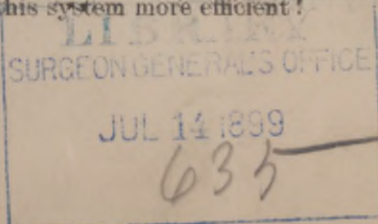


Report of the Committee

APPOINTED BY THE NEW ORLEANS MEDICAL AND SURGICAL ASSOCIATION, OCT. 25TH, 1879, ON THE FOLLOWING SUBJECTS, SUBMITTED BY THE EXECUTIVE COMMITTEE OF THE AMERICAN PUBLIC HEALTH ASSOCIATION, TO BE READ AND DISCUSSED AT THEIR MEETING AT NASHVILLE, TENN., NOV. 18TH, 1879.

PROPOSITIONS.

1. How to deal with a city in the yellow-fever zone in order to prevent the appearance of a first case.
2. How to prevent the importation of a first case.
3. How to deal with a first case and early cases generally when, in spite of precautions under first and second headings, it has made its appearance.
4. The duty of local boards of health, or other health authorities, to report such cases promptly, even though there may be some doubt as to the diagnosis. Whether the knowledge that such reports would be faithfully made would not have a tendency to allay apprehensions and give confidence to other communities while warning them of the importance of making preparations for contingencies.
5. Under what circumstances may it become necessary or expedient to remove the unacclimated portion of the population from an infected place? How may this be effected for the poorer classes of the population, and how should the people thus removed be cared for and supported?
6. Measures for isolating a dangerously infected place.
7. Organizations for the relief and treatment of the sick in an infected city.
8. Measures for preventing the spread of the disease from an infected place by railroads, including the management of transfer stations.
9. Inspection of steamboats at an infected place and at intermediate stations between the port of departure and their final destination. Should stations of observation be established by the National Board of Health? If so, what should be their relations to the health authorities of the States within whose territorial limits they may be established.
10. Results of the co-operation and aid given by the National Board of Health to State and municipal boards under the provisions of the act approved June 2, 1879. What suggestions may be made to render this system more efficient?



1. How to deal with a city in the yellow-fever zone in order to prevent the appearance of a first case.

ANSWER.—Put such city in the best possible hygienic conditions.

a.—DRAINAGE. Proper elevation and grading of the surface of the soil. All surface-gutters to be provided with sides and bottoms of masonry or chemically prepared wood, to facilitate flushing. All yards to be graded so as to drain into the gutters. All streets to be properly graded and paved. Banquettes carefully constructed. All privy vaults, where existing, should be required to be so remodelled as to avoid all possibility of seepage. In the construction of *new privies*, every care should be taken to remedy the defects of the present system.

b. We would suggest, as applicable to most houses already built, such practical alterations as would improve their general sanitary condition; i. e., elevation of the lots upon which they stand to avoid all stagnant water, and such alterations as are deemed necessary to improve their ventilation.

In building *new houses*, there should be an ordinance enacted and rigidly enforced by the proper authorities, requiring a specific elevation of the *whole lot* to be built upon, above the level of the street—such ordinance to be complied with before the foundations are allowed to be commenced.

We would suggest *thirty inches* as the minimum elevation for the floor above the surface of the lot.

No tenement houses to be allowed, as in our opinion they are always calculated to favor accumulations of filth, and thereby the production of disease.

Sufficient light and proper ventilation are essentials to health, also an abundant supply of *pure water*.

Where cisterns are used, the greatest care in their construction and management is necessary.

All accumulations of garbage or filth to be specially prevented.

Extensive excavations or disturbances of soil to be forbidden from May to November.

The thorough police of the city by trustworthy and competent sanitary inspectors.

2. How to prevent the importation of a first case.

ANSWER.—By a rational quarantine under the direction and management of physicians of undoubted capacity and recognized integrity.

Require all vessels, at all seasons of the year, to be subjected to careful *inspection* by the quarantine physician and to be subjected to such detention as he may deem necessary for efficient cleansing or disinfection. Establish a quarantine hospital for the treatment of infectious or contagious diseases arriving at quarantine—and we would advise that suitable facilities be provided for the unloading of cargoes and their proper disinfection when judged necessary.

