



Influence of Second Hand Smoke on Life and Health

Second hand smoke causes premature death and disease in children and nonsmoking adults. It's true. Second hand smoke happens when a non-smoker breathes smoke from someone else's cigarette, pipe, or cigar. The dangers are real; they are life threatening and there are a lot of them.

Dangers of Smoke and Smoking

"Second hand smoke has been found to contain more than 50 cancer causing agents and at least 250 chemicals that are known to be toxic or carcinogenic." (Dr. Carmona, US Surgeon General, 2006)

According to the Office of the Surgeon General "concentrations of many cancer-causing and toxic chemicals are higher in secondhand smoke than in the smoke inhaled by smokers." Even brief exposure to second hand smoke can be a health risk in many different ways, some of which are mentioned below.

Breathing: Cigarette smoke damages the lungs and airways. Air passages swell and over time, become filled with mucus. This can cause a cough that won't go away. Airways become blocked and breathing becomes more difficult. Sometimes, this leads to chronic bronchitis, emphysema, asthma, and other breathing related conditions. As breathing becomes more difficult, the body gets less oxygen that is needed. Every system in the body needs oxygen.

Heart and Blood Circulation: As breathing becomes more difficult, the heart has to work harder than usual. Cigarette smoke increases blood clotting and damages the layer of cells that line blood vessels. It also causes arteries in the arms and legs to narrow.

Smoke can cause the platelets (clotting agents) in the blood to become sticky and cluster. This reduces clotting time, and makes blood thicker. All these effects harm a person's cardiovascular system, increasing the risk of strokes, heart attacks and other serious cardiovascular conditions. There is also evidence that second hand smoke decreases blood flow to a wound site which can delay the healing process.

Smoke and Health Risk: Secondhand smoke is a health hazard for all people. It is harmful to both children and adults, and to both women and men. Nonsmokers who are exposed to secondhand smoke in any environment, increase heart disease risk by 25–30% and lung cancer risk by 20–30%.

Brain: Nicotine in smoke reaches the brain ten seconds after smoke is inhaled. Because the brain is the body's center for mood and conscious thought, nicotine has an effect on both. Nicotine also increases heart rate and blood pressure.

Poisons in Cigarette Smoke

The smoke that comes off the tip of a cigarette is twenty times more deadly than the smoke that is inhaled by the smoker. In addition to nicotine, here are just **a few** of other poisons in cigarette smoke:

- ✓ **Acetone** (One of the active ingredients in nail polish remover)
- ✓ **Ammonia** (Increases amount of nicotine absorption in the body)
- ✓ **Benzene** (Used in pesticides and causes leukemia)
- ✓ **Benzopyrene** (One of the most potent cancer causing chemicals)
- ✓ **Formaldehyde** (Embalming fluid)
- ✓ **Lead** (Causes anemia and stomach problems. It also damages the brain, nerves and the reproductive system)
- ✓ **Hydrogen cyanide** (Used in the gas chamber)
- ✓ **Toulene** (Highly toxic substance found in paint thinner)

Second Hand Smoke and Children

Second hand smoke causes respiratory symptoms and slows lung growth in children. It causes colds, bronchitis, more frequent and severe asthma attacks. It impairs a child's ability to learn. It causes sudden infant death syndrome (SIDS), low birth weight, middle ear problems, brain tumors, and other diseases.

Myths about Second Hand Smoke

Myth 1: Air conditioning eliminates exposure to smoke toxins

Myth 2: Ventilation eliminates exposure to second hand smoke

Myth 3: Opening a window in a home eliminates exposure to second hand smoke

Myth 4: Separating smokers from nonsmokers in one area of a building eliminates exposure to second hand smoke

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), set U.S. standards on ventilation issues. They have determined that ventilation systems **cannot entirely remove secondhand smoke from indoor spaces.**

There are some things that can be done to protect you and loved ones from second hand smoke.

Protect Yourself and Loved Ones from Second Hand Smoke

1. Completely avoid second hand smoke.
2. Do not frequent businesses that permit smoking.
3. Thank and support businesses that have smoke free policies.
4. Be an advocate against smoking.
5. Do not allow children to be exposed to smoke.
6. Ask others not to smoke around you or loved ones.

Internet Resources: retrieved from Internet on August 20, 2007

- http://www.cdc.gov/tobacco/data_statistics/Factsheets/SecondhandSmoke.htm
- <http://www.surgeongeneral.gov/library/secondhandsmoke/factsheets/factsheet3.html>
- http://www.wramc.amedd.army.mil/education/pat_edu/womenhlth/HeartHealth/smoke.htm
- <http://no-smoke.org/document.php?id=212>
- <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=400727>
- <http://www.surgeongeneral.gov/library/secondhandsmoke/factsheets/factsheet6.html>
- <http://www.surgeongeneral.gov/news/speeches/06272006a.html>
- <http://health.nv.gov/tobacco/NCIAA/SecondHandSmokeInsert.pdf>