

Native American Cancer Research Corporation Lung Health Fact Sheet



- Are your lungs healthy?
- Research shows that for 5 of the 6 IHS regions (Alaska, Northern & Southern Plains, East, Pacific Coast), lung cancer is the most common type of cancer. In the Southwest, lung cancer is the 2nd most common cause of cancer death.
- Identifying Lung problems early helps.
- You can talk with your provider about your Lung health risks
- Now you know. Now you can.

What is Lung Cancer?

- Lung Cancer is when the cells in the lung begin multiplying and cause tumors in the tissue.

Lung Cancer in the US

- Lung cancer is the second most common cancer among men and women
- Lung cancer is the leading cause of cancer-related death in the US
- Lung cancer is leading type of cancer death for both sexes for all IHS areas

Symptoms of Lung Problems

- Chronic cough
- Coughing up blood
- Shortness of breath
- Chest or shoulder pain (not due to an injury)
- Fatigue / tiredness
- Pneumonia or other lung infection that doesn't get better
- Hoarseness
- Bronchitis

I can't do as much as I used to, you know like I used to like to go around and enjoy watching pow wows ...but I don't stay so late, because I get so tired so easily, and it really affects my life, but I didn't quit what I was doing. I thought I might as well go on and live a normal life like I used to...



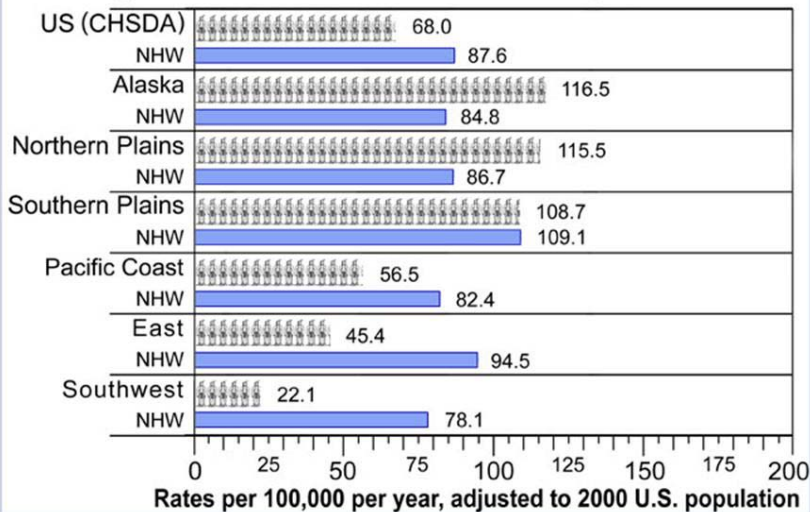
George Hogan III
[Crow] Lung

Did you know that

- About 30% of American Indians today still take part in ceremonies that use tobacco
- Alaska Natives rarely use tobacco in ceremonies
- Natives have the highest habitual use of manufactured tobacco in comparison to all other racial groups
- 1 out of 10 Alaska Native women use smokeless (spit) tobacco
- Smokeless (spit) tobacco causes mouth and lip cancers
- Babies and children are more susceptible to secondhand smoke problems than adults. It can cause:
 - “Sudden Infant Death Syndrome” (SIDS)
 - Asthma and other breathing problems
 - Sinus infections
 - Pregnant females who smoke are more likely to have a low birth weight baby
 - Low birth weight may cause other problems.

**Most lung problems are NOT cancer.
Please talk with your healthcare provider.**

Lung Cancer Incidence Rates - Males, 1999-2004



Espey, David K; Wo, Xiao-Chen; Swan Judith; Wiggins, Charles; Jim, Melissa A.; Ward, Elizabeth; Howe, Holly L.; Ries, Lynn A.G.; Miller, Barry A.; Jemal, Ahmedin; Ahmed, Faruque; Cobb, Nathaniel; Kaur, Judith S.; and Edwards, Brenda K. Annual Report to the Nation on the Status of Cancer, 1975-2004, Featuring Cancer in American Indians and Alaska Natives. Cancer [American Cancer Society]: 2007 [11-15-07]; Volume 110: No. 10. GRAPH MODIFIED BY Rick Clark, Native American Cancer Research

Graph Legend

- 🍪 CHSDA: IHS Contract Health Service Delivery Area
- 🍪 NHW: Non-Hispanic White
- 🍪 Alaska: includes *all* of Alaska
- 🍪 Northern Plains: 11 states: IA, IL, IN, MI, MN, MT, NE, ND, SD, WI, WY
- 🍪 Southern Plains: 3 states: KS, OK, TX
- 🍪 Pacific Coast: 4 states: CA, ID, OR, WA
- 🍪 East: 25 states, such as FL, GA, MO, MS, NC, NY, PA, TN
- 🍪 Southwest; AZ, CO, NM, NV, UT

