

# Ignition strength of 25 international cigarette brands

Andrew B Seidenberg, Vaughan W Rees, Hillel R Alpert, Richard J O'Connor, Gregory N Connolly

## **Abstract**

**Background** Cigarette-ignited fires are a leading cause of fire death and injury throughout the world and remain a global public health and safety problem. To reduce this harm, a small number of countries now require cigarettes to have reduced ignition propensity (RIP). It is not known if cigarette manufacturers are voluntarily introducing RIP cigarettes in other countries to help save lives.

**Methods** Using the ASTM E2187-04 test method, per cent full length burn (%FLB) was measured for three popular brands from each of seven countries that did not have RIP legislation at the time of purchase. Results were compared with %FLB measurements from four popular US brands purchased in a jurisdiction (Vermont) with an RIP law. SRM 1082 reference cigarette was also tested to assure laboratory quality control.

**Results** All cigarette brands purchased in countries not requiring fire safety standards for cigarettes exceeded 75% FLB. In contrast, none of the cigarette brands from the USA exceeded 10% FLB. The SRM 1082 reference cigarette demonstrated 5% FLB.

**Conclusion** Cigarette ignition propensity can be greatly reduced through legislation that requires cigarette fire safety standards. RIP cigarettes have the potential to significantly decrease the number of fire deaths, injuries and destruction of property caused by cigarette-ignited fires. Appropriate standards should be applied in cigarette markets globally.

## **Recommended Citation:**

Seidenberg AB, Rees VW, Alpert HR, O'Connor RJ, Connolly GN. Ignition strength of 25 international cigarette brands. *Tob Control* 2011 Jan;20(1):77-80.

Link to PDF: <https://tobaccocontrol.bmj.com/content/20/1/77.long>