

COMMERCIAL TOBACCO AND ASTHMA AN UNHEALTHY RELATIONSHIP

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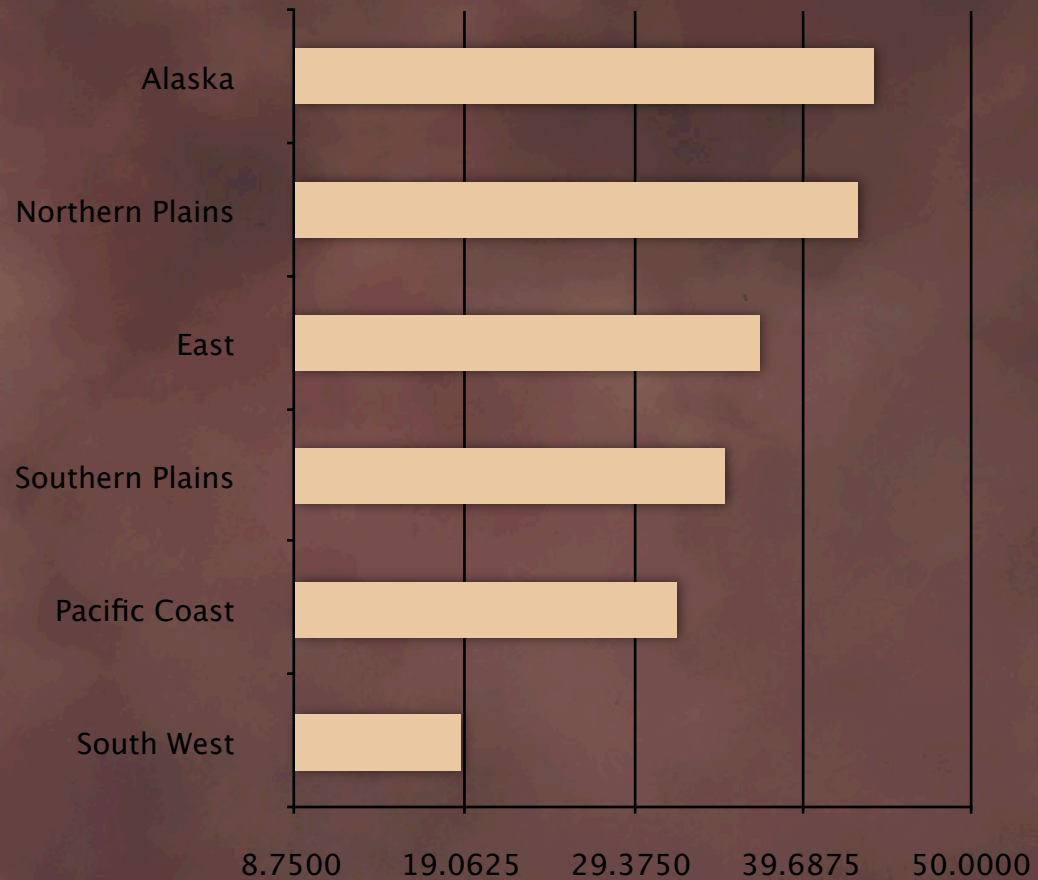
Northern Plains Asthma Prevention and
Management Campaign

www.sacredbreath.org



REGIONAL DIFFERENCES IN ADULT AMERICAN INDIAN SMOKING

Smoking Rates by Region



All Other Races - 20.8%



CONSEQUENCES OF COMMERCIAL TOBACCO ABUSE

- ✿ Asthma
- ✿ COPD – Chronic Obstructive Pulmonary Disease
- ✿ Diabetes – Including peripheral vascular disease
- ✿ Cancer
- ✿ Cardiovascular Disease

Cigarette smoking and exposure to secondhand smoke causes 443,000—or 1 in 5 deaths. Smoking-caused diseases result in \$96 billion in healthcare costs annually. This is preventable!



ENVIRONMENTAL TOBACCO SMOKE

- ✿ Also known as second hand smoke or passive smoke
- ✿ Third hand smoke
- ✿ Sidestream – the smoke that escapes from a tip of a cigarette
- ✿ Mainstream smoke – produced when air enters a lit cigarette and is exhaled by the person who smokes
- ✿ Chemical compounds – escape through the cigarette wrapper



DANGERS OF ENVIRONMENTAL TOBACCO SMOKE

- ☞ Smoke-filled rooms can have up to 6 times the air pollution as a busy highway
- ☞ ETS will stay in an enclosed environment for approximately 2 weeks before the air is officially clean
- ☞ One nonsmoker dies of secondhand smoke for every eight smokers.



