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Smoking Cessation for Chinese Men and Prevention for Women

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resilience by upgrading the training of emergency responders in handling specific disaster hazards, and educating the public about environmental health risks of chemical incidents. If the Chinese Government shows zero tolerance of illegal industrial practices and holds the relevant stakeholders accountable for such practices, the Tianjin incident could become a historical milestone for improvement of disaster risk reduction in China.

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1 Government of the People's Republic of China. Tianjin blast death toll rises to 158. http://www.gov.cn/xinwen/2015-08/31/content_2922569.htm (accessed Sept 2, 2015; in Chinese).

- Government of the People's Republic of China. Official announcement on types and quantity of chemical: 40 types with a quantity of 2500 tons. http://www.gov.cn/xinwen/2015-08/20/content_2915939.htm (accessed Aug 21, 2015; in Chinese).
- 3 Government of the People's Republic of China. The first official announcement on the emergency response of Tianjin incident. http://www. gov.cn/xinwen/2015-08/14/content_2912733.htm (accessed Aug 19, 2015; in Chinese).
- 4 National Health and Family Planning Commission of the People's Republic of China. The fifth expert team has arrived in Tianjin to provide further medical support for the blast incident. http://www.nhfpc.gov.cn/yjb/s3586 /201508/59c08dda337b414ea4e0c56e6698acd7.shtml (accessed Aug 19, 2015; in Chinese).
- 5 Government of the People's Republic of China. Presidential decree no. 69. http://www.gov.cn/flfg/2007-08/30/content_732593.htm (accessed Aug 19, 2015; in Chinese).
- 6 Government of the People's Republic of China. Regulations on accidental incidents. http://www.gov.cn/yjgl/flfg_sgzn.htm (accessed Aug 19, 2015; in Chinese).
- 7 WHO. Disaster risk management for health: chemical safety, 2011. http://www.who.int/hac/events/drm_fact_sheet_chemical_safety. pdf?ua=1 (accessed Aug 20, 2015).
- 8 Feng C, Wang Y. Review of accidents and disasters in China in the year 2007. J Saf Environ 2008; **8**: 160–68 (in Chinese).
- 9 Chan EY, Hung KK, Cai Y. An epidemiological study of technological disasters in China: 1979–2005. Eur J Emerg Med 2011; **18**: 1–3.
- 10 State Administration of Work Safety, the People's Republic of China. The list of responsible enterprises for major industrial accidents in the 3rd quarter of 2013. http://www.chinasafety.gov.cn/anquanfenxi/ anquanfenxi.htm (accessed Aug 19, 2015; in Chinese).

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Tobacco use is the largest preventable cause of death worldwide. It is estimated that more than 6 million people die every year from tobacco use, and that this growing toll will lead to more than a billion deaths in the 21st Century.^{1,2} China is at the epicentre of the global tobacco epidemic and accounts for 1 million of these deaths annually.³ If current rates of smoking in China continue unabated, 2 million people in China will die per year in 2030, contributing greatly to the global burden of disease. Complicating any efforts to reduce the public health burden of tobacco is the fact that China is the world's largest grower, manufacturer, and consumer of tobacco and has the largest workforce devoted to tobacco farming, manufacturing, and sales. Being a government monopoly, China Tobacco (the Chinese National Tobacco Corporation) provides over 7% of the Central Government's annual revenue through both taxes and net income.4

In *The Lancet*, the study by Zhengming Chen and colleagues³ reveals the extent of the tobacco challenge in China, its peculiar characteristics, and most importantly future implications unless aggressive public health actions are taken to promote smoking cessation in men.

The study examines national trends in prevalence in two large cohorts during a period of about 14 years. Given the multi-year latency period from tobacco exposure to onset of various smoking-associated diseases, careful data-based projections of future burden are crucial for the planning, implementation, and assessment of policies aimed at smoking prevention and control.

A striking characteristic of the tobacco epidemic in China is its gender distribution: 68% of men and 3.2% of women were smokers in Chen and colleagues' study³ (defined as ever regular users from the 2004–08 second cohort study). This distribution produces a correspondingly large effect on tobacco-attributed mortality, which is rising in men and falling in women. This effect has several implications. While men are at substantial risk of death and disease from active smoking, women are at risk from passive exposure at home and in the workplace.⁵

Although female smoking rates are associated with older ages, young Chinese women remain an attractive target for the tobacco industry, with the allure of increasing sales by crafting appeals based on themes of independence, glamour, sophistication, sexuality, and social acceptance. Such a focus on attracting female smokers has been

used successfully in other countries during periods of social reform and changing roles for women. In the USA, Edward Bernays, while employed by the American Tobacco Company, encouraged smoking among women under the guise of emancipation by calling cigarettes "Torches of Freedom".6 While Chinese public health policies and programmes need to aggressively encourage men to guit smoking, they also need to guard assiduously against smoking initiation, not only among men, but also among adolescent girls and young adult women.

