



International Tobacco Control
Policy Evaluation Project

Contraband Cigarette Purchasing from First Nations Reserves in Ontario and Quebec: Findings from the ITC Canada Survey 2002-2014

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*SRNT 2018 Annual Meeting
Baltimore, Maryland, USA
February 23, 2018*



Background

- Contraband tobacco products provide price-sensitive smokers with incentives to avoid higher-taxed cigarettes
- In Canada, Indigenous peoples do not pay taxes on cigarettes purchased from First Nations reserves while non-Indigenous peoples must pay all applicable taxes
- Recent evidence suggests on-reserve cigarette purchasing by non-Indigenous smokers is problematic in Ontario and Quebec (Guindon et al., 2013, 2016)

Study Objectives

- Theories from economic geography posit that distance between consumers and retail locations influences purchasing decisions and behaviours
- In the United States, evidence suggests that smokers living closer to Indian reservations where taxes are lower have greater odds of purchasing cigarettes on reservation
- This study examined the association between smokers' physical proximity to First Nations Reserves (FNR) and the likelihood of purchasing cigarettes on reserve

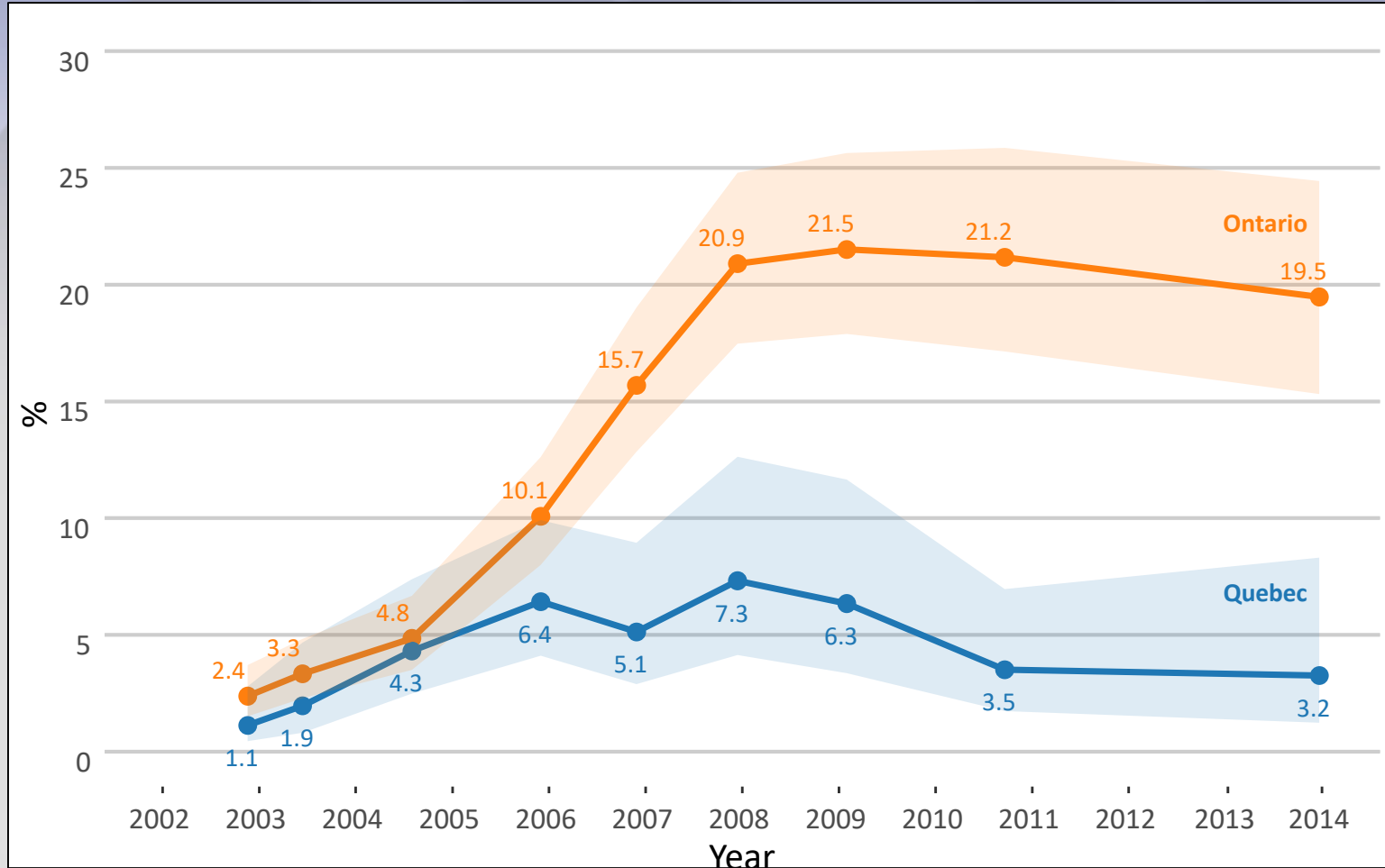
Methods

- Current smokers from Ontario (n = 2,126) & Quebec (n = 1,441) participating in at least one of the nine waves of the ITC Canada Survey (2002-2014)
- Euclidean distance between smokers' postal code of residence and FNR was computed using QGIS (Version 2.18)
- Weighted generalized estimating equations (GEE)
 - Test the effect of distance on the odds of purchasing on-reserve (over time within each province)
 - Test whether FNR purchasing was associated with past year quit attempts

