

THE CONTAGIOUS DISEASES AND THE CHILD CONSERVATION MOVEMENT.

THE November issue of *The Commonwealth* contains an article dealing with "The Contagious Diseases and the Child Conservation Movement," by Dr. Edwin H. Place. As nearly 90 per cent. of the deaths due to contagious diseases occur during the first ten years of life, efforts to reduce this portion of the child death rate is certainly worthy of consideration in a child conservation plan.

The ultimate success of any plan of diminishing these diseases depends on the education of both parent and child to a real understanding of the manner and methods of spread of contagion and the principles of personal cleanliness and asepsis. Success, therefore, is not to be easily secured, nor quickly, unless new facts and new measures of fighting these diseases are secured.

The public health measures available for fighting contagious diseases are mainly five: Immunization, isolation, quarantine, disinfection, and sanitation and hygiene. Immunization is the only measure which has been effective in the control of highly contagious diseases, such as small-pox and typhoid.

In many diseases, isolation still remains the basis of preventive work. This method is defective, however, in three respects: (1) It is not secured sufficiently early; (2) it is not complete and thorough; and (3) it is not sufficiently prolonged. The essential of isolation technique is the destruction of the virus at its point of exit.

Quarantine was at one time a measure of importance in the control of contagious disease, but the complexity of modern social contact and the spread and range of locomotion have practically removed it as a weapon. Without doubt it is the only method that is effective in the control of the more highly contagious diseases, such as measles and influenza. The greatness of the problem usually prevents the use of this method except in times of nervous stress or hysteria, and then it is always incomplete, consisting in closing the schools and churches and other places of public gatherings. Contact still goes on, however, and even if less free, the epidemic goes through its complete course in a little longer time.

Disinfection has had marked fluctuation in the public confidence as a preventive measure.

Terminal disinfection, *i.e.*, after the recovery of the patient, has a very low standing at present. Its fall from favor may be said to be due to three factors: (1) It was expensive, (2) it did not disinfect, and (3) it was not necessary.

The difficulties of disinfection in securing proper concentration, heat and moisture of the gas and its proper confinement are increased by the trouble in deciding how much of the premises should be treated. To thoroughly disinfect the average home would require knowledge of the laboratory expert. As the difficulties of practical disinfection have grown clearer, the non-essential of much of previous routine has become appreciated.

The influence of sanitation and hygiene on the incidence of contagious disease varies inversely with the contagiousness. For example, in measles, rubella and influenza no appreciable protection is given by the best of hygienic surroundings. In those diseases, in which more intimate contact is required for their dissemination, as diphtheria, scarlet fever, etc., hygiene may play a larger part.

No appreciable immunity may be claimed for those who live under such surroundings except so far as they may be protected from contact with the virus of disease. While hygiene has, then, no especial influence on immunity to infection, it may have some slight influence on the course and complications of the disease.



INFECTIOUS DISEASES OF CHILDREN.

IN a bulletin recently published by the Public Health Service, a study of 6,078 cases of infectious diseases among immigrant children is reported. The study related especially to cross infection and hospital management. The author states that opinion in regard to the proper management of contagious diseases treated in hospitals has undergone much change within the past decade. The old idea that infection occurs through the air and that a distinct quarantine must be drawn between wards and buildings containing patients with different contagious diseases has been gradually abandoned. This bulletin tries to show how, in the Ellis Island Hospital, the new methods have worked out in practice, and suggests changes which will result in additional improvements.