

# The effect of tobacco retailer density reduction on smoking in Belgium

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Smoking is one of the most significant **risk factors** for various diseases, posing a major **public health issue**.



Trends of current smoking suggest that tobacco control policies are needed to **achieve targets**.



The **Belgian Tobacco-Free Generation Plan** aims to reduce smoking by limiting access tobacco, including the **reduction of tobacco selling points**.

*How much burden can be avoided, evaluated by health impact assessment?*



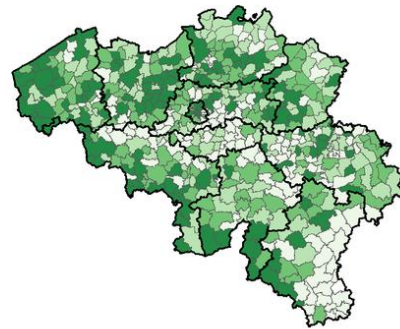
**~ 1% disease burden avoided by reducing tobacco sell-points**

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retail density



Spatial distribution of shops per 10 000 in Belgium



Highlights difference between urban and rural areas and importance of border location

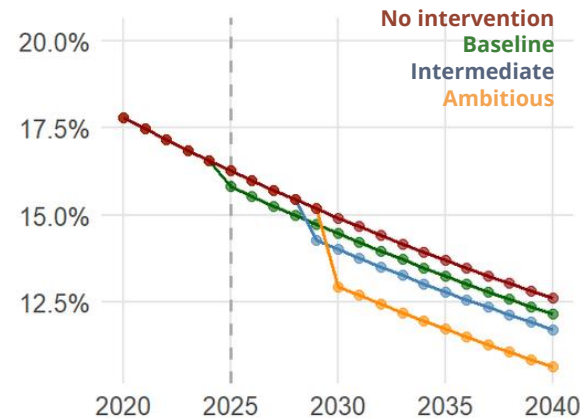
Green shades represent shops per capita, using quantile-based shading

**Dark green** = high density  
**Light green** = low density

smoking prevalence



Projected smoking prevalence under different scenarios



Compares the impact of different policy scenarios on reducing smoking rates

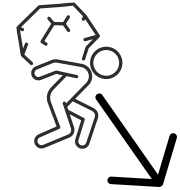


**Smoking prevalence** would be reduced almost **2 %** in ambitious scenario, compared to 0,5 % in baseline scenario

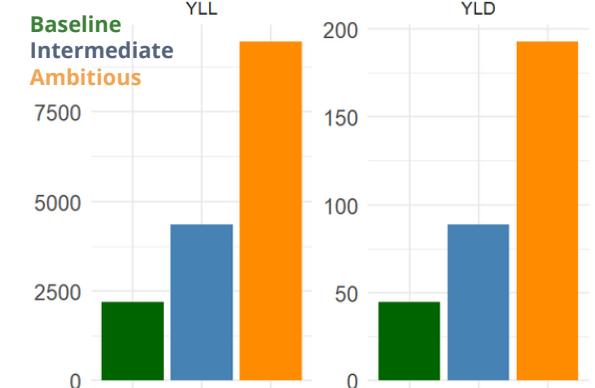
Comparative Risk Assessment

Potential Impact Fraction

disease burden



Avoidable lung cancer burden in 2040 under different policy scenarios



YLD and YLL from lung cancer highlight potential **preventable burden** in the future



In 2040, **9899 DALYs** of lung cancer could be saved using the ambitious scenario, compared to 2284 DALYs in baseline scenario