

# Mainstream smoke emissions of Australian and Canadian cigarettes

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## **Abstract**

We investigated how mainstream smoke emissions vary and interrelate in 15 Australian and 21 Canadian brands, using public emissions disclosures from 2001. These disclosures provided emission data for 40 hazardous agents under both standard and intensive ISO testing conditions. Our analyses focused on “adjusted emissions” (i.e., emissions per milligram of nicotine yield) for 13 selected agents. Adjusted emissions differed significantly by ISO testing condition for 9 of the 13 selected agents. Intensive condition adjusted emissions were strongly negatively correlated for several agent pairs. Country and manufacturer variables were the strongest predictors of intensive condition adjusted emissions for 8 of the 13 selected agents and significant predictors for all of them. Taken together, these results suggest potential for the intent of emission limits to be undermined by risk swapping (in which one specific exposure is reduced within a group at the cost of another’s exposure increasing) and risk shifting (in which a specific exposure is reduced within a group at the cost of that exposure’s increasing within another group).

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