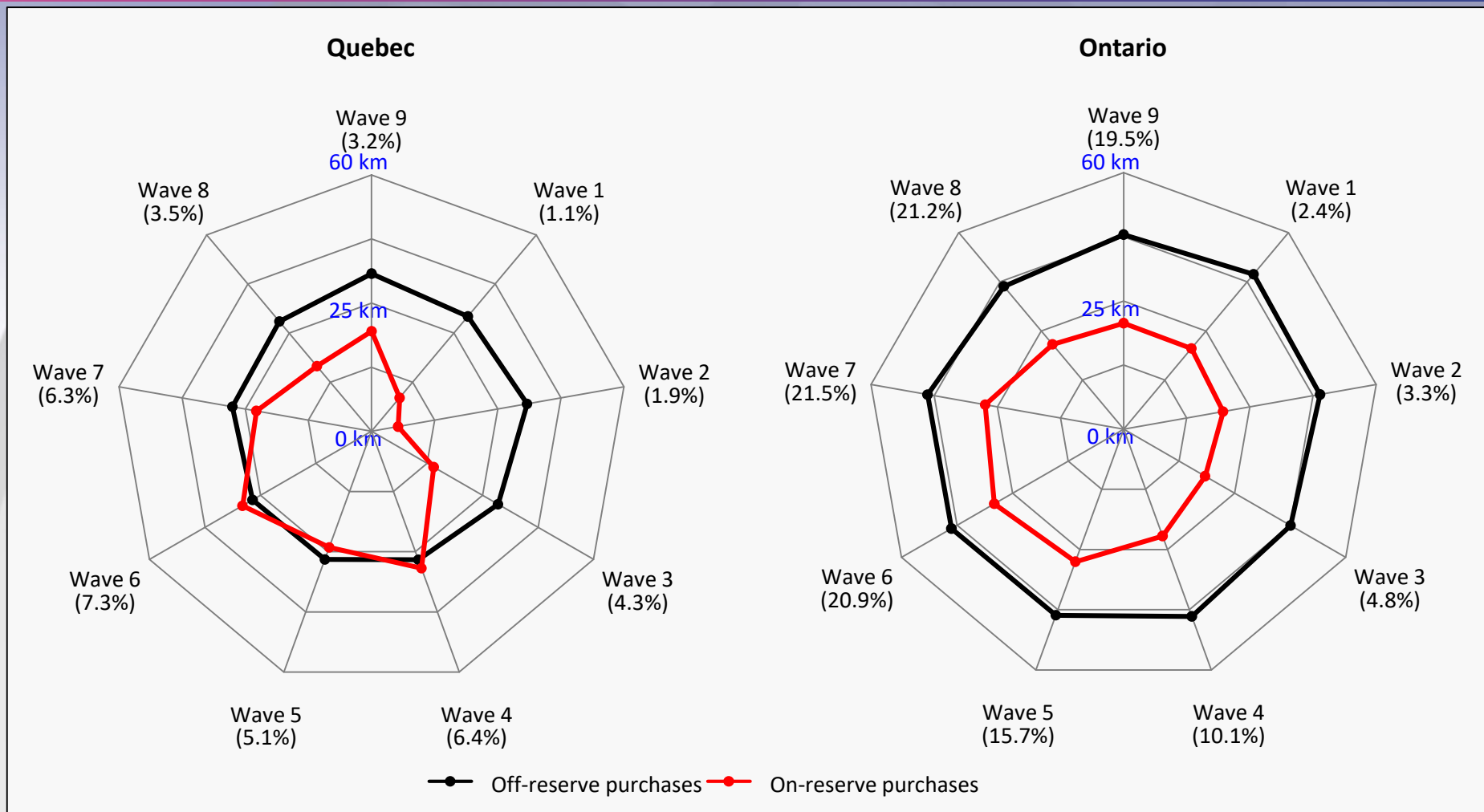
Results

- Smokers from Ontario (ON) were generally similar to those from Quebec (QC), with some exceptions
- Fewer smokers from ON were:
 - White (87% vs. 92%)
