

300,000 PREMATURE DEATHS--
AN EXAMPLE OF EXAGGERATION

Over the past few years, spokesmen for the Public Health Service and its various associates have been attributing anywhere from 125,000 to 300,000 excess or premature deaths per year to cigarette smoking. Even if the conclusions of the Surgeon General's Advisory Committee are taken as proven fact, these figures are an exaggeration for which there is no scientific basis.

THE NATURE AND ORIGIN OF THE CLAIM

Both former Surgeon General Luther L. Terry (now Chairman of the National Interagency Council on Smoking and Health) and the present Surgeon General, William H. Stewart, have used such figures. In addition, Emerson Foote, the advertising man and former Chairman of the National Interagency Council on Smoking and Health, has employed these figures a number of times. In fact, he was probably one of the first to do so. On January 11, 1965, Foote said:

"Cigarette smoking is today responsible for at least 125,000 deaths each year in the United States. Cigarette smoking may be responsible for as many as 300,000 deaths per year in this country."

In a speech given on February 17, 1965 (New York Times, February 17, 1965), Dr. Daniel Horn of the Public Health Service cited Foote as an authority, stating:

"Emerson Foote, Chairman of the National Interagency Council on Smoking and Health, has stated that cigarette smoking is responsible for at least 125,000 premature deaths this year." (Dr. Horn's emphasis)

During the Senate Commerce Committee hearings* on March 22, 1965, Foote again cited the 125,000-300,000 figures. First he attributed them to "responsible scientific authorities who have spent years studying the problem." (1965 Senate Hearings, page 104) Under questioning, however, he said he got them from Dr. Eugene Guthrie, the then Secretary of the Interagency Council, who today is the Assistant Surgeon General. (1965 Senate Hearings, pages 132-133) Dr. Horn, who was in the hearing room at the time, was called upon to explain the breakdown of the 125,000 figure. He said:

"The figure of 125,000--which is a very low estimate of the total number of deaths--which represents the excess number of deaths, occur in cigarette smokers over what would have occurred if they were to die at the same rate as people who had never smoked cigarettes. It consists of applying the 1962 death rates to the diseases in which a causal relationship has been indicated. These include coronary heart disease, lung cancer, bronchitis and emphysema, cancer of the oral cavity, cancer of the esophagus, cancer of the larynx, and cancer of the bladder.

"I am indebted to the original set of figures here, which have appeared in statements of the Public Health Service as long ago as last August, and to Dr. Levin, who has published these figures and is, I believe, scheduled to testify tomorrow.

"The number of deaths from coronary disease, which is included in that, is approximately 80,000. The number of deaths from lung cancer is 33,500. The number from bronchitis and emphysema is 16,500. Cancer of the oral cavity, esophagus, larynx and bladder, add up to 8,000. This totals 138,000, which is a little higher than the original estimate of 125,000, but is

*Hearings on Cigarette Labeling and Advertising before the Senate Committee on Commerce, 89th Cong., 1st Sess. (1965).

based on applying these to estimated 1965 deaths from these causes.

"This figure is obtained by applying rates only for these specific diseases and only to men, since the bulk of the epidemiological studies which have been done have been done on men. (1965 Senate Hearings, page 133)

When he later testified before the Senate Commerce Committee, Dr. Morton L. Levin, Chief of the Department of Epidemiology of Roswell Park Memorial Institute, further explained:

"One way of gaging approximately the extent of this health hazard is to estimate, as Dr. Horn stated a while ago, the excess deaths among male cigarette smokers, that is, the number of deaths among male cigarette smokers in excess of what would have been their experience in a single year had they had the same mortality as nonsmokers. These data are available from the prospective studies reported in the Surgeon General's Advisory Committee report. We have made such an estimate based upon the population of the United States and the mortality among males 18 years of age and over for the year 1962. I present this as an approximate indication of the magnitude of the health hazard of cigarette smoking as a cause of death.

"I hope that the committee will note that I am not stating that the causal and other significance of each cause of death is the same, because everything we have learned about relationship indicates that there is more than one way in which tobacco influences health, and that in many of the forms of disease and cause of mortality we haven't fully explored the mechanism. We are not fully certain as to what type of causal relationship, if any, exists.

"I would like to point out that where you have a toxic substance such as tobacco, and you observe a sizable increase in mortality, amounting to over 200,000 deaths, I think it was only prudent not to assume that any of these are necessarily without significance until all have been studied very

thoroughly. This we have not done yet.
(Emphasis supplied, 1965 Senate Hearings,
page 149)

In a letter to the American College of Physicians,
dated October 11, 1965, Dr. William L. Ross of the Public
Health Service quoted Dr. Louis M. Katz of the American Heart
Association as attributing 250,000 premature deaths a year to
cigarette smoking.

In an address before the National Tuberculosis
Association in Chicago, former Surgeon General Terry stated:

"Studies of mortality ratios of smokers
and nonsmokers indicate that 240,000 men
will die this year prematurely from diseases
associated with cigarette smoking. About
138,000 of these excess or premature deaths
will be from diseases clearly and definitely
associated with smoking, such as cancer of
the lung, larynx, oral cavity, esophagus and
bladder, as well as bronchitis, emphysema and
coronary heart disease. Another 102,000 ex-
cess or premature deaths will result from
diseases where the relationship to cigarette
smoking, while not obvious, is nevertheless
clearly indicated. A reasonable estimate of
excess deaths among women, added to the total
of 240,000 for men, would bring the over-all
total to 300,000."

