Silk is still needed for certain military purposes; nylon, rayon and other substitutes have not proven wholly satisfactory. We have abundance of mulberry trees, a seed-stock of silkworms—and thousand of Japanese women in internment camps who would be glad of a chance to undertake their traditional job of unreeling the cocoons to

add a little to the family income.

These are only samples of the thousands of projects awaiting formal organization of the Committee on Technical Development. The work that can be expected of it should not only aid materially in winning the war but in stabilizing the peace.

Science News Letter, August 8, 1942

PUBLIC HEALTH

Public Health Service Fighting Plague in Rodents

Concern Felt Over Reports of Large Numbers of Norway Rats in Plains States Although No Germs Found

THE NATION's health continues good, reports from state health officers to the U. S. Public Health Service show.

Only shadows on the otherwise bright health picture are caused by dysentery, meningitis, anthrax and infantile paralysis. The latter disease has caused a number of cases in Kentucky and Arkansas in recent weeks, but it is so late in the season that health authorities believe a widespread outbreak unlikely.

Texas reports the number of cases of bacillary dysentery is "very high." Of the 356 cases for the nation as a whole during the week ended July 25, 261 were reported from Texas. Virginia that same week reported 351 of the total 386 cases of dysentery of unspecified cause. The low reports from other states may mean that not all cases are being reported.

Reports of meningitis cases for some time have been higher each week than for the corresponding week of any year since 1937. Weekly totals for the nation run about 60 cases. Most of the cases are in the East, but so far the disease has not become epidemic.

A total of six cases of anthrax appeared in the latest available weekly report. The usual rate is one or two cases a week for the nation.

No human cases of plague have been reported so far this year. Anti-plague activities are being pushed strenuously by the federal health service and by California, Washington, Oregon, Montana and Idaho state health departments.

Some concern is felt over reports from the field investigators that large numbers of Norway rats have appeared along roadsides and around farm buildings in the Plains states, Kansas, Nebraska and the Dakotas. No plague germs have been found on any rodents within 200 miles of these areas, but the presence of the rats which may become a reservoir of the disease is causing some uneasiness.

Anti-plague units of the Public Health Service are vigorously searching for and destroying plague-infected ground squirrels and other rodents on and near military reservations and airfields in the West and Northwest.

Science News Letter, August 8, 1942

PUBLIC HEALTH

Dust Analysis Promises New Weapon Against Disease

BECAUSE of the development of an inexpensive and comparatively simple technique of analyzing dust particles, occupational diseases resulting from the inhaling of contaminating dusts may be attacked on a new front.

Research just completed in the Research Institute at the University of Oklahoma has produced the new method, known as the polarographic analysis of industrial dusts, which employs an electro-chemical method of analysis. It was

developed through the cooperation of the Oklahoma state health department and the University of Oklahoma Research Institute.

The study grew out of the difficulties that the Oklahoma department of health was having in attempting to solve the cause of poisoning that was prevalent among workers in smelters of the northeastern part of the state.

The dust particles available were so small that in many cases they could scarcely be weighed on even the best analytical balances, thus making it necessary to develop a new technique. With the polarograph, scientists were able to determine the quantities of lead, cadmium, and zinc which are most detrimental to health.

In the new technique, the elements present in the dust particles are determined with the spectrograph, and the quantities of lead, zinc, and cadmium are determined with the polarograph.

With the use of a polarographic analysis, industries now have a way of measuring the quantities of toxic constituents in the air in the various parts of the plants, and may remove the possibilities of poisoning by ventilating the various parts of the plants that present a health menace.

Robert C. McReynolds, research fellow, who worked under the supervision of Prof. J. Rud Nielsen, has directed work on the project since the first of this year. He was assisted by Robert Ady of the Oklahoma state health department.

Science News Letter, August 8, 1942

MEDICINE

Age and Sex Help in Diagnosis of Lung Cancer

THE PATIENT'S age and sex may help the doctor determine whether a lung tumor is cancer or not. Dr. Alfred Goldman, of the University of California Medical School, has found.

More than 80% of lung cancers occurred in men over 40 years of age, while 75% of the benign tumors, called adenomas, occurred in women under 40, Dr. Goldman found in his two-year study.

Since X-rays and the bronchoscope do not offer adequate means of diagnosing lung cancer in its early stages, Dr. Goldman advises exploratory surgical operations in suspected cases of lung cancer, just as such operations are now performed in suspected cases of cancer within the abdomen.

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