

## **Reduced ignition propensity cigarettes – setting a standard for the EU**

(A briefing paper for the EU)

### **The problem**

It is not known how many people across the EU 25 are killed each year as a result of fires caused by cigarettes, but it has been recently conservatively estimated to be at least 1,000<sup>1</sup>. Many more people are injured. The vast majority of fires causing fatalities and injuries are caused by manufactured cigarettes. Victims are often more likely to be from low income households and include non-smokers, smokers, children as well as adults, and fire-fighters. Cigarette fires also cause significant economic harm.

Many of the deaths could be prevented through the introduction of a fire safety standard for cigarettes which would result in cigarettes that were either self-extinguishing, i.e. would go out when not actively puffed, or alter the smouldering characteristics of the cigarette making a fire less likely. Industry documents reveal that tobacco manufacturers had the technology to reduce the ignition propensity of cigarettes some 20 years ago<sup>2</sup> and that the production of such cigarettes would not be significantly more costly or affect their taste.

### **International developments**

In 1987, a US Congress convened expert panel (the Technical Study Group, TSG) unanimously determined that reduced ignition propensity cigarettes were technically feasible<sup>3</sup> and in 1993 the TSG identified two methods for testing ignition propensity of cigarettes<sup>4</sup>.

In January 2000, Philip Morris introduced a reduced ignition propensity cigarette, Merit, (using tiny speed bands on special paper which encouraged it to self-extinguish when not actively puffed) to the market which was acceptable to consumers<sup>5</sup>. In April 2001, a reduced ignition propensity version of the same brand was introduced in New Zealand.

In August 2000, New York State became the first jurisdiction in the world to enact legislation requiring all cigarettes sold there to pass a reduced ignition propensity test by June 2003<sup>6</sup>. The New York Fire Safety Standards for Cigarettes (FSSC) (Part 429 of Title 18 of the Official Compilation of Codes, Rules, and Regulations of the State of New York) became effective and these standards were established by the Office of Fire Prevention and Control (OFPC) with cigarettes being tested in accordance with the American Society of Testing and Materials Standard (ASTM International) E2187-02b<sup>7</sup>. The standard requires a lit cigarette to be placed on 10 layers of standard filter paper in a draft-free environment and then observed to determine whether or not the tobacco column burns through its full length; a brand is in compliance if no more than 25% of the 40 cigarettes tested in a trial exhibit full length burns. This method of testing evolved from methods first developed by the US National Institute for Standards and Technology (NIST) Centre for Fire Research, in particular the Cigarette Extinction Test Method<sup>8 9</sup>.

The Department of Health in Canada, has proposed Regulations which would require all cigarettes manufactured in or imported into Canada as of 1 October 2005 to satisfy a reduced ignition propensity standard (as specified by ASTM E2187-02b)<sup>10</sup>. As in New York, cigarette manufacturers will be given the freedom to choose the manufacturing process or technical design to achieve this standard. Proposed amendments to Canada's Tobacco Reporting Regulations would also require manufacturers and importers to perform annual toxicity testing on cigarette brands and report the results of these to the Department of Health on an annual basis. A baseline survey has been conducted to determine the fire-risk behaviour of smokers with regard to cigarettes prior to the legislation becoming effective and will be repeated once the Regulations have been fully implemented in order to assess behavioural changes. An economic analysis of these regulations is available<sup>11</sup>.

### **Evidence of effectiveness of implementation**

It will not be possible to test whether the New York Act has significantly affected fires until three years have passed after the effective date of implementation of the Act. However, the Harvard School of Public Health and American Legacy Foundation have published a report exploring the implementation of the New York Law<sup>12</sup>. This preliminary report found that the US cigarette manufacturers designed reduced ignition propensity cigarette brands to meet the New York fire safety performance standard and of the brands studied, this appeared to have been achieved through paper banding. These New York brands were less likely to ignite fires than the same brands sold in Massachusetts and California. The majority of smoke toxic compounds did not differ between the New York and Massachusetts brands. Five compounds were slightly higher in the New York brands but there is no evidence that these increases would affect the already highly toxic nature of cigarette smoke. The introduction of the cigarettes had no effect on consumer purchases of cigarettes in New York indicating that they were acceptable to consumers and there was no impact on the cost of the cigarettes.

### **Concerns**

#### *Toxicity of reduced ignition propensity cigarettes*

The TSG indicated that toxicity was unlikely to be a concern of reduced ignition propensity cigarettes and the preliminary evidence from New York would appear to support this<sup>12</sup>. However, it is the responsibility of cigarette manufacturers to ensure that reduced ignition propensity cigarettes are not more toxic than conventional cigarettes and they should be required to provide evidence in support of this. As stated above, the Department of Health in Canada has included a requirement for manufacturers to perform two short term in vitro toxicity assays and report the results on an annual basis. It needs to be noted that this is rather a curious concern given that currently the tobacco industry can launch new brands of cigarettes onto the market without any prior regulatory approval or requirement to ensure that they are less harmful than other brands already on the market.

### *Will changes lead to negligent behaviour?*

This is an argument used by the industry to oppose the introduction of reduced ignition propensity cigarettes. We believe it is not a valid concern. First, fires tend not to be caused by “negligent” behaviour, but rather “uncontrolled” behaviour, such as falling asleep when inebriated or being on drugs, or when people are of older age or are confused. Cigarettes of low ignition propensity protect against such consequences. Secondly, there are many examples in society where safety standards have been imposed on consumer products to protect public health without triggering dangerous or irrational behaviour such as seat belts, head rests, air bags in cars, and if this argument was taken into account each time the authorities acted to impose safety standards on consumer products, nothing would be accomplished. Furthermore, governments already support initiatives to prevent fires caused by cigarettes such as restricting the flammability of furniture without considering whether such safety measures would lead to an increase in the number of fires. Finally, we suggest that the term ‘reduced ignition propensity’ be adopted rather than ‘fire-safe’ or ‘self-extinguishing’ to avoid misperceptions, as in Canada.

### *What about other tobacco products*

Currently it is believed that most fires are started by manufactured cigarettes and it is believed that hand rolled cigarettes and other tobacco products are less of a fire hazard than current manufactured cigarettes. The Department of Health in Canada is carrying out research on other tobacco products and may propose ignition propensity standards for other products at a later date. Any such developments could be incorporated into European regulations at a later date also.

## **Conclusion**

Introducing a standard for reduced ignition propensity cigarettes is a consumer protection measure which is long overdue. There is no reason why citizens in the EU should be exposed to cigarettes having a greater ignition propensity than is necessary. It is incumbent on regulators in Europe to protect the health of their citizens in a similar way to regulators in Canada and New York. We believe that a standard for the ignition propensity of manufactured cigarettes sold in the EU should be introduced as soon as possible.

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## References

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- <sup>5</sup> The Development of Banded Cigarette Paper to Reduce Fabric Ignition Propensity. Bates Number: 20629554842/4849.
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- <sup>8</sup> Ohlemiller TJ, Villa KM, Braun E, et al. Test Methods for Quantifying the Propensity of Cigarettes to Ignite Soft Furnishings. NIST Special Publication 851: U.S. Department of Commerce, Technology Administration, National Institute of Standards and Technology, 1993. Available at: [http://www.bfrl.nist.gov/info/fire\\_safe\\_cig/](http://www.bfrl.nist.gov/info/fire_safe_cig/)
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- <sup>10</sup> See <http://www.hc-sc.gc.ca/hecs-sesc/tobacco/legislation/rip.html>
- <sup>11</sup> See <http://www.hc-sc.gc.ca/hecs-sesc/tobacco/legislation/rip2/index.html>
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