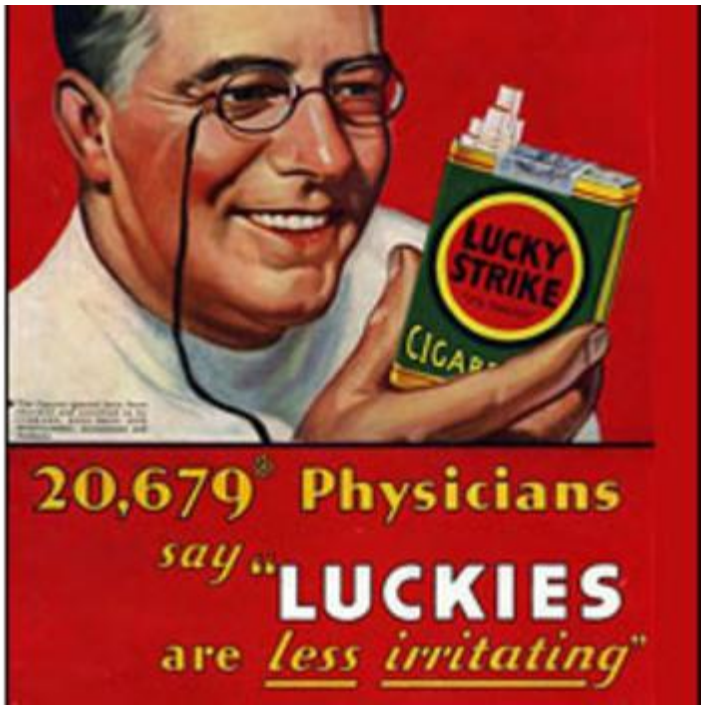
Smoking is not only hazardous to your health, but *OTHERS* too!

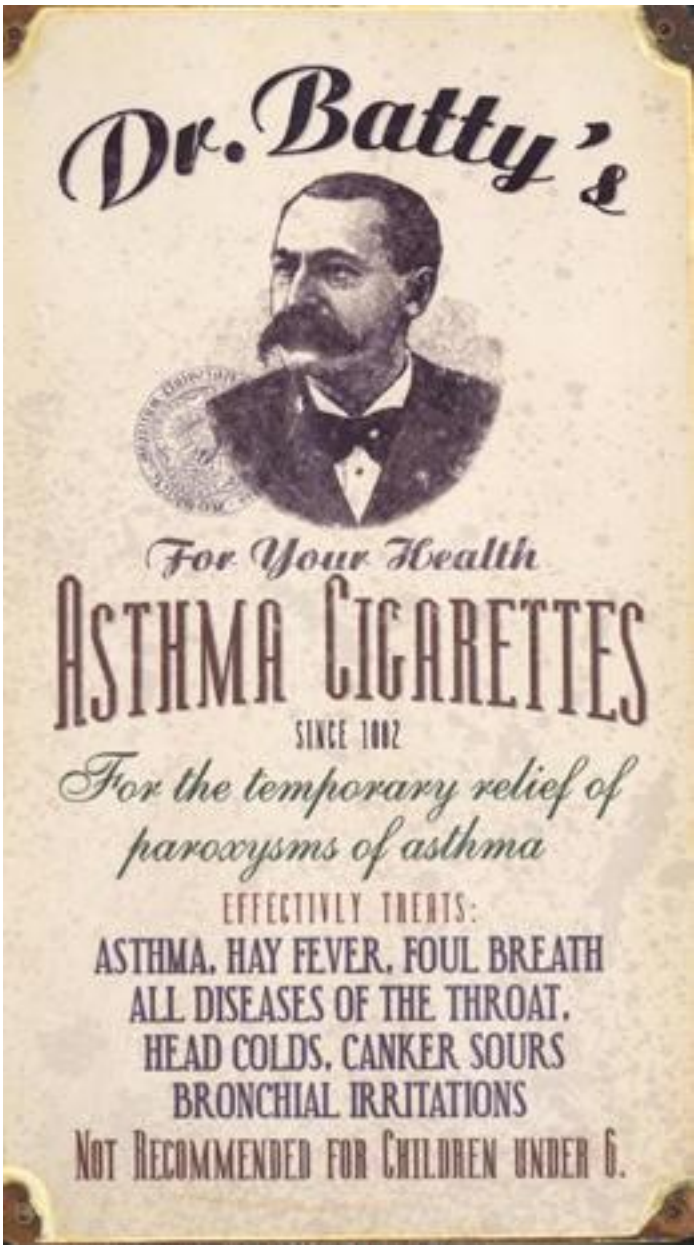
1st Hand, 2nd Hand & 3rd Hand Smoke from Tobacco Cigarettes - A Warning!

