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RESTRICTION AND PREVENTION

OF

DIPHTHERIA, SCARLET FEVER, MEASLES

CHOLERA

AND OTHER CONTAGIOUS OR INFECTIOUS DISEASES.

ISSUED BY THE

Board of Supervisors of Los Angeles County, California.

WALTER LINDLEY, M. D., County Physician. +

Los Angeles, Cala., October 28, 1885.

To the Citizens of Los Angeles County:

With the great immigration that is pouring into this county we are liable to have contagious diseases planted in our midst and it rests with you to take ordinary sanitary precautions and prevent any such calamity.

The following sanitary rules are taken almost verbatim as they were prepared by Dr. J. H. Raymond, M. D., Health Commissioner of the City of Brooklyn, New York, and who is the highest American authority on this subject.

Yours respectfully,

Walter Lindley, M. D., County Physician.

SANITARY TREATMENT

OF

Diphtheria, Scarlet Fever, Measles, Cholera, Small-pox

AND OTHER CONTAGIOUS OR INFECTIOUS DISEASES.

Diphtheria, Scarlet Fever, Measles and Small-Pox are highly contagious diseases, attacking persons of all ages, and may be contracted from those who are already affected, from the clothes that they have worn, and from everything which has been in the room with them. The infection clings to the body even after death, and these diseases may therefore be contracted from the bodies of those who have died with them. Even the walls of the room may be a source of infection to persons coming into it after the patient has left it, unless the infectious material is destroyed. In order to prevent the spread of these diseases in a family or house where they exist, and to promote the recovery of the sick, the following simple measures should be conscientiously and rigidly carried out, thereby preventing much suffering and saving human life.

An upper, sunny room, provided if possible with an open fire-place, and with no children on the same floor, should be arranged for the patient by removing everything from it which can possibly be spared, such as books, clothing, carpets, upholstered furniture, and window curtains; also plants, birds and other pets, *remembering that when once the patient has entered the room, nothing can with safety be removed until disinfected.* By thus stripping the room of all articles except those absolutely necessary, the subsequent disinfection is much more easily performed. If it is deemed necessary, a few small rugs will take the place of the carpet.

The fire-place serves a double purpose: first, as a means of ventilation; and second, by keeping a small fire burning therein, when the weather will permit, the pieces of soft muslin or

other material, which should always be used instead of towels or handkerchiefs in wiping the secretions from the mouth or nose, especially in diphtheria, can be destroyed by fire, and thus contagion by their means prevented.

One or two adults should take the entire charge of the patient, under no circumstances coming in contact with other persons, especially children. Kissing and "taking the breath" of persons having contagious diseases are especially dangerous, and should always be avoided. Open windows and open fire-places, with fire in them day and night, avoiding draughts and chilly air, protect the sick and those who nurse them.

Nothing should be removed from the room when the patient has once entered it, until it has been thoroughly disinfected.

Books, scrap-books, toys or other playthings should always be destroyed at the termination of the sickness, as being undoubted carriers of contagion. Locks of hair and other keepsakes have also been known to spread contagion.

Nurses should keep themselves and their patients as clean as possible, remembering that the more the infection accumulates, the more dangerous does it become. Special care should be taken in changing sheets and clothing, not to shake them or disturb them more than is absolutely necessary to remove them; as these acts disseminate the particles of skin which are removed with them, and which convey the germs of disease, they should be removed carefully and folded together and immediately disinfected.

DISINFECTION.

It is a popular idea that anything which destroys an offensive odor is a disinfectant. This is not only erroneous, but harmful, as reliance is thus placed on substances that in nowise act as destroyers of infectious material, which latter substances are the only true disinfectants. The methods recommended in this circular are, to a considerable extent, based upon the results of the work of the Committee on Disinfectants of the American Public Health Association.

DISINFECTANTS.

The agents recommended herein for disinfection are—

1. Fire.
2. Boiling water.
3. Chloride of Lime or Chlorinated Lime, either dry, or in solution as Standard Solution No. 1.
4. Solution of Chlorinated Soda, diluted as Standard Solution No. 3.
5. Sulphur.
6. Bichloride of Mercury.

Fire.—As already directed, the materials used in wiping away the discharges of the sick may be burned in the open fire-place, if such there be. In general, this method of disposal is to be recommended for all substances which have been exposed to infection, which cannot be treated with boiling water, and, could it be carried out in all cases, would make disinfection a very simple matter. If it is desired to burn substances suspected of being infected, and there is no fire in the room, such substances may be wrapped in a sheet soaked with Standard Solution No. 3, hereafter referred to, and in this condition conveyed to the fire elsewhere.

