

Recommendations from these White House conferences on child welfare, of which this of 1940 is the fourth since 1909, will provide a yardstick for state and city officials and welfare groups, in their planning during the forthcoming decade.

Science News Letter, January 27, 1940

GENETICS

Cousins Recently Born Are Brother and Sisters

CHILDREN with two sets of parents, but brother and sisters, nevertheless. That is how the geneticist sees the case reported in New York of the three babies born to identical twin fathers and identical twin mothers.

Benjamin and Hyman Rubin, identical twins, married Sylvia and Ruth Reisman, also identical twins, according to this report. Now one couple are parents of identical twin girls and the other couple have a boy born just four days before.

The little boy is a cousin of the little girls, but is, genetically speaking, their brother. Since his father is identical in heredity to the father of the girls and since his mother is identical to their mother, he is exactly as closely related to them as though he had been born to the same parents.

This is no mere play upon words, but is scientifically accurate. For identical twins have their origin in a single egg cell. They have drawn exactly the same set of genes in the vital grab-bag of human heredity. So far as the traits they can pass on to their children are concerned, they are interchangeable.

Scientists reserve a special welcome for the birth of identical twins. The reason is that no scientific experiment can be completely satisfactory without the inevitable control. When one laboratory rat is fed a new drug or given a new serum, the effects can be judged only when another rat, otherwise like the experimental animal, goes without—when there is a “control.”

In educational or other experiments on man, the “control” is often missing. In the identical twin, Nature provides an ideal control—two human chicks from the same single mother egg cell. Two persons with equal potentialities.

In the Rubin babies, Nature has been more than generous and provided, in addition to this “control,” another in the form of another baby born of parents exactly the same genetically and at practically the same time.

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PUBLIC HEALTH

Health of Industrial Workers Protected by Examinations

Non-Compulsory Program Worked Out by State Industrial Commission in Wisconsin; Employer Pays

HEALTH of industrial workers in Wisconsin is being protected by a non-compulsory program of physical examination worked out by the state's Industrial Commission, Harry A. Nelson, director of the Workmen's Compensation Department of the commission, reported at the Second Annual Congress on Industrial Health. The congress was held under the auspices of the American Medical Association in Chicago.

The program represents the recommendations of labor organizations, employers, physicians and insurance companies. It is in no way compulsory. It includes standards and safeguards designed to meet the approval of both employers and employees.

In concerns adopting the program,

every employe is examined before employment by a physician selected and paid by the employer. Time lost from work by employes and transportation expenses in connection with the examinations are also paid by the employer. Following the pre-employment examination, periodic reexaminations are given at such times as the examining physician directs. The intervals between examinations depends both on the employe's condition and the type of work he is doing.

Conditions threatening the employe's health can be detected by such examinations in time, it is hoped, to ward off the health menace, either by appropriate treatment or by change in working operations and conditions at the plant.

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MEDICINE

New Infantile Paralysis Leads May Reveal Way It Spreads

Saliva Will Be Examined for Virus; Disease Spread Now Seems More Like Diphtheria Than Like Typhoid

NEW LEADS on infantile paralysis research make the eventual conquest of this crippling childhood plague seem excitingly near at hand. Research plans announced by Basil O'Connor, president, National Foundation for Infantile Paralysis, show that scientists are following new trails in their search for ways of preventing the disease.

Saliva from mouths of infantile paralysis patients both before paralysis sets in and during the paralytic stage is going to be examined for the virus that causes the disease. The clue for this line of search comes from the recent discovery of the virus in sewage from localities that were gripped by infantile paralysis outbreaks. The virus was also discovered in the intestinal discharges of patients and of healthy persons who did not have infantile paralysis but who had been in

contact with patients. This proved the existence of healthy carriers of infantile paralysis, akin to the healthy carriers of typhoid fever.

How do the healthy carriers and the patients spread their germs to others? The saliva tests may give the answer to that question.

Infantile paralysis, it is now believed, spreads more like diphtheria than like typhoid fever. In infantile paralysis, as in diphtheria, there must be direct contact with a patient or a healthy carrier of the germs. In typhoid fever, water or food may spread the germs, which are discharged from the body with its waste matter.

If infantile paralysis germs, discharged with body wastes, were spread by water or food, scientists would expect everyone who used the same water and food sup-