Compiled, Edited, Designed by: David A. Sargent



Cigarette smoke contains thousands of poisons substances, many of which have been linked to the development of diseases. The chemical components of a cigarette combine to form new chemical substances. Chemical substances occur in cigarette smoke as gasses or as particles made up of water, tar and nicotine. The tar is a messy mixture of

hundreds of toxic chemicals, many of which are known to cause cancer (for example, nitrosamines, benzpyrene).



Many of the gases in tobacco smoke are harmful. These include carbon monoxide, nitrogen oxides, hydrogen cyanide, ammonia, and other toxic irritants such as acrolein and formaldehyde. Due to the high temperatures (over 800°C or 1400°F), the burning end of a cigarette is like a miniature chemical factory. It churns out many more noxious chemicals than are found in unlit tobacco or taken in by use of smokeless tobacco (for example, snuff, which contains no tar or gases). Altogether more than 4,000 chemical compounds have been identified in tobacco smoke.

The particles in tobacco smoke have different effects on the lung function, depending on how well or lacking the cigarette is filtered, how much or less of the cigarette is smoked, and how large or small the particles are. During smoking, the larger particles get deposited on the delicate lining of the lung and the larger airways that lead into the lung. Over time, the larger particles and certain gases in the cigarette smoke scar the lungs and damage the thousands of little hairs that line the airways.

Deposits of small particles in the smaller airways of the lungs can lead to a lung disease called emphysema. Cigarette smoking is the leading cause in many life threatening diseases. The chemicals that cause cancer are mainly in the tar. Tar, together with some of the irritant gases, may also be partly responsible for chronic bronchitis and emphysema. Nitrogen oxides are suspected, but the main agents responsible are not yet known. Neither nicotine nor carbon monoxide causes cancer, but they probably work together as causes of the heart diseases associated with smoking. It is easy to understand why the main cancers caused by smoking are at sites having direct contact with the smoke, specifically the lungs, mouth, and throat.

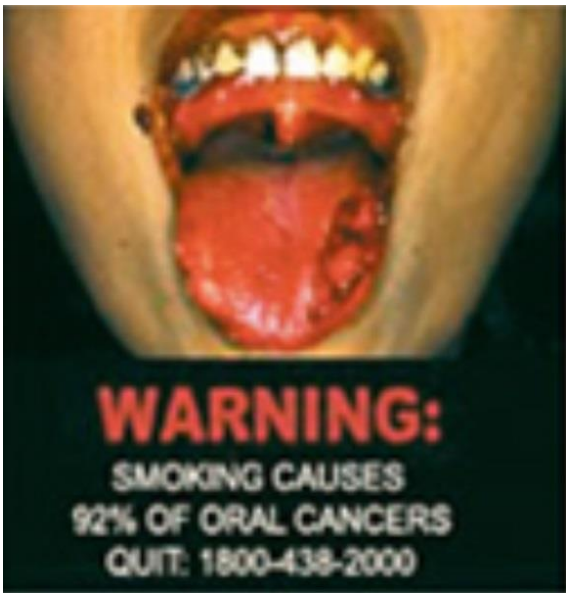
However, some cancer-producing chemicals are absorbed into the blood and transported to other parts of the body. This is how smoking causes cancer of the bladder, kidney, pancreas, and uterus.

