

# Great American Smokeout

November 19, 2009

*Thursday, November 19, is the Great American Smokeout, and the American Cancer Society continues its legacy of providing free resources to help smokers quit. The Great American Smokeout was inaugurated in 1976 to inspire and encourage smokers to quit for one day. Now, 39.8 percent of the 43.4 million Americans who smoke have attempted to quit for at least one day in the past year, and the Great American Smokeout remains a great opportunity to encourage people to commit to making a long-term plan to quit for good.*

## When Smokers Quit -Benefits of Quitting Over Time

**20 minutes after quitting:** Your heart rate and blood pressure drops.

**12 hours after quitting:** The carbon monoxide level in your blood drops to normal.

**2 weeks to 3 months after quitting:** Your circulation improves and your lung function increases.

**1 to 9 months after quitting:** Coughing and shortness of breath decrease; cilia (tiny hair-like structures that move mucus out of the lungs) regain normal function in the lungs, increasing the ability to handle mucus, clean the lungs, and reduce the risk of infection.

(Effect of Smoking on Arterial Stiffness and Pulse Pressure Amplification, Mahmud, A, Feely, J. 2003. *Hypertension*:41:183.)

## FACTS ABOUT SECONDHAND SMOKE

Secondhand smoke causes between 35,000 and 40,000 deaths from heart disease every year.<sup>1</sup> 3000 otherwise healthy nonsmokers will die of lung cancer annually because of their exposure to secondhand smoke.<sup>2</sup> These deaths occur because tobacco users are not the only ones who breathe smoke—all the people around them inhale it too. Unfortunately, non-smoking and ventilated public spaces cannot filter or circulate air at the rate necessary to eliminate secondhand smoke.<sup>3</sup>

### **What is Secondhand Smoke?**

- Secondhand smoke is the combination of smoke emitted from the burning ends of a tobacco product (sidestream smoke) and the smoke exhaled from the lungs of tobacco users (mainstream smoke).<sup>4</sup>
- Secondhand smoke contains over 4000 substances, more than 60 of which are known or suspected to cause cancer.<sup>5</sup> Some of the deadly substances in secondhand smoke and the cancers they cause are:

- o Arsenic, benzo(a)pyrene, cadmium, chromium, nickel, and NNK
    - lung cancer
  - o Nitrosamines □ cancers of the lung, respiratory system, and other organs
  - o Aromatic amines □ bladder and breast cancers
  - o Formaldehyde and nickel □ nasal cancer
  - o Benzene □ leukemia
  - o Vinyl chloride □ liver and brain cancer
  - o 2-naphthalimine and 4-aminobiphenyl □ bladder cancer
  - o Lead □ liver cancer
- Three of the above carcinogens -- arsenic, benzene, and vinyl chloride -- are regulated in the United States as hazardous air pollutants. Two of the bladder carcinogens -- 2-naphthalimine and 4-aminobiphenyl are banned for use in dye manufacturing.<sup>6</sup>
  - The Environmental Protection Agency (EPA) has classified secondhand smoke as a Group A carcinogen, a substance which is known to cause human cancer.<sup>7</sup>

<sup>1</sup> Steenland, K. (1992). Passive Smoking and the Risk of Heart Disease. *Journal of the American Medical Association* 267(1): 94-99.

<sup>2</sup> U.S. Environmental Protection Agency (EPA) (1992). *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*. Washington, D.C.: EPA.

<sup>3</sup> Repace, J, I. Kawachi and S. Glantz (1999). *Fact Sheet on Secondhand Smoke*. Available online at <http://repace.com/SHSFactsheet.pdf>.

<sup>4</sup> U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control (CDC) (1986). *The Health Consequences of Involuntary Smoking: A Report of the Surgeon General*. Washington D.C.: Government Printing Office (GPO).

<sup>5</sup> EPA (1992).

<sup>6</sup> Repace, J, I. Kawachi and S. Glantz (1999).

<sup>7</sup> EPA (1992).