chemical compounds, of which at least 43 are known to cause cancer or birth defects. Cigarette manufacturers add 600 different ingredients to their products, many of which are known to be extremely dangerous to health. According to the FDA, cigarette manufacturers also manipulate the nicotine content in order to maintain and provide for the user's addiction to the product. The Brown and Williamson Tobacco Corporation even genetically altered tobacco plants in order to double their natural nicotine content.

Each puff of smoke includes (among others) carbon monoxide, ammonia, formaldehyde, benzene, heavy metals, hydrogen cyanide and radioactive substances. If food or household products contained such chemicals, or caused such extensive death and illness, they would be banned. Tobacco, however, continues not only to be supported, but also to be subsidized by our government and Congress.

Tobacco is dangerous and affects many people. There are more than 50 million smokers in the United States and they consume more than 530 billion cigarettes a year. Worldwide, nearly a billion people smoke and use more than 5 trillion cigarettes. Also worldwide, tobacco use kills more than 3 million people each year. That figure is expected to increase to 10 million by the year 2020. Smoking is an epidemic that is growing at a faster rate than world population. Tobacco use is a unique hazard, according to the World Health Organization, since it will eventually kill half of all its users.

Tobacco has been used by humans for more than 1,600 years, and its associated medical problems have been known for more than 400 years. This is not a newly-discovered hazard to our health. Tobacco seeds were found in archaeological excavations in Mexico and Peru; and in 1633, Sultan Morad IV of Constantinople made smoking tobacco a capital offense, punishable by death. He held frequent public executions to support that decision. The first Romanov Czar of Russia, Mikhail Feodorovich, declared severe penalties for anyone caught smoking. By the late 1700s, King James I of England was strongly opposed to tobacco use, declaring it to be "a custome lothsome to the eye, hateful to the nose, harmeful to the braine, dangerous to the lungs, and in the black stinking fume thereof, nearest resembling the horrible Stygian smoke of the pit that is bottomless." He urged its prohibition and increased tobacco duty taxes by 4,000 percent. By the late 19th and early 20th centuries, nearly every state in the United States had some type of law against cigarettes or other uses of tobacco.

In 1761 Dr. John Hill published the first medical paper linking tobacco use and cancer (nasal); and a Cambridge, England physician published in 1789 a more extensive treatise on the dangers of using snuff. By 1964 more than 6,000 studies had been published in the world's medical literature on the health problems associated with the use of tobacco. By 1994 that literature had increased to more than 60,000 publications. We know smoking is dangerous and deadly; it is also wasteful. The land devoted to tobacco crop production today could be used to feed 10 to 20 million people a year, if planted in grains or other edible crops.

Knowledge about the risks associated with the use of tobacco, and recommendations on preventing resultant injuries and diseases, comes entirely from comprehensive human epidemiological research and the observations of physicians. None of this information has resulted from decades of animal experimentation.

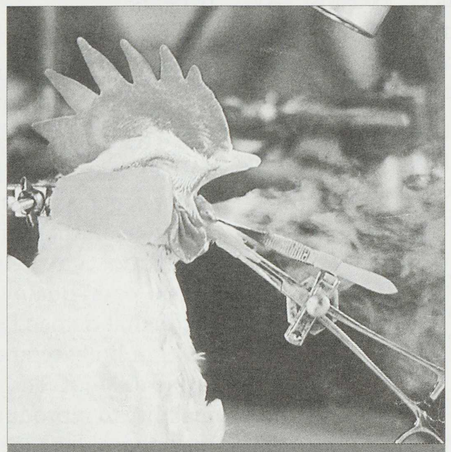
Since the dangers from tobacco smoke also come from passive exposure, we are all at risk. Current estimates indicate that more American cancer deaths result from passive exposure to tobacco smoke than from all of the regulated industrial air pollutants. For this reason, the EPA has classified passive tobacco smoke as a Class A carcinogen (very hazardous). It is only the tenth substance to receive such a high designation, with the others being materials like radon, benzene and asbestos.