The rate of death from cancer and heart diseases is twice as high in smokers as non-smokers. People who smoke two or more packs a day are three or four times more likely to have cancer or heart diseases than are non smokers. The way in which smoking causes heart attacks, strokes and other cardiovascular diseases is quite complex.

After absorption through the lungs, carbon monoxide combines with hemoglobin in the red blood cells and

reduces the amount of oxygen they can carry around the body.

Carbon monoxide and nicotine both appear to play a part in accelerating the deposition of cholesterol in the inner lining of arteries which over many years leads to arteriosclerosis, a kind of hardening and furring up of arteries which reduces blood flow.



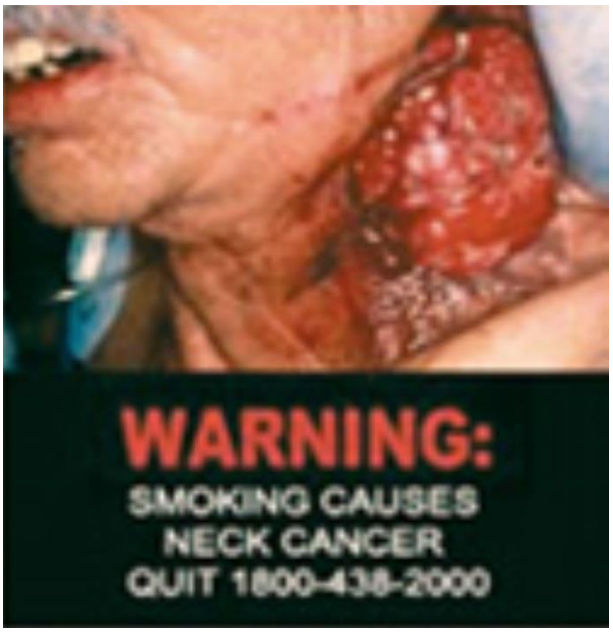
Cigarette smoking also makes the blood clot more easily, making episodes of thrombosis more likely.

Impairment of blood flow, and of oxygen-carrying capacity due to carbon monoxide, all reduces the supply of oxygen. This happens at the same time that the heart's need for oxygen is increased by the stimulant effect of nicotine on the rate and force of the heart's contractions. The lack of oxygen is damaging to the heart and increases the severity of a heart attack.

Nicotine can cause further problems by upsetting the regular rhythm of the heart.

Nicotine and carbon monoxide are also important factors in peripheral vascular disease, which can lead to gangrene of the feet. Nicotine causes constriction, or narrowing, of the small blood vessels. This, combined with carbon monoxide's oxygen-reducing effect, tips the balance in people with narrowed leg arteries.

Likewise, nicotine constriction of blood vessels in the placenta (which provides nourishment to an unborn baby), combined with the effects of carbon monoxide, reduces oxygen supply to the unborn babies of pregnant women who smoke.



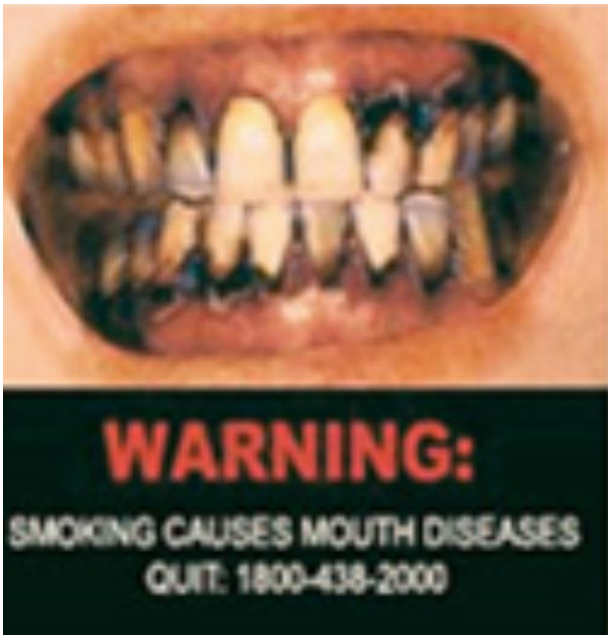
In these various ways both nicotine and carbon monoxide are involved in the effects of smoking on coronary heart disease, other vascular diseases, and on the development of the unborn child. Although stopping smoking may not reverse arteriosclerosis, a disease in which plaque builds up in the arteries, it will progress less quickly. Also, while the efficiency of the lungs decreases with age causing rapid degeneration of age in smokers. Smoking kills more than 400,000 people each in the United States, according to the U.S. government.

