

PUBLIC HEALTH

Medicines Sent Pakistan

A fantastic variety and quantity of drugs and supplies were sent by airplane to survivors of the devastating floods in Pakistan in order to ward off or treat epidemic diseases.

► TO WARD off or to treat typhoid fever, cholera, dysentery, and louse-borne typhus fever that may come in the wake of the devastating flood in Pakistan, the public health procurement branch of the Foreign Operations Administration has done some fast bargain hunting, buying and shipping in the U. S., England and Scotland.

Material requested at 10 a.m. by Army and Public Health Service disease-fighting teams, headed by Dr. Alexander D. Langmuir of the Public Health Service, was on a plane and on its way by 3 p.m. of the same day, even though price-conscious procurement officers at FOA had to phone around for the best buy as well as sufficient quantity. And the drugs and supplies already sent or now on the way are fantastic in both quantity and variety!

Twenty thousand pounds of calcium hypochlorite for water supply purification, plus 25,000,000 globuline tablets for purifying small water supplies and 10 pounds of orthotoluidine crystals to determine the amount of chlorine in the treated water.

One thousand vials of cholera vaccine, plus 500,000 neutral glass serum bottles with rubber stoppers and metal caps and hand sealers plus 100,000 glass ampoules. The bottles and ampoules are needed by Pakistan's own cholera vaccine manufacturing plant.

Fifty-three million four hundred thousand antimalarial tablets, 600,000 sulfaguandine tablets, 70,000 sulfathiazole tablets and 10,000,000 sulfadiazine tablets are among the drugs shipped.

More cholera vaccine may be sent and also more typhoid-paratyphoid vaccine. Ten thousand vials of the latter have already been sent.

Space was found on the planes for 100 ten-ounce dropper bottles and 10 sterilizers, 10 tons of the new insecticide, dieldrin, and 250 hand compression sprayers for using it. To fight lice and typhus fever, two tons of 10% DDT dust was sent with 100 hand dusters, Army type.

One thousand dozen hypodermic needles, 500 dozen infusion needles, 2,400 hypodermic syringes of 10cc (about one-third ounce) capacity each, 5,000 disposable intravenous sets for giving transfusions and salt and sugar vein feedings, plus 3,000 quart flasks containing salt solution, 2,000 quart flasks of sugar and salt solution, 1,000 quart flasks of sterile distilled water and 1,000 pint flasks of sterile distilled water are other items on the list.

In addition, 75,000 chloromycetin capsules, 105,000 aureomycin capsules and 25,000 salt tablets were sent by airplane to flood survivors in Pakistan.

Science News Letter, August 28, 1954

PSYCHOLOGY

Gifted Children's Needs

► GIFTED CHILDREN in school do not necessarily need more reading. Most of them are getting plenty of practice in that, but could absorb additional instruction in other subjects.

This was discovered by Dr. Nathan Kravetz of Los Angeles when he questioned teachers in 30 Los Angeles elementary schools.

Half of the teachers reported they most frequently give bright students extra reading assignments after their regular work is finished. However, 79% added that they would like to have time to prepare special assignments in such varied fields as handicrafts, art, music, research and student government.

In his study, Dr. Kravetz compared the academic performance of several hundred school children with their I.Q.'s. He found that they almost always lived up to their mental endowments in reading scores, but fell below expectancy in arithmetic, spelling and language.

Dr. Kravetz, who at 33 is principal of Sheridan Street School in Los Angeles, has come to the conclusion that "the so-called gifted children (those with I.Q.'s exceeding 135) are getting sufficient reading practice but too few opportunities in other areas of learning and self-expression."

Science News Letter, August 28, 1954

METEOROLOGY

Radioactive Hailstones Of Tennis Ball Size

► RADIOACTIVE HAILSTONES as big as tennis balls bombarded Washington one May day as the result of the explosion of an atomic cannon shell 29 hours earlier some 2,000 airline miles away in Nevada.

Three U. S. Navy Hydrographic Office scientists, Gilbert Jaffe, Walter Wittmann and Charles C. Bates, report this in the *Bulletin of the American Meteorological Society* (June).

The hailstones were not very "hot" radioactively, but they registered on a Geiger counter with which their melted substance was tested.

Many children at the time of the hailstorm ate several of the hailstones like snowballs, but they suffered no ill effects.

Debris of the atomic test was carried by a low pressure system to about 40,000-foot altitude over Frenchman's Flats, Nev., and then blown at about 65 knots eastward. In Washington's vicinity strong updrafts accompanying the passage of a cold front caused large raindrops and hailstones to be recirculated several times through the contaminated air mass before they fell to earth.

The hailstones fell on May 26, 1953.

Science News Letter, August 28, 1954

CYTOLOGY

Streptomycin Destroys All But Wall of TB Germs

► ONLY THE walls of a tuberculosis bacillus are left standing after a streptomycin attack.

The first change is a lengthening of the rod shaped TB germ. Then the middle swells. The swelling extends to other parts of the bacillus and, after about 96 hours of exposure to streptomycin, the bacillus begins to disintegrate. At the end of a week this disintegration is practically complete and all that is left of the once deadly germ is a hollow shell.

These changes in the bovine strain of TB germs growing in culture medium were observed with the help of an electron microscope by Drs. R. Vishwanathan, K. C. Gupta, A. Pande, I. C. Chopra and A. J. H. deMonte of the University of Delhi, Delhi, India, and the Drug Research Laboratories, Jammu, India.

Details are reported to the National Tuberculosis Association's *American Review of Tuberculosis* (Aug.).

Science News Letter, August 28, 1954

INVENTION

Extract Snail Chemical For Whooping Cough

► SEACH FOR new antibiotics to cure human diseases has ranged from molds, fungi, soil bacilli and higher plants to such things as slugs, snails and—well, probably not puppy dogs' tails.

Snails, however, have yielded a chemical called helicidine claimed to be a specific remedy for whooping cough. The claim is made in a patent, number 2,686,144, issued to Fidel Gonzalez-Barcena y Fonsdeviela of Madrid, Spain. The patent is for a process for producing helicidine from "living molluscs of the helicidae type."

Molluscs are members of that animal division that includes snails, slugs, mussels, oysters and clams. The helicidae type would be the snails.

Science News Letter, August 28, 1954