

Heated tobacco products: Technical Brief

The draft law № 11090, among other provisions, plans to decrease taxation levels for heated tobacco products (In accordance with the Tax Code of Ukraine, these products are termed "tobacco-containing products for electric heating with an electronically controlled heater", hereinafter referred to as HTP). In the explanatory note to the draft law, the authorities provided the justification based on a claim of the potentially reduced risk of their consumption to human health compared to conventional cigarettes (CC). This Technical Brief from the WHO Country Office in Ukraine provides an overview of the heated tobacco products regarding their taxation and claims of reduced harm.

Regarding the taxation approach for HTPs.

During the recent Conference of Parties (COP10) to the WHO Framework Convention on Tobacco Control (FCTC) held on February 5 – 10, 2024, WHO presented “Comprehensive report on research and evidence on novel and emerging tobacco products, in particular heated tobacco products, in response to paragraphs 2(a)–(d) of decision FCTC/COP8(22)”. WHO informed all the Parties to FCTC, including Ukraine, whose delegation was present at the meeting, about the recommended policy options to address the challenges of tobacco use, specifically in connection with FCTC Article 6. The Report states *that “until more clarity is provided about the harms and relative risks of HTPs and given the relative homogeneity of tobacco inserts used in HTPs, these products should be taxed at the same rate as conventional cigarettes (CCs), in order to achieve parity with the average CC tax rates within a country. In the case of a specific tax, the base should be per unit.”* [1]. Until now, Ukraine has thoroughly followed these recommendations and demonstrated adherence to effective tobacco control policies regardless of the emergency situation. Thus, the proposed decrease of the taxes for HTPs is not aligned with these recommendations, which are grounded in the WHO report. HTPs are tobacco products and were recognised by the COP8 as Tobacco Products. Before this, COP8 adopted a decision that equals HTPs and CC as tobacco products, and thus, all the provisions of the FCTC should be applied to HTPs (including taxation) [3].

Regarding the statement about the potentially reduced health risks of HTPs:

a) **Heated tobacco products** produce aerosols containing nicotine and toxic chemicals when tobacco is heated or when a device containing tobacco is activated. Users inhale these aerosols during a process of sucking or smoking involving a device. HTPs contain nicotine as well as non-tobacco additives and are often flavoured. Nicotine itself is a toxic substance that causes health risks and diseases and impacts negatively affects adolescents’ mental health [2].

b) **The existing evidence is insufficient to support the reduced exposure claims for HTPs.** Although the level of some harmful and potentially harmful constituents (HPHCs) in the emissions of HTPs is lower than in CCs’ smoke, the levels of others have not been reported or are higher [4, 5]. An independent assessment of industry data shows that more than 20 harmful and potentially harmful chemicals are significantly higher than in reference to cigarette smoke [5]. Additionally, these products are highly variable, and some of the toxicants found in the emissions of these products are carcinogens (i.e. they can cause cancer) [6, p.2]. There are unknown or unique toxic effects of HTPs.

c) **All forms of tobacco use are harmful, including HTPs.** Tobacco is inherently toxic and contains carcinogens even in its natural form. There is no reduction in the chronic disease burden among smokers who switch to HTPs, and there is an increased risk of chronic diseases (e.g. respiratory and cardiovascular diseases) in non-smokers who initiate HTP use. The tobacco industry has not been able to demonstrate that HTPs will reduce tobacco-related diseases. HTPs emit small particles that can easily access the lung and potentially damage lung tissue [7]. **There is insufficient evidence to support the claim of less harm relative to CCs,** and additional independent studies are required to substantiate any claims of reduced health harms.

Impact of HTPs on their users' health:

a) The patterns of the product use, topography, and device characteristics can potentially modify the exposures. For example, when the device is not cleaned between consecutive uses of heat sticks, it increases the release of charring and highly toxic formaldehyde cyanohydrin emissions [8].

b) There are emerging indications from studies in vitro and in laboratory animals that **more nicotine may be absorbed from the use of HTPs than cigarettes,** and this may approximate the addiction potential of HTPs to those of cigarettes [8]. This addiction potential is a primary driver of users' exposure to the toxic and carcinogenic constituents presents in tobacco products. **Nicotine is a chemically addictive toxicant that alone contributes to mortality from cardiovascular diseases.** It has been associated with various adverse health outcomes for the developing fetus, including fetal growth restriction, risk of preterm delivery and stillbirth. It may have effects on brain development during adolescence [9]. It is worth highlighting that the uptake of HTPs by non-users of any tobacco product increases their risk of addiction and adverse outcomes such as respiratory, cardiovascular and potentially other diseases.

c) There is **no reduction in the chronic disease burden among smokers who switch to HTPs.** The data indicate no improvement in several pulmonary and cardiovascular indicators and a high prevalence of dual-use (with smoking) in participants in switching studies. Therefore, the uptake of HTPs by smokers may not significantly reduce the prevalence of smoking-associated chronic diseases [10].

d) **Independent studies have shown that the use of HTPs negatively affects lung health.** A study concluded that the use of IQOS was associated with significant pulmonary and immunomodulatory toxicities, with no detectable differences between conventional cigarette smokers and those who switched to IQOS [11].

Finally, it is essential to link this set of arguments to the Eighth Report (2021) of the WHO study group on tobacco product regulation. Among the recommendations to policy-makers and all other interested parties, the Report **suggested prohibiting all manufacturers and associated groups from making claims about reduced harm of heated tobacco products, as compared with other products,** or portraying heated tobacco products as an appropriate approach for cessation of use of any tobacco product and to ban their use in public spaces unless robust independent evidence emerges to support a change in policy [8].

Conclusions:

- HTPs should be taxed at the same rate as conventional cigarettes (CCs).

- There is no evidence to demonstrate that HTPs are less harmful than conventional tobacco products.
- Thus, Parties to FCTC should avoid making claims about the reduced harm of HTPs, as compared with other products.

References:

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