However, the other negative effects from smoking are reversed within 24 hours of stopping, when nicotine and carbon monoxide have cleared from the body.

- Within 48 hours after quitting smoking, blood pressure decreases, pulse rate drops, body temperature of hands and feet increases, the carbon monoxide level in the blood returns to normal, the oxygen level in the blood increases to normal, the chance of a heart attack decreases, nerve endings start regenerating, and the ability to taste and smell is increased.
- Within the first year after quitting smoking circulation and lung function increase, and coughing, sinus congestion and shortness of breath decrease.

Pipe and Cigar Smoking

Pipe and cigar smokers who have never smoked cigarettes tend to be non-inhalers and their health risks are not as great as those of cigarette smokers. Due to the stronger, more alkaline smoke and longer periods of puffing, satisfying amounts of nicotine are absorbed slowly through the lining of the mouth and throat. However, their risk for cancers of the mouth and throat are significantly higher than that of nonsmokers.



Cigarettes, in contrast, provide pharmacological doses of nicotine only if they are inhaled. Cigarette smokers unfortunately become so addicted to the rapid absorption of nicotine through the lungs that they usually continue to inhale after switching to a pipe or cigars. Their health risks are therefore not reduced after switching and may even be increased. By providing smaller and milder cigars, the tobacco industry has made it easier for smokers to continue to inhale when they switch to cigars.

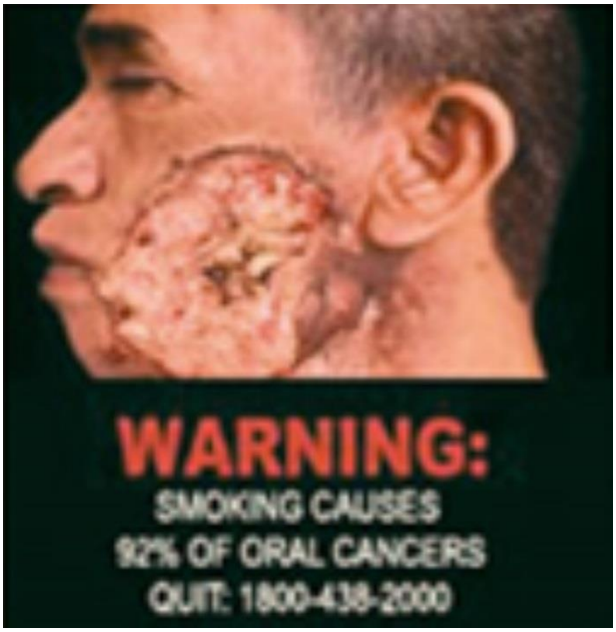
Passive Smoking

Passive smoking is the breathing in of air that has been polluted by other people's smoke. The smoke and the chemicals it contains remain in the air of a room for many hours, especially if it is poorly ventilated. They can also spread to other rooms. The concentrations of some cancer-producing nitrosamines are much higher in the side-stream smoke from the burning end of a cigarette than in the mainstream smoke inhaled directly by the smoker.

Passive smoking is difficult to avoid completely, and most nonsmokers who are exposed to it have measurable quantities of smoke products in their body fluids. Many nonsmokers find other people's smoke unpleasant and irritating. It may give them headaches and feelings of hangover.

