

The Scientific Basis of Tobacco Product Regulation. Report of the WHO Study Group on Tobacco Product Regulation (WHO technical report series, No. 945)

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Summary:

This report presents the conclusions reached and recommendations made by the members of the Study Group at its third meeting, during which it reviewed four background papers specially commissioned for the meeting and which dealt, respectively, with the following four themes. Overall recommendations are summarized in section 6 as follows:

1. Contents and design features of tobacco products: their relationship to dependence potential and consumer appeal

It is recommended that tobacco product contents and designs be evaluated from the perspective of dependence potential and consumer appeal; the significance for public health policies includes maintaining, increasing, and implementing standards for the contents, designs and emissions of tobacco products that relate to dependence potential and consumer appeal

2. Candy-flavoured tobacco products: research needs and regulatory recommendations

The use and marketing of candy-like additives in tobacco products should be restricted.

Tobacco manufacturers should be required to disclose additives, including candy-like additives, in tobacco products by brand and level.

The use of candy-flavoured additives in new tobacco brands should be prohibited. For tobacco companies or brands currently using flavoured additives, limits should be set on any additive that contributes to dependence, initiation, or increase in second-hand smoke exposure, or that discourages cessation.

3. Biomarkers of tobacco exposure and of tobacco smoke-induced health effects

Self-reported smoking status and self-reported daily cigarette consumption remain the recommended methods for quantifying and evaluating trends in tobacco exposures for the general population. However, differences in cigarette design, as well as in variations in individual smokers' patterns of use, limit the ability of self-reported daily consumption of cigarettes to reflect accurately the exposure received by individuals from the use of different tobacco products.

Biomarkers offer the potential to quantify more accurately individual exposure to nicotine and other specific tobacco emissions, and are valuable in situations where increased accuracy in the definition of smoking status or more precise measures of intensities of exposure are needed. Regulatory actions may need to be implemented despite the limitations of scientific knowledge or in the absence of scientific certainty.

4. Setting maximum limits for toxic constituents in cigarette smoke

The question of whether setting maximum limits for some potent smoke toxicants could reduce the toxicant levels produced by cigarette brands within a given market is being examined. It is proposed that, initially, maximum limits should be set for the carcinogenic tobacco-specific nitrosamines NNN (*N*-nitrosonornicotine) and NNK (4-(*N*-nitroso-methylamino)-1-(3-pyridyl)-1-butanone).

Adoption of the proposed maximum limits, banning brands above those limits, and prohibiting claims based on meeting the limit would allow regulation of tobacco emissions and a lowering of the levels of toxicants in the smoke of the remaining brands without misleading the public about the relative risk of smoking different brands.

As the capacity of the tobacco manufacturers to achieve lower levels of toxicants increases, the maximum levels can be progressively lowered to ensure that the toxicant yields of cigarettes are progressively reduced to a minimum.

It is expected that most countries will require that tobacco contents and emissions testing be provided by the tobacco manufacturers, with periodic validation by independent laboratories that have demonstrated competency in the analysis of tobacco constituents, such as those that are members of WHO's Tobacco Laboratory Network (TobLabNet). In order for TobLabNet to succeed in its role as the counterbalance against the industry's tobacco testing and research capabilities, WHO needs to continue to support it.