Tobacco and Cancer
TRADITIONAL ROLE OF TOBACCO

Tobacco has long played a significant role in the American Indian culture. Historically, tobacco was used in medicinal and healing rituals, in ceremonial or religious practices, and as an instructional or educational device. Tobacco was seen as a gift of the earth.

Source: Hodge et al., 1995; (Seig, 1971; Paper, 1989).
American Indians and Alaska Natives have the highest rate of commercial tobacco use (32.4% ) of any racial/ethnic group in the United States.
## Smoking Prevalence Among U.S. Adult Ethnic/Racial Groups

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>2006</th>
<th>2013</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American or Black</td>
<td>21.5</td>
<td>26.7</td>
<td>17.3</td>
</tr>
<tr>
<td><strong>American Indian/Alaska Native</strong></td>
<td>32.0</td>
<td>37.5</td>
<td>26.8</td>
</tr>
<tr>
<td>Asian American</td>
<td>13.3</td>
<td>20.6</td>
<td>6.1</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>16.2</td>
<td>21.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>White/Non-Hispanic</td>
<td>21.9</td>
<td>24.0</td>
<td>20.0</td>
</tr>
</tbody>
</table>

(CDC, 2006)
Cigarette Smoking Among Adults by Race - 2006

Source: CDC. MMWR 56(44); 1157-1161. National Health Survey, U.S. 2006
Cigarette Smoking* Trends: Adults, 1983–2002

Title

- American Indian/Alaska Native
- African American
- Hispanic/Latino
- White
- Asian/Pacific Islander

Years


Percent

Source: National Health Interview Surveys, 1983-2002, selected years, aggregate data

* Smoking on 1 or more of the previous 30 days.

HP 2010 Goal (12%)
Smokeless Tobacco Use

Preventable Causes of Death, United States 2004

In The United States, 2004

(Mokdad et al., 2004)
438,000 U.S. Deaths Attributable Each Year to Cigarette Smoking*

*Average annual number of deaths, 1997--2001

Lung Cancer

- Most originate in bronchi
- Can be metastatic from other sites
- Spread rapidly through spongy lung tissue
Lung Cancer

- Incidence (M/F): 54/40 per 100,000
- Mortality (M/F): 50/34 per 100,000
- 5-year survival from 1% to 50% (avg 15%)
  - Depending on stage and type

- More people die from lung cancer than breast, colon, and prostate cancers combined.
AI/AN and NHW incidence rates, lung cancer, both sexes, by region, 1999–2004

Rate per 100,000

Region

- N. Plains
- Alaska
- S. Plains
- P. Coast
- East
- Southwest
- US

AI/AN

NHW

Percent

<table>
<thead>
<tr>
<th>Region</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Plains</td>
<td>44.1</td>
</tr>
<tr>
<td>Alaska</td>
<td>39.0</td>
</tr>
<tr>
<td>Southern Plains</td>
<td>31.9</td>
</tr>
<tr>
<td>Pacific Coast</td>
<td>30.9</td>
</tr>
<tr>
<td>Southwest</td>
<td>21.2</td>
</tr>
<tr>
<td>Overall</td>
<td>32.2</td>
</tr>
</tbody>
</table>


HP 2010 Goal (12%)
438,000 U.S. Deaths Attributable Each Year to Cigarette Smoking*

*Average annual number of deaths, 1997--2001

What are these “other” cancers?

2. Oral cavity
3. Pharynx
4. Larynx
5. Esophagus
6. Bladder

• Stomach
• Cervix
• Kidney
• Pancreas
• Acute myeloid leukemia
• (Colon)
### Five Leading Cancers 1984-1999

#### Males

<table>
<thead>
<tr>
<th>Alaska Natives</th>
<th>US Whites</th>
<th>Southwest Indians</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lung/Bronchus</td>
<td>1. Prostate</td>
<td>1. Prostate</td>
</tr>
<tr>
<td>2. Colon/Rectum</td>
<td>2. Lung/Bronchus</td>
<td>2. Colon/Rectum</td>
</tr>
</tbody>
</table>

---

**Note**: This data is from the Centers for Disease Control and Prevention (CDC) report.
What else can cause lung

- Air pollution (particulates and chemicals)
- Radon gas, other radiation exposure
- Asbestos
- Arsenic
- Other chemicals:
  - Uranium, beryllium, vinyl chloride, coal dust, nickel chromate, mustard gas, chloromethyl ether, gasoline, diesel exhaust
Causes of Cancer

• Most lung cancer (85%) is caused by smoking, either direct or second-hand.
• Individual risk is higher with more exposure.
• Tobacco use is a major contributor to many other cancers.
• Other exposures are important, but their contribution is small compared to smoking.
Knowledge is only part of the

• Most clients know that tobacco use is bad for their health
• More than 70% say they want to quit.
• More than 50% have made at least one serious attempt to quit.
The problem is:

- Nicotine is powerfully addictive.
- Tobacco users often do not know how to quit.
- WE NEED TO HELP THEM!