



NICOA'S  
*Monograph Series*

Volume 1-Number 3

Lung Cancer Deaths  
and Smoking  
among American Indians  
by Nathaniel Cobb, M.D.

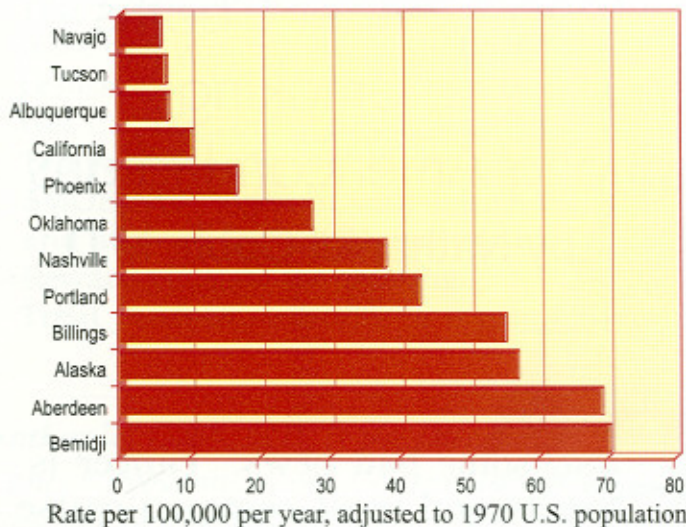
**F**irst, some bad news: cancer is the second most common cause of death for American Indian and Alaska Native people, accounting for one out of every six deaths. Of the fatal cancers, by far the most common is lung cancer, which is responsible for one-fourth of all cancer deaths each year. Lung cancer rates have been steadily increasing for American Indians and Alaska Natives since the 1960s. Lung cancer is almost always fatal, since it spreads so rapidly through the lung and there is no good screening test to detect it before it spreads.

*National Indian Council on Aging*



**B**ut there is good news. Current research shows that 90% of all lung cancer cases can be prevented . . . you guessed it: by not smoking. Heavy smoking over a number of years greatly increases one's risk of developing not only lung cancer, but also cancer of the bladder, kidney, pancreas, esophagus, mouth, and larynx—not to mention heart disease, emphysema, and bronchitis. When you quit smoking, it immediately reduces your risk. After ten years of not smoking, the cancer risk of a former smoker is only slightly higher than someone who never smoked. If Indian people had continued to use tobacco only for traditional and ceremonial purposes, in 1996 we would have seen at most 35 lung cancer deaths instead of 350.

