

## EMISSION AND CONSTITUENT LABELLING



**Article 11.2:** *Each unit packet and package of tobacco products and any outside packaging and labelling of such products shall, in addition to the warnings specified in paragraph 1(b) of this Article, contain information on relevant constituents and emissions of tobacco products as defined by national authorities.*

### WHAT ARE CONSTITUENTS AND EMISSIONS?

Constituents and emissions refer to the substances found in tobacco products and smoke. Cigarette smoke contains approximately 4,000 chemicals, including over 60 carcinogens and toxins, such as formaldehyde, benzene, and hydrogen cyanide.<sup>1</sup> Although there is general agreement that cigarette packages should provide some information on these chemicals, regulators continue to struggle with how to best communicate this information in a feasible and meaningful way to consumers. Regulators have traditionally required manufactures to print the levels of three emissions (tar, nicotine, and carbon monoxide) on the side of packages. This remains the most common practice throughout the world.

### WHAT DO EMISSION NUMBERS MEAN?

Tar, nicotine, and carbon monoxide emission numbers are **misleading**. They represent neither the amount of chemicals present in the cigarette, nor the amounts actually ingested by human smokers. This is because the emission numbers are determined by a machine that “smokes” cigarettes according to a fixed puffing regime. This machine method does not predict the amount of smoke inhaled by individual consumers or account for design elements such as “filter ventilation” – tiny holes poked in the filter that lead to low emission levels under machine smoking, but much higher levels under human smoking. As a result, there is **no association** between the machine-generated emission numbers printed on packages and the health risk of different brands.<sup>2,3</sup>

### HOW DO SMOKERS INTERPRET EMISSION NUMBERS?

The emission numbers printed on packages are the same numbers that tobacco companies have used in misleading advertising that markets “low tar” cigarettes as an alternative to quitting.<sup>2,4</sup> Printing emission numbers on packages reinforces this deceptive marketing campaign and the **false** belief that low tar cigarettes are less hazardous. For example:

- ⊙ 75% of smokers from Australia, Canada, the U.S. and the UK believe that the tar numbers on packs are related to exposure;<sup>5</sup>
- ⊙ Among smokers who believe that some brands are less harmful than others, most believe that the tar and nicotine levels indicate brands that are less harmful;<sup>5</sup>
- ⊙ When shown emission labels on two cigarette brands from the European Union, 92% of smokers recently reported that the 4mg product would deliver less tar than the 10mg product, and 90% reported that they would buy the 4mg product if they were trying to reduce the risks to their health.<sup>6</sup>



Therefore, regulations that require emission numbers to be printed on packages are not only ineffective, but **harmful regulatory practices**. Scientific bodies, including the World Health Organization’s scientific group on tobacco product regulation, have called for the **removal** of emission numbers from packages.<sup>7</sup> There are other machine testing methods, some of which test cigarettes under more intensive conditions and generate higher emission numbers; however, the emissions from these other testing methods do **not** serve as reliable measures of risk or exposure among actual smokers, and should not be printed on packages due to their deceptive potential.<sup>8</sup>

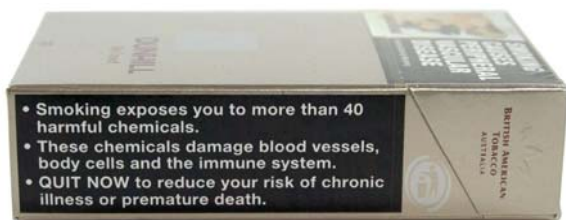
## IF EMISSION NUMBERS ARE REMOVED, WHAT SHOULD REPLACE THEM?

Research demonstrates that **descriptive** emission and constituent information is easier to understand and less likely to create false impressions about the risks of different products than the use of numbers.<sup>6,9,10</sup> Several countries, including Brazil, Venezuela, Australia, and Thailand, have already replaced emission numbers with descriptive information.

Descriptive messages on the side of packages should be rotated and periodically refreshed. Focus group testing can also be used to identify what types of information about constituents and emissions are most effective for communicating with smokers. Using pictures along with descriptions of the chemicals' effects may increase the impact of these messages.



Labelling regulations should also prohibit manufacturers from voluntarily printing constituent and emission numbers on packages. Manufacturers often choose to print tar and nicotine levels on packages in a highly selective and misleading fashion. For example, in the U.S., tar levels were printed on more than 90% of U.S. brands with less than 3mg of tar, compared to fewer than 2% of brands with 8-11mg of tar.<sup>11</sup> Similar practices have occurred in jurisdictions such as Brazil, where regulators have removed the requirement to print numbers, but have not prohibited manufacturers from doing so.



## SUMMARY

- ⊙ There are no differences in health risk between conventional cigarette brands, including “high tar” and “low tar” cigarettes.
- ⊙ Printing tar and nicotine numbers on packages is misleading to smokers and causes harm.
- ⊙ All emission numbers on packages should be removed and replaced with descriptive information.

## REFERENCES

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