Passive smoke also carries significant health risks for nonsmokers:

The amount of nicotine absorbed by a nonsmoking child whose father smokes is equivalent to the child himself smoking about 30 cigarettes a year; 50 cigarettes a year from a mother who smokes, and 80 cigarettes a year if both parents smoke.



A nonsmoker who spends about four hours in a smoky room may absorb the equivalent of one cigarette.

Nonsmoking women whose husbands smoke have a 50% increase in their risk for lung cancer.

Secondhand smoke causes about 3,000 lung cancer deaths each year in nonsmokers.

Young children are especially vulnerable and have an increased risk of coughs and chest and ear infections if their parents smoke.

Proverbs 17:6, “Children's children are the crown of old men;
and the glory of children are their fathers.”

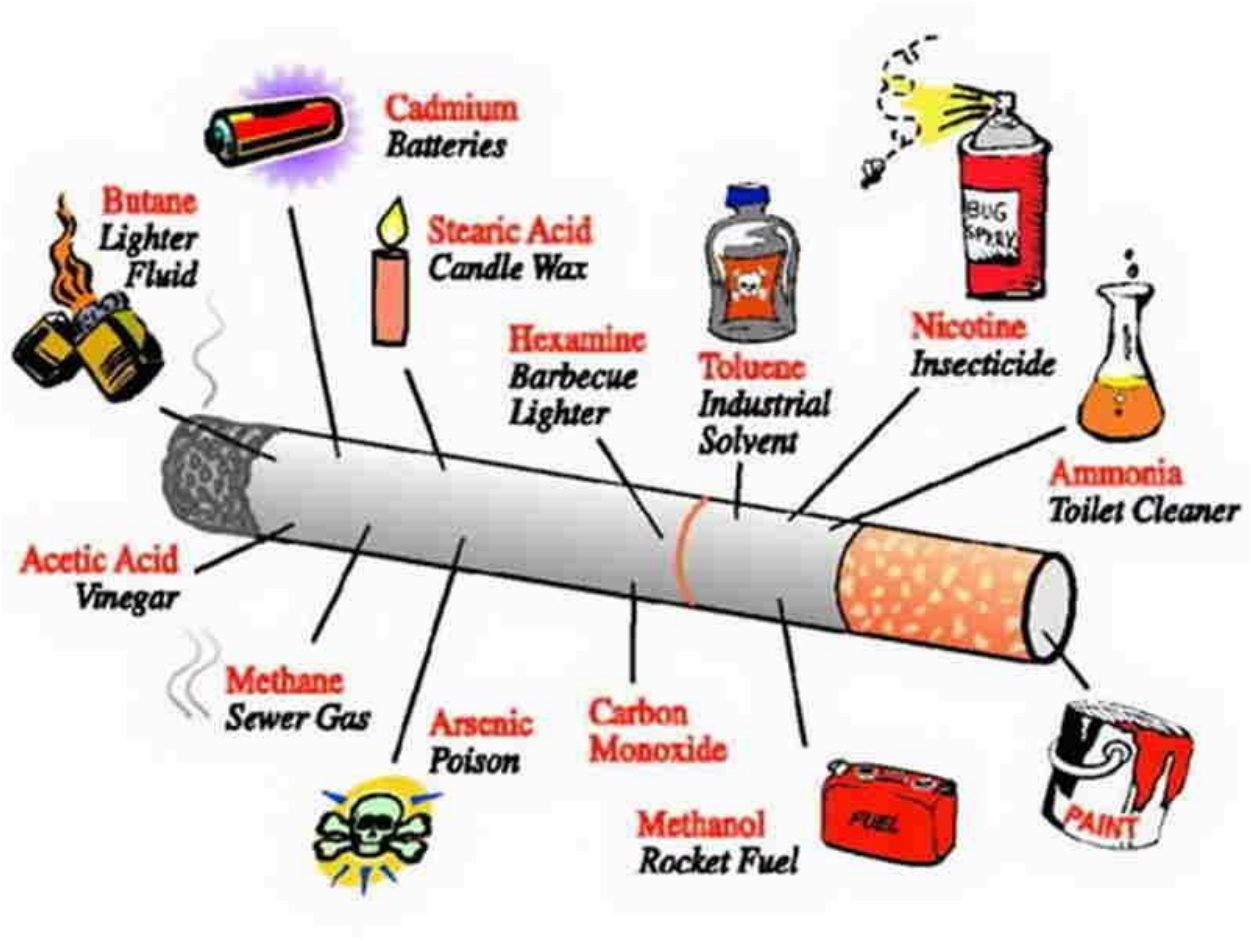
Here are some of the things you breathe in secondhand smoke, together with their common uses:

