 and over in California had a mammogram within the past two years, however, only 1 in 10 American Indian/Alaska Native women 40 years and older, reported never having a mammogram.
Patient/Provider Communication

- There are 217 known Native American languages spoken today. Most, if not all do not include a word for “cancer.” (16)

- In the Navajo language, the word for cancer translates as the sore that does not heal. This psychological sense of hopelessness reflects a cultural perspective that impedes cancer detection in its early, more treatable stages. (17)

- American Indians/Alaska Natives are underrepresented in clinical trials. LaVallie et al. reported the factors that increase the willingness to participate were: having a lead researcher of Native descent, having a study physician with experience treating American Indians/Alaska Natives, personal experience with the cancer being studied, family support for participation, and belief/hope that the study would result in new treatments. (18)

Disparities

- American Indian/Alaska Native women are significantly less likely to be diagnosed with breast cancer than rest of the general United States population. (9)

- American Indians/Alaska Natives have a higher incidence of kidney, stomach, liver, cervix, and gallbladder cancers compared to the non-Hispanic/Latino white populations. (9)

- Espey et al. reported lung and colorectal cancer incidence rates were highest in the Northern Plains and Alaska and were significantly elevated in comparison with non-Hispanic/Latino whites. (9)

- Between 1999-2004, American Indian/Alaska Native men from the Northern Plains region and American Indian/Alaska Native women from Alaska and the Northern and Southern Plains regions had higher cancer incidence rates than non-Hispanic/Latino white men and woman in the same areas. (10)

- When compared to non-Hispanic/Latino white population, American Indian/Alaska Native populations were less likely to earn a high school diploma and more likely to live in poverty. (10)

- Watson et al reported that American Indians/Alaska Natives lifetime risk of dying of bladder cancer is low (11.9 per 100,000) compared with that for non-Hispanic/Latino whites (40.5 per 100,000). However, the American Indians/Alaska Natives risk of dying, relative to the risk of ever being diagnosed with bladder cancer, is disproportionately high. (19)

- Although American Indian/Alaska Native children have a lower incidence of acute lymphoblastic leukemia (ALL), Hispanic and American Indian/Alaska Native children with ALL have poorer survival rates than non-Hispanic/Latinos white and Asian/Pacific Islander children. (20)

- Breast and cervical cancer incidence rates among Alaska Natives are similar to non-Hispanic/Latino white rates, whereas rates for cancer of the uterus and ovary are significantly less compared to non-Hispanic/Latino whites. Thirty-five year trends show increasing rates in breast cancer and decreasing rates of cervical cancer. (21)

- Cancer is the third leading cause of death for American Indians/Alaska Natives of all ages and is the second leading cause of death among American Indians and Alaska Natives over the age of 45. (14, 22)

- From 1999 to 2004, the overall incidence rate (per 100,000 persons per year) of colorectal cancer was 9% lower in the American Indian and Alaska Native population (46.3) than in the non-Hispanic/Latino white population (50.8). (32)

- American Indian/Alaska Natives were diagnosed more often with advanced colorectal cancer than with localized colorectal cancer compared with non-Hispanic/Latino whites. (32)

Outcomes

- The most common types of cancer for American Indians/Alaska Natives are cancer of the breast (28%), colon and rectum (13%), and lung (10%). (9)

- Espey et al. reported mortality rates were highest in Alaska and the Northern Plains due to cancer of the lung, colorectum, liver, stomach, gallbladder, and kidney. (10)
• American Indians and Alaska Native youths aged 12-17 had the highest smoking rates compared with other racial groups. However, this data may be difficult to interpret since surveys typically do not separate ceremonial tobacco use from habitual actual misuse.\(^{(11)}\)

• Cervical cancer mortality is particularly high among American Indians who reside in the Northern Plains and Southwest regions of the United States.\(^{(12)}\)

• Nearly 10% of American Indian/Alaska Native men and 15% of American Indian/Alaska Native women in California, age 40 and over, reported being diagnosed with some type of cancer.\(^{(13)}\)

• Lung cancer is the second most common cancer occurring in American Indian and Alaska Native men (51.40 cases per 100,000), behind prostate cancer (60.66 per 100,000).\(^{(23,24)}\)

• The most frequently diagnosed cancers among Alaska Native men is prostate (20%), lung (19%), and colorectal cancer (17%).\(^{(24)}\)

• The most frequently diagnosed cancers, accounting for over a half (57%) of all cancers diagnosed in Alaska Natives for the years 1999-2003 were: colon/rectum, lung, breast, and prostate.\(^{(23,24)}\)

• Cancer cases in the Alaska Native population increased dramatically from 1994 to 2003. These cancers constitute 45% of approximately 6,000 diagnosed cases in the past 35 years.\(^{(23)}\)

• From 1993-2002, only 24% of Alaska Native men and 42% of Alaska Native women were diagnosed while the cancer was still localized.\(^{(23)}\)

• American Indian/Alaska Native men and women have higher incidence rates for stomach and liver cancer. American Indian/Alaska Native men and women also have higher mortality rates for stomach and liver cancer.\(^{(26,27)}\)

• American Indians have the highest rate of gallbladder cancer of any ethnic group, and this incidence is highest among American Indians living in New Mexico.\(^{(28)}\)

• American Indians and Alaska Natives have the highest percentage of distant stage lung, breast, prostate, and colorectal cancer at diagnosis compared to non-Hispanic/Latino whites.\(^{(30,31)}\)

References


