



Health Hazard from Secondhand and Third-hand Smoke 二手菸與三手菸危害健康(英文)

Haze does not only come from air pollution in the environment, but also from cigarette smoking. Secondhand smoking is the main source of indoor haze (PM2.5) and only early smoking cessation will protect young children from threats of indoor haze.

Smoking by parents increases the risk of lung cancer in children and increase the likelihood of diseases including otitis media (ear infection), asthma, pneumonia and leukemia. It could also lead to sudden infant death syndrome, poor fetal growth and stillbirth. Even if parents do not smoke in front of their children, residual third-hand smoke attached to their clothes, car and house could still lead to leukemia in children.

Smoking in houses = Indoor Haze and brings harm to young children

The particulate matter (PM2.5) concentration in the house of smokers is 10 times that of non-smokers.

The amount of PM2.5 of non-smokers who have lived with smokers for their entire lifetime is similar to that of those who have been living in a city with severe haze. A 70% reduction of PM2.5 is found in nonsmoking households.

The chance of getting lung cancer for those living with smokers is 20~30% higher than that of the average

Long-term secondhand smoke exposure may even cause or aggravate respiratory tract disease in children, and is related to leukemia in children, lymphoma, brain and central nervous system lesions, liver lesion, hepatoblastoma and other cancers.

Secondhand smoke exposure rate in family reaches as high as 55.3%

According to the “Children’s Health Care Requirement Investigation,” secondhand smoke exposure rate in domestic infants under 18-month-old is as high as 55.3 %. Continuous follow-up of infants at age 3 and 5 show secondhand smoke exposure rates of 58.9 % and 54.3 %.

Infants aged 18 month, 3 years and 5 years seeking medical treatment due to asthma, otitis media and bronchitis have exposure rate to secondhand smoke of 55.6 %, 58.5 % and 53.4 %, respectively.

Third-hand smoke is an invisible killer for infants

Infants living with smokers not only have to sustain hazard of secondhand smoke, but also face threats from third-hand smoke. Studies show that third-hand smoke left on the clothes, car and housing furnishing may still lead to leukemia even if smokers do not smoke in front of their children.

Nicotine comes with strong surface adhesion and chemically reacts with the nitrate, ozone and other compounds in the air. It produces more powerful new toxins such as nitrosamine and other carcinogens that adhere to the clothing, furniture, curtain or carpet.

Early smoking cessation keeps children healthy with fewer diseases

The toxic particles of third-hand smoke residing in the environment contain at least 11 types of highly carcinogenic compounds that may lead to deficiency in the cognition of children and increase the probability of infantile asthma and middle ear cancers. They are particularly threatening to infants crawling in the house.

Smoking is hazardous to the health. Secondhand or third-hand smoke not only damages the infant’s respiratory system but also seriously affect their brain development.

Parents should quit smoke early to keep infants and pregnant women at home away from the threats of secondhand smoke. Parents can utilize the diverse smoke cessation resource and free smoke-cessation hotline at 0800-63-63-63 to create a healthy living environment for their family and children.