In a speech presented to an American Cancer Society
Science Writers Seminar in March 1966 at Phoenix, Arizona,
Surgeon General Stewart stated:

"On the subject of statistics, I want
to make clear that I am in full agreement with
former Surgeon General Terry's estimate of
deaths due to cigarettes. Last May he stated
that at least 125,000 premature deaths, and
maybe as many as 300,000 deaths, in the United
States a year are due to cigarette smoking.

"I not only support this estimate, but
believe that when more precise data for women
smokers are available, the estimate is more
likely to be closer to the maximum than the
minimum figure."

During the course of the hearings on appropriations for the Department of Health, Education and Welfare for 1968* on April 3, 1967, Surgeon General Stewart was questioned about this statement:

"Mr. Hull...why did you say in March of 1966 that 'at least 125,000 premature deaths, and maybe as many as 300,000 deaths, in the United States a year are due to cigarette smoking'?"

"Dr. Stewart. Did I say 'due to'?"

"Mr. Hull. Yes, implying that cigarette smoking is actually causing between 125,000 and 300,000 premature deaths a year.

"Dr. Stewart. The Surgeon General's report established a cause and effect relationship between lung cancer and cigarette smoking. There are about 50,000 deaths a year from lung cancer. It went on to say there was an association between cigarette smoking and cardiovascular disease and pulmonary disease.

"Mr. Flood. Will you show the fatality rate between men and women?"

"Dr. Stewart. Yes. (The information follows:)

"Dr. Morton Levin of the Roswell Park Memorial Institute in 1965 reported a study which indicated that based on 1962 death rates, 1960 populations, and the results of the major epidemiological studies, there were 227,000 excess deaths among male cigarette smokers over the numbers which would have occurred if these men had died at the same rates as nonsmokers of the same age. Since the number of men 18 and over has increased more than 10% since 1960, a current estimate for excess deaths among men is about 250,000. There is now good evidence to show that cigarette smoking bears a significant relationship to mortality among women in the same categories as those experienced by men, but considering

*Hearings on Departments of Labor and Health, Education, and Welfare Appropriations for 1968 before the House Subcommittee of the Committee on Appropriations, 90th Cong., 1st Sess. (1967).

1

the lower proportion of smokers and especially the lower proportion of smokers among older women, the number of excess deaths among women is probably not more than 50,000. The combined estimates for men and women bring the total to 300,000." (1967 House Hearings on Appropriations, Part 4, page 78)

* * *

There is no scientific evidence for these figures.

The Report of the Surgeon General's Advisory Committee on Smoking and Health, under its principal findings on the effects of smoking, stated that "the total number of excess deaths causally related to cigarette smoking in the U. S. population cannot be accurately estimated." (Smoking and Health, page 31) Former Assistant Surgeon General James M. Hundley, who served as Vice-Chairman of the Advisory Committee, said at the time the Committee's Report was being released--

"The Committee considered the possibility of trying to make such calculations, but it involves making so many assumptions that the Committee felt it should not attempt this, that it might be as misleading as it was informing." (Surgeon General's Press Conference of January 11, 1964)

In bandying such excess death figures about since the release of the Report, it is ironic that the Public Health Service, and even the Surgeon General himself, has chosen to ignore this admonition of the Committee on being misleading.

From the foregoing review on the nature and origin of the 125,000-300,000 excess death figures, it appears that all of the figures used by the various Public Health Service officials are related to the study done by Dr. Levin at Roswell Park. An analysis of the breakdown of his figures is most revealing when compared to the finding of the Surgeon General's Advisory Committee.

According to Terry (see above), the 300,000 excess death figure from cigarette smoking can be broken down as follows:

138,000 excess male deaths due to coronary heart disease, bronchitis and emphysema, cancer of the oral cavity, esophagus, larynx and bladder.

102,000 excess male deaths due to "diseases where the relationship to cigarette smoking, while not obvious, is nevertheless clearly indicated.

60,000 excess female deaths.

300,000 Total

(The above figures more or less coincide with the Levin figures that were inserted in the House Committee Appropriations Hearings by Surgeon General Stewart--see above.)

The 138,000 excess male death figure (see above) breaks down further according to Horn (see above) as follows:

80,000 - due to coronary heart disease.

33,500 - due to lung cancer.

16,500 - due to bronchitis and emphysema.

8,000 - cancer of the oral cavity, esophagus, larynx and bladder.

138,000 Total

Now, even if the findings of the Report of the Surgeon General's Advisory Committee are to be accepted, only the deaths from primary lung cancer, cancer of the larynx in the male and bronchitis were found to be causally related to cigarette smoking. According to the above figures, therefore, a total of 58,000 excess deaths at most are allegedly caused every year by diseases which the Advisory Committee linked with cigarette smoking.

This figure of 58,000 should even be reduced inasmuch as it includes deaths from emphysema and cancer of the oral cavity, esophagus, and bladder. In addition, the 33,500 deaths due to lung cancer include a number which were not specified as primary and may include histologic types of lung cancer that no one contends are caused by cigarette smoking.

Hence, the estimates of excess or premature deaths being quoted by Public Health Service officials as due to cigarette smoking are at least 242,000 deaths too high even by the Surgeon General's Advisory Committee's own standards.

In closing, the fact that cigarette smoking has been reported as statistically associated with excess deaths from virtually all causes was said by Dr. Joseph Berkson, formerly of the Mayo Clinic, to be without any "scientifically known pharmacological or physical explanation." His position was that this lack of specificity supported the proposition that smoking may be a symptom or indicator but not the cause of a disease. Thus, in his view, statistical associations showing excess deaths among smokers weakened the theory that cigarette smoking was causative.