DANGERS OF ENVIRONMENTAL TOBACCO SMOKE COMPARED TO MAINSTREAM SMOKE

- ❖ 2 to 3 times the amount of **Nicotine**
- ❖ 3 to 5 times the amount of **Carbon Monoxide**
- ❖ 8 to 11 times the amount of **Carbon Dioxide**
- ❖ 5 to 10 times the amount of **Benzene***
- ❖ 13 to 30 times the amount of **Nickel***

* Known Carcinogens



IMPACT ON OUR CHILDREN

- ❖ 60% of children aged 3–11 years old are exposed to ETS
- ❖ By age five, each of these children will have inhaled the equivalent of 102 packs of cigarettes
- ❖ Reduced lung function – lungs are still developing
- ❖ Developing and exacerbating asthma



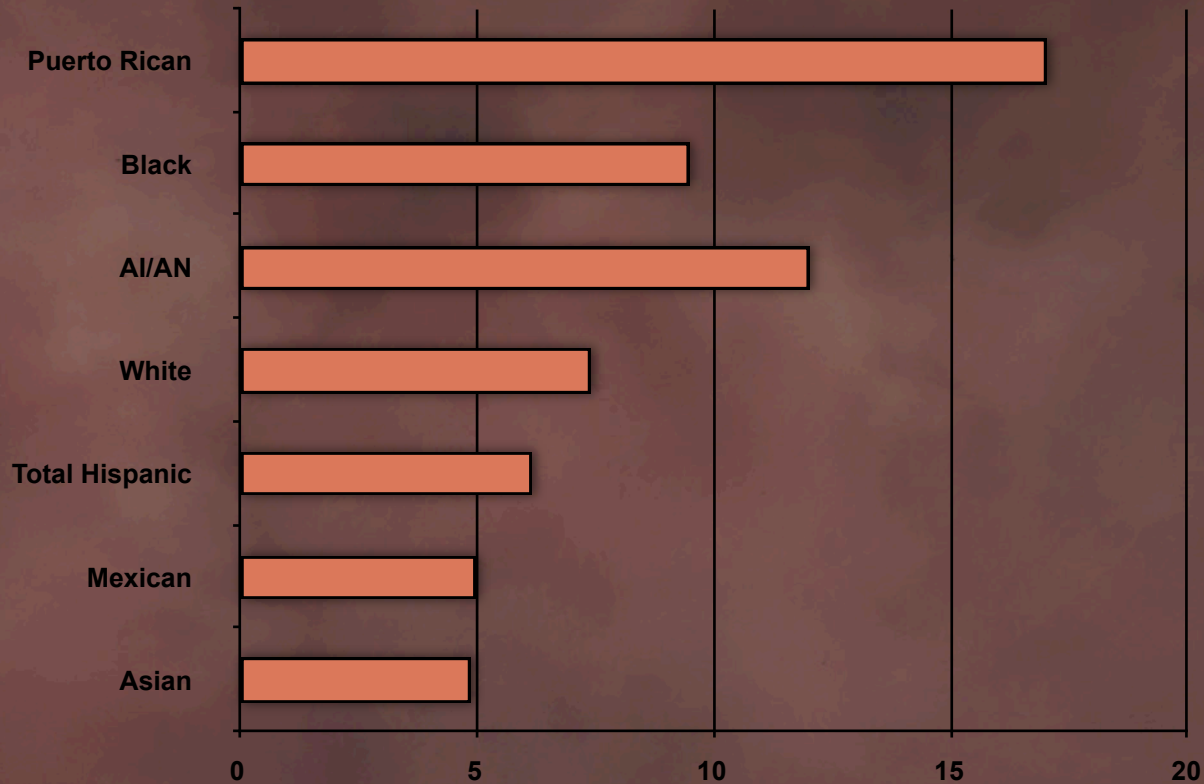
IMPACT ON OUR CHILDREN

- ✿ Infections of lower respiratory tract
- ✿ Increases risk of developing coughs and colds
- ✿ Removal of tonsils and adenoid glands
- ✿ Increased ear infections
- ✿ SIDS
- ✿ Dental caries






