We found that cigarettes are sold in most fixed retail outlets and street vendors around secondary schools. Most fixed retail outlets sell single cigarettes, which is an illegal activity. Exterior advertising and promotions were rarely observed, but interior promotions were found in 12 to 46 percent of stores, depending on the city. Few stores posted signs prohibiting sales to minors.

Trained observers assessed the sale, advertising and promotional materials for tobacco products at fixed retail outlets and street vendors through direct observational measurements. All retail outlets were evaluated within 300 meters of 20 randomly-selected secondary schools in each of the three largest cities in Mexico (Mexico City, Guadalajara and Monterrey). A stratified random sample design was used to choose the schools, based on a census tract socioeconomic marker and the density of retail outlets from a commercial data source (Figure 1). Data collection occurred from November to December 2014. Trained observers visited a total of 1417 outlets; of these, 852 fixed retail outlets and 45 street vendors sold cigarettes. More than half of fixed retail outlets were small grocery stores, often called tiendas de aborrones.

With regulations restricting other types of advertising, the tobacco industry has increasingly concentrated its resources on point-of-sale (POS) marketing. Youth are targeted by, and particularly susceptible to, this type of tobacco marketing, which has been found to be widespread in stores that adolescents often visit in the United States. Data are limited from low- and middle-income countries.

Methods
Trained observers assessed the sale, advertising and promotional materials for tobacco products at fixed retail outlets and street vendors through direct observational measurements. All retail outlets were evaluated within 300 meters of 20 randomly-selected secondary schools in each of the three largest cities in Mexico (Mexico City, Guadalajara and Monterrey). A stratified random sample design was used to choose the schools, based on a census tract socioeconomic marker and the density of retail outlets from a commercial data source (Figure 1). Data collection occurred from November to December 2014. Trained observers visited a total of 1417 outlets; of these, 852 fixed retail outlets and 45 street vendors sold cigarettes. More than half of fixed retail outlets were small grocery stores, often called tiendas de aborrones.

Conclusions
We found that cigarettes are sold in most fixed retail outlets and street vendors around secondary schools. Most fixed retail outlets sell single cigarettes, which is an illegal activity. Exterior advertising and promotions were rarely observed, but interior promotions were found in 12 to 46 percent of stores, depending on the city. Few stores posted signs prohibiting sales to minors.

Figure 1: Mapping outlets around a school in Mexico City, Mexico
Key findings

- Sixty-three percent of all retail outlets sold cigarettes.
- The density of retail outlets around the schools was higher in Mexico City than Guadalajara or Monterrey.

Fixed outlets (n=852)

- Few fixed outlets had exterior promotions (0.4% in Monterrey to 2.2% in Mexico City).
- All observed external promotions were signs; no decorative elements were observed (e.g., chairs, umbrellas).
- Interior promotions in fixed outlets ranged from 13 percent of outlets in Guadalajara to 46 percent in Monterrey.
- Among stores with interior promotions, most promotions were visible from outside in Mexico City (76%) and Guadalajara (65%), but not Monterrey (31%).
- Interior promotions were often at the height of the eyes of children in Monterrey (91%), but not Mexico City (10.5%) or Guadalajara (0%).
- Monterrey had the highest percentage of outlets with shelves that contained tobacco products (58%), compared with Mexico City (28%) or Guadalajara (34%).
- On shelves with tobacco products, health warning labels were usually visible in Mexico City (76%) and Monterrey (69%), but not in Guadalajara (31%).
- Sales of single cigarettes were found in most stores (69 to 74% of fixed outlets).
- Sales of contraband cigarettes (e.g., packs in another language or those that did not contain the packaging and labeling currently required in Mexico) were rarely observed (1 to 2% of fixed outlets).

Street vendors (n=45)

- Street vendors selling cigarettes were only observed in Mexico City.
- Most street vendors in Mexico City sold single cigarettes (96%); 10 percent sold contraband cigarettes.

Table 1. Description of tobacco fixed outlets around schools in Mexico City, Guadalajara and Monterrey, 2014

<table>
<thead>
<tr>
<th></th>
<th>Mexico City n=365 stores</th>
<th>Guadalajara n=248 stores</th>
<th>Monterrey n=239 stores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior promotions visible in fixed outlets; %</td>
<td>2.2</td>
<td>1.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Interior promotions visible in fixed outlets; %</td>
<td>28.8</td>
<td>12.5</td>
<td>46.0</td>
</tr>
<tr>
<td>Interior promotions visible from outside in fixed outlets among outlets with any interior promotions; %</td>
<td>76.2</td>
<td>64.5</td>
<td>46.0</td>
</tr>
<tr>
<td>Interior promotions at the height of the eyes of children in outlets with any promotions; %</td>
<td>10.5</td>
<td>0.0</td>
<td>90.9</td>
</tr>
<tr>
<td>Shelves containing tobacco products; %</td>
<td>27.7</td>
<td>34.3</td>
<td>57.7</td>
</tr>
<tr>
<td>Warning labels visible on packs on shelves; %</td>
<td>76.2</td>
<td>30.6</td>
<td>68.8</td>
</tr>
<tr>
<td>Signs prohibiting sales to minors; %</td>
<td>12.7</td>
<td>0.4</td>
<td>30.6</td>
</tr>
<tr>
<td>Sell single cigarettes; %</td>
<td>74.0</td>
<td>68.5</td>
<td>70.7</td>
</tr>
<tr>
<td>Sell illegal tobacco products; %</td>
<td>1.1</td>
<td>0.8</td>
<td>0.8</td>
</tr>
</tbody>
</table>

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