



AMERICAN INDIAN/ALASKA NATIVES & TOBACCO USE

Despite reductions in smoking* prevalence achieved since the first Surgeon General's report on the consequences of smoking in 1964, smoking remains the leading cause of preventable death in the United States.¹ Smoking accounts for 480,000 deaths in the United States each year, and is a major risk factor for the four leading causes of death: heart disease, cancer, chronic obstructive pulmonary disease, and stroke.² American Indians and Alaska Natives (AI/AN), as a whole, have an especially high risk of suffering from tobacco-related death and disease because they have the highest prevalence of smoking compared to any other population group in the United States.

Tobacco Use Among American Indian/Alaska Native Adults

American Indians and Alaska Natives (AI/AN) have a higher smoking rate than any other racial/ethnic subgroup. According to the 2020 National Health Interview Survey (NHIS) of adults ages 18 and over, 27.1 percent of AI/AN currently smoke.³ In comparison, 13.3 percent of Whites, 14.4 percent of African Americans, 8.0 percent of Hispanics, and 8.0 percent of Asian Americans currently smoke. Overall, 12.5 percent of U.S. adults are current smokers.⁴

A study of National Survey on Drug Use and Health (NSDUH) trends from 2002 to 2016 found that while there have been significant downward trends in the smoking rates among all other race/ethnic groups, there was no significant change in the smoking rates of AI/ANs. Additionally, the study found that the high smoking rates among AI/ANs increased when other risk factors were present, including lower levels of education and income.⁵

Within the AI/AN population, smoking rates can vary considerably from one tribe to another. According to a 2005 study, 14 percent of Southwest tribal members were smokers compared to a 50 percent smoking rate among Northern Plains tribal members.⁶ A 2010 study found that, despite a lack of tobacco-related tribal traditions, cigarette use was four times higher among Alaska Natives than American Indians in the Southwest United States (32 percent vs. 8 percent).⁷

According to the Centers for Disease Control and Prevention, AI/AN women have the highest rate of smoking during pregnancy of any racial or ethnic group. 16.7 percent of AI/AN women smoke during their pregnancy, compared to 10.5% of whites, 6.0% of African Americans, 1.8% of Hispanics, and 0.6% of Asian Americans.⁸ Tobacco use during pregnancy is one of the key preventable causes of adverse pregnancy outcomes.

In addition to having the highest smoking rate among all racial/ethnic groups, AI/ANs have the highest prevalence of use of any tobacco product. According to the 2020 NHIS, 34.9% of AI/AN adults are current users of any tobacco product (compared to 21.1% for Whites, 19.4% for African Americans, and 11.7% for Hispanics).⁹

Tobacco Use Among American Indian/Alaska Native Youth

AI/AN high school students have traditionally had the highest rates of tobacco use of all racial/ethnic groups. According to the 2022 National Youth Tobacco Survey (NYTS), AI/AN high school students also have the highest rates of e-cigarette use (14.6%) and any tobacco product use (20.0%), and the second highest rate of any combustible tobacco product use (6.6%). Data for other tobacco products, such as cigarettes and cigars were not available from the 2022 NYTS. However, earlier data from the 2019 High School Youth Risk Behavior Survey (YRBS) showed that both cigarette and cigar smoking rates were also higher among AI/AN high school students compared to their peers.¹⁰

* References to smoking or tobacco use throughout this document refer to the use of commercial tobacco and not the sacred and traditional use of tobacco by some American Indian communities

Tobacco Use Health Consequences Among American Indian/Alaska Natives

Cancer is the second leading cause of death among AI/ANs.¹¹ Each year, over 3,800 AI/ANs are diagnosed with a tobacco-related cancer and over 1,800 die from a tobacco-related cancer.¹²

Lung cancer is the second leading cause of cancer incidence and the leading cause of cancer death.^{13,14}

- From 2001-2009, the vast majority of lung cancer deaths (88 percent for men, 84 percent for women) were attributable to smoking among AI/AN over age 35 living in 637 Indian Health Service Contract Health Service Delivery Area (IHS CHSDA) counties.¹⁵
- Overall, the 5-year relative survival rate for lung cancer is lower among AI/ANs compared to Whites (19% versus 22%).¹⁶
- However, lung cancer rates among AI/ANs vary greatly by tribal region. The Northern Plains region, which has some of the highest smoking prevalence among AI/ANs, has the highest rate of lung cancer incidence, followed by the Southern Plains and Alaska regions.¹⁷ From 2014-2018, rates of lung cancer incidence among AI/ANs in the Northern and Southern Plains, Alaska, and the Pacific Coast regions were significantly higher than rates for their White counterparts.¹⁸
- Unlike for other racial/ethnic subgroups, whose declines in overall smoking prevalence have led to a narrowing of disparities in lung cancer rates, lung cancer incidence among AI/AN men have only recently begun to decline, and lung cancer incidence among AI/AN women have remained relatively stable since the 1990s.¹⁹

