

PUBLIC HEALTH

Do Not Expect National Infantile Paralysis Outbreak

Federal H-Men Have Gone to Field to Study the Tennessee-Alabama Outbreak and to Try New Nose Spray

NO INDICATIONS are seen by U. S. Public Health Service officials that the infantile paralysis (poliomyelitis) epidemic in Alabama and Tennessee will reach national proportions. Reports from other parts of the country show no unusual amount of the disease.

Federal health authorities are also encouraged by the fact that the Alabama-Tennessee outbreak is not so severe as the North Carolina epidemic of about the same time last year. Nor does it show any great tendency to spread.

Federal "H-men" led by Dr. Charles Armstrong have gone into the affected areas in order to aid in the application

of the new nose spray which it is hoped will prevent the disease. Developed by Dr. Armstrong and Dr. W. T. Harrison as the result of experimental work on monkeys, the alum-picric acid nasal spray is receiving its first large-scale application in this epidemic.

In the hope of saving some of those who might otherwise fall victims, the nasal spray is being used without any attempt at making a controlled experiment. Physicians and health officers are administering the spray, which is quite harmless, to those who desire it and who can be treated with the facilities available. Undoubtedly a study will be made later to determine whether any

cases of poliomyelitis occur among those who are treated with the spray, but there is no systematic exclusion of some from the treatment in order to have a "normal" group in which the disease might have an unhampered chance to spread, as would be the case if the doctors were conducting a laboratory experiment.

In last year's North Carolina epidemic there was experimental use of vaccines designed to provide artificial immunity to the disease. In the time subsequent to that use medical opinion has developed which has indicated that vaccines should not be used.

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MEDICINE

Nasal Spray as Preventive Of Infantile Paralysis

BECAUSE spraying the nose with an alum-picric acid solution has proved effective in preventing poliomyelitis (infantile paralysis) in monkeys, it is being used on an experimental basis in combating the Alabama-Tennessee epidemic.

Although the U. S. Public Health Service warns that this new development by two of its surgeons, Drs. Charles Armstrong and W. T. Harrison, "is not at present to be regarded as of proved value in the prevention of poliomyelitis in man," directions have been issued telling how the treatment may be administered.

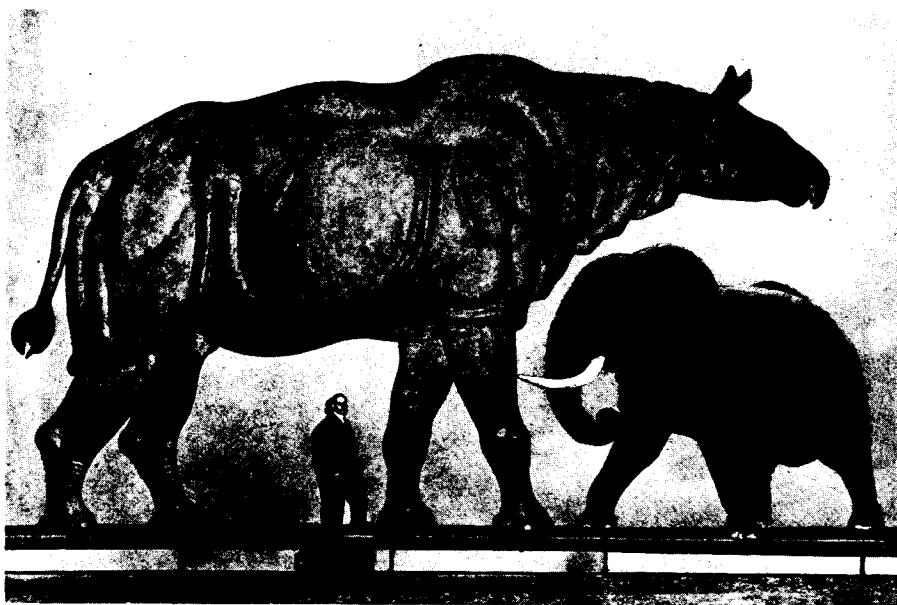
If it is desired to use the solution it should be sprayed into the nostrils three or four times on alternate days, and thereafter weekly during the presence of poliomyelitis. The spray tip should be pointed upward and backward at an angle of about 45 degrees, and the spraying should be thorough enough to reach the pharynx as well, when a bitter taste will be noted. The early applications at least should be administered by a physician.

Still Experimenting

The experimental work on animals is still being pursued. Therefore, the tentative procedure is subject to such changes as may be dictated by future findings.

The most effective solution so far developed during experimentation on monkeys is prepared as follows:

Solution A—Dissolve one gram (1 gm.) of picric acid in 100 cc. of physiological salt solution (0.85%). (Warming facilitates solution of the picric acid.) (*Turn to next page.*)



WORLD'S LARGEST

Baluchitherium, the biggest mammal that ever walked the earth, has a new full-size portrait statue in the American Museum of Natural History, in New York City. John W. Hope, museum staff artist who made the image, stands under his handiwork to give an idea of the extinct monster's tremendous size. It was half again as high as the largest living mammal, the African elephant, and it had a body about twice as bulky as the elephant's. Baluchitherium (the name is Greek for "Beast of Baluchistan") was a 10-ton, 30-foot-long relative of the rhinoceros, that lived in Central Asia 25,000,000 years ago. (See SNL, June 8, 1935, for article on Titan Beasts.)

