Smokeless tobacco is defined as tobacco that is consumed without combustion at the time of use. Unlike smoked tobacco, which is burned or heated and then inhaled, smokeless tobacco is used orally (chewed, sucked, dipped, held in the mouth) or nasally. This results in absorption of nicotine and other chemicals across mucus membranes.

**Worldwide Use**

- An estimated 300 million people across about 70 low-, middle-, and high-income countries use smokeless tobacco.
- Smokeless tobacco use varies significantly across individual countries and regions, between youth and adults, and between males and females.
- The majority of adult smokeless tobacco users (89%, or approximately 268 million people) live in low- and middle-income countries (LMICs) in South-East Asia. Three countries alone (India, Bangladesh and Myanmar) host 259 million users (86% of the global total).
- Among adults, males generally have higher rates of smokeless tobacco use than females. However, use among women is similar to, or greater than, use among men in some countries, such as Bangladesh, Thailand, Cambodia, Malaysia, Vietnam, South Africa, Mauritania, Sierra Leone, and Barbados.
- Among youth (aged 13–15), boys generally have a higher rate of smokeless tobacco use than girls.

**Product Ingredients**

Worldwide, smokeless tobacco products range in complexity from simple cured tobacco to elaborate products with numerous chemical ingredients. Consequently, these products can vary greatly in composition and, in some cases, contain extremely high levels of total nicotine, free nicotine, and carcinogens (more than 30 identified). Chemicals and other ingredients in smokeless tobacco products, including non-tobacco plant material, can affect the attractiveness, addictiveness, and toxicity of the products. Common ingredients in many smokeless tobacco products include:

- additives such as flavoring agents, fruit juices, sweeteners, salt, humectants, and alkaline agents; and
- non-tobacco plant material such as areca nut, spices, betel leaf, catechu and non-tobacco condiments (e.g., supari or pan masala).

**Modes of Use**

The mode of smokeless tobacco use can vary based on geographic location, ingredient availability, cultural/societal norms, and personal preferences. Smokeless tobacco products can be consumed orally or inhaled through the nose.

**ORAL**

- **Chewing** - Products contain tobacco leaves, other leaves (e.g., betel leaf), nuts (e.g., areca nut), other condiments.
- **Sucking** - Products contain moist powdered tobacco with alkaline agents (e.g., snus, khaini, lozenges).

**NASAL**

- **Applying** - Products are in a powdered or pasted form (e.g., mishri, bajjar, gudakhu, creamy snuff).
- **Gargling** - Products mix tobacco with water (e.g., tuibur).

- **Inhalation** - Products are in an extremely fine dry powder form (e.g., nasal snuff).
Health Consequences

The extent of health risks from tobacco use varies by region due, in part, to differing levels of harmful constituents and ways in which smokeless tobacco products are used. Because of these widely varying characteristics and use patterns, smokeless tobacco products differ across products and regions in their abuse liability, toxicity, carcinogenicity, and impact on health.

• Strong scientific evidence documents that smokeless tobacco products cause: cancer of the oral cavity, esophagus, and pancreas; precancerous oral lesions; reproductive and developmental toxicity (including stillbirth, preterm birth, and low birth weight); and addiction.

• A substantial body of evidence from the United States, Sweden, and Asia indicates that smokeless tobacco use is associated with an increased risk of fatal ischemic heart disease and stroke.

• Heavy use of Swedish snus appears to be associated with an increased risk of developing type 2 diabetes.

• Nasal use of snuff has been associated with edema of the mucosa and chronic rhinitis.

Modes of Manufacture

Smokeless tobacco can be broadly divided into pre-made and custom-made products.

<table>
<thead>
<tr>
<th></th>
<th>PRE-MADE</th>
<th>CUSTOM-MADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufactured</td>
<td>Cottage Industry</td>
<td>Vendor/Individual</td>
</tr>
<tr>
<td>• Made in advanced for sale</td>
<td>• Made in advanced for sale</td>
<td>• Made by a vendor or individual</td>
</tr>
<tr>
<td>• Made in a mechanized factory</td>
<td>• Usually handmade by workers in small retail environments (e.g., market stall, small shops)</td>
<td>• Involves mixing two or more components together by hand to form a final product that meets the preferences of the user</td>
</tr>
<tr>
<td>• Sealed in labeled commercial packaging</td>
<td>• Often sold in noncommercial packaging</td>
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</tbody>
</table>

Examples include: Chewing tobacco, creamy snuff, dissolvables, dry snuff, rape, most Western products, gutka, zarda

Examples include: Dohra, gutka, mainpuri, betel quid, toombak, gudakhu, gul, tuibur, snuff, naswar

Examples include: Betel quid, mawa, gudahku, khaini

KEY MESSAGES

• Over 300 million people worldwide use some form of smokeless tobacco. Smokeless tobacco products and use vary widely across the world.

• Smokeless tobacco contains nicotine and many cancer-causing substances.

• Smokeless tobacco causes serious health harms, including cancer, reproductive and developmental toxicity (including stillbirth, preterm birth, and low birth weight), and addiction.

• The WHO Framework Convention on Tobacco Control includes smokeless tobacco products in its definition of tobacco products and, as such, obligates Parties to protect health by acting to prevent and reduce the use of smokeless tobacco.

REFERENCE