Acetone	Nail polish remover (Warning on Products about ventilation.)
Acetic Acid	Vinegar
Aluminum	Metal
Ammonia	Floor and toilet cleaner
Arsenic	Rat poison
Benzene	Industrial solvent
Benzo(a)pyrene	Diesel exhaust
Butane	Cigarette lighter fluid
Cadmium	Rechargeable batteries
Copper	Electric wiring
Carbon Monoxide	Auto exhaust
DDT	Insecticide (Warning on Products about ventilation.)
Dieldrin	Insecticide (Warning on Products about ventilation.)
Formaldehyde	Preservative for dead bodies, wood, and fabrics
Hexamine	Barbecue lighter
Hydrogen Cyanide	Gas chamber poison. (Hitler used to kill the Jewish people or genocide)

Lead	Fishing sinkers
Magnesium	Flares
Methane	Swamp gas (Also found in a FART!)
Methanol	Rocket and auto fuel
Napthalene	Moth balls
Nicotine	Insecticide and the addictive drug in tobacco
Nitrobenzene	Gasoline additive
Nitrous Oxide Phenols	Disinfectant
Polonium 210	Radioactive compound (Where is the radioactive symbol on the package?)
Silicon	Computer chips
Silver	Jewelry
Stearic Acid	Candle wax
Titanium	Airplane and missiles
Toluene	Industrial solvent (Warning on Products about ventilation.)
Vinyl Chloride	Raw material to make plastic
Zinc	Metal, in pennies

Isaiah 14:21, “Prepare slaughter for his children for the iniquity of their fathers; that they do not rise, nor possess the land, nor fill the face of the world with cities.”

What's in cigarette smoke?



1. Toxic gasses from incinerated tobacco that spread rapidly through the air.

2. Small particles that remain suspended in the air indefinitely.

3. Larger particles that settle on floors, ceilings, and walls — only to be swept into the air again.

A little toxic waste dump on fire...

A burning cigarette puts thousands of poisons into the air. Because smokers only take a few puffs from each cigarette, it spends over 90% of the time smoldering and generating air pollution non-smokers are forced

to breathe. In fact, most of the toxic chemicals produced by cigarettes end up in the air non-smokers breathe rather than being inhaled by the smoker.

Because cigarette smoke is so complex and so toxic, it is impossible to remove the health danger for non-smokers with filters or ventilation. Big Tobacco, while hawking ventilation "solutions" is always careful to include a disclaimer saying that ventilation "does not purport to address health effects..."

3rd Hand Smoke!

Researchers at Massachusetts General Hospital for Children (MGHfC) have coined a new term that describes yet another set of dangers associated with cigarette smoke: third-hand smoke. Study results published in the January, 2009 issue of the journal Pediatrics discuss how this new health hazard, third-hand smoke, is especially dangerous for children.

Have you ever stood in a check-out line and known there was a smoker nearby, even though no one was smoking at the time? Or have you perhaps walked into a room that had the unmistakable smell of stale cigarette smoke lingering, regardless of the fact that a fan was moving the air? This is what researchers are calling third-hand smoke -- and it represents the toxic deposits that are left behind long after a cigarette is put out.

