

During an epidemic aggravation, *recent* vaccination is the only safeguard. Persons who have had small-pox, or who have been exposed to it in former years with impunity as nurses and the like, are not secure from attack. The mortality of the disease in the unprotected, varies from 20 to 50 per cent. ; in the protected, from 2 to 5 per cent. During an epidemic of small-pox other diseases are more frequent and more fatal. Foul emanations from sewers and so forth have little to do with it. They affect the general health, but do not promote in a marked degree, the spread or duration of the epidemic.

Disinfectants, such as chlorine, carbolic acid, the fumes of sulphur, etc., will not destroy the germs of small-pox, unless they are strong enough to destroy human life. Sunlight, air and heat are the best disinfectants. Clothing is perfectly disinfected by baking in an oven, or exposure for a short time to a heat above that of boiling water.

The period of most active contagion is after the appearance of the eruption, and during the process of scabbing. It is questioned by some good authorities whether the disease is contagious at all prior to the formation of pustules.

Whenever small-pox shows a tendency to become epidemic in a city or neighbourhood, every individual should be speedily vaccinated, no matter what may be his previous history or experience relative to the disease. The only exceptions are children who have been vaccinated within a year or two: and even these should be re-vaccinated if the disorder break out in their dwelling or in a neighboring house. Vaccination will not take *perfectly* a second time, in more than two or three out of every 100 persons. A large scar is no evidence of genuine vaccination, nor is a large and painful sore. These may result from a common ulcer or a poisoned wound. A spurious pustule is apt to be worse than the genuine vaccinia.

A few individuals will take the vaccination again and again, while a few are entirely vulnerable. The latter are considered to enjoy a like immunity from small-pox. When re-vaccination is not followed by itching or any other effect, it should be repeated. The virus may not have been active. It is well to vaccinate in as many as two places. No other matter should be employed than the lymph or crust from the first vaccination of a healthy child; or that taken from the cow. There is less uncertainty in the former than the latter. The crust should never be kept long after mixing it with water. It develops a virulent poison. There is no ground for the dread of constitutional disease, as the result of vaccination. The extreme cases of inflammation and sloughing which occasion-