

MEDICINE

Fear of Cancer Saves

► **WHETHER SMOKING** does or does not cause lung cancer, many lives are going to be saved by the current agitation over the subject.

In New York, one of 10 states where a survey is being made on the lung cancer-smoking question, many men have been inspired to see their doctors. As a result, 10 have been found with cancer in an early, probably curable form.

This survey, being made with volunteer workers for the American Cancer Society, is taking a forward-looking rather than the historical, backward-looking direction. In the past, doctors have compared smoking habits of lung cancer patients with patients not having lung cancer. The weakness of this approach is that until a person develops lung cancer, or until he dies, no one can say he is not a lung cancer patient or going to become one. Therefore previous studies do not, in the opinion of some scientists, positively answer the question as to whether

smoking causes lung cancer.

So for the past year some 200,000 men aged 50 to 69 years have been questioned about their smoking habits. As these men die, records of the date and cause of death will be collected. From these, Drs. E. Cuyler Hammond and Daniel Horn of the American Cancer Society's statistical staff hope to have an answer to the question.

So far, they find that 18% of the men never smoked, 6% smoked occasionally and 76% are or were regular smokers.

Only 16% of the 50- to 54-year-age group never smoked compared to 23% in the 65- to 69-year group. This may mean that non-smokers live longer or that the habit is growing.

Older smokers show a much greater tendency to reduce or quit smoking than younger men. One-fourth of regular cigarette smokers quit at some time. One-half of cigar and pipe smokers stopped.

Science News Letter, November 1, 1952

PHARMACOLOGY

Vaccine Made By Firm

► **FOR THE first time**, yellow fever vaccine in the United States will be manufactured by a pharmaceutical firm instead of by the U. S. Public Health Service.

The shift to the National Drug Company of Philadelphia was announced in Washington by Surgeon General Leonard A. Scheele of the Public Health Service.

The Public Health Service developed the vaccine and has been sole producer of it for this nation and for all the Americas since 1942. The shift is in line with the policy to turn over to the pharmaceutical industry the manufacture of biological products once large-scale production becomes feasible.

Many pharmaceutical firms were interested in making the vaccine, but National Drug is the only one that can within a reasonable time start producing the vaccine

in sufficient quantity to meet the current and stockpile needs of the Armed Services, which are the chief consumers of this product.

Manufacture of the vaccine by the National Drug Company does not alter the regulations governing distribution. All eligible consumers now receiving the vaccine may continue to do so. Clinics issuing yellow fever vaccine certificates are designated by the Public Health Service in accord with the international sanitary regulations of the World Health Organization. Vaccination certificates must be obtained by travelers from a designated clinic in order to be valid for international travel.

In conformance with the Biologics Control Law, the National Drug Company must obtain a license from the Public Health Service before it can distribute yellow fever vaccine of its own manufacture. License requirements provide that a biological product must meet established standards relating to safety, potency, and purity. The National Drug Company is now constructing special plant facilities at Swiftwater, Pa., to produce yellow fever vaccine.

Science News Letter, November 1, 1952

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GENERAL SCIENCE

Science Foundation Opens New Rolls

► **MORE THAN 500** fellowships for graduate study in the medical, biological, engineering, mathematical and physical sciences

will be available to graduate students in 1953-54, the National Science Foundation announced.

Oct. 24 marked the first day during which applications for the 1953-54 fellowship program were received, the foundation announced. The majority of the fellowships will go to graduate students, but a few will be awarded to people who already have a Ph.D. degree. Test scores of scientific aptitude and achievement, academic records and recommendations will figure in selection of applicants.

Applications may be obtained from the Fellowship Office, National Research Council, Washington 25, D. C. Completed applications must be returned by Jan. 5, 1953.

Science News Letter, November 1, 1952

CHEMISTRY

First Total Synthesis Of Cortisone Achieved

► **TOTAL SYNTHESIS** of cortisone, the anti-arthritis hormone chemical, all the way from simple, readily available chemicals to cortisone itself can be done through a 30-step process worked out by Dr. Lewis H. Sarett and associates of Merck and Co., Inc., Rahway, N. J.

The American Chemical Society says this is the first report of the preparation of cortisone in one laboratory by total synthesis through a single series of reactions. The method is described in the *Journal of the American Chemical Society* (Oct. 5).

Science News Letter, November 1, 1952

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