Reasons for Polio Rise

➤ WE ARE having more infantile paralysis because we have more children under 15 years of age. The serious housing shortage and the fact that good transportation now brings country and city people together are two more likely reasons for the increase in the disease during the past 10 years, statisticians of the Metropolitan Life Insurance Company in New York declare.

The number of reported cases of infantile paralysis has been higher in the past 10 years than in any previous comparable period, they report.

In about the same period of time, since 1940, the population under age 15 has increased from 33,000,000 to nearly 40,000,000, or more than 20%.

The housing shortage would play a part because of the crowded living conditions which might favor the spread of the disease. Since people can and do travel more, those living in rural areas are not so isolated as formerly and that may explain the increasing frequency of infantile paralysis in areas that formerly had little of the disease.

Improved diagnosis and reporting of cases probably accounts for some of the increase, the statisticians point out. They term this increase an "apparent" one while the



other conditions would lead to a real increase in cases.

Deaths from infantile paralysis have been going down, even though number of reported cases has increased. Last year, when the number of cases was greater than any year since 1916, the death rate among children insured in the company's industrial department was only one-fifteenth of the all time high of 1916 and less than one-half the 1931 rate.

The long-term decline in the death rate resulted chiefly from the decline in mortality at ages under 10, especially among girls. At ages over 10, especially among boys, there is some sign of a rise in the mortality. The reason for this is not clear. Science News Letter, September 24, 1949

Veterinary medicine Bigger Pigs on Less Feed Promise of Gland Treatment

► A GLAND treatment that makes pigs into bigger porkers on less feed has been discovered by Dr. R. Braude of Reading, England.

On this treatment the pigs in Dr. Braude's experiments used one-third of a pound less feed for every pound of live weight gain, amounting to a 10% saving in feed. The new fattening process increased the size and weight of the animals but the gain was apparently in lean meat, since carcasses of treated animals were not as fat as those of untreated litter mates.

A synthetic female sex hormone, called stilbestrol, and iodinated casein were used in the first experiments. Dr. Braude is now substituting synthetic thyroxin, iodine-containing thyroid gland chemical, for the iodinated casein. He expects to try the new fattening process on a commercial scale soon.

Pork from these treated pigs will be fit for human consumption, Dr. Braude reported on the basis of experiments by Dr. Peter Bishop of Guy's Hospital, London. Dr. Bishop fed pork from the exprimental pigs to volunteer women patients without adverse effects.

Science News Letter, September 24, 1949

NUCLEAR PHYSICS-PSYCHOLOGY Men More Hopeful than Women about Atom Energy

➤ MEN are more hopeful than women about the development of atomic energy, Dr. Lillian Wald Kay, of New York University, found from interviews of 6,500 adults in New York City and Cincinnati, Ohio, who attended an exhibit of Man and the Atom.

Women are less well informed about

applications of atomic energy than men but are more ready to ask for information about all uses, including weapons.

Among those who are informed about possible peacetime uses of atomic energy, men and women differ in their principal interests. Men are concerned about the applications to power. Women are interested in medical uses.

Dr. Kay reported her findings at the meeting of the American Psychological Association in Denver, Colo.

Science News Letter, September 24, 1949

GEOLOGY

Age of Atlantic Ocean Is Half Billion Years

➤ THE depths of the Atlantic Ocean have been very much as they are today for 500,000,000 years, about a quarter of the known age of the earth.

The supposed youth of the Atlantic basin, generally placed at only 70,000,000 years, was exploded by underwater depth charge explosions set off by the Albatross ocean bottom exploring expedition.

Prof. Hans Pettersson, Swedish oceanographer who led the exploration, reported the new age determination to the British Association for the Advancement of Science meeting at Newcastle-Upon-Tyne, England.

Soundings of the sea were made by echoes from the explosions. Two echoes were obtained, one from the top of the layer of sediment and the other from underlying bedrock. The sediment depth was shown by this method to be 12,000 feet. The rate at which sediments on the floor of the ocean accumulate now is about a quarter of an inch (seven millimeters) per 1,000 years. Simple calculation gives the age as about 500,000,000 years.

Science News Letter, September 24, 1949

Words in Science— SPEED-ACCELERATION

► SPEED is the rate of travel of an object. It is expressed in miles per hour or feet per second.

Velocity is not just a hard way of saying speed; it means speed in a given direction. Velocity in one direction is not at all the same as velocity in another direction even though the speed may be the same.

Acceleration is the rate of increase in velocity. A car that has a quick pick-up accelerates well. Acceleration is usually expressed in feet per second per second. The repetition of "per second" is not a misprint because acceleration means change in velocity. It is the increase in speed (feet per second) that occurs in each second.

Science News Letter, September 24, 1949

