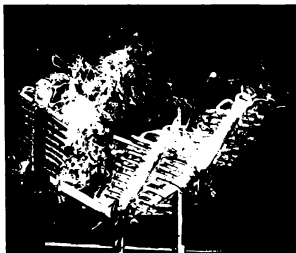


## Cigarettes and Lung Cancer

By Lois Mattox Miller



OVER THE past five years the American public has become increasingly aware of and concerned over the rapidly increasing number of deaths from lung cancer and the apparent relationship of this disease to cigarette smoking. In working with my husband, Senior Editor James Monahan, on the *Reader's Digest Tobacco-Health* articles, we have seen important developments which, although by no means solving the problem, do present distinct possibilities for reducing the risk of lung cancer.

The first major development was the publication in *The Jour-*

*nal of the American Medical Association* of August, 1954 of the preliminary report of the Hammond-Horn study for the American Cancer Society which indicated, from a broad statistical basis, an association between cigarette smoking and high death rates, particularly in lung cancer. This association between cigarette smoking and lung cancer was further established and a cause and effect relationship indicated by the Society's final report on the mass survey of the smoking habits of nearly 200,000 men, published in March, 1958. Some 28

epidemiological studies done here and in seven countries abroad, over many years, confirm the cigarette-lung cancer association.

This epidemiologic evidence of a cigarette-lung cancer relationship was supported, during the same period, by experimental, chemical, and pathologic evidence. Substances in cigarette smoke were isolated and used to produce cancer in laboratory animals. At least ten cancer-causing agents were identified in cigarette smoke, and two of these produced in experimental animals lung cancer of the type commonly found among cigarette smokers. Autopsy studies of men who had died from various diseases, including lung damaged in proportion to the number of cigarettes smoked.

TODAY, most scientists who have made the closest study of the problem are convinced that cigarette smoking is the major cause—although not the only cause — of lung cancer. This opinion, however, is not unanimous. The high incidence of lung cancer in certain industries, if employees are not protected from noxious fumes, implicates air pollution as a possible cause of the disease. However, all the evidence makes it clear that cigarette smoking is largely responsible for the ten-

fold increase in lung cancer death rates since 1930.

In order to determine whether popular filter brands decreased the tar and nicotine content of cigarette smoke, the *Reader's Digest* arranged studies by a well-known firm of consulting chemists.

First tests made in 1957 revealed that the majority of filter tip brands then on the market were mere mouth pieces; some filter tip brands gave the smoker more tar and nicotine than the plain tip brands manufactured by the same companies. However, subsequent tests in 1958 and 1959 showed a big increase in filtration efficiency and a much lower tar and nicotine content of the smoke. While the value of smokt filters is still undetermined, advice offered by many physicians can be summed up thus: "If you are not now a smoker, do not acquire the habit. If you must smoke, smoke a pipe or cigars. If you smoke cigarettes, your best bet is to stop smoking. If you can't break the habit, cut down on the number of cigarettes you smoke: the more cigarettes you smoke, the greater the risk. If you don't cut down, switch to low-nicotine, low-tar cigarettes and keep your consumption of them at a minimum. Smokers will be wise if they have a chest x-ray at least once and better twice every year."