

# Effects of meeting MPOWER requirements on smoking rates and smoking-attributable deaths

## Sudan

This factsheet presents estimates of the effect of implementing MPOWER policies consistent with the WHO Framework Convention on Tobacco Control (WHO FCTC). The estimates are based on the *Abridged SimSmoke* model (1).



World Health  
Organization

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## **Smoking prevalence**

Sudan is a middle-income country with a population of more than 30 million in 2011(2), of which 33.2% live in urban areas (3). Based on the STEPwise survey conducted at subnational level in 2005, the current tobacco smoking rate (ages 25–64) is 29% for men and less than 3.5% for women (4).

## **Tobacco control policies**

### *Protect people from tobacco smoke*

Based on the 2013 WHO report on the global tobacco epidemic (5), which includes data from 2012, Sudan had no smoke-free legislation for health-care facilities, educational facilities and universities, government facilities, indoor offices, restaurants and public transport. There have been no changes in statutes since 2007. Smoke-free policies were at the lowest level in 2012.

### *Offer help to quit tobacco use*

In 2012, there was no toll-free quit line with a live person to discuss cessation in Sudan. Nicotine replacement therapy could not be purchased in a pharmacy. Bupropion and varenicline were not legally sold. Smoking cessation support was not available in health clinics or other primary care facilities, hospitals, offices of a health professional, in the community or in other places. Cessation programmes were at the lowest level in 2012.

### *Warn about the dangers of tobacco*

In 2012, Sudan had a law mandating that health warnings appear on tobacco packages and a requirement that they cover 15% of the package and be rotating; however, warnings were not required to be graphic. Requirements had not changed since 2007. Sudan did not have a national anti-tobacco mass media campaign in 2011–2012. There was a national agency/technical unit for tobacco control and five full-time equivalent staff. Government expenditure on tobacco control was US\$ 459 294 (960 000 Sudanese pounds) in 2008. Health warnings and mass media campaigns were at the lowest level in 2012.

### *Enforce bans on tobacco advertising, promotion and sponsorship*

In 2012, Sudan had bans on direct tobacco advertising on national/international television and radio, local/international magazines and newspapers, billboard and outdoors, point-of-sale and the internet. These bans all existed in 2007. The compliance score of direct advertising bans was 7 out of 10. For indirect advertising, there were bans on the free distribution of tobacco products, promotional discounts, appearance of tobacco brands and products in television and films (product placement and non-product placement), non-tobacco goods and services identified with tobacco brand names, brand name of non-tobacco products used for tobacco products, and sponsored events. These bans all existed in 2007. The compliance score of indirect advertising bans was 3 out of 10. Advertising restrictions were at the second highest level in 2012.

### *Raise taxes on tobacco*

WHO's comparable estimate for the price of a pack of 20 cigarettes of the most sold brand was 4.00 Sudanese pounds for 2008 and 8.00 Sudanese pounds for 2012; in terms of international dollars (purchasing power parity) the price increased from US\$ 2.91 to US\$ 3.31. WHO's comparable estimate of taxes as a percentage of retail price was 72.0% for 2008 and 72.0% for 2012. Ad valorem excise taxes were 58%, value added taxes 14%, and there were no specific excise taxes.

# Sudan

## Key findings

The *Abridged SimSmoke* model for Sudan estimates nearly 3.8 million smokers in 2010, and projects 1.9 million premature deaths of smokers alive in that year. Without proper implementation of MPOWER tobacco control policies, smoking prevalence rates will remain relatively stable or increase from 29% for males and 3.5% for females and smoking-attributable deaths are likely to continue to rise.

- Increasing cigarette excise taxes to 75% of the retail price would prevent much youth smoking and reduce smoking prevalence by 16.3% within 5 years, increasing to 32.7% in 40 years, and ultimately avert 628 000 premature deaths.
- Stronger enforcement of comprehensive smoke-free laws is predicted to reduce smoking prevalence by 3% in 5 years, increasing to 4% in 40 years, and avert about than 72 000 premature deaths.
- A well-publicized and comprehensive cessation policy can reduce smoking prevalence by 1% within 5 years, increasing to 3% in 40 years, and prevent nearly 57 000 premature deaths.
- Strong health warnings can reduce smoking prevalence by 7% within 5 years, increasing to 14% in 40 years, and prevent more than 260 000 premature deaths.
- A high-level mass media campaign is projected to reduce smoking prevalence by 5.5% in 5 years, increasing to 7% within 40 years, and avert more than 260 000 premature deaths.
- A comprehensive marketing ban with enforcement is projected to reduce smoking prevalence by 5% in 5 years, increasing to 6% within 40 years, and avert 115 000 deaths.

Implementing the stronger set of policies suggested above, in line with the WHO FCTC, could reduce smoking prevalence by 33% within 5 years, increasing to 41% within 20 years and 52% within 40 years. About 1 million premature deaths could be averted. The *Abridged SimSmoke* model incorporates synergies in implementing multiple policies. A large tax increase accompanied by comprehensive marketing restrictions, a comprehensive cessation programme, and a mass media campaign would reduce smoking prevalence about 40% by 2025, thus meeting the global target.

## Limitations

*Abridged SimSmoke* has been developed based on an extensively validated simulation model, providing support for the estimates given above. However, the model has certain limitations.

- It does not consider tobacco products other than cigarettes, such as smokeless tobacco, e-cigarettes and shisha (waterpipe). If tax increases and other policies are only directed at cigarettes, smokers may substitute to other tobacco products, which would offset some of the health gains from reduced smoking. If policies are also targeted toward the use of non-cigarette products, then substitution to these products may be reduced.
- Mortality risks for smoking are based on studies for the United States of America. However, as a middle-income country, smoking rates may increase in Sudan as incomes rise, especially among women. As a middle-income country, the effects of reductions in tobacco use on smoking-attributable deaths may be lower than projected for Sudan, due to higher background health risks and lower levels of smoking intensity and duration.

- It does not include deaths from second-hand smoke exposure. In addition, there are costs associated with morbidity and productivity loss due to premature death.
- It has been developed to use data from the biennial WHO global tobacco epidemic reports (5). The tobacco control policy data are restricted to a specific set of policies and definitions. The model does not consider policies directed at cost-minimizing behaviour, enforcement against smuggling, product regulation and youth access.

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## References

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