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## Background

- Understanding the illicit cigarette market is important for tobacco control
- Tobacco companies have used illicit channels to introduce brand variants to new markets and avoid taxation
- The industry lobbies against tobacco control measures by warning about lost tax revenue from increased illicit trade
- This study investigates the change in the illicit cigarette prevalence in urban retail locations between 2013 and 2015/16 within nine countries across four WHO regions

## Methods

- The Tobacco Pack Surveillance System (TPackSS) systematically collects unique cigarette packs sold in low- and middle-income countries with high tobacco use
- In 2015/16, TPackSS returned to countries that changed their health warning requirements since a 2013 pack collection
- In each country, one vendor in each of 12 low, middle, and high socioeconomic areas in three major cities (four in India in 2016, five in China) was sampled and unique packs were purchased
- The absence of health warning labels (HWL) from countries in which it was purchased was used to identify illicit packs

### Examples of Illicit Packs Collected



## Results

Percentage of Illicit Brand Variants Found in Urban Retail Locations, by Country

Country	Sample size (in 2013)	Non-country HWL	% illicit	Sample size (in 2015/16)	Non-country HWL	% illicit	Change in %	p-value
Indonesia	215	0	0	252	34	13.5	13.5	<0.0001
China	453	31	6.8	750	134	17.9	11.1	<0.0001
Brazil	119	0	0	147	2	1.4	1.4	0.20
Russia	505	1	0.2	502	0	0	-0.2	0.32
Bangladesh	191	135	70.7	236	163	69.1	-1.6	0.74
Vietnam	147	63	42.9	150	61	40.7	-2.2	0.70
India	135	41	30.4	94	25	26.6	-3.8	0.53
Thailand	126	61	48.4	111	31	27.9	-20.5	0.0013
Philippines	143	45	31.5	114	1	0.9	-30.6	<0.0001

- The 2013 sample of 2,034 packs found an illicit sample proportion that ranged from 71% in Bangladesh to 0% in Brazil and Indonesia
- The 2015/16 sample of 2,356 packs again found a large illicit prevalence in Bangladesh and minimal illicit pack presence in Brazil's retail environment
- Significant increases in illicit prevalence were observed in Indonesia (13 percentage points (pp)) and in China (11 pp)
- Significant decreases in illicit prevalence were found in Philippines (31pp) and Thailand (20pp)
- The proportion of illicit cigarettes found in the other five countries did not significantly change
- Research is ongoing to identify the sources of illicit packs

## Conclusions

- Changes in the illicit prevalence of cigarette packs in urban retail locations could be the result of changes in enforcement, brand availability, consumer demand, and sampling variation
- Ongoing research is investigating potential causes

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