 - Low income (< \$30,000/year – 24% vs. 33%)
 - Low education (43% vs. 52%)
 - Rural (16% vs. 23%)
 - Smoked roll-your-own cigarettes (2% vs 8%)

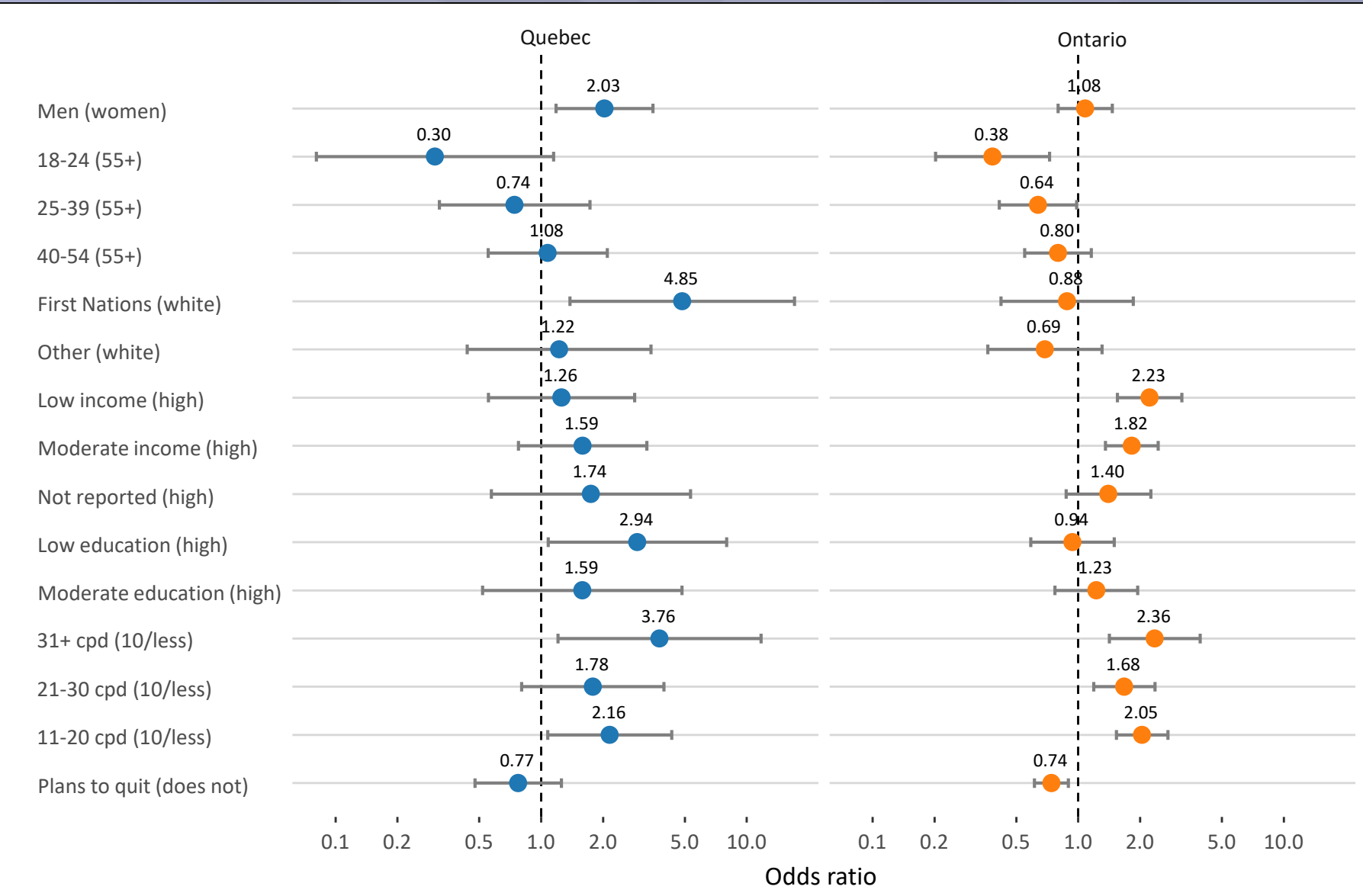
% of smokers last purchasing cigarettes on reserve

