

Excessive Cigarette Smoking

The Public Health Service is, of course, concerned with broad factors which substantially affect the health of the American people. The Service also has a responsibility to bring health facts to the attention of the health professions and the public.

In June 1956, units of the Public Health Service joined with two private voluntary health organizations to establish a scientific Study Group to appraise the available data on smoking and health. We have now reviewed the report of this Study Group and other recent data, including the report of Dr. E. C. Hammond and Dr. Daniel Horn on June 5 to the American Medical Association in New York.

In the light of these studies, it is clear that there is an increasing and consistent body of evidence that excessive cigarette smoking is one of the causative factors in lung cancer.

The Study Group, appraising 18 independent studies, reported that lung cancer occurs much more frequently among cigarette smokers than among nonsmokers, and there is a direct relationship between the incidence of lung cancer and the amount smoked. This finding was reinforced by the more recent report by Dr. Hammond and Dr. Horn.

Many independent studies thus have confirmed beyond reasonable doubt that there is a high degree of statistical association between lung cancer and heavy and prolonged cigarette smoking.

Such evidence, of course, is largely epidemiological in nature. It should be noted, however, that many important public health advances in the past have been developed upon the basis of statistical or epidemiological information. The Study Group also reported that in laboratory studies on animals at least five independent investigators have produced malignancies by tobacco smoke condensates. It also reported that biological changes similar to those which take place in the genesis of cancer have been observed in the lungs of heavy smokers. Thus, some laboratory and biological data provide contributory evidence to support the concept that excessive smoking is one of the causative factors in the increasing incidence of lung cancer.

At the same time, it is clear that heavy and prolonged cigarette smoking is not the only cause of

lung cancer. Lung cancer occurs among non-smokers, and the incidence of lung cancer among various population groups does not always coincide with the amount of cigarette smoking.

The precise nature of the factors in heavy and prolonged cigarette smoking which can cause lung cancer is not known. The Public Health Service supports the recommendation of the Study Group that more research is needed to identify, isolate, and try to eliminate the factors in excessive cigarette smoking which can cause cancer.

The Service also supports the recommendation that more research is needed into the role of air pollution and other factors which may also be causes of lung cancer in man.

To help disseminate the facts, the Public Health Service is sending copies of this statement, the Study Group report, and the report of Dr. Hammond and Dr. Horn to State health officers and to the American Medical Association with the request that they consider distributing copies to local health officers, medical societies, and other health groups.

While there are naturally differences of opinion in interpreting the data on lung cancer and cigarette smoking, the Public Health Service feels the weight of the evidence is increasingly pointing in one direction: that excessive smoking is one of the causative factors in lung cancer.

The Service notes that the Study Group found that more study is needed to determine the meaning and significance of any statistical association between smoking and heart disease. The Study Group reported there is no convincing biological or clinical evidence to date to indicate that smoking per se is one of the causative factors in heart disease. Although the report by Dr. Hammond and Dr. Horn has since provided additional data on this subject, the Service feels that more statistical and biological data are needed to establish a definite position on this matter.

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*Copies of the report *Smoking in Relation to Death Rates*, by Dr. E. C. Hammond and Dr. Daniel Horn, and the *Joint Report of the Study Group on Smoking and Health* are available from the Division of Public Inquiries, Public Health Service.*