A disturbing feature of the new study³ is the further documentation of the trend toward smoking initiation at an earlier age. Men born in the 1930s began smoking at about 25 years of age, but those born in 1970 started at an average age of about 20, implying that many started before age 20, and almost all used cigarettes. These extra years of cigarette smoking significantly increase the eventual risk from tobacco exposure.

Several myths about tobacco and its use have limited the effectiveness of health education messages in China.⁷ These include the belief that protective biological mechanisms specific to Asian populations make smoking less hazardous, that it is easy to guit smoking, and that tobacco use is an intrinsic and ancient part of Chinese culture. The new study³ clearly shows the severe health consequences of tobacco use for premature mortality among Chinese men. One difference in the Chinese mortality pattern compared with that in western populations is that rates of chronic lung disease are relatively higher than coronary heart disease rates, possibly because of the larger role of indoor air pollution (from cooking and heating) compared with new forms of outdoor air pollution (produced by industry, power generation, and cars).

To prevent millions of future deaths, the findings of the new study suggest some possible solutions. First, Chinese men need to quit smoking; they can receive great benefits if they quit before age 35 years (and preferably well before 35 years), but for those who have not yet developed a fatal disease, even quitting at later ages offers substantial gains. Secondly, the remarkably low level of smoking among Chinese women needs to be preserved, which will require sustained effort, especially since experimentation with tobacco among adolescent girls has increased substantially since the 1980s,8 and exposure to secondhand smoke needs to be controlled. The greatest challenge in making progress to reduce the burden of mortality from smoking in China over the next few decades is to increase rates of smoking cessation. In their study population, Chen and colleagues³ noted that less than 10% of Chinese ever-smokers had quit by choice (as opposed to quitting because they were ill). By contrast, in many high-income countries, there are more ex-smokers than current smokers, suggested by guit rates in excess of 50%.9 These sobering facts appropriately lead Chen and colleagues to conclude that "Widespread smoking cessation offers China one of the most effective, and cost-effective, strategies to avoid disability and premature death over the next few decades."

A promising finding from another nationwide study¹⁰ is evidence of increasing rates of guitting attempts and successful quitting in cities with active tobacco control programmes. Robust efforts at the municipal level, along with effective provincial and national policies, offer hope that the public health actions proven to be effective in some Asian locales, such as Hong Kong and Taiwan, can alter the trajectory of death and disease among men in mainland China, and change the social norm of widespread smoking and lost years of life and health.

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- Mathers CD, Loncar D. Projections of global mortality and burden of 1 disease from 2002 to 2030. PLoS Med 2006; 3: e442.
- Jha P. Avoidable global cancer deaths and total deaths from smoking. 2 Nat Rev Cancer 2009; 9: 655-64.
- 3 Chen Z, Peto R, Zhou M, et al, for the China Kadoorie Biobank (CKB) collaborative group. Contrasting male and female trends in tobacco-attributed mortality in China: evidence from successive nationwide prospective cohort studies. Lancet 2015; 386: 1447-56.
- Eriksen M, Mackay J, Schluger N, Gomeshtapeh FI, Drope J. The tobacco atlas, 5th edn. Georgia: The American Cancer Society, 2015
- 5 Gan Q, Smith KR, Hammond SK, Hu TW. Disease burden of adult lung cancer and ischaemic heart disease from passive tobacco smoking in China. Tob Control 2007; 16: 417-22.
- 6 Tye L. The father of spin: Edward L Bernays and the birth of public relations. New York: Macmillan, 2002
- Ma S, Hoang MA, Samet JM, et al. Myths and attitudes that sustain smoking in China. J Health Commun 2008; 13: 654-66.
- Han J, Chen X. A meta-analysis of cigarette smoking prevalence among 8 adolescents in China: 1981–2010. Int J Environ Res Public Health 2015; 12: 4617-30.
- Giovino GA, Mirza SA, Samet JM, et al. Tobacco use in 3 billion individuals from 16 countries: an analysis of nationally representative cross-sectional household surveys. Lancet 2012; 380: 668-79
- Liang X, ed. Report of China city adult tobacco survey 2013-14: a 14-city 10 experience. Atlanta: CDC Foundation, 2015.



