

splints and plaster casts, played an important role in the rehabilitation effort. Limbs thrown into grotesque positions by the paralyzing poison were manipulated back into place and then set. After a period of time a foot pushed backward or twisted askew was returned to a more normal condition, where it could again function.

Braces posed something of a problem in Morocco. Although they have crucial rehabilitation value, they often tend to be hot, heavy and uncomfortable, made up of metal and leather devices sometimes reaching as high as the waist. Previous reports from Morocco said that the braces were frequently unused or broken by patients, probably because they were unaccustomed to wearing

anything so confining. To what extent the braces actually performed their intended task should be indicated in the April findings.

Dr. James Pert of the American National Red Cross had this to say about the Moroccan project:

"Because the disaster in Morocco occurred at the same time with the same effects from the same cause, it offers a unique opportunity to evaluate rehabilitation methods. Certainly it was a most unfortunate incident. But it will provide information about rehabilitation that could not otherwise have been obtained without many, many years of research."

• Science News Letter, 83:218 April 6, 1963

## MEDICINE

# Typhoid Fever in U.S.

► TYPHOID FEVER has struck both coasts of the United States but no epidemic is anticipated, health officials say. Dr. Alexander Langmuir, chief, epidemic intelligence service, Communicable Disease Center, Atlanta, Ga., told SCIENCE SERVICE that general vaccination is not recommended.

Several cases of typhoid, one each in New York City, Pittsburgh, Pa., Hartford, Conn., and Berkeley, Calif., have been linked with the epidemic in the ski resort town of Zermatt, Switzerland. The division of foreign quarantine, U.S. Public Health Service, said that health officials all over the country are following up passengers on planes from Switzerland.

The cause of the Zermatt outbreak, which has spread to St. Moritz in Switzerland as well as into Great Britain and The Netherlands, is believed to have been traced to an Italian construction worker who was responsible for its spread through the resort's water system.

In a Los Angeles, Calif., suburb, eighteen entirely unrelated cases of typhoid fever have been traced to a teen-age party where

contaminated chicken salad was blamed for the outbreak.

Dr. Norman B. McCullough, chief of the laboratory of bacterial diseases, National Institutes of Health, Bethesda, Md., said that there are enough typhoid carriers in this country to cause epidemics at any time if our water purification system should break down in the big cities.

"The big epidemics are water-borne," Dr. McCullough said. "A few cases still occur each year in this country but the number of deaths is small."

Only 21 deaths from typhoid fever occurred in 1960, according to Public Health Service reports.

Typhoid fever is an acute illness lasting several weeks and formerly resulted in the death of as many as 10% of the patients. It is caused by *Salmonella typhosa*, a parasite of man, infecting foods and water. The soiled hands of carriers such as the famous Typhoid Mary can transmit the disease. Epidemics have been caused by sewage contamination or shellfish.

• Science News Letter, 83:219 April 6, 1963

## PUBLIC HEALTH

# More Fallout in Foods

► RADIOACTIVE FALLOUT from the 1962 U. S. and USSR nuclear tests are now being found in this country's food.

The danger is from strontium-90 and cesium-137, since iodine-131 disappears two months after testing. However, further testing in 1963 would pose another iodine-131 danger.

Strontium-90 lodges in bone and remains there for many years, threatening leukemia, cancer of the blood-forming cells, as well as bone cancer.

Cesium-137 affects the whole body, and it can cause defective children in future generations.

The U. S. Department of Agriculture has a decontamination process that removes cesium-137 as well as radioactive strontium from milk. The cost of this treatment was ten cents per quart a year ago, but cost estimates are now down to nine-tenths of a cent per quart.

Fresh milk contributed 80% or more of

all the radioactive strontium in the total diet in most of the cities last year that got heavy doses of fresh fallout. Widespread use of the milk decontamination process would remove the danger from radioactive milk.

Tests made by Consumers Union, Mt. Vernon, N. Y., with the aid of a U. S. Public Health Service grant during the first six months of 1962, were the first measurements of radioactivity in the total diet to be made within a few months after a large series of nuclear detonations.

Samples of the total diet of teen-agers and infants showed the daily intake of cesium-137 by infants was only half that of teen-agers. But because one-year-olds weigh only about a sixth as much as adults, the concentration of the radioisotope in babies is three times as high. The greater sensitivity of children to radiation makes this difference important.

• Science News Letter, 83:219 April 6, 1963

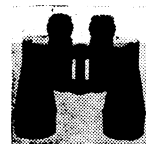
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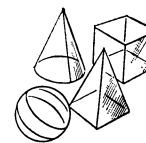
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