

# HEATED TOBACCO PRODUCTS (HTPS) INFORMATION SHEET

MAY 2018

WHO/NMH/PND/17.6

## What is a heated tobacco product?

Heated tobacco products are tobacco products that produce aerosols containing nicotine and other chemicals, which are inhaled by users, through the mouth. They contain the highly addictive substance nicotine (contained in the tobacco), which makes HTPs addictive. They also contain non-tobacco additives, and are often flavoured. HTPs mimic the behaviour of smoking conventional cigarettes, and some make use of specifically designed cigarettes to contain the tobacco for heating.

## What are some examples of HTPs?

There are a number of these tobacco products available on several markets. Examples include iQOS from Philip Morris International, Ploom TECH from Japan Tobacco International, Glo from British American Tobacco, and PAX from PAX Labs.

## How do HTPs work?

In order to produce the nicotine-infused vapor, HTPs heat tobacco up to 350°C (lower than 600°C as in conventional cigarettes) using battery-powered heating-systems. The heating-system enclosed in a device, can be an external heat source to aerosolize nicotine from specially designed cigarettes (e.g. iQOS and Glo), or a heated sealed chamber to aerosolize nicotine directly from tobacco leaf (ex. Ploom and Pax).

The heating device requires charging and the user draws on the mouthpiece at intervals to inhale volumes of the aerosol through the mouth, which is then taken into the body.

## Where are HTPs marketed?

HTPs are marketed or planned to be marketed in close to forty countries as of September 2017\*, and based on the current trend, it is likely that these tobacco products will be introduced in more countries.

## Are HTPs electronic-cigarettes?

No, HTPs are not e-cigarettes. HTPs heat tobacco to generate nicotine. E-cigarettes heat e-liquid, which may or may not contain nicotine and in most cases do not contain tobacco.

## Are HTPs safer than conventional tobacco?

Currently, there is no evidence to demonstrate that HTPs are less harmful than conventional tobacco products. Some tobacco industry-funded studies have claimed that there are significant reductions in the formation of and exposure to harmful and potentially harmful constituents relative to standard cigarettes. However, there is currently no evidence to suggest that reduced exposure to these chemicals translates to reduced risk in humans. Therefore, additional independent studies will be required to substantiate claims of reduced risk/harm.

## Are HTPs safe for second-hand exposure?

Currently, there is also insufficient evidence on the potential effects of second-hand emissions produced by HTPs. Independent studies are needed to assess the risk posed to bystanders exposed to emissions released from HTPs.

## What does WHO recommend?

All forms of tobacco use are harmful, including HTPs. Tobacco is inherently toxic and contains carcinogens even in its natural form. Therefore, HTPs should be subject to policy and regulatory measures applied to all other tobacco products, in line with the WHO Framework Convention on Tobacco Control (WHO FCTC).

## What do we not know?

There is a large knowledge gap, as this generation of HTPs has not been on the market long enough for potential effects to be studied. Conclusions cannot yet be drawn about their ability to assist with quitting smoking (cessation), their potential to attract new youth tobacco users (gateway effect), or the interaction in dual use with other conventional tobacco products and e-cigarettes. Future independent studies should address these effects, as well as the safety and risk of HTPs.

\*Provisional list of countries where HTPs are either marketed or planned to be marketed as of September 2017: Australia, Austria, Belgium, Canada, Colombia, Czechia, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Japan, Kazakhstan, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Serbia, South Africa, Spain, Sweden, Switzerland, Ukraine and the United Kingdom.