3. How to deal with a first case and early cases generally when, in spite of precautions under first and second headings, it has made its appearance.

ANSWER.—Every means should be adopted to insure the earliest information to the health authorities regarding such case or cases.

Isolate, as far as practicable, the locality where such cases have occurred, and delegate to the proper authorities sufficient power for a thorough and repeated disinfection of such locality. All clothing and bedding of patients should be thoroughly disinfected by heat, or destroyed. In case of death, immediate *private* burial to be insisted upon.

4. The duty of local boards of health, or other health authorities to report such cases promptly, even though there may be some doubt as to the diagnosis. Whether the knowledge that such reports would be faithfully made, would not have the tendency to allay apprehensions and give confidence to other communities, while warning them of the importance of making preparations for contingencies.

ANSWER.—All suspicious cases should be at once reported to the proper health authorities, whose duty it should be to investigate such cases and report them without delay to all other in-

terested communities. We believe this to be the only course to pursue to gain confidence and allay useless apprehension.

5. Under what circumstances may it become necessary or expedient to remove the unacclimated portion of the population, from an infected place? How may this be effected by the poorer classes of the population, and how should the people thus removed be cared for and supported?

ANSWER.—We do not believe that yellow fever is *contagious*, communicated from body to body—but that the cause, whatever it may be, spreads through the atmosphere, and that a certain amount of the poison in this medium is necessary for its manifestation. That its spread is not by diffusion, otherwise it would grow less and less in intensity; but, that it is capable of multiplying in some way, as yet unknown to us, thereby increasing the intensity of its infection. That this atmospheric infection-tendency while greatly due to, is not wholly dependent upon heat and moisture, but that the presence of decomposing organic material and the gases arising therefrom enter largely as a factor, if not in its production, at least in its spread; and that cleanliness of person and surroundings will go far towards preventing its spread, if not securing its entire eradication.

The removal of the unacclimated from the place of infection is a measure of wisdom, and would save many lives. The presence of the disease and its disposition to spread, as manifested in the successive attacks of several members of the same household or adjoining households, should be the signal for a general removal of the unacclimated; for the rapidity of its spread, is evidence of its intensity.

The details of measures for the removal of the poor will be suggested and controlled by the circumstances of location and surroundings. The governments, national, State, or municipal, or all three, aided by private contributions, should furnish means for their care.

6. Measures for isolating a dangerously infected place.

ANSWER.—When the disease has progressed to such an extent as to render a place *dangerously infected*, within the meaning

of the term as employed by the National Board of Health, we would recommend the removal of all persons liable to infection and regulate intercourse so as by all possible means to prevent the ingress of unacclimated persons.

7. Organizations for the relief and treatment of the sick in an infected city.

ANSWER.—Each infected district should have its own hospital centrally located, of sufficient capacity to meet all wants, and presided over by a staff of medical men of standing and reputation in their profession and community. Each hospital should have its ambulances easy and comfortable, and every patient dependent on charity for its support and medical treatment, if discovered within the first *twelve* hours after the invasion, should be removed to said district hospital. The hospital staff should have entire control of the district, and such patients as have been sick for twelve or more hours should be treated at their place of residence by this staff, and their necessities should be relieved from the hospital upon the order of the attending physician.

8. Measures for preventing the spread of the disease from an infected place by railroads, including the management of transfer stations.

ANSWER.—We recommend the adoption of such measures by the National Board of Health as shall secure, during the prevalence of an epidemic, the abolition on railroad cars of all upholstered articles of furniture, rugs, carpets and such other material not washable, as well as all other material capable of conveying infection, and the substitution therefor of mattresses, chairs, seats, etc., made of wire, cane, wood or other open material. That the cars, especially sleeping cars if used, be open to free ventilation, as there can be no better purifier than the current of air which passes through cars when in rapid motion. Also, that all articles of bedding be thoroughly washed in boiling water after leaving point of departure.

