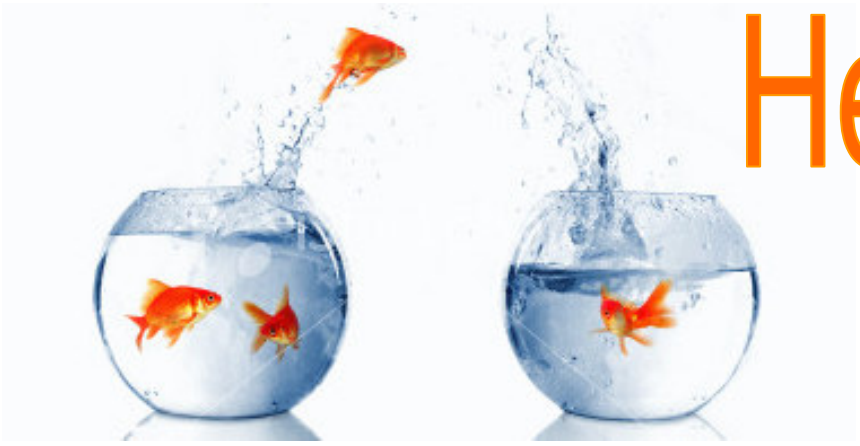


Healthy Lungs

How Our Lungs Work

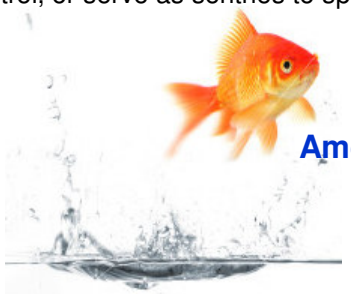
In mechanical terms lungs can be described as the site of gas exchange: Oxygen--the fuel all cells and organs of our body need to function--is extracted from the air we inhale and infused into the bloodstream, to be distributed to other organs and tissues. With each exhalation, we dispose of carbon dioxide. In our lungs, in the course of a single day 8,000 to 9,000 liters of breathed-in air meet 8,000 to 10,000 liters of blood pumped in by the heart through the pulmonary artery. The lungs relieve the blood of its burden of waste and return a refreshed, oxygen-rich stream of blood to the heart through the pulmonary vein.

The lungs are internal organs. Yet they are constantly exposed to our external environment--a direct interface with the world outside. With each breath, a host of alien substances enter our bodies.

The lungs, with their tiny air sacs called alveoli, have sometimes been compared to sponges. They are actually far more complex than many other organs. The lungs must play multiple roles--supplier of oxygen, remover of wastes and toxins, defender against hostile intruders. They contain at least three dozen distinct types of cells, each with its special tasks and abilities. Some scavenge foreign matter. Others, equipped with delicate, hairlike cilia, sweep the mucous membranes lining the smallest air passages. Still others act on substances crucial to blood-pressure control, or serve as sentries to spot invading agents of infection.

What is the cost?

Smoking-related diseases claim an estimated 438,000 American lives each year, including those affected indirectly, such as babies born prematurely due to prenatal maternal smoking and victims of "secondhand" exposure to tobacco's carcinogens. Smoking costs the United States over $167 billion each year in health-care costs including $92 billion in mortality-related productivity loses and $75 billion in direct medical expenditures or an average of $3,702 per adult smoker.



Source:
American Lung Association

Wellness Proposals.com

Cigarette Smoking and our Lungs

Cigarette smoking has been identified as the most significant source of preventable morbidity and premature mortality worldwide. Cigarette smoke contains over 4,800 chemicals, 69 of which are known to cause cancer. Smoking is directly responsible for approximately 90 percent of lung cancer deaths and approximately 80-90 percent of COPD (emphysema and chronic bronchitis) deaths.

- About 8.6 million people in the U.S. have at least one serious illness caused by smoking.
- Smoking in pregnancy accounts for an estimated 20 to 30 percent of low-birth weight babies, up to 14 percent of preterm deliveries, and some 10 percent of all infant deaths.
- Smoking by parents is associated with a wide range of adverse effects in their children, including exacerbation of asthma, increased frequency of colds and ear infections, and sudden infant death syndrome.
- In 2005, an estimated 45.1 million, or 21.0 percent of, adults were current smokers.
- Tobacco advertising plays an important role in encouraging young people to begin a lifelong addiction to smoking before they are old enough to fully understand its long-term health risk.
- Approximately 90 percent of smokers begin before the age of 21.
- In 2005, 23 percent of high school students were current smokers as well as over 8 percent of middle school students .
- Secondhand smoke involuntarily inhaled by nonsmokers from other people's cigarettes is classified by the U.S. Environmental Protection Agency as a known human (Group A) carcinogen, responsible for approximately 3,400 lung cancer deaths and 46,000 (ranging 22,700-69,600) heart disease deaths in adult nonsmokers annually in United States.
- Employers have a legal right to restrict smoking in the workplace, or implement a totally smoke-free workplace policy.

For more information on smoking, please review the Tobacco Use Morbidity and Mortality Trend Report in the Data and Statistics section at www.lungusa.org or call the American Lung Association at 1-800-LUNG-USA (1-800-586-4872).