Solution B—Dissolve 1 gram (1 gm.) of sodium aluminum sulphate (sodium alum) in 100 cc. of physiological salt solution (0.85%). Any turbidity in this solution should be removed by filtering one or more times through the same filter paper.

Mix solutions A and B in equal amounts. The resulting mixture, which contains 0.5% picric acid and 0.5% alum, is sufficiently antiseptic to prevent the growth of organisms and is ready for use as a spray. Homemade concoctions are not favored.

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MEDICINE

Short Syphilis Treatment Has Been Successful

THREE Chicago scientists believe that they have succeeded in decreasing materially the long period of treatment necessary for persons who have syphilis in its early stages. They further feel that their methods bring the eradication of the disease in its early stages one step nearer realization.

Dr. Clarence A. Neymann, Dr. Theodore K. Lawless and S. L. Osborne have merely combined the recognized fever and drug treatments of syphilis, and the results have been highly satisfactory. (*Journal, American Medical Association, July 18.*)

The average time consumed in this combined treatment is forty-two days. An average of five sessions of fever were given each patient and an average of five injections of neoarsphenamine were given during the treatment period. A small amount of bismuth salicylate was also used.

Test Cases

Fourteen cases of early syphilis were treated with hyperpyrexia; that is, the patients were given a high fever. Half of them simultaneously were given arsphenamine and bismuth compounds.

The seven treated by fever therapy alone developed further signs of the disease. The seven given the combined treatment have shown no clinical signs of syphilis for periods ranging between five and eighteen months.

"This entire treatment presupposes an organized expert medical and nursing staff trained in giving hyperpyrexia treatments and the hospitalization of the patient during twenty-four hours for each session of hyperpyrexia," the three medical scientists state.

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METEOROLOGY-AGRICULTURE

In Tennessee Valley Also Drought Did Great Damage

DROUGHT came early to the Tennessee valley—came early, and was broken early.

It was broken before dry weather elsewhere in the country began to get widespread attention. But the heavy rains that broke it did not repair damage already done by the most severe spring and early summer drought ever recorded at the Knoxville station of the U. S. Weather Bureau.

For 81 days, April 12 to July 1, only 2.69 inches of rain fell, and that came in scattered light showers. This was only one-quarter normal precipitation for the period. Though these observations were made in Knoxville itself, they are representative of the Tennessee valley as a whole.

University of Tennessee agricultural authorities estimate the damage for that state alone as between forty and fifty million dollars.

The hay crop was reduced sixty per cent. Farmers began to sell their dairy cattle because they had no feed for them, and in some cities the price of milk went up. Since the rain, forage crops such as millet, Sudan grass, soybeans, cowpeas and sorghum have been planted in an effort to make up the shortage.

Too Late to Plant

Only sixty per cent of the usual tobacco acreage had been set before the rain, and now it is too late to plant more. Early garden and truck crops were cut from fifty to seventy-five per cent, and now late plantings are being made in the hope that farmers will have vegetables to can for winter use.

Corn and cotton have suffered least, but there had not been time to plant a full crop before the rain came. Some corn is now being planted for silage. Wheat, barley and rye were little affected. Spring oats were a failure.

If corn, cotton, tobacco and the newly planted crops are to be successful, there must be more rain. None has fallen since the drought-breaking precipitation at the very first of the month. As late summer and fall are normally seasons of lightest rainfall in this section, the outlook is not altogether bright.

Though the drought retarded the filling of Norris dam, enough water was

stored so that some could be released to raise low water levels of the lower river. On June 19 the sluiceways were opened to maintain navigable depths below Chattanooga. Ninety-seven thousand acre-feet were discharged, and the lake level was reduced by more than four and one-half feet. The gates were closed again on July 3, following the heavy rains. By July 10 the losses had been more than made good.

Despite the fact that Norris Lake gates were not closed until March 4, the lake would have filled to the normal 1,020-foot level by July 20, had there been average rainfall, with no necessity for an emergency release of water. There were 1,436,900 acre-feet of water in the lake when the draw-down began. Total capacity at maximum flood level of 1,052 feet is 3,400,000 acre-feet.

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ARCHAEOLOGY

Germans Build Museum For Prehistoric Art

GERMANY'S famous art galleries are to have a new addition—an exhibit of prehistoric art.

Wall pictures that the world's first artists painted in dim caverns or on cliffsides have been copied by expeditions led by Prof. Leo Frobenius, of Goethe University, Frankfurt am Main. To house the 3500 pictures, large and small, the German government is considering the construction of a special museum.

Evidence that there were two schools of art, even in the dawn of art history, is revealed by cave paintings in France and Spain. The eastern Spanish style was carried out in one color and depicted human beings as well as animal figures. The Franco-Cantabrian style, executed in polychrome, depicted animals exclusively. Both styles apparently flourished in the territory at the same time, Professor Frobenius concludes.

The fact that frescoes found in caves and on cliffs in Libya, North Africa, show resemblance to the Spanish style is regarded as evidence that Spain and North Africa made a territory of uniform artistic culture, 30,000 years ago.

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