

# The impact of neighbourhood violence and social cohesion on smoking behaviours among a cohort of smokers in Mexico

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## Abstract

**Background:** Recent increases in violent crime may impact a variety of health outcomes in Mexico. We examined relationships between neighbourhood-level violence and smoking behaviours in a cohort of Mexican smokers from 2011 to 2012, and whether neighbourhood-level social cohesion modified these relationships.

**Methods:** Data were analysed from adult smokers and recent ex-smokers who participated in waves 5 and 6 of the International Tobacco Control Mexico survey. Self-reported neighbourhood violence and social cohesion were asked of wave 6 survey participants (n=2129 current and former smokers, n=150 neighbourhoods). Neighbourhood-level averages for violence and social cohesion (ranges 4–14 and 10–25, respectively) were assigned to individuals. We used generalised estimating equations to determine associations between neighbourhood indicators and individual-level smoking intensity, quit behaviours and relapse.

**Results:** Higher neighbourhood violence was associated with higher smoking intensity (risk ratio (RR)=1.17, 95% CI 1.02 to 1.33), and fewer quit attempts (RR=0.72, 95% CI 0.61 to 0.85).

Neighbourhood violence was not associated with successful quitting or relapse. Higher neighbourhood social cohesion was associated with more quit attempts and more successful quitting. Neighbourhood social cohesion modified the association between neighbourhood violence and smoking intensity: in neighbourhoods with higher social cohesion, as violence increased, smoking intensity decreased and in neighbourhoods with lower social cohesion, as violence increased, so did smoking intensity.

**Conclusions:** In the context of recent increased violence in Mexico, smokers living in neighbourhoods with more violence may smoke more cigarettes per day and make fewer quit attempts than their counterparts in less violent neighbourhoods. Neighbourhood social cohesion may buffer the impact of violence on smoking intensity.

## Recommended Citation

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