

AN ANNOUNCEMENT FROM  
**THE N.Z. DEPARTMENT OF HEALTH**



Millions upon millions of FLIES are waiting to take the place of the one just killed.

The fly has a short life but a merry one. Flies believe in large families. It's nothing to Mrs. Fly to produce 120 eggs in a day and repeat the performance four to six times during her life of a few weeks. Meantime, her fickle mate is on the wing again for another fly-by-night conquest.

**FACTS ABOUT FLIES.** Did you know that a fly flies at only 4½ miles an hour or about the pace a horse walks? Why then is he so maddeningly hard to swat?

Because he has four thousand lenses for eyes: he's slicker than a jet plane—he can fly rapidly sideways, and, as if that

weren't enough, his built-in radar detects the movement of your arm as it comes in to get him.

**THE ANSWER.** Kill flies where they breed before they have a chance to reproduce millions of progeny, just one of which can carry on its tiny body, over 3,000,000 bacteria, and can spread over a flight area of 5 square miles, scores of infectious diseases. Some of these are tuberculosis, diarrhoea, food poisoning, undulant fever, conjunctivitis, "summer sickness", dysentery, typhoid, etc.

His filthy habits of vomiting and constantly passing liquid waste, menace health.

Remember the use of insecticides is no substitute for the simple precautions everybody can, and should take, against the fly—through cleanliness, the proper disposal of house and garden garbage, and through keeping food covered. NEVER use insecticide spray where food is exposed.

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# Danger in the Cigarette Pack

LAST year American medical authorities went on record agreeing that there was a positive relationship between cigarette smoking and lung cancer. Just lately the Medical Research Council of Great Britain advised the British Government that there was a direct causal connection between tobacco smoking and lung cancer. In Great Britain this disease is now responsible among males for approximately one in 18 of all deaths—of all deaths, please note, not just of cancer deaths—and in females for one in 103 of all deaths. The graph of incidence shows no levelling off. It is still rising. It has been predicted that shortly one in 11 in Great Britain will be dying of lung cancer.

The deaths from lung cancer have greatly increased in other countries in the last quarter century. Many competent enquiries have returned the same answer. These were carried out in Great Britain, the U.S.A., Finland, Germany, Holland, Norway and Switzerland. They show, in every case, a rising death rate as the amount of smoking increases. They show, amongst smokers, these differences: More deaths in heavy smokers than in light smokers, more in cigarette than in pipe smokers, more in those who continued to smoke than in those who gave it up. From the studies it can be fairly accurately predicted that one in eight of lifelong cigarette smokers will die of lung cancer. The relevant prediction for non-smokers is one in 300.

This is a huge difference. That non-smokers do get lung cancer at this significantly lower rate is the fact that the diehards seize on. There must therefore be some other cause. It cannot all be blamed on smoking. It is agreed that smoke polluted air could help in the causation, but studies made so far only show that the part played by smoky air is very minor. Garage hands, transport workers, and other workers in smoky atmospheres, have no increased risk. Smoky atmospheres cannot be entirely dismissed, for studies also show that among the small number of deaths in non-smokers, there are more in large cities than among those in rural areas. Certain industrial processes can increase the risk of lung cancer, at least five industrial causes being now recognised.

Until recently the cancer-causing substances had not been identified in tobacco smoke, but now several such substances have been pin-pointed. Until

This is the text of a talk on health broadcast recently from ZB, ZA, YA and YZ stations of the NZBS by DR H. B. TURBOTT, Deputy-Director-General of Health

this was accomplished the evidence against tobacco rested mainly on statistical evidence of relationship, and the conviction of many doctors, from their clinical observations, that increased cigarette smoking and lung cancer were connected. One of these cancer-producing substances has experimentally produced cancerous cell growth in human foetal lung tissue kept alive in the laboratory.

Tobacco smoke is a much more complex thing than you would suspect. It consists largely of tiny oily droplets held in suspension in air. These oily droplets are microscopic enough to get everywhere in the lungs and to be retained in the cells. Already over 100 different substances are recognised in these tiny oily droplets, and so far five of these have been proved capable, in certain circumstances, of causing cancer in animals. The theory that tobacco smoke is the culprit is immeasurably strengthened by these research delvings into the composition of such smoke. Final proof could only be forthcoming by human experimentation, obviously unallowable.

The big tobacco combines are naturally concerned. In Great Britain they are assisting the Medical Research Council in continued research. Naturally, if tobacco is blameworthy, they want to remove the stigma and make smoking safe.

The canvas has to be broad, wide enough for patterns of research into more than lung cancer. Evidence is building up that other diseases are associated with tobacco smoking, such as cancer of the larynx, chronic bronchitis, and coronary thrombosis. It has to be admitted that the general death rates of smokers greatly exceed those of non-smokers.

To sum up then: It seems obvious that the rising generation should be discouraged from smoking in the present state of our knowledge. If the older folk can't give it up, they should progressively wean themselves to the minimum found possible, for the evidence of danger is definite.

## NEW WALTON CONCERTO

A FEW months ago in a concert promoted by the Royal Philharmonic Society, a new Cello Concerto by William Walton (right) was performed for the first time in Europe by Gregor Piatigorsky, who commissioned the work and earlier gave its first world performance in Boston. "The middle movement is a brilliantly effective scherzo of the familiar Waltonian type—all spiky rhythms and flying staccato semiquavers," said the *Manchester Guardian*; and of the long coda to the last movement: "His music here seems to have something of that characteristic quality of serenity and light that we associate with the music of composers in their old age." In the BBC transcription of this European premiere to be heard from YAs, 3YZ and 4YZ on November 24, Gregor Piatigorsky plays with the BBC Symphony Orchestra under Sir Malcolm Sargent.