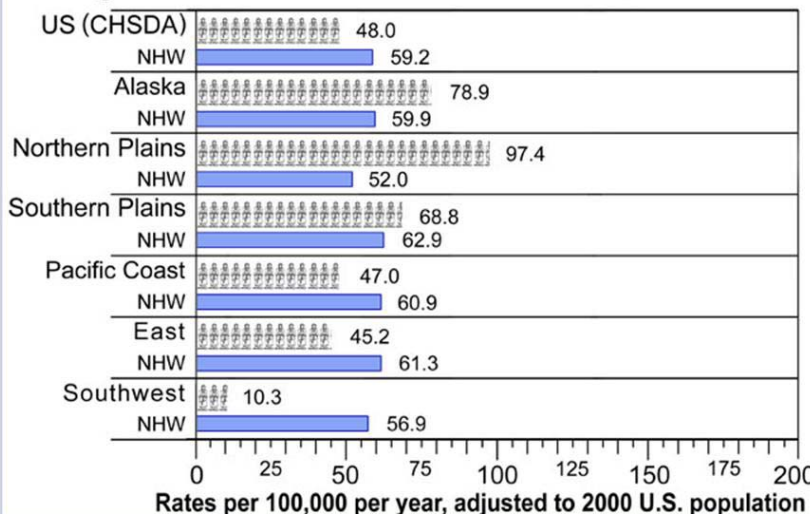
What are examples of Traditional Uses of Tobacco?

Tobacco was:

- 🍪 Linked to fertility of the land
 - 🍪 Agricultural ceremonies were done to bless the harvest
- 🍪 Used to bind agreements between tribes

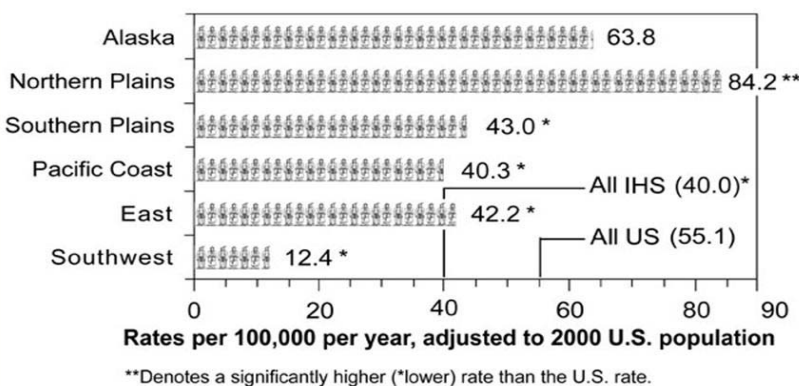


Lung Cancer Incidence Rates - Females, 1999-2004



Espey, David K; Wo, Xiao-Chen; Swan Judith; Wiggins, Charles; Jim, Melissa A.; Ward, Elizabeth; Howe, Holly L.; Ries, Lynn A.G.; Miller, Barry A.; Jemal, Ahmedin; Ahmed, Faruque; Cobb, Nathaniel; Kaur, Judith S.; and Edwards, Brenda K. Annual Report to the Nation on the Status of Cancer, 1975-2004, Featuring Cancer in American Indians and Alaska Natives. Cancer [American Cancer Society]: 2007 [11-15-07]; Volume 110: No. 10. GRAPH MODIFIED BY Rick Clark, Native American Cancer Research

Lung Cancer Mortality Rates Both Sexes, 1999-2003



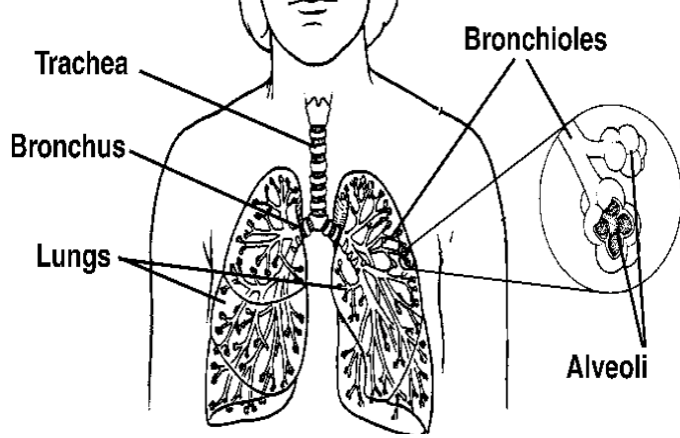
**Denotes a significantly higher (*lower) rate than the U.S. rate.

