Environmental Tobacco Smoke

What Is It?
Environmental tobacco smoke (ETS) is a mixture of particles that are emitted from the burning end of a cigarette, pipe, or cigar, and smoke exhaled by the smoker. Smoke can contain any of more than 4,000 compounds, including carbon monoxide and formaldehyde. More than 40 of the compounds are known to cause cancer in humans or animals, and many of them are strong irritants. ETS is often referred to as "secondhand smoke" and exposure to ETS is often called "passive smoking."

What Are the Health Effects?
Secondhand smoke has been classified as a Group A carcinogen by the U.S. Environmental Protection Agency (EPA), a rating used only for substances proven to cause cancer in humans. A study conducted in 2005 by the California EPA concluded that each year approximately 3,400 lung cancer deaths in nonsmoking adults are attributable to ETS. Exposure to secondhand smoke also causes eye, nose, and throat irritation. It may affect the cardiovascular system and some studies have linked exposure to secondhand smoke with the onset of chest pain. ETS is an even greater health threat to people who already have heart and lung illnesses.

Infants and young children whose parents smoke in their presence are at increased risk of lower respiratory tract infections (pneumonia and bronchitis) and are more likely to have symptoms of respiratory irritation like coughing, wheezing, and excess phlegm. In children under 18 months of age, passive smoking causes between 150,000 and 300,000 lower respiratory tract infections, resulting in 7,500 to 15,000 hospitalizations each year, according to EPA estimates. These children may also have a buildup of fluid in the middle ear, which can lead to ear infections. Slightly reduced lung function may occur in older children who have been exposed to secondhand smoke. In the United States, 21 million children live in homes where residents or visitors smoke in the home on a regular basis.

Children with asthma are especially at risk from ETS. The EPA estimates that exposure to ETS increases the number of asthma episodes and the severity of symptoms in 400,000 to 1 million children annually. Secondhand smoke may also cause thousands of non-asthmatic children to develop the disease each year.

What Can Be Done to Reduce Exposure to ETS?

- Do not allow smoking in the home, especially around children. Do not allow babysitters and others who work in the home to smoke in the home or near your children. If someone does smoke at home, increase ventilation in the area where smoking takes place.
• Make sure that any outside group that assists in the care of children, such as schools and daycare facilities, has a smoking policy in force that protects children from exposure to ETS.

• If your workplace does not have a smoking policy that protects nonsmokers from exposure to ETS, try to get it to implement one. See if it will either ban smoking indoors or designate a separately ventilated smoking room that nonsmokers do not have to enter as part of their work responsibilities.