Boiling Water.—Experiment has demonstrated that boiling in water for half an hour will destroy the vitality of all known disease germs. This is therefore recommended as the best means to be employed in the disinfection of all articles which can be thus treated, such as the body-clothing of the patient, the bed-clothes, towels, etc. All utensils which are used in the room in the feeding of the patient, such as plates, tumblers, spoons, knives, forks, etc., should likewise be treated with boiling water before being removed from the room. Food itself, not consumed by the patient, should not be used by others, as it is liable to become infected in the sick room.

Chloride of Lime.—This substance, also called Chlorinated Lime, to be effective as a disinfectant must be of the best quality, and in purchasing, that which is inclosed in glass bottles should be preferred, as when packed in paper or wooden boxes, it is liable to have deteriorated When dissolved in water, in the proportion of *four ounces to the gallon*, it forms the

Standard Solution No. 1, recommended by the Committee on Disinfectants. The solution thus prepared is to be used in the disinfection of discharges in contagious diseases, especially in typhoid fever and cholera. One pint should be well mixed with each discharge; after ten minutes disinfection is completed, the contents of the vessel may be then safely thrown into the privy-vault or water-closet. The expectorated matter of those sick with consumption should be discharged in a cup half filled with this solution or with Standard Solution No. 3.

To thoroughly disinfect a privy-vault containing but a small amount of material, Standard Solution No. 1 should be used in the proportion of one gallon for each gallon of material in the vault. When thus disinfected, the contents should be removed. Subsequently, the material in the vault should be daily covered with the dry chloride of lime. It is only necessary to employ this large quantity in solution when there is reason to believe that the vault is infected, as with cholera or typhold fever; when it is desired simply to deodorize it, a less quantity will probably accomplish the purpose. The cost of the Solution No. 1 is about three cents a gallon.

Solution of Chlorinated Soda.—To be effective this solution must contain at least three per cent. of available chlorine, and in purchasing it, care should be exercised to obtain such a quality. The Standard Solution No. 3, of the Committee, is made by adding five parts of water to one part of the Solution of Chlorinated Soda. The cost of this solution is about ten cents a gallon. When thus diluted it may be used for all the purposes for which Standard Solution No. 1 was recommended, and is of a somewhat more agreeable odor, though more expensive.

This solution should be used to cleanse portions of the body soiled with discharges of those sick with infectious diseases, or the hands of attendants similarly soiled.

Bichloride of Mercury (Corrosive Sublimate), is recommended in this circular to be used only in the disinfection of privy-vaults, which contain so much material believed to be infected with the germs of typhoid fever or cholera, that the disinfection by Chloride of Lime would be impracticable. In using this it should be dissolved in the proportion of one ounce of Bichloride

of Mercury to one gallon of water; this quantity will disinfect four gallons of infected excremental matter.

TREATMENT OF THE BODY OF THE PATIENT AFTER RECOVERY OR DEATH.

When the patient has recovered, he should be first sponged over with the Solution of Chlorinated Soda, diluted in the proportion of one part to twenty parts of water; and, indeed, during the course of the illness occasional sponging of the body with this very dilute solution, under the direction of the attending physician, will be of value in preventing the escape from the surface of the body of infectious material. When, after recovery, the body has been thus sponged, not omitting the head and hair, a thorough washing of the body with soap and warm water should follow, and the patient dressed in clothes which have not been exposed to infection. This should take place in another room than the one occupied during the illness.

Should the case result fatally, the body should be thoroughly sponged with either Standard Solution No. 1 or No. 3, and then wrapped completely in a sheet saturated with one of these solutions, and inclosed in a coffin, which is to be closed, and the interment must take place within twenty-four hours, and be strictly private. If the interment is to take place at a distance requiring transportation by any other means than a hearse, the coffin must be of metal, or metal-lined, and hermetically sealed.

DISINFECTION OF THE CLOTHING AFTER RECOVERY OR DEATH.

The clothing of the patient should be treated in the manner already described as necessary during the sickness. Whatever can be boiled in water should be thus disinfected; articles which cannot be boiled should, if circumstances will permit, be burned; all other articles should be left in the room to be subjected to the fumigation hereafter to be described, and until thus treated, the room and its contents should be closed with lock and key, to prevent any one from entering.

DISINFECTION OF ROOM AND CONTENTS.

