

MEDICINE

Mass Vaccination for TB

Eleven European countries are about to enter into this program involving some 15,000,000 children. BCG, made from weakened TB germs, will be used.

► THE largest mass vaccination of children ever undertaken is about to get under way in 11 European countries. The vaccinating will be done in an attempt to stop the tuberculosis epidemic which has followed the war.

BCG, made from living but greatly weakened TB germs, will be used. The germs have lost their power to cause disease but are able to mobilize the body's TB-resisting forces and thus give immunity to the disease.

Some 15,000,000 children will be vaccinated, according to present plans. Before the actual vaccinating starts, 50,000,000 children will be tested for susceptibility to tuberculosis.

The testing and vaccinating will be under the direction of Dr. Johannes Holm, technical director of the Danish Red Cross. This organization and its Scandinavian associates, the governments of each of the 11 countries, and the World Health Organization are cooperating in the mass procedure for checking TB. The American Overseas Aid—United Nations Appeal for Children has voted \$2,000,000 from its funds to help finance the project, and has earmarked another \$2,000,000 for the same sort of TB fight now being planned for Far Eastern and South American countries.

The 11 European countries where the program will be launched immediately are: Finland, Albania, Hungary, Bulgaria, Czechoslovakia, Yugoslavia, Greece, Italy, Rumania, Austria and

Poland.

Tuberculosis cases are now four to five times the normal rate in Europe, Dr. Holm reports. More food and BCG vaccination at once are the only measures for checking the disease, in his opinion. A pilot test he conducted in Hungary showed that two-thirds of the children there already have or have had tuberculosis. On these figures he bases his estimate that 15,000,000 children throughout Europe, one-third of its child population, need BCG vaccination to help them escape the disease.

The BCG for the mass vaccinations will be produced by the Danish Serotherapeutic Institute in Copenhagen and the Pasteur Institute, Paris.

Several large scale trials of BCG vaccination are now under way in the United States under the auspices of the U. S. Public Health Service and state and municipal health departments. But general vaccination of the population in this country is not recommended by such TB authorities as the American Trudeau Society and the medical section of the National Tuberculosis Association.

When the vaccine is prepared under ideal conditions and given to tuberculin-negative persons by approved techniques, it "can be considered harmless," these organizations state. But they add that "the degree of protection reported following vaccination is by no means complete nor is the duration of relative immunity permanent or predictable."

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ASTRONOMY

Comet Bester Now Visible

► COMET BESTER, now visible through binoculars, is only one of 15 comets now known to be in the heavens.

It is the only one, however, that is bright enough to be easily found. The recently discovered Comet Pajdusakova-Mrkos can be picked up with a small telescope. A larger instrument is needed to find the others, one or two of which are as faint as nineteenth magnitude.

"If a tail like that on Comet 1947n, the spectacular southern-hemisphere

comet, had formed on Comet Bester," stated Dr. Leland E. Cunningham of Students' Observatory, University of California, at Berkeley, "it would have been a conspicuous object in field glasses or binoculars. With a stringlike tail that is but faintly visible at best, it appears mostly as a blob of light that moves slowly across the sky."

The long, narrow tail of the comet comes out of the comet's nucleus instead of being formed from the entire head,

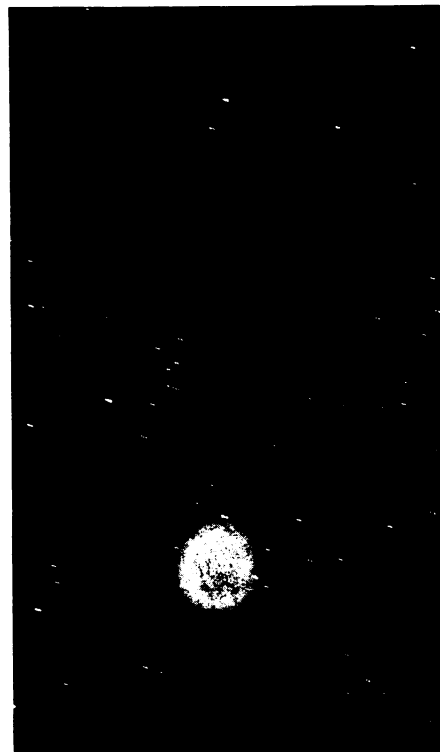
as was the case with Comet 1947n (*See SNL, Jan. 31*).

The comet is following quite exactly the path predicted for it by Dr. Cunningham last fall. It is less bright than astronomers had hoped, but then comets are notorious in being slightly fainter or brighter than predicted. It is also impossible to estimate accurately just what they will look like, or even whether they will have tails at all.

Those who wish to see Comet Bester will have to be real night-owls. It is visible just before dawn. On April 3 it will be about one-third of the way from the first magnitude star Vega to the first magnitude star Deneb Cygni. On April 7 the comet's right ascension will be 18 hours, 50.5 minutes, its declination plus 50 degrees, 26 minutes. On April 13 it will be directly north of the head of "Draco," the dragon.

So far this year, four comets have been reported, three of them later being picked up by other observatories. One of these, discovered by C. A. Wirtanen of the University's Lick Observatory, is unique in that it is the faintest periodic comet on record, Dr. Cunningham stated. It is now of the nineteenth magnitude.

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