SECONDHAND SMOKE

Note from the editor: The City of Manhattan is looking into the possibility of establishing a city ordinance eliminating smoking in workplaces. Therefore, this issue will look at some of the research on secondhand smoke.

The U.S. Surgeon General issued a report in June 2006 saying that there is no safe level of exposure to secondhand tobacco smoke. "The health effects of secondhand smoke exposure are more pervasive than we previously thought," said Surgeon General Richard Carmona. "The scientific evidence is now indisputable: Secondhand smoke is not a mere annoyance. It is a serious health hazard that can lead to disease and premature death in children and nonsmoking adults."

Key findings about the effects of secondhand smoke:

- Raises the risk of heart disease for nonsmokers by 25-30 percent
- Raises the risk of lung cancer for nonsmokers by 20-30 percent
- Linked to sudden infant death syndrome
- Linked to childhood respiratory problems, ear infections, and asthma attacks

Secondhand smoke, also known as environmental tobacco smoke, is a mixture of the smoke given off by the burning end of tobacco products (sidestream smoke) and the mainstream smoke exhaled by smokers. Secondhand smoke is a complex mixture containing many chemicals (including formaldehyde, cyanide, carbon monoxide, ammonia, and nicotine), many of which are known carcinogens. The inhalation of secondhand smoke is sometimes called involuntary smoking. This year more than 126 million nonsmokers in the United States will be exposed to secondhand smoke. In 2005, it was estimated that exposure to secondhand smoke yearly kills more than 3,000 adult nonsmokers from lung cancer, approximately 46,000 from coronary heart disease, and an estimated 430 newborns from sudden infant death syndrome. According to the CDC’s National Health Interview Survey in 2000, more than 80 percent of the respondents age 18 years or older believe that secondhand smoke is harmful. Separating smokers and nonsmokers in the same air space is not effective, nor is air cleaning or a greater exchange of indoor with outdoor air. Also, having separately ventilated areas for smoking may not offer a satisfactory solution to reducing workplace exposures.

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2006 SURGEON GENERAL’S REPORT
HEALTH EFFECTS OF SECONDHAND SMOKE

EVIDENCE IS “SUGGESTIVE” THAT THERE IS A RELATIONSHIP BETWEEN:

- Maternal exposure to secondhand smoke during pregnancy and preterm delivery.
- Prenatal and postnatal exposure to secondhand smoke and childhood cancer.
- Prenatal and postnatal exposure to secondhand smoke and childhood leukemias.
- Prenatal and postnatal exposure to secondhand smoke and childhood lymphomas.
- Secondhand smoke and breast cancer.
- Secondhand smoke and a risk of nasal sinus cancer among nonsmokers.
- Exposure to secondhand smoke and an increased risk of stroke.
- Secondhand smoke exposure and adult-onset asthma.
- Secondhand smoke exposure and risk for chronic obstructive pulmonary disease.
- Chronic secondhand smoke exposure and a small decrement in lung function in the general population.
- Short-term secondhand smoke exposure and an acute decline in lung function in persons with asthma.
- Secondhand smoke exposure and acute respiratory symptoms including cough, wheeze, chest tightness, and difficulty breathing among persons with asthma and healthy persons.
- Prenatal and postnatal exposure to secondhand smoke and childhood brain tumors.

EVIDENCE IS SUFFICIENT TO INFER A “CAUSAL” RELATIONSHIP BETWEEN:

- Secondhand smoke exposure and nasal irritation.
- Maternal exposure to secondhand smoke during pregnancy and a small reduction in birth weight.
- Parental smoking and cough, phlegm, wheeze, and breathlessness among children of school age.
- Maternal smoking during pregnancy and persistent adverse effects on lung function across childhood.
- Exposure to secondhand smoke after birth and a lower level of lung function during childhood.
- Persons with nasal allergies or a history of respiratory illnesses are more susceptible to developing nasal irritation from secondhand smoke exposure.
- Parental smoking and middle ear disease in children, including acute and recurrent otitis and chronic middle ear effusion.
- Secondhand smoke exposure and lung cancer among lifetime nonsmokers.
- Exposure to secondhand smoke and sudden infant death syndrome.
- Exposure to secondhand smoke and increased risks of coronary heart disease morbidity and mortality among both men and women.
CONCLUSIONS FROM PREVIOUS SURGEON GENERAL'S REPORTS

Children of smoking parents have an increased prevalence of reported respiratory symptoms, and have an increased frequency of bronchitis and pneumonia early in life.

Children of smoking parents appear to have measurable but small differences in tests of pulmonary function when compared with children of nonsmoking parents.

Children of parents who smoke have an increased frequency of a variety of acute respiratory illnesses and infections, including chest illnesses before 2 years of age and physician-diagnosed bronchitis, tracheitis, and laryngitis, when compared with the children of nonsmokers.

Chronic cough and phlegm are more frequent in children whose parents smoke compared with children of nonsmokers.

Chronic middle ear effusions are more common in young children whose parents smoke than in children of nonsmoking parents.

Cigarette smoke in the air can produce an increase in both subjective and objective measures of eye irritation.

OTHER INFORMATION FROM THE 2006 SURGEON GENERAL'S REPORT

* Workplaces and homes are the predominant locations for exposure to secondhand smoke.

* Exposure to secondhand smoke tends to be greater for persons with lower incomes.

* Evidence from peer-reviewed studies shows that smoke-free policies and regulations do not have an adverse economic impact on the hospitality industry.

* Expectant females expose their fetus to tobacco smoke whether from their active smoking or from their exposure to secondhand smoke.

* Smoking by parents slows lung growth in their children.

* More than 50 carcinogens have been identified in sidestream and secondhand smoke.

* Exposure to secondhand smoke causes endothelial cell dysfunction

* Establishing smoke-free workplaces is the only effective way to ensure that secondhand smoke exposure does not occur in the workplace.

CANCER CAUSING CHEMICALS IN SECONDHAND SMOKE:

- Formaldehyde...used to embalm dead bodies
- Benzene...found in gasoline
- Polonium-210...radioactive
- Vinyl Chloride...used to make pipes
- Carbon Monoxide...found in car exhaust
- Hydrogen Cyanide...used in chemical weapons
- Butane...used in lighter fluid
- Ammonia...used in household cleaners
- Toluene...found in paint thinners
- Cadmium...used in making batteries
- Lead...once used in paint
- Arsenic...used in pesticides
- Chromium...used to make steel

Secondhand smoke has more than 4,000 chemicals! Source: CDC

FINAL THOUGHTS: The tobacco industry has actively tried to sustain the controversy about secondhand smoke even as the scientific community has reached consensus regarding its negative effects. During the time the epidemiologic studies of secondhand smoke have been carried out, exposure has been widespread and almost unavoidable. Therefore, the risk estimates may be biased downward because there are no truly unexposed persons!

2006 Surgeon General’s Report

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KSU Counseling Services
English/Counseling Services - 2nd Floor
Phone: 532-6927

KSU Alcohol & Other Drug Education Service
Director: Bill Arck
214 English/Counseling Services Bldg.
Phone: 532-6927

Alcoholics Anonymous
Noon Meeting (Mon.-Sat.)
Blue Valley United Methodist Church
835 Church Ave.
Phone: 537-9260

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