# **Fact Sheet**

## **Secondhand Smoke**

## (updated September 2006)

### **Definition of Secondhand Smoke**

- Secondhand smoke, also known as environmental tobacco smoke, is a complex mixture of gases and particles that includes smoke from the burning cigarette, cigar, or pipe tip (sidestream smoke) and exhaled mainstream smoke.<sup>1</sup>
- Secondhand smoke contains at least 250 chemicals known to be toxic, including more than 50 that can cause cancer.<sup>1</sup>

## **Health Effects of Secondhand Smoke Exposure**

- Secondhand smoke exposure causes heart disease and lung cancer in nonsmoking adults.<sup>2</sup>
- Nonsmokers who are exposed to secondhand smoke at home or work increase their heart disease risk by 25–30% and their lung cancer risk by 20–30%.
- Breathing secondhand smoke has immediate harmful effects on the cardiovascular system that can increase the risk of heart attack. People who already have heart disease are at especially high risk.<sup>2</sup>
- Secondhand smoke exposure causes respiratory symptoms in children and slows their lung growth.<sup>2</sup>
- Secondhand smoke causes sudden infant death syndrome (SIDS), acute respiratory infections, ear problems, and more frequent and severe asthma attacks in children.<sup>2</sup>
- There is no risk-free level of secondhand smoke exposure. Even brief exposure can be dangerous.<sup>2</sup>

### **Current Estimates of Secondhand Smoke Exposure**

- Exposure to nicotine and secondhand smoke is measured by testing the saliva, urine, or blood for the presence of a chemical called cotinine. Cotinine is a byproduct of nicotine metabolization, and tobacco is the only source of this marker.<sup>2</sup>
- From 1988–91 to 2001–02, the proportion of nonsmokers with detectable levels cotinine was halved (from 88% to 43%).<sup>3</sup>
- Over that same time period, cotinine levels in those who were exposed to secondhand smoke fell by 70%.<sup>3</sup>
- More than 126 million nonsmoking Americans continue to be exposed to secondhand smoke in homes, vehicles, workplaces, and public places.<sup>2</sup>
- Most exposure to tobacco smoke occurs in homes and workplaces.<sup>2</sup>
- Almost 60% of U.S. children aged 3–11 years—or almost 22 million children—are exposed to secondhand smoke.<sup>2</sup>
- About 25% of children aged 3–11 years live with at least one smoker, compared to only about 7% of nonsmoking adults.<sup>2</sup>

- The California Environmental Protection Agency estimates that secondhand smoke exposure causes approximately 3,400 lung cancer deaths and 22,700– 69,600 heart disease deaths annually among adult nonsmokers in the United States.<sup>4</sup>
- Each year in the United States, secondhand smoke exposure is responsible for 150,000–300,000 new cases of bronchitis and pneumonia in children aged less than 18 months. This results in 7,500–15,000 hospitalizations, annually.<sup>5</sup>

#### References

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### **For Further Information**

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