Age-Adjusted Lung Cancer Mortality Rates,  
By IHS Area, Both Sexes, 1989-1993

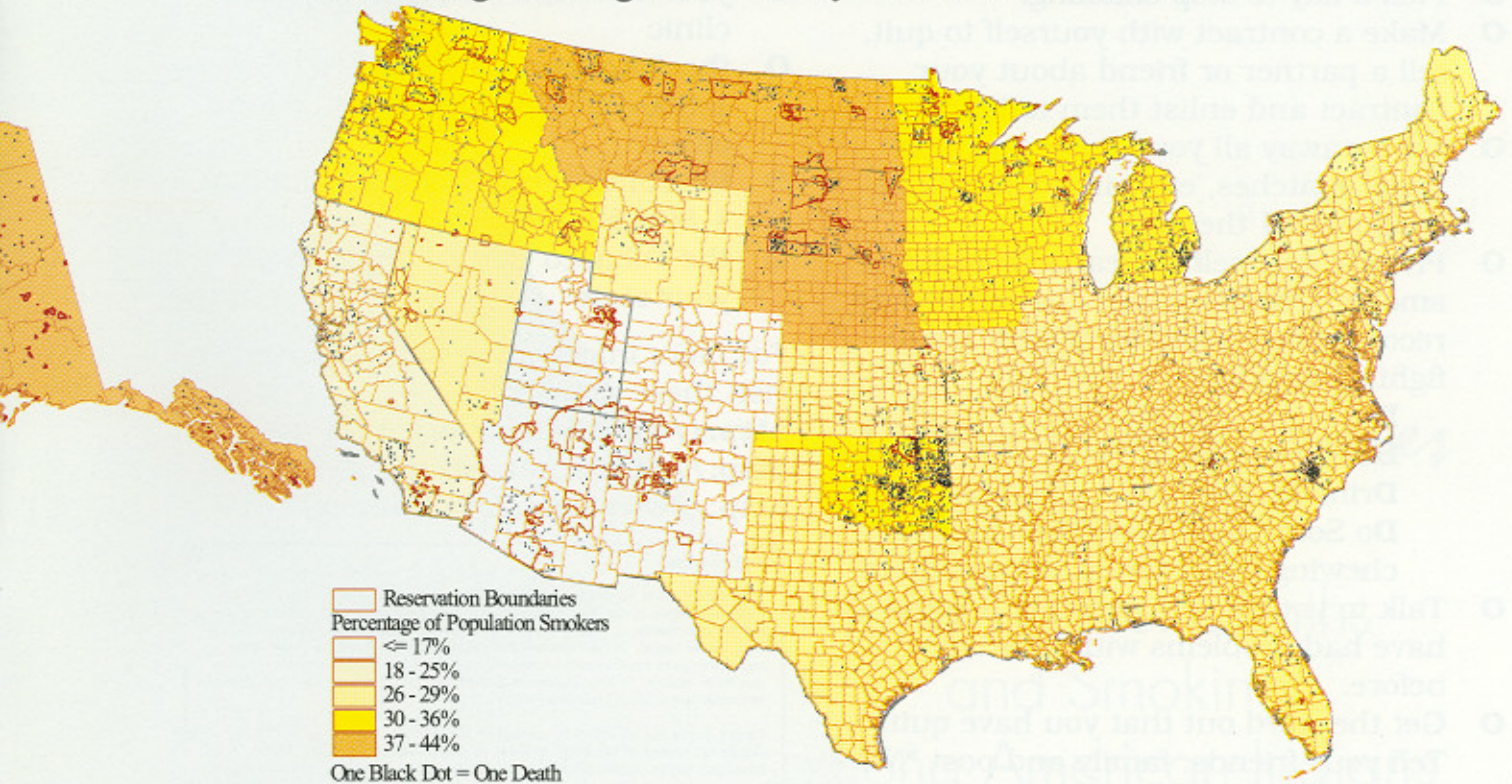


Smoking rates are very different among Native Americans in different parts of the country. Smoking is uncommon in the Southwest tribes, while in the Northern Plains and Alaska, almost everyone seems to smoke.

