

# Smoke-free legislation linked to drop in adverse health outcomes

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Smoke-free legislation is associated with a reduction in multiple adverse

health outcomes, according to a review published online July 7 in *JAMA Network Open*.

Shamima Akter, Ph.D., from Hitotsubashi University in Tokyo, and colleagues examined the associations between population-level tobacco control policies and [health outcomes](#) in a systematic review of studies. The final analysis included 144 studies; 126 (87.5%) were of high or moderate quality.

The most frequently reported policies were smoke-free legislation, tax or price increases, multicomponent tobacco control programs, and a minimum cigarette purchase age law (126, 14, 12, and one study, respectively). The researchers found that smoke-free legislation was associated with reduced risk of all cardiovascular disease (CVD) events, respiratory system disease (RSD) events, hospitalization due to CVD or RSD, and adverse birth outcomes (odds ratios, 0.90, 0.83, 0.91, and 0.94, respectively). In almost all sensitivity and subgroup analyses, these associations persisted. No clear association of tax or [price increases](#) with [adverse health outcomes](#) was seen in meta-analysis. All eight studies reported significant associations between tax increases and decreases in adverse health events in the narrative synthesis.

"We found that implementation of smoke-free legislation was followed by a significant decrease in multiple adverse health outcomes," the authors write. "The findings support the need to accelerate the uptake of laws restricting smoking in [public spaces](#) in efforts to protect people from related cardiovascular, respiratory, and birth health hazards."

**More information:** Shamima Akter et al, Evaluation of Population-Level Tobacco Control Interventions and Health Outcomes, *JAMA Network Open* (2023). [DOI: 10.1001/jamanetworkopen.2023.22341](https://doi.org/10.1001/jamanetworkopen.2023.22341)

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