- 🍪 Used as an offering to a traditional healer for prayers or to elders to share their wisdom
- 🍪 Used as medicine:
 - 🍪 On open wounds to numb the pain
 - 🍪 To ward off pests (mosquitoes)
 - 🍪 Paste for infant's gums during teething
 - 🍪 For chills or fevers
 - 🍪 For toothaches or earaches
 - 🍪 For childbirth pains
 - 🍪 To treat intestinal upset
 - 🍪 For headaches

Haverkamp D, Espey D, Paisano R, Cobb N. *Cancer Mortality Among American Indians and Alaska Natives: Regional Differences, 1999-2003*. Indian Health Service, Rockville, MD, February 2008. GRAPHS MODIFIED BY: Rick Clark, Native American Cancer Research (note horizontal grid)

Anatomy of the Lungs

- 📖 The body has 2 lungs
- 📖 There are a total of 5 lobes
 - ⊕ Right lung = 3 lobes
 - ⊕ Left lung = 2 lobes (need room for the heart)
 - ⊕ Most lung cancer starts in the bronchi



<http://www.cancer.org/Cancer/LungCancer-Non-SmallCell/OverviewGuide/lung-cancer--non-small-cell--overview-non-small-cell-lung-cancer>

Lung Cancer Screening

- 📖 At present there are no recommended screening tests for lung cancer
- 📖 Tests commonly used to look for lung cancer include:
 - ⊕ Chest X-ray
 - ⊕ Spiral CT of the chest (looks at all parts of the lung from a variety of directions)
 - ⊕ Lung cytology (examines your sputum that you cough up)
 - ⊕ Saliva test (can identify early signs of lung cancer and must be treated right away)
- 📖 New tests to find very small tumors that are more likely to be curable are being developed
- 📖 New tests are trying to find changes in your lungs before they become cancer so that cancer can be prevented

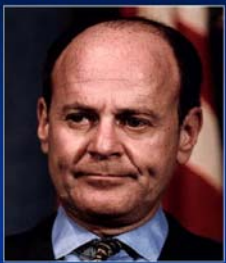


Jeannie Harris Morris [Mohawk]

I have lung cancer. ... I'm a very healthy woman except for that one flaw.

Well, I was a heavy smoker. They blame smoke.

What the tobacco companies know



"Studies of clinical data tend to confirm the relationship between heavy and prolonged tobacco smoking and incidence of cancer of the lung."

(internal memo, RJ Reynolds, 1953)

Steven Gladstone
Chairman and CEO of
RJR

<http://www.GetRealColorado.com>

Uranium Mining and Lung Cancer

- 📖 Natives who were exposed to uranium while working in mines developed lung cancer
- 📖 The family members who did the laundry for the uranium mine workers may also develop lung cancer (inhaled the uranium particles)

Prevention (No Tobacco Exposure) is best.

Finding the cancer while in early development is 2nd best.

- 📖 If lung cancer is found when it is very small and has not spread, it may be curable
- 📖 Unfortunately, only a small proportion of lung cancer is found in this early stage of growth

RJ Reynolds 1954 Public Statement

- 📖 "There still isn't a single shred of substantial evidence to link cigarette smoking and lung cancer directly."

What are protective behaviors to reduce the risk of lung cancer?

- 📖 Don't habitually use manufactured tobacco
- 📖 Avoid exposure to secondhand smoke
- 📖 Reduce exposure to contaminants and chemicals (asbestos, radon)
- 📖 Eat a healthy diet
- 📖 Get daily physical activity



The “shield” of health protecting against Lung cancer may include daily physical activity, healthy, low fat, diet limited or no alcohol, and so on

Risks that “damage” the shield of health include:

1. Using manufactured tobacco habitually (most important risk factor) [80% all lung cancers]
 - a. Number of cigarettes smoked
 - b. Age when smoking began (younger age is more of a risk than someone who started smoking when they are in their 30s)
 - c. Duration of smoking (the more number of years smoked is more of a risk than someone who smoked for a few years)
2. Being exposed to secondhand smoke [5-7% of all lung cancer]
3. Being exposed to chemicals or pollutants [3-5% of all lung cancer]
 - a. Asbestos
 - b. Radon
 - c. Uranium
 - d. Beryllium
 - e. Air pollution (diesel, tar, nickel, chromium)

What “causes” Lung cancer?

- 📖 “Cause” means there is a direct link between the behavior or “factor” eventually resulting in cancer (like habitual use of manufactured tobacco causing lung problems)
 - 🕒 The “cause” is unknown
- 📖 “Risk Factor(s)” usually refers to behaviors / exposures to something that increases your chances of getting cancer (see the shield of health / risks)

What does the shield below tell you about this man's cancer risks?



The shield of health / risks



The holes mean the man has risks for lung cancer

Partially supported by “Native Navigators and the Cancer Continuum (NNACC) [PI: Burhansstipanov, R24MD002811]

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<http://www.NatAmCancer.org>



Partially supported by Mayo Clinic's Spirit of Eagles Community Network Programs [PI: Kaur: NCI U01 CA 114609]