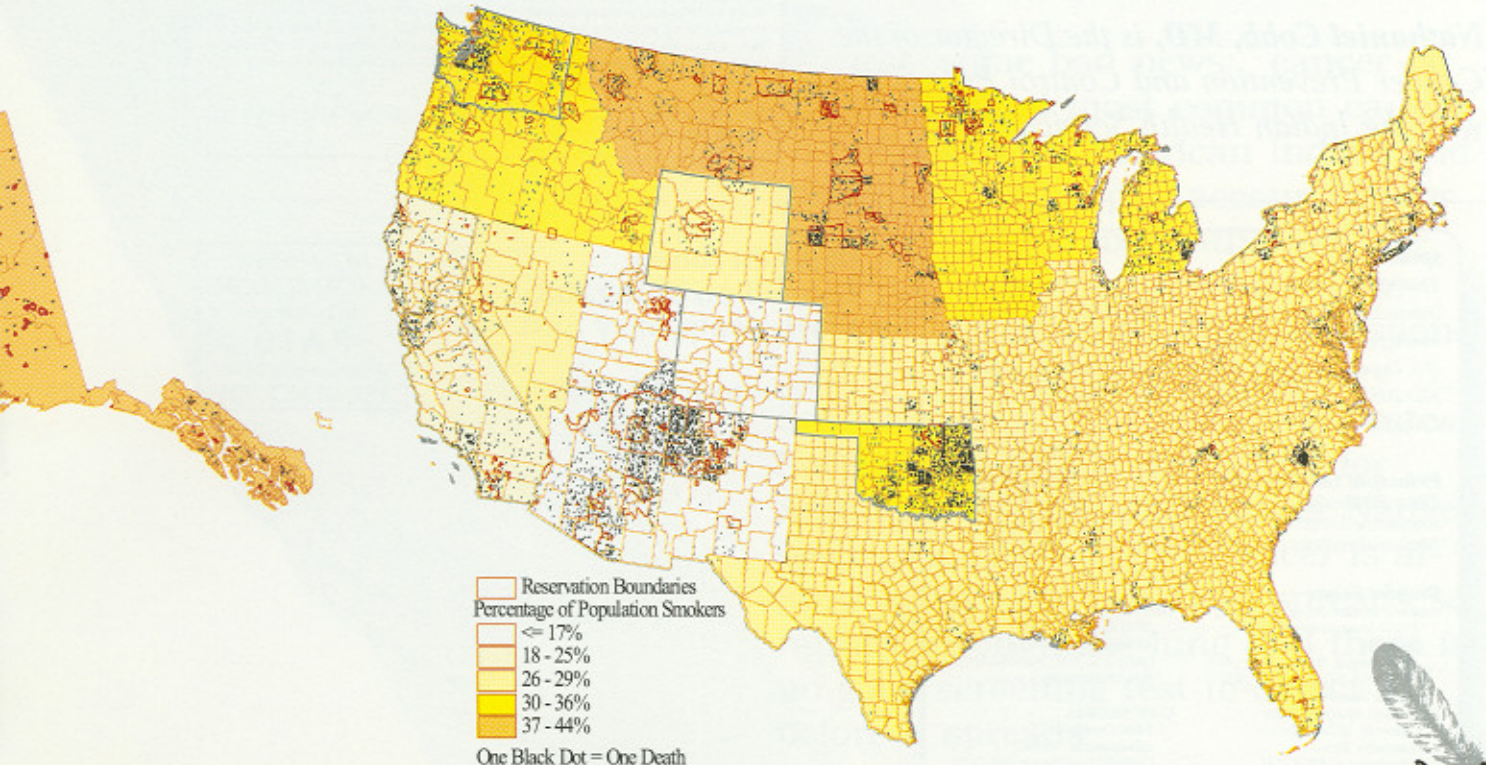
These maps show Indian cancer deaths (1984-1996) as black dots, and smoking rates as shades of yellow. Map 1 shows the deaths from lung cancer (each death represented by a black dot) and Map 2 shows the deaths from all of the types of cancer that are not associated with smoking. On Map 1 we see that the lung cancer deaths are more common in states where more people are smokers. For example, the Southwest has a large Indian population, with only a scattering of lung cancers, while Oklahoma is full of dots. Map 2 shows that other types of cancer occur wherever Indians live. Comparing the two maps, you can see how smoking influences lung cancer mortality rates across the nation.



**Map 1: Lung Cancer Deaths for Indians (1984-1996) and the Prevalence of Smoking Among Indians by State (1988-1992).**



**Map 2: Indian Cancer Deaths Not Related to Smoking (1984-1996) and the Prevalence of Smoking Among Indians by State (1988-1992).**





## How to Quit Smoking

- Pick a day to stop smoking.
- Make a contract with yourself to quit, tell a partner or friend about your contract and enlist them to help.
- Throw away all your cigarettes, ashtrays, matches, etc. since you will no longer need them.
- Prepare yourself to deal with urges to smoke. The American Cancer Society recommends using the **FOUR D's** to fight off urges:
  - Delay**
  - Deep Breathing**
  - Drink Water**
  - Do Something Else** (such as chewing gum, candy, carrot sticks)
- Talk to your health provider if you have had problems with quitting before.
- Get the word out that you have quit! Tell your friends, family and post "NO SMOKING" signs in your home, car, and at work to remind **everyone!**
- Reward yourself for quitting. Treat yourself to dinner or a nice gift!

