Tobacco is a green, leafy plant that is grown in warm climates. After it is picked, it is dried, ground up, and used in different ways. The drug can be combined with other chemicals and used in three forms including:

- Cigarettes or Cigars to smoke
- Commercial Chew or Iqmik to chew
- Powdered tobacco to sniff

This issue of NEAM News will illustrate the dangers of tobacco use and will discuss some recent research of tobacco use in the Bristol Bay region. The research cited is from the Nicotine Exposure and Metabolism study (NEAM), which was conducted between 2004 and 2010. The research project asked Alaska Native people in the area about their interaction with tobacco and how they felt about the drug. The study also measured amounts of nicotine and carcinogens (cancer causing chemicals) in adult bodies of Alaska Native people who use or do not use different types of tobacco. If you would like to learn more about the research project please visit www.anthc.org or www.bbahc.org.

41% of NEAM participants said they tried tobacco when they were age 11 or younger. Read more on Page 7.

11% of adults in the Bristol Bay region currently use spit tobacco.

According to the CDC’s Behavioral Risk Factor Surveillance System (BRFSS), 2007.

48% of adults in the Bristol Bay region currently smoke.


Is Spit Safe?
Check out page 3 for more information about Commercial Chew and Iqmik.

Tobacco is found in a variety of products including cigarettes, cigars, and spit tobacco.
Younger adults (age 18-24) are more likely to smoke than older adults (age 35+).

Carcinogen: the name of any substance or agent that is known to cause cancer.

According to the Centers for Disease Control and Prevention, the negative health effects from smoking account for 1 in every 5 deaths each year in the United States.

A 2007 statewide survey found that 32% of Alaska Native High School students use cigarettes regularly.

163 of the 400 NEAM participants were current, regular cigarette users, but 27% of them were seriously considering quitting within 30 days of answering the questionnaire.
Is “Spit” Safe?

No! This form of tobacco use is not a safe alternative to smoking cigarettes. There are 28 known carcinogens in Commercial Chewing Tobacco and Snuff. Nicotine, the drug found in tobacco, is addictive. Tobacco use can cause oral problems, cancer, increased risk of death due to heart disease, or other health problems. People who use spit tobacco have a much greater risk of oral cancer.

Iqmik is usually made by mixing fire-cured tobacco leaves with ash (burnt fungus that grows on the bark of trees).

Spit Tobacco Usage Rates Among Alaska Native People by Region 2005-2007

<table>
<thead>
<tr>
<th>Region</th>
<th>Usage Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Alaska Natives:</td>
<td>11%</td>
</tr>
<tr>
<td>Alaska Non-Natives:</td>
<td>4%</td>
</tr>
</tbody>
</table>

Spit tobacco use is a problem statewide; if you or someone you know want to quit using tobacco and needs help please call the Alaska Quit Hotline: 1-800-QUIT-NOW or visit www.bbahc.org/tobacco.html

How Spit Tobacco is Used

Commercial Chew and Iqmik are generally used by placing a piece of the product between the cheek and lower lip. It is either chewed or held in place and saliva is spit or swallowed. Some dried tobacco is powdered and sniffed through the nose.

The fungus phellinus ignarius used to make Iqmik.

Data Source: Alaska BRFSS
According to the Americans Non Smokers Rights Foundation, every 10% price increase of cigarettes results in a 4% decrease in number of adult cigarette smokers and a 7% decrease in number of youth who smoke. The current tax on 1 pack of cigarettes in Alaska is $2.00; to see other state’s tax rates visit www.tobaccofreekids.org. Tobacco products in rural Alaska are more expensive than other cities due to shipping rates and stocking fees. The average price for 1 pack of cigarettes in the United States is $5.29 (including sales tax). Higher taxes help reduce tobacco use, especially among youth.

Since 2007 Alaska’s state tax on 1 pack of cigarettes is $2.00

**CHEMICALS IN TOBACCO PRODUCTS**

<table>
<thead>
<tr>
<th>CHEMICALS IN TOBACCO PRODUCTS</th>
<th>NICOTINE</th>
<th>TAR</th>
<th>CARBON MONOXIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A strong poisonous drug in high doses. It is the main ingredient in some insecticides or bug sprays. In its pure form, just one drop on a person's tongue could kill him or her.</td>
<td>The oily material which remains after tobacco passes through the filter. When a smoker inhales, a lot of the tar sticks to and blackens the lungs.</td>
<td>A poisonous gas formed when something is burned. A smoker inhales this gas, which is also found in the exhaust of a car. This gas interferes with our respiratory (breathing) and circulatory (heart, arteries, and veins) systems.</td>
<td></td>
</tr>
</tbody>
</table>
Nicotine is the chemical that makes tobacco addictive or habit forming. Once someone smokes, chews, or sniffs tobacco, nicotine goes into the bloodstream and to the brain, and the body wants more. The nicotine in tobacco makes it a drug. This means that when tobacco is used it changes the brain in some way. Nicotine activates the dopamine chemicals in the brain, which affects the brain’s reward and pleasure centers, and makes the person feel good temporarily. Nicotine is a stimulant, meaning that it makes the person feel like he or she has more energy. It also makes the heart beat faster and raises blood pressure.