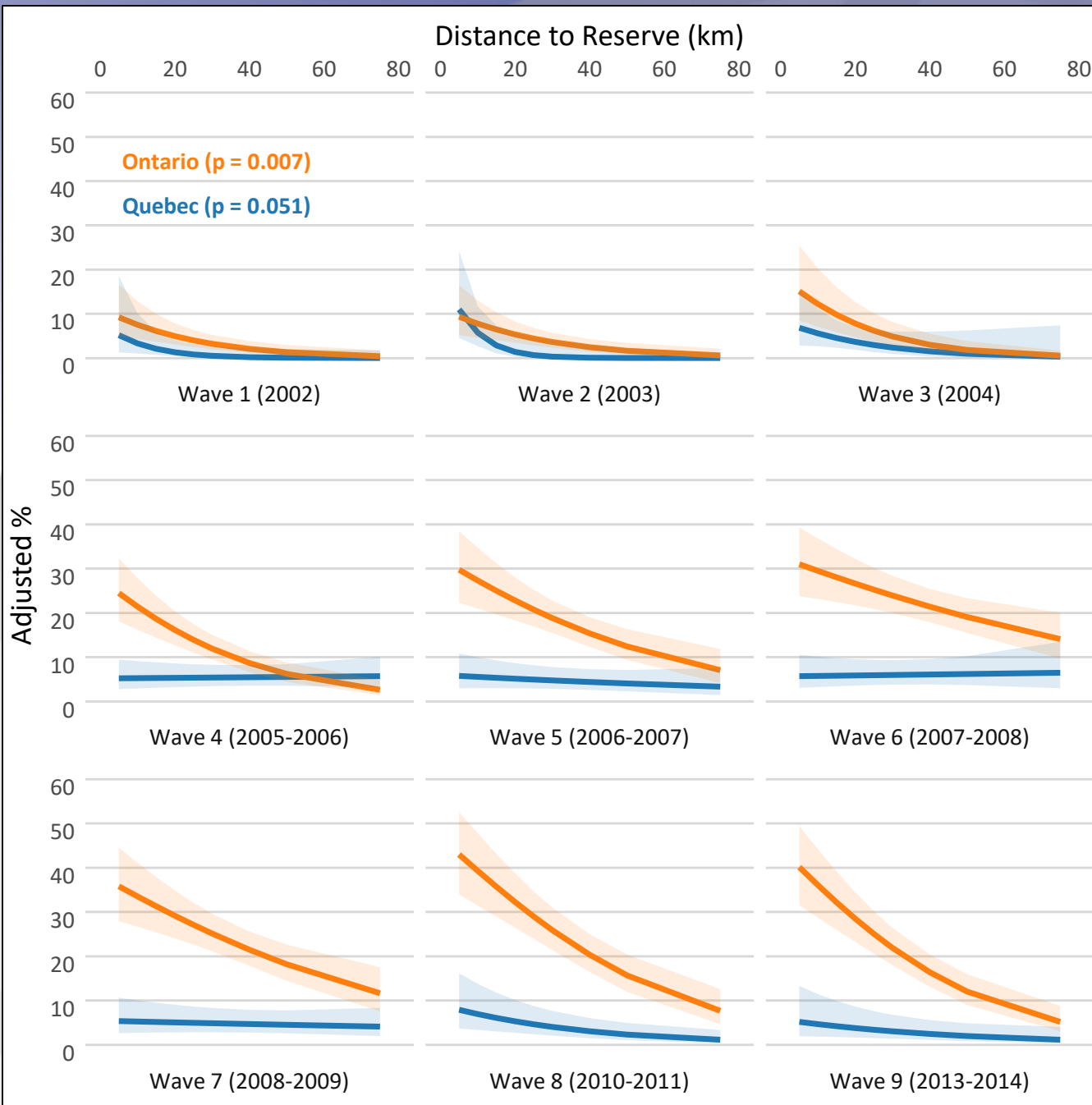


Average distance to FNR by Purchase Type



Factors associated with on-reserve purchases (all waves)