*Nathaniel Cobb, MD, is the Director of the Cancer Prevention and Control Program with the Indian Health Service.*

## If You Need Help To Quit, Contact:

- your doctor, a hospital or a health clinic
- the American Cancer Society at 1-800-227-2345 or call your local office.
- the American Lung Association at 1-800-586-4872
- the Tobacco Control Program in your state.

For more information about cancer visit these websites:

<http://www.cancer.org>  
<http://cancernet.nci.nih.gov>  
<http://www.cdc.gov/cancer/>

### Technical Notes

The mortality data for this monograph are from state death certificates, compiled in Public Use Tapes by the National Center for Health Statistics, CDC. These tapes include information on race, county of residence, and Underlying Cause of Death. They do not include any information that could identify individuals. State death certificates have been found to under-report American Indian and Alaska Native race by as much as 30% in Oklahoma, California, and Michigan. This monograph has not adjusted for this misclassification.

Cancer deaths are identified by a range of ICD-9 codes. The category "Cancer Deaths not related to Smoking" includes all cancers except : lung (including bronchus), larynx, mouth, esophagus, bladder, pancreas, kidney, cervix, and stomach.

Data for smoking was obtained from Surgeon General's Report: Tobacco Use Among U.S. Racial/Ethnic Minority Groups, 1988-1992.

Each death is attributed to the county of residence, and a black dot for that death is randomly placed on the map within that county. The ArcInfo and ArcView software used to generate these Geographic Information System maps utilizes county and state codes that are used by federal agencies. These codes are Federal Information Processing Standards (FIPS). FIPS change when the county boundaries change. For example in Arizona, Yuma county split into LaPaz and Yuma counties. In Alaska Aleutians split to Aleutians East and Aleutians West. Dillingham split to Dillingham and Lake & Peninsula. Also, Kobuk was renamed to Northwest Arctic Borough. An anomaly to the data occurred in Washington County in Utah, which lies to the extreme southwest of the state. From 1984 to 1990 this county shows high mortality levels which are not proportional to the Indian population that resides in that county. We believe that there is an input or storage problem and have excluded this data from this monograph. This anomaly needs to be further investigated.

The term "Indian" refers to American Indian and Alaska Native, as reported on tobacco use surveys or death certificates.

### Sponsors:

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### Principal Investigator:

Dave Baldrige  
 Executive Director  
 National Indian Council on Aging



### Project Team:

National Indian Council on Aging  
 10501 Montgomery Blvd. NE  
 Suite 210  
 Albuquerque, NM 87111  
 (505) 292-2001/Fax 292-1922  
 E-mail: [dave@nicoa.org](mailto:dave@nicoa.org)  
 Earth Data Analysis Center  
 University of New Mexico  
 Bandelier West  
 Albuquerque, NM 87131  
 (505) 277-3622/Fax 277-3614  
 E-mail: [mingsis@spock.unm.edu](mailto:mingsis@spock.unm.edu)

Data Analysis Service  
 1009 Bradbury Dr. SE  
 Albuquerque, NM 87106  
 (505) 272-7597/Fax 842-8018  
 E-mail: [maris@unm.edu](mailto:maris@unm.edu)

CAPE Associates  
 6405 Crambrook NE  
 Albuquerque, NM 87111  
 (505) 821-8476/Fax 797-7172  
 E-mail: [lesen@unm.edu](mailto:lesen@unm.edu)

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**National Indian Council on Aging, Inc.**  
 10501 Montgomery Blvd., NE  
 Suite 210  
 Albuquerque, NM 87111

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