

# Smoke-Free Environments

## THE HEALTH HARMS OF SECONDHAND SMOKE

### Facts About Secondhand Smoke

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

### 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.<sup>4</sup> It kills an estimated 890,000 people every year.<sup>5</sup>

A 2011 study estimated that in 2004, 47% of all deaths caused by secondhand smoke occurred in women, 28% in children and 26% in men.<sup>6</sup>

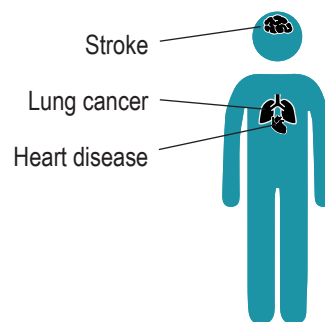
- In adults, secondhand smoke causes lung cancer, stroke and heart disease (including heart attacks).<sup>4</sup>
  - Secondhand smoke increases the risk of stroke by 20–30%.<sup>4</sup>
  - Secondhand smoke increases the risk of coronary heart disease by 25–30%.<sup>7</sup>
- In children, secondhand smoke causes sudden infant death syndrome (SIDS), low birth weight, impaired lung function, respiratory infections (such as bronchitis and pneumonia), chronic and acute respiratory symptoms (such as coughing and breathlessness), ear infections and exacerbated asthma attacks that occur more often.<sup>4</sup>
- The evidence suggests that secondhand smoke is a risk factor for breast cancer, nasal sinus cancer, pharynx and larynx cancer, chronic obstructive pulmonary disease, pre-term delivery, asthma, chronic and acute respiratory symptoms (such as coughing and breathlessness) and atherosclerosis (a build-up of plaque in the arteries) in adults.<sup>4</sup>
- The evidence suggests that secondhand smoke is a risk factor for developing asthma as a child.<sup>4</sup>

### Secondhand Smoke contains:

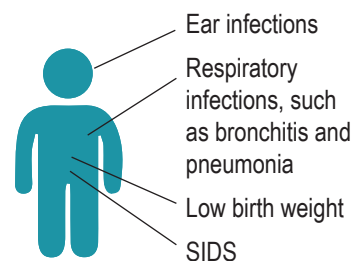
- Carcinogens, such as benzene, polonium-210 and chromium;
- Toxic metals, such as arsenic, lead and cadmium;
- Poisonous gases, such as ammonia, hydrogen cyanide and carbon monoxide.

### Health Harms

#### ADULTS



#### CHILDREN



## Exposure to Secondhand Smoke is High Worldwide

It was estimated that a third of women and about a fifth of men worldwide were exposed to secondhand smoke in 2016.<sup>8</sup> Another study conducted in 2016 estimated that about 56% of youth (age 12–15) across 68 low- and middle-income countries were exposed to secondhand smoke in any place.<sup>9</sup>

Adults working in establishments that allow smoking have prolonged exposure to secondhand smoke. These workers do not have a choice about avoiding tobacco smoke if they want to keep their jobs. According to the Global Adult Tobacco Survey:

- In Pakistan, 69.1% of adults who work indoors are exposed to tobacco smoke at the workplace.<sup>10</sup>
- In Egypt, 60.7 % of adults are exposed to tobacco smoke in enclosed areas at the workplace.<sup>11</sup>
- In China, 63.3% of adults have noticed tobacco smoke at workplaces.<sup>12</sup>
- In Indonesia, 51.3% of adults who work indoors are exposed to tobacco smoke at the workplace.<sup>13</sup>

## Key Messages

- **There is no 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.**

## References

1. International Agency for Research on Cancer. IARC Monograph Volume 100E (2012) Personal Habits and Indoor Combustions. World Health Organization 2012. 2. Centers for Disease Control and Prevention. Secondhand Smoke (SHS) Factsheet. U.S. Department of Health and Human Services 2017. 3. World Health Organization. WHO Report on the Global Tobacco Epidemic 2009. 4. U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Centers for Disease Control and Prevention 2014. 5. World Health Organization. Tobacco Factsheet. WHO March 2018. 6. Öberg M, Jaakkola M, Woodward A, Peruga A and Prüss-Ustün A. Worldwide burden of disease from exposure to second-hand smoke: a retrospective analysis of data from 192 countries. The Lancet 2011. 7. Institute of Medicine Committee on Secondhand Smoke Exposure and Acute Coronary Events. Secondhand Smoke Exposure and Cardiovascular Effects: Making Sense of the Evidence. Epidemiologic Studies of Secondhand-Smoke Exposure and Cardiovascular Disease. National Academies Press, 2010. 8. Global Burden of Disease 2016 Risk Factors Collaborators. Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet 2017. 9. Xi et al. Tobacco use and second-hand smoke exposure in young adolescents aged 12–15 years: data from 68 low-income and middle-income countries. The Lancet Global Health 2016. 10. Global Adult Tobacco Survey Pakistan 2014. 11. Global Adult Tobacco Survey Egypt 2009. 12. Global Adult Tobacco Survey China 2010. 13. Global Adult Tobacco Survey Indonesia 2011.