run around and play with other children and go to school have had an attack, they are immune to it. Then there follow one or two years in which so few children are susceptible to the disease that not many cases are reported. But as more children are born and grow into the run-about and school ages, a new large group susceptible to measles develops and the number of cases suddenly increases greatly over the previous year or two.

The present epidemic is centered in New York, New Jersey, Ohio, Illinois and Michigan. Experience in previous epidemics leads public health officials to expect the peak of the epidemic by the middle of April.

Measles is a dangerous disease and the younger the child the greater the danger. Children under three years are especially likely to have fatal complications, such as pneumonia. Parents are therefore warned to keep young children from contact with those who have measles or may be coming down with it. The first symptoms may be easily confused with those of a cold.

Injections of the blood serum of someone who has recently recovered from measles are likely to avert an attack or make it less severe.

Science News Letter, March 15, 1941

MEDICINE

New Disease Mystery Caused By Toxoplasma

In Adults, Ailment Might Be Mistaken for Rocky Mountain Spotted Fever; Possibly Spread by a Tick

DOCTORS have a new disease mystery to solve. It concerns the ailment or ailments caused by a large, one-celled parasite known as Toxoplasma. The deaths of two adults and one six-year-old boy from infection with Toxoplasma, and a non-fatal case in another little boy, are reported (Journal, American Medical Association, March 1). The ailment may or may not be rare. How often it occurs is one of the unknowns in the problem.

The two little boys had "atypical encephalitis," Dr. Albert B. Sabin, of the Children's Hospital Research Foundation and the University of Cincinnati College of Medicine, reports. Encephalitis means "sleeping sickness" to most laymen, but the little patients did not have typical sleeping sickness. Convulsions, fever, disorientation, and an increased number of a certain kind of white blood cells in the spinal fluid were the chief features of the disease.

In the adults, the ailment might have been mistaken for Rocky Mountain spotted fever or endemic typhus fever, according to the report of these cases by Dr. Henry Pinkerton and Dr. Richard G. Henderson, of St. Louis University School of Medicine. Rash, fever and lung involvement were the outstanding features in these cases.

Toxoplasma, the "germ" that caused these quite different ailments, was first

discovered in 1908 in the gondi, a North African rodent. Since then it has been found in many animals, such as guinea pigs, rabbits, rats and mice and has been reported as causing disease in man. Scientists generally, however, rather doubted that Toxoplasma could or did cause sickness in man because the evidence in the earlier reports, with one exception, was inconclusive.

Now, however, the proof is more definite. Dr. Sabin and Dr. Pinkerton and Dr. Henderson report laboratory tests, including transmission of the disease to guinea pigs by inoculation with blood or spinal fluid from the patients, which are pretty convincing evidence that the Toxoplasma caused the illnesses.

How the patients got the infection is part of the mystery that remains to be solved. In the cases of the two adults, there was a suggestion that ticks, such as transmit Rocky Mountain spotted fever, might have given it. A cat in the home of one of the little boys became sick and had convulsions about the time the child got sick. This was suggestive, but the cat had been disposed of, so no tests could be made to determine whether it also was infected with Toxoplasma. Mosquitoes had been troublesome around this home, but no ticks had been seen.

Some cases of Toxoplasma infection have been reported in infants and it was

thought these babies got the sickness from their mothers, although the mothers themselves did not have it.

Because the two adults who died of toxoplasmosis had lung involvements, the St. Louis doctors point out that the ailment might be transmitted directly from person to person, as the common cold is.

The infection is probably relatively rare, Dr. Sabin says, althought there is "yet no indication how frequent such infection is." The St. Louis doctors, however, pointing out the similarity in the adults to recently reported cases of atypical pneumonia of unknown cause, state that it is not justifiable to assume that toxoplasmosis is a rare disease.

Treatment so far has been directed to relief of symptoms, but Dr. Sabin's report indicates that the newer sulfa drugs may prove effective. He gave sulfanilamide to one of the little boys, but without success. Later tests with mice showed that sulfapyridine and sulfathiazole have a curative effect on the infection in mice, but that sulfanilamide "only delays death but cannot prevent it" in this condition.

Science News Letter, March 15, 1941

PSYCHOLOGY-GENETICS

Sensitivity to Noise Is Perhaps Inherited

CERTAIN individuals may be advised to stay away from noisy occupations such as riveting, pneumatic drilling, the tank corps in the Army if recent psychological research is found to have human applications.

Abnormal sensitivity to noise in rats, which makes some animals go wild with activity and even have an epileptic-like fit at the sound of jingling keys, is hereditary, Dr. Norman R. F. Maier and Nathan M. Glaser, of the University of Michigan, have found.

Of 18 rats tested, all of whom were offspring of normal parents, not a single one was found to have the "neurotic" sensitivity to noise, these scientists report in the *Journal of Comparative Psychology*. (October)

But among 25 offspring of one "neurotic" and one normal parent, more than half were thrown into fits by the key jingling.

When both parents were noise sensitive, the proportion of the offspring who showed the "neurotic" tendency was increased to nearly 75 per cent.

The evidence of the experiments is that the noise sensitivity is inherited as a dominant trait, the psychologists con-