The room, having been vacated by the patient, should first be fumigated by burning sulphur. This fumigation should be done under the supervision of some intelligent person. Nothing should be removed from the room until this is completed, unless it has been disinfected in the manner already described. Everything to be fumigated should be so opened and exposed that the sulphur fumes can come in contact with all portions thereof. All cracks of doors and windows, fire-places or other channels by which the gas may escape, should be tightly closed, using cotton wadding when necessary. For a room ten feet in all its dimensions—that is, one containing one thousand cubic feet of air space—two pounds of broken sulphur and one pound of flowers of sulphur should be provided, and an increased amount for larger rooms, in the same proportion. This quantity is important, as less will not so efficiently accomplish the desired disinfection. The sulphur should be put in an iron pot, and this placed on bricks in a large wash-tub half filled with water, or in a large coal-scuttle containing wet ashes, This precaution is necessary to prevent setting fire to the floor. which would occur if the pot were placed directly on the floor or carpet. The vessel containing the sulphur should not be one with soldered joints, as the intense heat would melt the solder. A pot capable of holding one gallon is about the right capacity for three pounds of sulphur. The pot should be placed in the center of the room; if the room is a large one, containing several thousand cubic feet of air space, several pots should be provided, distributed at different points. Everything being in readiness, sufficient alcohol to moisten the sulphur should be poured on it, a lighted match applied, and when it is seen that the sulphur is well ignited, the room should be left and the door shut, and all cracks outside, including the key-hole, closed by paper, cotton, or other material. At the end of ten hours the fumigation is completed. Great care should be exercised in emptying the room of the sulphur fumes, as these cannot be safely breathed and are excessively irritating to the eyes and throat. If possible, a window should be opened from the outside, and through this the fumes permitted to escape; if this is impracticable, all the windows and doors of adjoining rooms

should be opened, and then the door of the fumigated room, and through these outlets the fumes allowed to find an exit. Thorough airing will remove the slight odor which remains.

The fumigation being completed, all wood work, as of floors, windows and doors, and the walls and other surfaces should be washed over with Standard Solution No. 3; particular attention being paid to cracks, crevices and out-of-the-way places, in which dirt ordinarily finds a lodgment and from which it is with difficulty removed. A subsequent washing with hot water and soap will complete the cleansing process, and the room may be considered again habitable.

ADDITITIONAL PREVENTIVE MEASURES,

TO BE EMPLOYED IN THE ABSENCE AS WELL AS IN THE PRESENCE OF CONTAGION.

See that the whole house, from cellar to attic, is clean. Keep the cellar dry, well ventilated and well whitewashed, and never allow, even for a day, garbage or other filth to be kept in it.

Open the windows of sleeping rooms every day for as long a time as possible, and in every way obtain as much fresh air as possible.

Abolish the privy in the yard if there is a sewer in the street, and substitute a well-flushed water-closet; if there is no sewer, see that the vault is emptied frequently, and kept inoffensive and innocuous by the abundant use of the Standard Solution No. 1, previously referred to, and subsequently sprinkling the dry chloride of lime freely over the surface of the contents daiiy.

Be sure that there are no leaks or defective traps or joints in the drain-pipes of the house, through which the gases from the decomposing filth contained therein can enter to pollute the air you breathe.

Should there at any time be any suspicion cast upon the drinking water, it should be boiled; this is to be rigidly carried out in epidemics of typhoid fever or cholera.

Unripe or stale fruit and vegetables, and those of difficult digestion, should be avoided at all times, particularly during the prevalence of cholera.

When the children complain of sore throat, send promptly for a competent physician; a few hours' delay may cost their lives. If the disease is pronounced contagious, keep the other children from schools of all kinds until a permit is procured for their return. Members of the family should not attend social or other gatherings so long as the disease continues. Keep the patient and the attendants quarantined from other members of the family and house.

SCHOOLS.

After the patient has recovered, the children of the house can attend school as soon as the sick-room has been disinfected; in cases of scarlatina and measles this will not be until desquamation—or peeling off of the skin—is completed.

The measures here recommended are to be used in all contagious diseases, whether diphtheria, scarlet fever, measles, small-pox, or others.

☞READ THIS CAREFULLY, AND PRESERVE IT FOR REFERENCE IN THE SICK ROOM, READING IT OVER WHEN YOU HAVE NOTHING BETTER TO DO, AND BURN IT WHEN THE CASE IS TERMINATED. ADDITIONAL COPIES CAN BE HAD ON APPLICATION.