

Environmental Tobacco Smoke (ETS) and Lung Health

Introduction

Active smoking leads to heart disease, lung diseases and many types of cancer, claiming 5,596 lives in 1998 in Hong Kong. Medical expenses directly attributable to smoking have been estimated to be \$2800 millions in the same year. It is increasingly recognized that environmental tobacco smoke (ETS) or passive smoke is also detrimental to health.

What is ETS?

The primary components of ETS are mainstream smoke exhaled by the smoker, and side-stream smoke emitted from the burning ends of cigarette. Both side-stream and mainstream smoke contain more than 4,000 toxic chemicals including over 40 carcinogens. The US Environmental Protection Agency has now classified ETS as a human Group A lung carcinogen, which appears to have no threshold effect. In Hong Kong and other major cities of the world, ETS is the most common and serious indoor pollutant.

Adverse effects of ETS on lung health

- (1) **Children** : Exposure of ETS leads to low birth weight, reduced lung growth, higher risks of the following disorders : sudden infant death, respiratory and ear infections, asthma and its acute exacerbations, and behavioral and learning disorders.

- (2) **Adults** : ETS exposure is associated with higher risks of developing asthma, chronic obstructive pulmonary disease (COPD) and lung cancer. Patients suffering from asthma and COPD have more frequent exacerbation from ETS exposure.

Magnitude of ETS exposure and economic consideration

Heavy exposure of employees in restaurants and bars to ETS is common. These employees have a high prevalence of respiratory symptoms, impaired lung function and higher risk for lung cancer. Smoking ban in restaurants does not reduce business. On the other hand, health care cost due to illnesses from ETS exposure is high, amounting to HK \$ 750 millions in 1998. Exposure to ETS in the same year claimed 1324 lives in Hong Kong.

Conclusion

The harmful effects of ETS are irrefutable. We **strongly support** the Government's proposed legislative amendment of smoking (Public Health) Ordinance to protect the health of our community

American College of Chest Physicians (HK& Macau Chapter)

Hong Kong Lung Foundation

Hong Kong Thoracic Society