Tobacco: deadly in any form or disguise



# Tobacco products of today

All pictures were taken from: Wikipedia Encyclopedia and CDC Atlanta

### Rolls of tobacco which are smoked

# Cigarettes

- A cigarette is a small paper-wrapped cylinder of cured and shredded or cut tobacco leaves, rolled into a paper tube. Ingredients in the final cigarette generally include not only tobacco, but many other products such as, residual pesticides, herbicides, fertilizer, heavy metals, arsenic, cyanide and other toxins.
- Tobacco smoke contains more than 4000 chemicals, many of which are toxic and carcinogenic.
- © Cigarettes can be found worldwide and are among the most deadly and addictive products ever produced by mankind. When used as intended by their manufacturers, they kill approximately one half of their users.
- Despite decades of advertised innovation, extravagant claims, allusions to reduced risk and healthy imagery by the tobacco industry, there is little evidence that smoking filtered cigarettes, "lights and milds", "low tar" or other variants reduces the health risks of smoking cigarettes.

# "Organic", "natural" and "additive free" cigarettes

The terms "organic", "natural" and "additive free", when applied to cigarettes, do not have the same meaning as for foods, since the most deadly ingredient is the tobacco itself and the by-products generated when tobacco burns.

### Roll-your-own (RYO) cigarettes

- Materials sold for roll-your-own cigarettes are often advertised with claims that imply they are healthier, or at least less harmful, than the materials used in commercial cigarette production.
- There is no data confirming that

- this type of cigarette is less toxic than commercially manufactured cigarettes.
- Some studies suggest that they may lead to higher levels of tar exposure on a cigarette-bycigarette basis.

### Bidis and kreteks

They are smaller and often handmade cigarettes, mainly used in the South East Asian and Middle Eastern regions.



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They draw heavily on regional preferences for spices and herbs, using tobacco as a major, but not necessarily the main, ingredient.

#### **Bidis**

- Bidis typically contain a few hundred milligrams of tobacco wrapped in a tendu or temburni leaf.
- Exported bidis vary widely in their incorporation of spices and flavourings.
- They are most commonly used in the South East Asian countries however they are increasingly exported as exotic and less harmful alternatives to conventional cigarettes.
- Bidi smoking is linked with oral cancer, an increased risk for cancer of the lung, stomach and oesophagus as well as cardiovascular disease.

#### Kreteks

- Also known as clove cigarettes, they typically contain 40% cloves and 60% tobacco.
- Nicotine and other toxins might vary more widely in kreteks than for commercially manufactured or conventional cigarettes with similar characteristics.





- These cigarettes are the dominant form found in Indonesia, and are now sold in other countries and on the internet. They are becoming more commonly available and used worldwide.
- Available evidence indicates that disease could be very similar to that for conventional cigarettes.

### **Cigars**

- Cigars are rolls of tobacco wrapped in tobacco leaf. Machine-manufactured cigars, as well as some hand-rolled cigars, may be wrapped with paper made from tobacco that is called "reconstituted" or "sheet" tobacco.
- Cigars generally contain several times as much tobacco as cigarettes, but their size is much more variable.
- The use of cigars is widespread around the world.
- Cigars do not even need to be lit to expose users to nicotine and other substances. Merely holding an unlit cigar in the mouth

exposes the user to tobacco and its poisons. Cigar smoking causes cancer of the lung, oesophagus, larynx and oral cavity.

# Other ways to smoke tobacco: pipes and waterpipes

### **Pipes**

- The smoking pipe typically consists of a small bowl where the tobacco is placed and burned to be smoked and a thin tube that ends in a mouthpiece.
- Pipe smoke tends to be more alkaline than cigarette smoke and thus does not need to be directly inhaled to sustain high levels of nicotine addiction.
- The pipe smoker and nonsmokers may be exposed to smoke equivalent to that of several cigarettes.
- Pipe smokers carry a substantially higher risk of diseases including chronic obstructive pulmonary disease, oral head and neck cancer, laryngeal cancer, oesophageal

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cancer and lung cancer. The relative risk for lip and oral cancer associated with pipe smoking is higher than for cigarette smoking.

# Waterpipes (hookahs, bhangs, narghiles, shishas)

Waterpipes are made in a variety of designs in which the smoke of the

substance is passed through water ("bubbled") before inhalation.

- With the introduction of flavoured tobacco, waterpipe usage is increasing dramatically, especially among young people not only in the South East Asia and Middle East regions, where they are already very popular, but globally on college campuses and elsewhere.
- Serious lung disease, cancer and other adverse health effects have been documented and linked with waterpipe smoking.
- In addition to tobacco-related diseases, sharing a waterpipe may

increase the risk of transmission of tuberculosis and viruses such as herpes or hepatitis.

# Non-combusted "oral" or "smokeless" tobacco products

- Smokeless tobacco products have been marketed, sometimes aiming particularly at young people to promote initiation of tobacco use.
- They are now marketed more aggressively to cigarette smokers as an alternative in situations in which smoking is not allowed.
- In some regions of the world, the use of oral smokeless tobacco remains the dominant form of tobacco use.
- Oral non-combusted products are highly addictive and can cause cancer of the head, neck, throat and oesophagus, as well as many serious oral and dental conditions.

# Types of smokeless tobacco

Chewing tobacco is shredded like short cut grass, intended to be chewed throughout the day as



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desired. In the South East Asian region, the tobacco is often mixed with various chewable mixtures of herbs, spices, areca nut, betel leaf or paan.

Snuff is chopped into particles like large coffee grounds, moistened and used by holding between gum and cheek.





- Swedish snus is a variant on snuff that is processed differently so that some variants must be kept refrigerated; it is typically more moist.
- Gutkha is a commercially manufactured oral smokeless tobacco in India and South East Asia. The tobacco is mixed with a flavoured and sweetened dry mixture of areca nut, catechu, slaked lime and other condiments. In India, gutkha has attracted the younger generation and women, since it makes it easier for them to chew tobacco without attracting social sanction.

Tobacco use, including smokeless tobacco, and excessive alcohol consumption are prominent risk factors in oral cancer, being estimated to account for about 90% of oral cancers.

# **Tobacco products of tomorrow**

The tobacco industry continues to develop new products, spending huge budgets on research into what are known as "reduced-harm" products, all of which are still untested in their long-term health effects.

Any claims of harm reduction without solid epidemiological data should be viewed with suspicion.

Caution is needed with new products. All existing and new products put on to the market must be regulated.