Asthma Prevalence

Current asthma prevalence in the United States, 2005



American Indian/Alaska Native Data

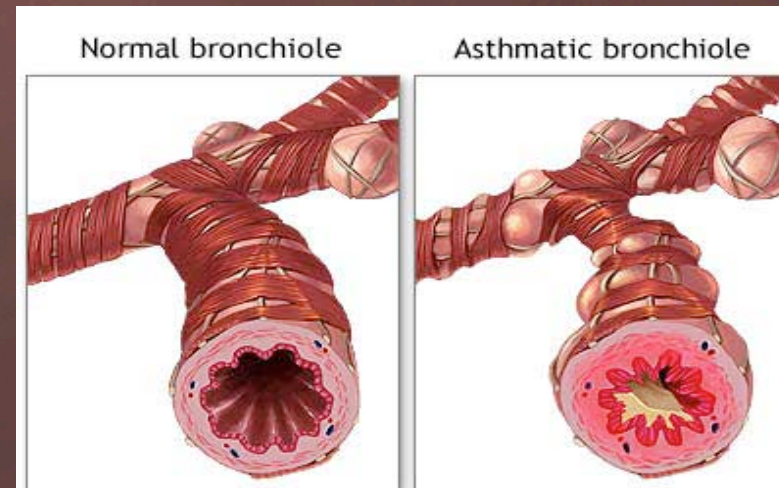
-  Individual studies and state-based surveys indicate AI/AN may have a 33% higher prevalence than non-native people.
-  Based on a 2002 survey, 11.6 percent of AI/AN said they suffered from asthma. This was significantly higher than the national average of 7.5 percent, and much higher than several other racial or ethnic groups.
-  Overall, lack of sufficient tribal asthma data and the tendency to “lump” race/ethnicity-specific data makes the determination of prevention and treatment needs complicated and the disparities difficult to measure.



What is Asthma?

- ✿ The bands of muscle that surround the airways tighten and make the airways narrow. This tightening is called bronchospasm.
- ✿ The lining of the airways becomes swollen or inflamed.
- ✿ The cells that line the airways produce more mucus, which is thicker than normal.

Normal
Airway
versus
Asthmatic



Symptoms of Asthma

- 🥁 Constant/frequent cough, especially at night
- 🥁 Difficulty breathing/shortness of breath
- 🥁 Wheezing—a high pitched noise when breathing
- 🥁 Tight chest/chest pain



Triggers = Irritants that can produce asthma symptoms

- 🦋 Tobacco Smoke/Wood Smoke
- 🦋 Allergens – molds, pollens / grass
- 🦋 Strong odors (perfume, air fresheners, cleaning chemicals, etc.)
- 🦋 Emotional Distress
- 🦋 Cold (or very hot) air
- 🦋 Infections (colds, viruses, flu)
- 🦋 Exercise (common in children)



THE LINK BETWEEN COMMERCIAL TOBACCO SMOKE AND ASTHMA

- ❖ The airways in a person with asthma are very sensitive and can react to many things, or "triggers." Tobacco smoke is one of the most powerful asthma triggers
- ❖ When a person inhales tobacco smoke, irritating substances settle in the moist lining of the airways and can set off asthma episodes. Often, people with asthma who smoke keep their lungs in a constant state of poor asthma control and have ongoing asthma symptoms



THE LINK BETWEEN COMMERCIAL TOBACCO SMOKE AND ASTHMA

- ❖ Tobacco smoke also damages tiny hair-like projections in the airways called "cilia." Normally, cilia sweep dust and mucus out of the airways.
- ❖ Cigarette smoke also causes the lungs to make more mucus than normal. As a result, when cilia don't work, mucus and other irritating substances build up in the airways
- ❖ Smoking increases the risk of asthma attack and can permanently damage your airways. There is no cure for that!



STRATEGIES TO ELIMINATE COMMERCIAL TOBACCO ABUSE

Monitor tobacco use and prevention policies

Protect people from tobacco smoke

Offer help to quit tobacco use

Warn people about the dangers of tobacco

Enforce bans on tobacco advertising, promotion, and sponsorship

Raise state cigarette taxes on tobacco



Centers for Disease Control and Prevention
Tobacco Control State Highlights 2010



TYPES OF ASTHMA MEDICATIONS

1) **Bronchodilator Medication**

“Quick Relief Medication” or “Rescue Medication”

General Use: Controls acute symptoms and relaxes smooth muscle around the airway.

2) **Anti-inflammatory Medication**

“Control Medication” or “Preventive Medication”

General Use: Prevent asthma symptoms before they start; decrease mucus production.

These types of medicines are taken regularly, not when symptoms start.



ASTHMA ACTION PLAN

- ✿ **VERY IMPORTANT** to maintain asthma action plan
- ✿ Monitor lung function with the use of a peak flow meter



QUESTIONS OR COMMENTS?

Recommended Websites:

American Academy of Allergy, Asthma, and Immunology

<http://www.aaaai.org/>

National Institutes of Health

<http://www.nih.gov/>

National Heart, Lung, and Blood Institute

<http://www.nhlbi.nih.gov/>

American Academy of Pediatrics

<http://www.aap.org/>

National Center for Chronic Disease Prevention, Centers
for Disease Control and Prevention (CDC)

<http://www.cdc.gov/>





Wohpila Tanka!