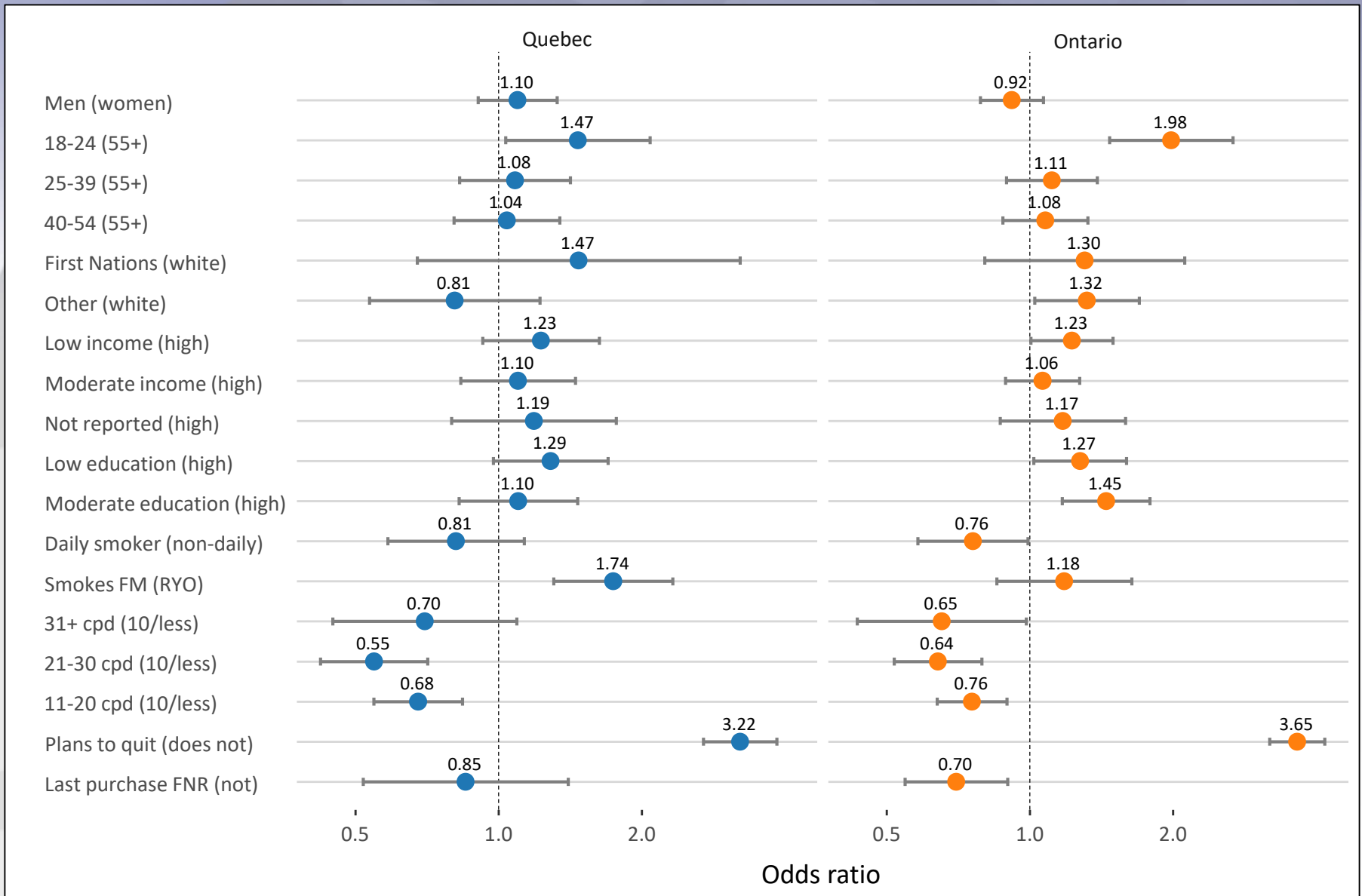


Adjusted % of smokers last purchasing on reserve over time by province and proximity to First Nations reserves

In Quebec, the effect of distance did not vary by survey wave ($p = 0.051$).

In Ontario, the effect of distance became more intensive over time ($p = 0.007$).

Odds of trying to quit in the past year (all waves)



Conclusions

- From 2002-2014, proximity to FNR was associated with on-reserve purchases in Ontario
- Contraband purchases were associated with decreased odds of making past-year quit attempts
- In 2008, Quebec took measures to curb contraband tobacco; the declining prevalence of FNR purchases suggests those measures were effective
- Policies that deter non-Indigenous smokers from purchasing on-reserve may curb contraband tobacco purchasing in Ontario

ITC Project Research Organizations



ITC Project Research Support



Core support provided by the U.S. National Cancer Institute (P01 CA200512)

Core support provided by a Canadian Institutes of Health Research Foundation Grant

