

MEDICINE

Cholera Claims 20,687

Since January, cholera, dreaded throughout recorded history, has been leaving a well-worn trail of death across parts of the Far and Middle East.

► THE CHOLERA EPIDEMIC that is sweeping India, Cambodia, East Pakistan, Burma, Nepal and Thailand has a tenacious grip that has resulted in 20,687 deaths among an estimated 48,279 cases reported since January.

Most present day Americans, however, have had little contact with this disease.

Cholera is an infectious disease, caused by an organism that inhabits the gastrointestinal tract. It results in vomiting, diarrhea and dehydration.

Sanitary habits play a major role in the prevention and control of cholera. Strict control of the water supply, of food and food handlers and of flies is necessary for successful control. Immunization by vaccine is effective for from three to six months after administration. While this is not a guaranteed method of prevention, it is an effective barrier to the spread of the disease.

Antibiotics and sulfonamides have little significant effect upon cholera infection.

Cholera has been known in India for centuries. It spreads westward by two routes—by sea to the shores of the Red Sea, Egypt, and the Mediterranean; and by land to northern India and Afghanistan, to Iran, central Asia, on to Russia.

In the great invasions of Europe in the

19th century, it sometimes followed one route and sometimes another. An Indian epidemic of 1817, reached Europe by way of Iran (then Persia), and to Russia by 1830. From there it extended to America.

Another epidemic of 1841 followed the same track and reached Europe and America in 1847. A third took place in Asia in 1850 and entered Europe in 1853; this epidemic was particularly severe throughout North and South America.

The spectacular path of the epidemic of 1892-95 left a trail of death on the overland route. It traveled with unprecedented rapidity, five months, from the North-West provinces of India, to Leningrad (then St. Petersburg). It was only a matter of a few days before it reached Hamburg. From there it spread to England and the U. S.

During the period of 1910-1925, cholera continued to be prevalent in India. During 1918-1919, when the disease was also epidemic in China, the recorded mortality for each of those years reached 500,000.

The U. S. Public Health Service has for some time recommended cholera shots for citizens visiting the countries now experiencing the epidemic.

Science News Letter, August 23, 1958

NATURAL RESOURCES

"Backyard" Wood Needed

► A GRASSROOTS movement is beginning that promises to contribute much towards solving a national problem, our dwindling timber resources.

Representatives of the 4,500,000 small woodlands owners have scheduled meetings throughout the nation to see what can be done to get the best use out of the timber they own. The aim is to bring the trees and forest soil, which includes some of the best land in the United States, under scientific management.

The first of these meetings was held in Wausau, Wis.

Currently, many of the small woodlands owners are neither getting as much income out of their forests as they could, nor growing as much marketable timber as the land can yield.

Some 55% of all commercial forest land is owned by farmers and other small landholders, the U. S. Forest Service reported. There is a growing need for timber, and successful management of the small forest could add millions of feet of timber to our resources.

Interest in the timber resources problem is "boiling up," George Vitas of the Forest Service said. Landowners are getting to-

gether, within their states or in cooperation with neighboring states, to discuss problems and sample opinion on how to get more out of their woodlots. Local commercial groups as well as Forest Service representatives are cooperating.

Twenty-two meetings, being held from now through November, may result in the nation's fulfilling its timber needs: twice as much wood as being used presently, available by the year 2000.

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MEDICINE

Soot Particles Deposited In Lungs Cause Damage

► THE EVERYDAY SOOT particles that find their way into obscure pockets of our lungs are now suspected as the cause of deterioration of lung structure and function.

A study conducted at the New Orleans Veterans Administration hospital showed that a lung condition, known medically as chronic pulmonary emphysema, tends to develop in areas of the lungs where soot nestles.

Emphysema is a condition in which the lungs overexpand and breathing becomes difficult and less effective, Dr. Charles P. Oderr, the hospital's chief of radiology, explained.

The research study indicated that emphysema is much more common and begins developing at a much earlier age than had been thought.

The investigators "photographed" lung tissue specimens through a beryllium window tube instead of using the conventional X-ray tube.

Of 125 persons studied at the hospital, 13% were clinically diagnosed, while an additional 45% showed evidence of the disease when examined through the beryllium window. Persons with indoor jobs involving dust contact had more disease than those with non-dusty indoor jobs while those with outdoor jobs were intermediate.

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ADDED ENGINE—The U. S. Air Force's Atlas ballistic missile will have an intercontinental range of more than 6,000 miles as a result of the addition of a third engine. The new sustainer is in the center of the thrust section with booster engines on either side, as seen in this overhead view of the missile lying on its handling trailer. This view of the missile was taken as it was being backed into position for erection in the tower. Angled pipe above the center engine is the turbopump exhaust.