The Committee was told that the average age of death from lung cancer was the same for non-smokers, light smokers and heavy smokers. It was suggested that if cigarette smoking caused lung cancer, the average age of death from the disease should be younger for smokers than for non-smokers and younger for heavy smokers than for light smokers. However, Dr. W. F. Forbes, Professor of Chemistry and Statistics, University of Waterloo, Waterloo, Ontario, advised the Committee that this type of statement was misleading in two ways. First, he pointed out, the important thing is that, within specific age groups, the lung cancer death rate generally increases with daily cigarette consumption. Second, he said that he had been able to demonstrate by means of mathematical models that one would expect the maximum number of deaths from lung cancer to occur at similar ages in non-smokers and light and heavy smokers.[22] In other words, the cause of lung cancer, smoking or otherwise, has no bearing on the average age of death. Therefore, the average age of death from lung cancer cannot be used as an argument for or against a causative or dose-response relationship between cigarette smoking and the disease.

The observation that cigarette smokers rarely acquire cancer of the trachea through which the smoke passes on the way to the lung does not disprove the carcinogenic properties of cigarette smoke. Recognized industrial carcinogens such as asbestos, chromium and uranium also cause lung cancer but not cancer of the trachea and these carcinogens are breathed through the trachea like cigarette smoke.[23]

The Committee was informed that long term projections suggest that lung cancer rates will eventually level off and that this is an argument against the cigarette smoking—lung cancer hypothesis since cigarette consumption is increasing. However, per capita cigarette consumption has decreased in recent years and the proportion of cigarette smokers appears to be decreasing among men. Therefore, it would be expected that lung cancer would begin to level off or even decrease in future years. Further, even without decreases in smoking, one would expect lung cancer rates to eventually stabilize after cigarette smoking had spread up through the age groups and reached its maximum level among both men and women.[24]

The Committee was told that the fact that cigarette smoking was associated with so many conditions raised doubts as to the significance of its connection with

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[22] Minutes—No. 41—Thursday, June 12, 1969, page 1796.

[23] Hueper, W.C., Occupational and Environmental Cancers of the Respiratory System, Springer-Verlag, New York, Inc., 1966.

[24] Tables were shown by another witness to indicate progressive increases in the age at which lung cancer incidence peaks, and to support the theory that the disease will eventually disappear. However, these tables are prepared from numbers of cases of lung cancer not from rates based on the size of the veteran patient population in each age group. Therefore, one must assume that the figures presented reflect nothing more than the increasing ages of veteran patients since World Wars I and II. (See Minutes—No. 32, Tuesday, May 20, 1969, pages 1199, 1233 and 1238.)