

manner as nearly as may be as if the ship were a house within the district of such authority, and shall give all such medical and other directions with reference to the persons therein, as seem to such authority requisite or proper for preventing the spread of the disease therefrom, and for disinfection or disposal of any thing infected, or that has been exposed to infection therein or therefrom.

(Signed)

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General Memorandum on the proceedings which are advisable in places attacked or threatened by Epidemic Disease.

1. Wherever there is prevalence or threatening of cholera, diphtheria, typhus, or any other epidemic disease, it is of more than common importance that the powers conferred by the Nuisances Removal Acts, and by various other laws for the protection of the public health, be well exercised by those in whom they are vested.

2. If the danger be considerable, it will be expedient that local authorities, in taking measures against it, avail themselves of the best medical advice which their district or its neighbourhood can supply.

3. Proper precautions are equally proper for all classes of society. But it is chiefly with regard to the poorer population, therefore chiefly in the courts and alleys of towns, and at the labourers' cottages of country districts, that local authorities are called upon to exercise vigilance, and to proffer information and advice. Common lodging-houses, and houses which are sub-let in several small holdings, always require particular attention.

4. Wherever there is accumulation, stink, or soakage, of house refuse, or of other decaying animal or vegetable matter, the nuisance should as promptly as possible be abated, and precaution should be taken not to let it recur. Especially all complaints which refer to sewers and drains, or to foul ditches, and ponding of drainage, or to neglect of scavenging, should receive immediate attention. The trapping of house-drains and sinks, and the state of cesspools and middens, should be carefully seen to. In slaughter-houses, and other places where beasts are kept, strict cleanliness should be enforced.

5. In order to guard against the harm which sometimes arises from disturbing heaps of offensive matter, it is often necessary to combine the use of chemical disinfectants with such means as are taken for the removal of filth; and in cases where removal is for the time impossible or inexpedient, the filth should always be disinfected. Disinfection is likewise desirable for unpaved earth close to dwellings, if it be sodden with slops and filth. Generally, where cholera or typhoid fever is in a house, the privy requires to be disinfected.

6. Sources of water-supply should be well examined. Those which are in any way tainted by animal or vegetable refuse, above all, those into which there is any leakage or filtration from sewers, drains, cesspools, or foul ditches, ought no longer to be drunk from. Especially where the disease is cholera, diarrhoea, or typhoid fever, it is essential that no foul water be drunk.

If unfortunately the only water which for a time can be got should be open to suspicion of dangerous organic impurity, it ought at least to be boiled before it is used for drinking, but then not to be drunk later than twenty four hours after it has been boiled. Or, under medical or other skilled direction, water, in quantities sufficient for one day's drinking in the house, may be disinfected by a very careful use of Condy's red disinfectant fluid; which should be added to the water (with stirring or shaking) in such number of drops that the water, an hour afterwards, shall have the faintest pink colour which the eye can distinctly perceive. Filtering of the ordinary kind cannot by itself be trusted to purify water, but is a good addition to either of the above processes. It cannot be too distinctly understood, that dangerous qualities of water are not obviated by the addition of wine or spirits.

7. The washing and lime-whiting of uncleanly premises, especially of such as are densely occupied, should be pressed with all practicable dispatch.

8. Overcrowding should be prevented. Especially where disease has begun, the sick-room should, as far as possible, be free from persons who are not of use or comfort to the patient.

9. Ample ventilation should be enforced. It should be seen that window-frames are made to open, and that windows should be sufficiently opened. Especially where any kind of infective fever has begun, it is essential, both for patients and for persons who are about them, that the sick-room and the sick-house be constantly well traversed by streams of fresh air.

10. The cleanliest domestic habits should be enjoined. Refuse-matters which have to be cast away should never be let linger within doors; and things which have to be disinfected or cleansed, should always be disinfected or cleansed without delay.

11. Special precautions of cleanliness and disinfection are necessary with regard to infective matters discharged from the bodies of the sick. Among discharges which it is proper to treat as infective, are those which come, in cases of small-pox, from the affected skin; in cases of cholera and typhoid fever, from the intestinal canal; in cases of diphtheria, from the nose and throat; likewise, in cases of any eruptive or other epidemic fever, the general exhalations of the sick. The caution which is necessary with regard to such matters must, of course, extend to whatever is imbued with them; so that bedding, clothing, towels, and other articles, which have been in use by the sick, do not become sources of mischief, either in the house to which they belong, or in houses to which they are conveyed. Moreover, in typhoid fever and cholera, the evacuation should be regarded as capable of communicating an infectious quality to any night-soil with which they are mingled in privies, drains, or cesspools; and this danger is best guarded against by thoroughly disinfecting them before they are thrown away: above all, they must never be cast where they can run or soak into sources of drinking water.

12. All reasonable care should be taken not to spread infective disease by the unnecessary association of sick with healthy persons. This care is requisite, not only with regard to the sick-house, but likewise with regard to day-schools and other establishments wherein members of many different households are accustomed to meet.

13. Where dangerous conditions of residence cannot be promptly remedied, it will be best that the inmates, while unattacked by disease, remove to some safer lodging. If disease begins in houses where the sick person cannot be rightly circumstanced and tended, medical advice should be taken as to the propriety of removing him to an infirmary or hospital. In extreme cases, special infirmaries may become necessary for the sick, or special houses of refuge for the endangered.

14. Privation, as predisposing to disease, may require special measures of relief.

15. In certain cases, special medical arrangements are necessary. For instance, as cholera in this country almost always begins somewhat gradually in the comparatively tractable form of what is called "premonitory diarrhoea," it is essential that, where cholera is epidemic, arrangements should be made for affording medical relief without delay to persons attacked, even slightly, with looseness of bowels. So again, where small-pox is the prevailing disease, it is essential that all unvaccinated persons (unless they previously have had small-pox) should very promptly be vaccinated; and re-vaccination should also be offered, both to persons above puberty who have not been vaccinated since childhood, and to younger persons whose marks of vaccination are unsatisfactory.

16. It is always to be desired that the people should, as far as possible, know what real precautions they can take against the disease which threatens them, what vigilance is needful with regard to its early symptoms, and what (if any) special arrangements have been made for giving medical assistance within the district. Especially in case of small-pox or of cholera, such information ought to be spread abroad by printed hand-bills or placards. In any case where danger is great, house-to-house visitation by discreet and competent persons may be of the utmost service, both in quieting unreasonable alarm, and in leading or assisting the less educated and the destitute parts of the population to do what is needful for safety.

17. The present Memorandum relates to occasions of emergency. Therefore the measures suggested in it are all of an extemporaneous kind; and permanent provisions for securing the public health have not been in express terms