Hong Kong Thoracic Society(HKTS)

- Established in 1987, the HKTS now consists of 1300 registered members, including doctors, nurses, and allied health professionals
- HKTS dedicates herself to raising awareness for respiratory health and facilitating future breakthroughs in the field
- HKTS has long lasting and fraternal relationships with CHEST Delegation (Hong Kong and Macau) and the Hong Kong Lung Foundation. We work in partnerships and teamwork in all aspects to promote education, research and publicity
- Two large-scale conferences are held every year, namely the Annual Scientific Meeting (March) and the Autumn Respiratory Seminar (November)
- Three Special Interest Groups (on Sleep Medicine & Respiratory Failure, Interventional Pulmonology, and Airway Diseases respectively) were established not long ago to fuel research interests among our young fellows
- In collaboration with sister organizations, the Society has successfully organized many regional and international meetings including the 13th Asia Pacific Congress on Diseases of the Chest in 1994, the International Allergy Forum in 1995 and 1997, the 20th Eastern Region Conference of the International Union Against Tuberculosis and Lung Disease in 1999, the Educational Seminar of Asian Pacific Society of Respirology (APSR) ,the 9th and 17th Congress of the APSR in 2004 and 2012 respectively.
- Newsletters (joint with the CHEST Delegation) are published quarterly, offering our members the latest updates and insight in the field
- Public promotion events are organized from time to time. Other activities arranged include press conferences, health checks, educational talks, radio programs and essay publications in the media
- http://www.hkresp.com (JOINT WEBSITE OF THE HONG KONG THORACIC SOCIETY AND THE CHEST DELEGATION HONG KONG AND MACAU)

Impact of Air Pollution on Hong Kong

According to Hong Kong University's Hedley Environmental Index, there were over 1,800 premature deaths and over HKD 20 billion economic loss caused by air pollution in 2017 alone

School of Public Health The University of Hong Kong (2017) Hedley Environmental Index

Significant associations between level of air pollution and hospitalization : --- increasing respiratory, cardiovascular admissions ;affecting children's health

- Relative risks (RR) for asthma hospitalization for every 10 mg/m3 increase in NO2, O3, PM10 and PM2.5 were 1.028, 1.034, 1.019 and 1.021 respectively.

  Ko FW, et al. Effects of air pollution on asthma hospitalization rates in different age groups in Hong Kong. Clin Exp Allergy 2007;37:1312-9

- For every 10ug/m3 increase in NO2, SO2, O3, PM10 and PM2.5, hospital admission for asthmatic children increased by 1.9-8%.

  Lee SL. Association between air pollution and asthma admission among children in Hong Kong. Clin Exp Allergy 2006;36:1138-46

- A 10 mg/m3 increase in PM2.5 was associated with a 3.1% increase in COPD admissions.

  Fanny Ko and David Hui. Air pollution and COPD. Respirology (2012) 17, 395–401

- air pollution increased influenza hospitalization (0.24% increase in hospitalisation per 10ug/m3 increase of O3).

  Lai HK et al. Int J Environ Health Res 2010;20:219-30

- Increase in nitrate concentrations was associated with the largest increase of 1.32% in cardiovascular hospitalizations; elevation in manganese level (0.02 ug/m(3)) was linked to a 0.91% increase in respiratory hospitalizations.

  Pun VC et al. Short-term associations of cause-specific emergency hospitalizations and particulate matter chemical components in Hong Kong. Am J Epidemiol. 2014 May 1;179(9):1086-95

- Synergistic interaction between PM10 and NO2 on emergency cardiac hospitalizations in Hong Kong.

  Yu IT et al. Synergy between particles and nitrogen dioxide on emergency hospital admissions for cardiac diseases in Hong Kong. Int J Cardiol. 2013 Oct 3;168(3):2831-6

- Results have confirmed certain adverse effects on children's respiratory health from long-term exposure to ambient air pollution. PM10 may be the most relevant pollutant with adverse effects on wheezing and phlegm in boys. Both PM10 and NO2 may be contributing to cough and phlegm in girls.

  Gao Y et al. Chronic effects of ambient air pollution on respiratory morbidities among Chinese children: a cross-sectional study in Hong Kong. BMC Public Health. 2014 Feb 3;14:105

To Help… HKTS…

HKTS supported smoke-free legislation and we can see some effect of the change in legislation

- Implementation of comprehensive smoke-free legislation was associated with a significant reduction in hospital admissions for childhood LRTI.

  Lee SL, Wong WH, Lau YL. Smoke-free legislation reduces hospital admissions for childhood lower respiratory tract infection. Tob Control. 2016 Dec;25(e2):e90-e94.

- There was a decline in the annual proportional change for ischaemic heart disease (IHD), acute myocardial infarction (AMI) and CVD mortality in the year after the intervention (smoke-free legislation in Hong Kong) for all ages and those aged 65 years or older.

  Thach TQ, Hedley AJ et al. The smoke-free legislation in Hong Kong: its impact on mortality. Tob Control. 2016 Nov;25(6):685-691.

HKTS will join the AQO (Air Quality Objective) Review Concern Group

- A cross-disciplinary coalition which is composed of different medical groups, patients' group, Legislative councilors, green groups and chambers
- Aims to strengthen the call for public health as one of the overarching goals on legal and policy framework
- Regular meetings and Workshops
- Plan to submit a joint statement for the AQO Review Public Consultation in the first quarter of 2019 to pressure the Hong Kong Government to have HKAQO tightened up to the most stringent WHO level by 2019 and full compliance to the WHO standard by 2030, and set an action timeline to achieve the level

HKTS is also considering :

- Set air pollution as the theme of publicity of our society in 2019
- Arrange talk on air pollution in our academic meetings with different interest groups