

# Cigarette sales in pharmacies in the USA (2005–2009)

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## ABSTRACT

**Background** Several US jurisdictions have adopted policies prohibiting pharmacies from selling tobacco products. Little is known about how pharmacies contribute to total cigarette sales.

**Methods** Pharmacy and total cigarette sales in the USA were tabulated from AC Nielsen and Euromonitor, respectively, for the years 2005–2009. Linear regression was used to characterise trends over time, with observed trends extrapolated to 2020.

**Results** Between 2005 and 2009, pharmacy cigarette sales increased 22.72% ( $p=0.004$ ), while total cigarette sales decreased 17.43% ( $p=0.015$ ). In 2005, pharmacy cigarette sales represented 3.05% of total cigarette sales, increasing to 4.54% by 2009. Extrapolation of these findings resulted in estimated pharmacy cigarette sales of 14.59% of total US cigarette sales by 2020.

**Conclusions** Cigarette sales in American pharmacies have risen in recent years, while cigarette sales nationally have declined. If current trends continue, pharmacy cigarette market share will, by 2020, increase to more than four times the 2005 share.

## INTRODUCTION

For decades, the pharmacy profession has called for an end to the selling of cigarettes in pharmacies.<sup>1</sup> The Institute of Medicine has recommended a ban on tobacco sales in US pharmacies as part of a comprehensive strategy to reduce tobacco usage among young people.<sup>2</sup> Since 2009, a growing number of local jurisdictions in the US—including Boston, San Francisco and several smaller jurisdictions in Massachusetts and California—have implemented policies prohibiting pharmacies and other healthcare institutions from selling tobacco products.<sup>3–5</sup> While this might reduce the number of retailers selling tobacco products, an arguably more important public health outcome of these bans may be the contribution to de-normalisation of tobacco use.<sup>2</sup>

The recent attention given to tobacco sales in US pharmacies gives rise to questions regarding the extent to which pharmacies contribute to total cigarette sales. As tobacco control efforts focus on reducing promotion, sale and use of tobacco products, it is important to understand the relative contribution to total tobacco sales that pharmacies represent. Thus, cigarette sales in US pharmacies as a proportion of the total retail market were examined. In addition, data were extrapolated to the year 2020 to understand the longer-term relationship between current pharmacy sales trends and total market share.

## METHODS

Pharmacy cigarette sales were tabulated for 2005–2009 from AC Nielsen ScanTrack data. These data represent point of purchase sales from all standalone US pharmacies with at least \$1 million in annual sales, which includes approximately 95% of all standalone US pharmacies.<sup>6</sup> The total US cigarettes sold for the same years were obtained from the 2010 Euromonitor report on the cigarette market in the USA, which reports retail sales of duty-paid cigarettes.<sup>7</sup>

Pharmacy cigarette market share was estimated by dividing annual pharmacy cigarette sales by total annual US cigarette sales and multiplying by 100. Simple linear regression (two-sided  $p$  value) was used to characterise trends over time and was extrapolated to the year 2020. Extrapolated figures post-2009 represent linear projections assuming the linear trend over 2005 to 2009 remains constant. All analyses were completed using STATA V.10.0 SE.

## RESULTS

From 2005 to 2009, cigarette sales in pharmacies significantly rose 22.72%, from 11.84 billion sticks (individual cigarettes) to 14.53 billion sticks sold ( $p=0.004$ ; figure 1A). During the same time period, sales of cigarettes in the USA significantly decreased 17.43%, from 387.97 billion sticks to 320.36 billion sticks ( $p=0.015$ ; figure 1B). In 2005, pharmacy cigarette sales represented 3.05% of total US cigarette sales, increasing to 4.54% of US sales by 2009. Extrapolating the current findings over time, a continued decrease in national sales and increase in pharmacy cigarette sales result in an estimated pharmacy cigarette sales of 14.59% of US cigarette sales by 2020.