What makes tobacco addictive?

When NEAM participants, who had tried to quit using tobacco in the past were asked:

“What were the reasons you started using again?”

41% (105 out of 253) of people said ADDICTION or CRAVING.

Don’t miss Issue 3 of NEAM News for more information on Nicotine!
History of tobacco in Alaska

1778: Tobacco was well known to Alaska Native people, and even requested in most villages for trade.

1741: Tobacco was introduced to Alaska Native people by Russian explorers.

1990’s: Alaska Native tribal leadership recognizes tobacco rates and related cancer rates, and begins to focus on tobacco control.

1998: A tobacco control movement of Clean Indoor Air ordinances began to limit the exposure to secondhand smoke.


2001: Research began on tobacco and nicotine among Alaska Native people.

2004: The Bristol Bay Area Health Corporation Tobacco Cessation Program was created to help people thinking about quitting tobacco.

2004-2011: The Nicotine Exposure and Metabolism Study (NEAM) was conducted to better understand current uses of tobacco in the Bristol Bay region.

Since 2007, over 50% of Alaska communities have Clean Indoor Air ordinances and tobacco free hospitals campuses.

Tobacco has never been grown in Alaska and Alaska Native people do not have a history of using tobacco products in religious or ceremonial ways.
What do all of these types of cancer have in common? They can be caused by tobacco.

Lung Cancer  Esophageal Cancer
Larynx Cancer  Liver Cancer
Nasal Cavity Cancer  Pancreatic Cancer
Oral Cavity Cancer  Bladder Cancer
Leukemia (cancer of the blood or bone marrow)  Cervical Cancer

What in tobacco causes cancer?

There are over 4,000 chemicals in cigarettes, 69 of them are known to be carcinogenic. A carcinogen is something that causes cancer.

Our bodies are made up of thousands of cells. In a healthy person, new cells are made only when the body needs them. In a person with cancer, the abnormal cells grow out of control and destroy normal cells. The abnormal cells keep dividing and forming more abnormal cells. These cells are not healthy. If cells divide when new cells are not needed, a growth (tumor) or hard mass forms. It could be small like a pea or large like a grapefruit. A cancerous growth is called a malignant tumor.

Cancer usually is fatal when it spreads to other parts of the body. Sometimes cancer cells break away from a malignant tumor and find their way into the bloodstream. They travel to another part of the body or organ from where they began. There they start multiplying and dividing and form new cancerous tumors in a process called metastasis. For example, if a woman who has a malignant tumor in her breast does not have it removed while it is small, part of the tumor might break away and go into her bloodstream. From there it may travel to her brain. Cancer can be deadly, even if treated immediately.
During the NEAM study, 379 Alaska Native people from the Bristol Bay region were asked how old they were when they first tried tobacco and what type of tobacco it was. These two graphs show the results.

75% of participants said they were age 14 or younger when they first tried tobacco.

Almost half of the participants said that smoking cigarettes was the first type of tobacco they tried, while 41 percent cited Commercial Chew as their first fix.

The health risks of tobacco use for kids are serious. Like adults, children who use tobacco can become addicted to nicotine and can have a hard time quitting, increasing their risks of cancer, heart health problems, and even premature death. Starting young also makes it more difficult to quit.

Moses Toyukak from Manokotak tells his grandchildren: “Be smart, Don’t start.”

If you know a child or teen who uses tobacco check out TobaccoFreeKids.org for ideas on how to help them quit.
Tobacco Trivia

Word List:
ADDICTION
CANCER
CARCINOGEN
CHEW
CIGARETTE
CONTROL
DRUG
EMPHYSEMA
HEALTH
IQMIK
LEAF
NEAM
NICOTINE
QUIT
RESEARCH
SMOKE
SPIT
TAR
WITHDRAWAL

BBAHC Nicotine Dependence Treatment Program
Phone: 907-842-9547 or 1-800-478-5201
Website: www.bbahc.org/tobacco.html
Have you been thinking about stopping tobacco?
Or have you tried in the past with no success?
Tobacco Cessation Programs may help.

Tobacco Cessation Programs offer:

- **Free** and **confidential** advice on how to stop using
- Information on medications that may help
- Support from a friendly, knowledgable tobacco specialist

For more information on tobacco check out BBAHC’s website:
www.bbahc.org

ALASKA NATIVE TRIBAL HEALTH CONSORTIUM
Nicotine Exposure and Metabolism Study
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