

## Attachment B6: Smokeless Tobacco Facts for Testing

### Health Effects:

- TF0036: Smokeless tobacco can cause cancers of the mouth, esophagus and pancreas.
- TF0038: Smokeless tobacco use can cause gum disease that can lead to tooth loss.
- TF0039: People who use smokeless tobacco often develop white patches in their mouths that can turn cancerous.
- TF0295: If you start using smokeless tobacco when you're a teenager, in ten years you'll have used about as much tobacco as your body weight.
- TF0296: Smokeless tobacco can stain a person's teeth.
- TF0305: Any smokeless tobacco use can be harmful – there is no safe level. People who use smokeless tobacco can experience health consequences at any age.
- TF0307: Smokeless tobacco use can increase the risk of heart disease and stroke.
- TF0308: Smokeless tobacco can cause inflammation at the site where it's placed. It can also contribute to gum disease.
- TF0332: Smokeless tobacco use can cause cavities.
- TF0411: People who use smokeless tobacco can develop red patches in their mouth, which have a high likelihood to turn cancerous.
- TF0417: The white patches in a smokeless tobacco user's mouth can become more severe if he/she continues to use smokeless tobacco.
- TF0418: The white patches in a smokeless tobacco user's mouth may disappear over time if he/she stops using smokeless tobacco.
- TF0036: Dip can cause mouth cancer, which can require jaw removal.

### HPHCs:

- TF0037: People who use smokeless tobacco are exposed to a toxic mix of 4,000 chemicals, including as many as 30 chemicals that are linked to cancer.
- TF0416: The chemicals in smokeless tobacco, including some that can cause cancer, may be absorbed through the linings of the mouth and by swallowing saliva that contains tobacco particles. Then, those carcinogens circulate throughout the body and may cause damage to multiple organs.
- TF0301: People who use smokeless tobacco are exposed to Benzo[a]pyrene. Benzo[a]pyrene is carcinogenic to humans.

## Quantitative Study of Tobacco Facts Designed to Inform Youth Tobacco Prevention Messaging

- TF0297: People who use smokeless tobacco are exposed to chemicals such as:
  - o Acetaldehyde
  - o Arsenic
  - o Benzo[a]pyrene
  - o Cadmium
  - o Nicotine
  - o N-Nitrosonornicotine (NNN)
  - o 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK)
  - o Formaldehyde
  - o Chromium
  - o Nickel
  - o Lead
  - o Chrysene
  - o Ethyl carbamate (urethane)
    - Message variation: People who use dip are exposed to formaldehyde, which is a chemical used to preserve dead bodies.
    - Message variation: People who use dip are exposed to lead, which is a chemical found in old paint.
- TF0298: Smokeless tobacco products contain cancer-causing chemicals such as:
  - o Arsenic
  - o Benzo[a]pyrene
  - o Cadmium
  - o Crotonaldehyde
  - o N-Nitrosonornicotine (NNN)
  - o 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK)
  - o Chromium
  - o Nickel
  - o Chrysene
  - o Ethyl carbamate (urethane)
    - Message variation: People who use dip are exposed to arsenic, which is a chemical found in pesticides.
    - Message variation: People who use dip are exposed to cadmium, which is a chemical found in batteries.
    - Message variation: People who use dip are exposed to chromium, which is a chemical used to make steel.

## Quantitative Study of Tobacco Facts Designed to Inform Youth Tobacco Prevention Messaging

- TF0299: People who use smokeless tobacco are exposed to NNK, which causes cancer in animals and has been linked to an increase in the risk of cancer in humans.
- TF0300: People who use smokeless tobacco are exposed to NNN, which causes cancer in animals and has been linked to an increase in the risk of cancer in humans.
- TF0306: The nicotine content of smokeless tobacco products can vary by product type and brand. People who use smokeless tobacco can get as much or more nicotine than cigarette smokers.

### Addiction:

- TF0205: Smokeless tobacco products can lead to nicotine addiction.
- TF0426: Smokeless tobacco users continue to crave smokeless tobacco despite harmful consequences and tend to switch to products with higher nicotine levels.

### Social Norms:

- TF0427: Interpersonal factors such as family and peer use of smokeless tobacco have a significant impact on the initiation and continued use of smokeless tobacco among youth.
- TF0425: There are a number of factors – like advertising, images of tobacco products in the movies, and tobacco use by family and friends – that increase the risk that teens try tobacco themselves.
- TF0430: The initiation of smokeless tobacco among male youth has been shown to be influenced by their fathers, grandfathers, male cousins, and brothers.
- TF0429: Youth who have a sibling who uses tobacco products and/or smokeless tobacco are more likely to have used smokeless tobacco before.
- TF0428: Youth who perceive friend approval of substance use are more likely to experiment with smokeless tobacco.

### Other:

- TF0287: Some smokeless tobacco products can contain fungi such as yeast and mold, as well as bacteria.
- TF0385: Every year, more than 2,300 people in the U.S. are diagnosed with oral, esophageal, and pancreatic cancer because of smokeless tobacco use. For just oral cancer, this number is more than 1,600 people.