Cigarette smoke contains gases and small particles that are deposited on every surface they come in contact with, be it the smoker's hair and clothing, or the environment the cigarette was smoked in. Dangerous for

young children who may crawl on contaminated surfaces and ingest toxins via hand-to-mouth, third-hand smoke is a serious health risk for our kids, especially those who live in the homes of smokers.

In discussing the hazards of transferring toxins clinging to the smoker and his or her surroundings to children in the vicinity, Jonathan Winickoff, MD, MPH, lead author of the study and assistant director of the MGHfC Center for Child and Adolescent Health Policy explains, "When you come into contact with your baby, even if you're not smoking at the time, she comes in contact with those toxins. And if you breastfeed, the toxins will transfer to your baby in your breast milk." Winickoff adds however, that nursing a baby if you're a smoker is still a better choice than bottle-feeding. Researchers involved in the study surveyed more than 1,500 households in an effort to learn about adult attitudes regarding the danger third-hand smoke represents to their children and how that might affect smoking in the home.

Highlights of what they discovered include:

Approximately 95 percent of nonsmokers and 84 percent of smokers believe that secondhand smoke is hazardous for children. On the issue of whether third-hand smoke threatens the health of children: 65 percent of nonsmokers and 43 percent of smokers felt that third-hand smoke harms children.

When asked about rules regarding smoking in the home:

Approximately 88 percent of nonsmokers said they didn't allow smoking, while only 27 percent of smokers prohibit smoking in the home. However, both non-smokers and smokers who felt that third-hand smoking was harmful to children's health were more inclined to restrict smoking in their homes.

The Chemicals in Cigarettes

Researchers have identified upwards of 4,000 different chemical compounds that are present in cigarette smoke, including 200 poisonous gases, 60 carcinogens and several heavy, toxic metals.
The Chemicals in Cigarettes: What They Are and How They Affect Us

Secondhand Smoke

When a cigarette is smoked, about half of the smoke is inhaled and exhaled (mainstream smoke) by the smoker and the other half floats around in the air (side-stream smoke). The combination of mainstream and side-stream smoke makes up environmental tobacco smoke (ETS).

Secondhand Smoke Facts

Also known as secondhand smoke, ETS plays a role in a multitude of health problems that can affect nearly every organ of our bodies. From heart disease and cancer to respiratory problems that steal our ability to breathe, secondhand smoke is toxic and dangerous to anyone exposed to it.

Children and Secondhand Smoke

Children face a higher risk than adults of the negative effects of secondhand smoke. Not only is a child's body still developing physically, but their breathing rate is faster than that of adults. Adults breathe in and out approximately 14 to 18 times a minute, where

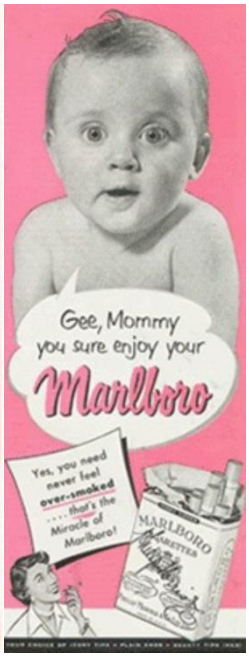
newborns can breathe as many as 60 times a minute. Up until a child is about 5 years old, the respiratory rate is quite fast; usually between 20 and 60 breaths per minute.

Secondhand Smoke and Children

When the air is tainted with cigarette smoke, young, developing lungs receive a higher concentration of inhaled toxins than do older lungs.

They Depend on Us

Young children have less control over their surroundings than the rest of us. Babies can't move to another room because the air is smoky, or the floor is contaminated with the toxic residue of cigarette smoke. They depend on us to provide them with a healthy environment to grow up in. Do your part to insure that children don't suffer the health hazards posed by cigarette smoking. Ban smoking in your home and car, and if you smoke, quit now.



Proverbs 22:6, “Train up a child in the way he should go: and when he is old, he will not depart from it.”