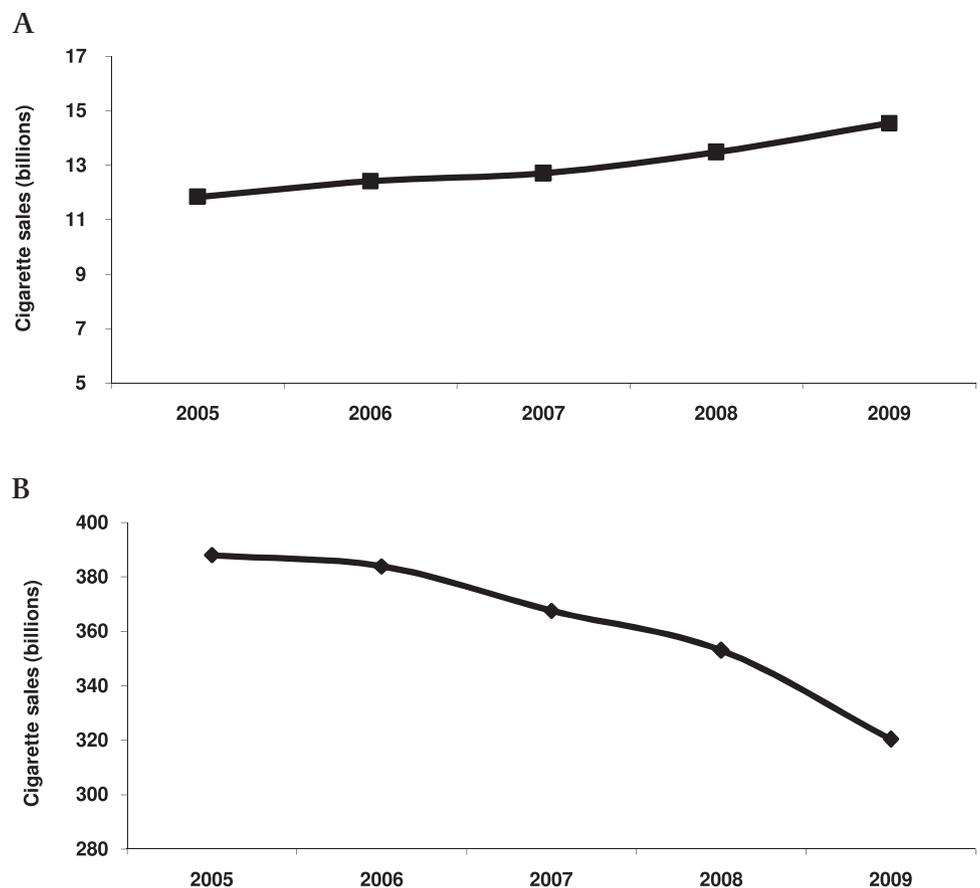
## DISCUSSION

Cigarette sales in US pharmacies increased significantly between 2005 and 2009, despite declining national cigarette sales. If current trends continue, the pharmacy cigarette market share will, by 2020, increase more than four times of the 2005 market share. Changing demographics of those who visit pharmacies, increased availability and promotion of cigarettes in pharmacies or other tobacco industry activities may be contributing to this trend. The increase in numbers of retail chain pharmacies and the decrease in independent pharmacies that occurred during this time period may also be contributing factors,<sup>8</sup> as chain pharmacies are more likely to sell cigarettes than independent pharmacies.<sup>9 10</sup>

Pharmacy cigarette sales data were only available for the 5 years reported. Due to the relatively small number of data points, the linear extrapolation

## Brief report

**Figure 1** (A) US Pharmacy cigarette sales (billions of sticks). (B) Total US cigarette sales (billions of sticks).



should be interpreted with caution. However, the observed significant trend supports the use of extrapolation in this analysis. Further, because Euromonitor reports duty-paid retail cigarette sales,<sup>7</sup> the total market sales data do not include duty-free cigarette sales purchased through the internet, from Native American Reservations or illicit channels.

In 2009, more than 16 000 grocery and mass merchant stores were licensed to sell prescription pharmaceuticals.<sup>8</sup> The pharmacy cigarette sales data reported here included sales from standalone pharmacies only. Therefore, cigarette sales within grocery and mass merchant stores that sell pharmaceuticals were not represented. In Boston, San Francisco and other jurisdictions that have adopted tobacco-free pharmacy policies, tobacco sales bans have been applied to all retailers that possess a pharmacy license, including grocery and mass merchant stores.<sup>4 5</sup>

The observation of an increasing trend in sales of an addictive and harmful product, during a time when total cigarette sales have declined, warrants attention. Recent actions of local jurisdictions to eliminate tobacco sales in pharmacies may be one way to address this problem. In contrast to recent local ordinances, pharmacist groups have called for pharmacies to

voluntarily cease the sale of tobacco.<sup>11</sup> Whether voluntarily excluded or banned by law, effective policy is needed to reverse the current trend for pharmacies—widely perceived as providers of health products and information—from becoming increasingly important providers of tobacco products.

**Competing interests** None.

**Contributors** AS and IB conceptualised the study and wrote the first draft; IB performed all data analysis; and VR and GC revised the paper critically for important intellectual content.

**Provenance and peer review** Not commissioned; externally peer reviewed.

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## What this paper adds

- ▶ Between 2005 and 2009, cigarette sales in American pharmacies increased 22.72%, while total US cigarette sales declined 17.43%.
- ▶ If current trends continue, by 2020, nearly 1 in 7 cigarettes sold in the US will be purchased in a pharmacy.



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