The 2007 annual report on the status of cancer in the U.S. found that there is wide variation in AI/AN cancer surveillance, and that regional and tribe-specific data is needed to fully understand the disease burden among Indian tribes. Regional and tribal variations in cancer rates likely reflect geographic and tribal variations in risk factors and access to screening. For example, among AI/ANs, regional lung cancer rates mirrored regional smoking prevalence rates.²⁰

Heart disease is the leading cause of death among AI/ANs, for which tobacco use is an important risk factor.²¹ Heart disease death rates for AI/ANs show geographic disparities, with the highest rates occurring primarily in Northern Plains states, including North and South Dakota, as well as Wisconsin and Michigan.²² The CDC estimates that racial/ethnic disparities for smoking-attributable mortality are most pronounced for cardiovascular disease. From 2001-2009, smoking-attributable mortality for ischemic heart disease, other heart disease and stroke for AI/AN women over age 35 was double that of White women, among those living in 637 HIS CHSDA counties.²³

Tobacco Industry Targeting of American Indian/Alaska Natives

As with other minority populations, the tobacco industry strategically targets AI/ANs. The industry has provided funding to cultural events like powwows and rodeos to build credibility. Additionally, the industry promotes brands like Natural American Spirit that use the cultural image of traditional American-Indian warriors.²⁴

Helping American Indian/Alaska Natives Quit Smoking

Since federally recognized tribes are considered sovereign nations, they are exempt from state taxation of tobacco products, making cigarettes cheaper on tribal lands. Recommendations for lowering the high rate of smoking-caused cancer and heart disease include reducing tobacco use among this community by better tailoring tobacco cessation and treatment programs to the AI/AN community, increasing tobacco product prices and increasing funding for tribal tobacco control programs.²⁵

Additional Sources of Information

- *National Indian Health Board*, <http://www.nihb.org>, and its Area Health Boards
- *Native CIRCLE, American Indian/Alaska Native Cancer Information Resource Center and Learning Exchange*, at Mayo Clinic, <http://www.mayo.edu/research/centers-programs/cancer-research/other-initiatives/native-populations>.

- Indian Health Service, http://www.ihs.gov/epi/index.cfm?module=epi_tobacco_main
- Bureau of Indian Affairs, <http://www.bia.gov/>
- Association of American Indian Physicians, <http://www.aaip.org/>