Exposure to passive smoke is associated with *decreased* lung capacities, *increased* early childhood illnesses (bronchitis, pneumonia, upper respiratory tract infections, asthma) and *increased* risk for lung, cervical, thyroid, breast and brain cancers. Also, when one or both parents smoke it is associated with decreased intellectual and general child development.

Active use of tobacco products exposes individuals to a vast array of diseases and injuries. It is specifically known that tobacco smoke causes gastric and duodenal ulcers; 50% of all strokes; 90% of chronic obstructive lung disease; 30% of all cancers, including cancers of the bladder (50%), cervix (30%), esophagus (80%),

mouth and lips (76%), throat (80%), lungs (85%), pancreas (30%), kidneys (50%), stomach (19%), and 20 to 30% of leukemias; nearly all cases of emphysema; 30% of coronary heart disease; a 70% increased risk of arteriosclerosis; peripheral vascular disease; chronic mucus hypersecretion, and visual problems ranging from an increased incidence of cataracts to decreased peripheral vision.

Tobacco use is also associated with a host of other medical problems, including: poor wound healing from injuries and diseases; spontaneous abortions, reduced birthweight, ectopic pregnancies and 2,500 fetal deaths a year in women who smoke while pregnant; damage to the immune system; aortic aneurysms; increased risk of Alzheimer's Disease; infertility in males; osteoporosis in older female smokers; subarachnoid hemorrhages; hypertension; emotional instability; fires that kill 2,000 to 4,000 people each year; and increased hospitalization.



CHICKEN VICTIM—This chicken is forced to puff on a cigarette in an experiment to study the effect of gases found in smoke on the animal's windpipe.

Even such pro-smoking researchers as Dr. John Diana of the Tobacco and Health Research Institute have noted that it is "difficult to find, in modern medical literature, a disease or abnormality which is not affected in some manner by cigarette smoking."

By itself the nicotine in cigarettes is very hazardous. It is as addictive as heroin and 5 to 10 times more potent than either cocaine or morphine in creating mood and behavior changes. In August of this year, the Drug Abuse Advisory Committee of the FDA finally decided that nicotine is officially an addictive drug.

Laboratory animals do not naturally consume tobacco products, but they have died by the millions in experiments to justify the above smoking-induced conditions in humans. For decades researchers have attempted to create smoking-related diseases in animals and used them to test possible treatments. They have forced rodents, rabbits and birds to breathe in smoke-filled chambers; attached cigarette-containing face masks on rabbits, dogs and monkeys, and even trained baboons to smoke individual cigarettes. All of these efforts have failed, but they continue to be done.

For example, although tobacco smoke contains many known carcinogens that directly contact the mouth, throat and lungs, and cause cancer in all of those locations in humans, such tumors do not occur naturally in non-human animals and are very difficult to create artificially. Despite spending most of the 19th and 20th centuries trying to cause emphysema in the lungs of many types of animals, researchers are still unsuccessful. Individuals involved in such research have noted that: the animal models did not produce results that "enhanced understanding of the pathogenesis of emphysema;" "the artificiality of putting a large quantity of an elastolytic enzyme into lungs of an animal severely limits the usefulness of this model in answering questions relating to mechanisms of human emphysema;" "no convincing studies have been published on emphysema in small animals in relation to cigarette smoking;" and researchers at the National Research Council observed in 1989 that no laboratory animal had contracted emphysema as a result of experimental exposure to tobacco smoke.

Laboratory animals are subjected to a wide variety of cruel procedures in attempts to create human-like, smoking-related diseases. These include, but are not limited to:

- The induction of oral cancer by direct application of powerful carcinogens onto parts of their mouths or in rodent cheek pouches (an anatomical structure humans do not have).
- The induction of bladder cancer by feeding potent carcinogens to mice, rats, hamsters, guinea pigs, dogs, and cats.
- The creation of esophageal tumors by forced-feeding of strong carcinogens.