

## 12 February 1954: Ministry of Health: Press statement

The Parliamentary Answer given <by> the Minister of Health today (Friday) (of which a copy is attached) is based on advice given to him by his Standing Advisory Committee on Cancer and Radiotherapy who for three years have been giving close consideration to the problem of the possible relationship between tobacco smoking and cancer of the lung. In view of the public interest and concern over this question it is, in the Minister's opinion, of very great importance that uninformed and alarmist conclusions should not be drawn from the Committee's advice and that the qualifications mentioned by the Committee in their advice should be fully realised.

In the Autumn of 1950 an article by Dr. Doll and Professor Bradford Hill in the *British Medical Journal* suggested that, on evidence arising from a statistical enquiry, there was a relationship between smoking and cancer of the lung. The Committee at that time considered that further evidence was needed. Late in 1952 a further article by Dr. Doll and Professor Bradford Hill, which confirmed their earlier conclusions, reports from research workers in the U.S.A., and the submission of arguments seeking to demonstrate that the relationship was not proved, led to a panel under the Chairmanship of the Government Actuary being asked in 1953 to enquire and report to the Standing Advisory Committee. The conclusions reached by this panel were considered by the Standing Advisory Committee who advised the Minister as in the attached statement.

Although it can be taken as established that a relationship between smoking and lung cancer exists, it is important to realise that this relationship is not a simple matter, that a great deal of information and research is still required and it is not possible to draw final conclusions. The Minister considers that it would be helpful, in order that the matter can be looked at in proper perspective, to set down firstly what facts are known about the relationship, and secondly what must be regarded as speculative and unproved.

### **Facts Which Are Known**

The Minister would like to draw attention to the following facts, which are now well established:-

(1) There has been an increase in deaths from lung cancer in this country which began about 1919 and has continued ever since. The increase is much greater in males than females. Between 1911 and 1919 the number of deaths from cancer of the lung was about 250 per year. The rise which began about 1919 can be illustrated from the figures of deaths for 1931 as compared with subsequent years. In 1931 the number of deaths attributed to lung cancer in England and Wales was 1,358 for males and 522 for females. Those figures represented 5% of all *cancer* deaths and 0.5% of deaths from all causes in males, and 2% of all *cancer* deaths and 0.2% of deaths from all causes in

females. The latest figures available, for 1952, showed a further increase in that 11,981 males and 2,237 females died from the disease. These represent 26% of all *cancer* deaths and nearly 5% of deaths from all causes in males, and 5% of all *cancer* deaths and 1% of deaths from all causes in females. The figures also show that the highest mortality rate from lung cancer in males occurred in the 65-74 age group, whereas in females the highest rate occurred in the 75 and over age group.

(2) Comparable increases have been reported in all countries from which reliable statistics are available. Factors such as the increasing age of the population and better diagnosis account for some of the rise but not the whole of it.

(3) Tobacco smoking lays some part in this increase. To use the language of statisticians, there is an "association".

(4) It is certain that tobacco smoking cannot be the only factor since the disease occurs in non-smokers. Not one but several factors or a combination of factors must be regarded as responsible.

(5) The disease is more prevalent in urban areas than rural and different parts of the country suffer more than others.

(6) No substance producing cancer of the lung has yet been specifically identified in tobacco smoke. Certain tars derived from tobacco smoke have produced skin cancers in mice but this is not considered as being conclusive evidence of the presence of a substance producing cancer of the lung.

So much is known.

### **Further Evidence Needed**

The following matters must, however, remain speculative until further evidence comes to light:-

(i) There is no firm evidence of the way in which smoking may cause lung cancer or of the extent to which it does so. All that can be said at present is that there is a presupposition that it does, but the evidence does not permit us to say any more than that.

(ii) The difference in incidence between town and country and between different towns suggests that other factors should be taken into account such as atmospheric pollution or risks from particular occupations, but no evidence is available of the extent to which these factors operate.

(iii) Although the risk of contracting the disease appears to increase with the amount smoked, particularly of cigarettes, no reliable factual estimate can be made of the precise effect of smoking.

In view of this, it is not possible to come to a final and definite conclusion on this matter. A good deal of research and information is needed before anything more firm can be said. Many investigations are taking place both in this country and abroad which bear directly on the problem and also into the

related problem of the effect of atmospheric pollution on health. The Ministry are in close touch with the Medical Research Council on this, and there will be no hesitation in launching further research if any particular line shows promise. Opportunity is taken of paying tribute to the valuable pioneer work of Dr. Doll and Professor Bradford Hill and other workers who have given us what little information we have.

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