Campaign for Tobacco-Free Kids, December 9, 2022, Marela Kay Minosa

- ¹ *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*, PHS publication 1103, 1964, http://www.cdc.gov/tobacco/sgr/sgr_1964/sgr64.htm. McGinnis, JM, et al., "Actual causes of death in the United States," *Journal of the American Medical Association (JAMA)* 270:2207-2212, 1993.
- ² HHS, *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*, 2014, <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/>. CDC, "Deaths: Leading Causes for 2010," Table D, *National Vital Statistics Reports*, 62(6), December 20, 2013, http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_06.pdf.
- ³ Cornelius ME, et al. Tobacco Product Use Among Adults — United States, 2020. *MMWR Morb Mortal Wkly Rep* 2022;71:397–405. DOI: <http://dx.doi.org/10.15585/mmwr.mm7111a1>. Current smoking is defined as persons who reported having smoked ≥ 100 cigarettes during their lifetimes and, at the time of the survey, reported smoking every day or some days.
- ⁴ Cornelius ME, et al. Tobacco Product Use Among Adults — United States, 2020. *MMWR Morb Mortal Wkly Rep* 2022;71:397–405. DOI: <http://dx.doi.org/10.15585/mmwr.mm7111a1>.
- ⁵ Agaku, IT, et al., "Disparities in current cigarette smoking among US adults, 2002-2016" *Tob Control*, 0:1-8, Published online May 30, 2019.
- ⁶ Henderson, et al., "Correlates of Cigarette Smoking Among Selected Southwest and Northern Plains Tribal Groups: The AI-SUPERPPF Study," *American Journal of Public Health (AJPH)* 95:867-872, 2005.
- ⁷ Redwood, D, et al. "Differences in cigarette and smokeless tobacco use among American Indian and Alaska Native people living in Alaska and the Southwest United States," *Nicotine and Tobacco Research*, 12(7): 791-796, July 2010.
- ⁸ CDC, "Cigarette Smoking During Pregnancy: United States, 2016." NCHS Data Brief, 305, February 2018, <https://www.cdc.gov/nchs/data/databriefs/db305.pdf>.
- ⁹ Cornelius ME, et al. Tobacco Product Use Among Adults — United States, 2020. *MMWR Morb Mortal Wkly Rep* 2022;71:397–405. DOI: <http://dx.doi.org/10.15585/mmwr.mm7111a1>.
- ¹⁰ CDC, *2019 High School Youth Risk Behavior Survey Data*. Available at <https://yrbs-explorer.services.cdc.gov/#/tables?questionCode=H32&topicCode=C02&year=2019>. Accessed on August 21, 2020. 6.0 percent of US high school students are current smokers. Another survey, the 2019 National Youth Tobacco Survey, using different methodology than the YRBS, found that 5.8% of US high school students smoke.
- ¹¹ Deaths: Final Data for 2012. NVSR Volume 63, Number 9. 85 pp. (PHS) 2014 -1120. http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_09.pdf
- ¹² CDC, "Vital Signs: Disparities in Tobacco-Related Cancer Incidence and Mortality—United States, 2004-2013," *Morbidity & Mortality Weekly Report*, 65(44): 1212-1218, <http://www.cdc.gov/mmwr/volumes/65/wr/mm6544a3.htm>.
- ¹³ Kohler, BA, et al. "Annual Report to the Nation on the Status of Cancer, 1975-2011, Featuring Incidence of Breast Cancer Subtypes by Race/Ethnicity, Poverty, and State," *J Natl Cancer Inst*, 107(6).
- ¹⁴ American Cancer Society. *Cancer Facts & Figures 2022*. Atlanta: American Cancer Society; 2022.
- ¹⁵ Mowery, P.D., et al., "Disparities in Smoking-Related Mortality Among American Indian/Alaska Natives," *Am J Preve Med*, published online July 6, 2015.
- ¹⁶ American Cancer Society. *Cancer Facts & Figures 2022*. Atlanta: American Cancer Society; 2022.
- ¹⁷ American Cancer Society. *Cancer Facts & Figures 2022*. Atlanta: American Cancer Society; 2022.; HHS, *Tobacco Use Among U.S. Racial and Ethnic Minority Groups, Report of the Surgeon General*, 1998, http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_1998/index.htm.
- ¹⁸ American Cancer Society. *Cancer Facts & Figures 2022*. Atlanta: American Cancer Society; 2022.
- ¹⁹ American Cancer Society. *Cancer Facts & Figures 2022*. Atlanta: American Cancer Society; 2022.
- ²⁰ Espey, D, et al. "Annual Report to the Nation on the Status of Cancer, 1975–2004, Featuring Cancer in American Indians and Alaska Natives," *Cancer*, 110(10):2119-52, November 2007.
- ²¹ Deaths: Final Data for 2012. NVSR Volume 63, Number 9. 85 pp. (PHS) 2014 -1120. http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_09.pdf. See also, HHS, *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*, <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/>; HHS, "Tobacco Use Among U.S. Racial and Ethnic Minority Groups, Report of the Surgeon General," 1998, http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_1998/index.htm.
- ²² Casper, M., et al. "Atlas of Heart Disease and Stroke Among American Indians and Alaska Natives," 2005, http://www.cdc.gov/dhdsp/atlas/aian_atlas/.
- ²³ Mowery, P.D., et al., "Disparities in Smoking-Related Mortality Among American Indian/Alaska Natives," *Am J Preve Med*, published online July 6, 2015.
- ²⁴ HHS, *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*, <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/>; HHS, "Tobacco Use Among U.S. Racial and Ethnic Minority Groups, Report of the Surgeon General," 1998, http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_1998/index.htm.
- ²⁵ See, e.g., Espey, DK, et al., "Annual Report to the Nation on the Status of Cancer, 1975-2004, Featuring Cancer in American Indians and Alaska Natives," *Cancer* (DOI: 10.1002/cncr.23044) Published online, October 15, 2007; Print issue date, November 15, 2007, <http://www3.interscience.wiley.com/cgi-bin/fulltext/116330621/HTMLSTARTW?CRETRY=1&SRETRY=0>.