

Smoke-Free Cities

Health Harms of Secondhand Smoke



What's in Secondhand Smoke?

- Secondhand tobacco smoke is the combination of the smoke emitted by a burning tobacco product and the smoke exhaled by a smoker.¹
- Secondhand smoke contains a complex and toxic mixture of more than 7,000 chemicals, including about 70 known carcinogens.²
- The World Health Organization's International Agency for Research on Cancer classifies secondhand smoke as a carcinogen.¹
- There is no known safe level of exposure to secondhand smoke.³

Secondhand Smoke Causes Death, Disease and Disability

Secondhand smoke is a cause of premature death and disease in children and in adults who do not smoke.⁶ It kills an estimated 1.3 million people globally every year.³

- The 2021 Global Burden of Disease estimates that globally about 1.29 million adults, and 44,000 children under the age of 20 died from secondhand smoke exposure.⁴ In adults, secondhand smoke is a known cause of stroke, heart disease (including heart attacks), cancer, chronic obstructive pulmonary disease, respiratory infections, and other conditions.³
 - Exposure to secondhand smoke increases the risk of stroke by 20–30%⁶ and the risk of coronary heart disease by 25–30%.⁷
- In children, secondhand smoke causes sudden infant death syndrome (SIDS), low birth weight, impaired lung function, respiratory infections (such as bronchitis and pneumonia),

Contents of Secondhand Smoke

- **Carcinogens, such as benzene, polonium-210 and chromium;**
- **Toxic metals, such as arsenic, lead and cadmium;**
- **Poisonous gases, such as ammonia, hydrogen cyanide and carbon monoxide.**

Health Harms of Secondhand Smoke

ADULTS

Stroke

Lung cancer

Heart disease



CHILDREN

Low birth weight

Respiratory infections

SIDS

Asthma

Ear infections



chronic and acute respiratory symptoms (such as coughing and breathlessness), ear infections and exacerbated and more frequent asthma.⁶

- Evidence also suggests that secondhand smoke is a risk factor for breast cancer, nasal sinus cancer, pharynx and larynx cancer, lung cancer, chronic obstructive pulmonary disease, pre-term and low birth weight babies, type 2 diabetes, chronic and acute respiratory symptoms (such as coughing and breathlessness) and atherosclerosis (a build-up of plaque in the arteries) in adults.^{6,8}
- Secondhand smoke is a risk factor for developing and exacerbating childhood asthma.⁶

Exposure to Secondhand Smoke Remains High Worldwide

While almost 1/3 of the world's population lives in countries that protect them from exposure to secondhand smoke in workplaces and public places, and others are protected by state and local laws, the majority of the world's population remains unprotected by strong smoke-free laws.⁹

Adults working in establishments that allow smoking have prolonged exposure to secondhand smoke and thus a very elevated risk of harm to their health. These workers cannot avoid tobacco smoke if they want to keep their jobs. According to the Global Adult Tobacco Survey:

- In China, 50.9% of adults who work indoors are exposed to tobacco smoke at the workplace.¹⁰
- In India, 30.2% of adults who worked indoors were exposed to tobacco smoke at the workplace.¹¹
- In Pakistan, 70.0% of adults who worked indoors were exposed to tobacco smoke at the workplace.¹²

Patrons and hospitality workers are also exposed to high levels of secondhand smoke.

- In China, 73.3% of adults were exposed to secondhand smoke in restaurants.¹⁰
- In Vietnam, 89.1% of adults were exposed to secondhand smoke in bars.¹³
- A 2021 study shows the majority (57.6%) of youth globally continue to be exposed to secondhand smoke in public places.¹⁴

Adults exposed to tobacco smoke at the workplace



China



India



Pakistan

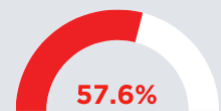
Patrons and hospitality workers exposed to secondhand smoke



China



Vietnam



Global Youth

Key Takeaways

- **Cities can play a key role in protecting their residents from secondhand smoke by passing comprehensive smoke-free laws.**
- **There is no known safe level of secondhand smoke exposure.**
- **Exposure to secondhand smoke causes death, disease and disability among nonsmoking adults and children.**
- **Adults exposed to secondhand smoke in the workplace are at greater risk for developing tobacco-related health problems than adults who work in smoke-free environments.**
- **In order to protect public health, countries should adopt comprehensive smoke-free laws that prohibit smoking in all indoor public places without exception.**
- **Everyone has the right to breathe clean air in workplaces and public places, free of the toxins in secondhand smoke that cause disease and death.**

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