

an English time-table giving statistics in districts apart from London, I quote as follows :

(1)	Where the population to one square mile was 166	the death rate was 16.75
(2)	“ “ “ “ 379	“ “ 21.88
(3)	“ “ “ “ 4,449	“ “ 28.03
(3)	“ “ “ “ 65,823	“ “ 38.62

From a Glasgow table I take the following :

Death rate in 100,000, living in 1 or 2 rooms, 3 and 4 rooms, 4 and 5 rooms.		
Zymotic disease .....	478	246
Acute lung disease including Consumption .....	985	689
Nervous and diseases of nutrition in children ..	480	285
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The chemical and physical exciting causes of disease I will not refer to, for they do not concern us quite so directly in the consideration of prevention. That other division of exciting causes, namely the vital causes, I will consider a little more fully. Our attention should be directed, first, to the particular micro-organism which caused the disease, the most common channel of entrance into the human body, the means by which it can be prevented, or the means by which the individual may gain an immunity against it. We must, also, consider if that immunity is a real protection, and also if it is at all lasting. Some of the articles written of late on this subject, would lead us to believe that the pendulum has been swinging too far, in attributing so large a portion to the bacterial causation of disease, and in the value of inoculation against it.

It would be well to remember that many of the bacteria are our friends rather than our enemies. By their influence CO<sub>2</sub> is produced for the growth of plants. They are therefore necessary for agriculture.

We are also indebted to them for the production of many of the organic acids. But what concerns us most is the rôle many of them play in the production of disease. Diseases which depend for their existence on the presence of bacteria in the tissue are known as infectious diseases.

In general use, infectious and contagious are synonymous, although correctly speaking, a contagious disease is one transmitted from one individual to another by direct contact, while the term infectious is broader. Here the morbid agent gains access to the body in some more round-about way, through such means as water, food or soil. It will almost be necessary therefore that there should be in this latter case a predisposing cause. Typhoid fever, therefore, would be an infectious, non-contagious disease. Erysipelas, tuberculosis, and pneumonia, usually non-contagious, might be contagious. Smallpox, measles, and scarlet fever, are notably contagious. Successful prophylaxis, therefore, against any particular disease would necessitate a knowledge of the morbid agent causing the disease, its means of dissemination and the disinfectant to which it is especially susceptible. For example, in typhoid, the milk and water supplies should be thoroughly guarded, sick-room infection should be carefully prevented. For example, the thorough and separate disinfection of the bed linen, towels or napkins, or any garments coming into contact with the patient. An exclusive set of eating utensils should be