Transfer stations should be under the supervision of competent medical officers, subject to the rules and regulations of the National Board of Health.

9. Inspection of steamboats at an infected place and at intermediate stations between their port of departure and their final destination. Should stations of observation be established by the National Board of Health? If so, what should be their relations to the health authorities of the States within whose territorial limits they may be established?

ANSWER.—As relates to inspection of steamboats, we recommend the same regulations in regard to furniture as already mentioned for railroad cars, and the faithful execution of the following rules as already adopted by the National Board, and put into use last summer at New Orleans, to-wit:

“Any decayed wood in the deck or floors should be looked for and required to be replaced by sound wood forthwith, or be left without covering of any kind and be required to be saturated daily with a boiling hot solution of copperas—one quart of copperas to the pailful of boiling water. All kitchen, pantry or other decks or floors subject to frequent wettings and dampness, should receive a last washing daily from hot copperas water. All storerooms or closets should be looked into and the stowing away of damp or soiled clothing therein prohibited. Water closets and urinals should be scrupulously clean and odorless.

“The hold and keelson of all steamboats and other vessels should be examined with special care, and whenever any bilge water or offensive odor is present, cleansing should be required by pouring in and pumping out water, by use of the syphon pipes for carrying steam at as high a heat as possible, under the dunnage, and by the use of copperas until all foul odor is removed. Merely damp holds and keelsons should be sprinkled with copperas to prevent mustiness.”

Stations of observation should be established by the National Board of Health, at certain intervals along routes to be provided for by the regulation of the Board, and should be provided with ample and comfortable accommodations for taking care of such sick as it may be deemed necessary to remove from cars or steamboats. Said stations should be governed by the rules and regulations of the National Board of Health.

In connection with the management of railroads, we would

call attention to the fact that a convention of railroad managers has been called to meet at Nashville, Tenn., on November 19th. We heartily endorse this movement and are convinced that it will be productive of much good.

“The object of this meeting,” to quote from their circular, “is to secure uniform rules and regulations that will give the greatest protection by affording reliable means to arrest the spread of infectious or contagious diseases, while at the same time providing for the movements of freights and passengers with the least inconvenience compatible with safety to the public health.”

10. Result of the co-operation and aid given by the National Board of Health to State and municipal boards under the provisions of the Act approved June 2, 1879. What suggestions may be made to render this system more efficient?

ANSWER.—In the consideration of this subject, your committee do not esteem it incumbent upon it to speak for distant communities, and therefore will restrict its observations to the State of Louisiana and mainly to the city of New Orleans. The subject is naturally divisible into two sections, and the results of the co-operation and aid furnished by the National Board of Health will first receive attention.

Its co-operation has been carried out chiefly through its medical inspectors and sanitary officers. In localities where yellow fever has been an unfamiliar visitor, they have aided in distinguishing real from supposed cases, have greatly contributed by their advice to prevent panic, and in case of actual presence of the disease, have directed suitable means for its repression. Having been selected with reference to their fitness for the service these officers have also acted as inspectors on railroad trains and steamboats, and have superintended the movement of merchandise, and of travellers and their baggage, and there is reason to hope that the failure of yellow fever to spread from New Orleans and Memphis in 1879 may be due to their well directed efforts. This view is fortified by the fact of its somewhat extended spread from the Morgan city focus, where the

above system of co-operation was long delayed by the late discovery of the outbreak. It may safely be affirmed, that Mississippi city is the only place which has received yellow fever infection from New Orleans in 1879, and in this locality the rules of the National Board of Health were not enforced, owing to the doubts in the first cases.

Another important result, which is perhaps attributable to the co-operation of the National Board of Health, has been the establishment of confidence among threatened communities in the measures adopted for their protection by that Board, and by State and local Boards of Health, the general compliance with the rules of the National Board of Health by local health authorities, and the moderation of inland quarantine restrictions to such an extent that its inconveniences have not amounted to serious hardships, such as occurred last year. Besides this, the thorough system of inspection and disinfection of vessels by the National Board of Health, meeting as it did the hearty approval of those interested in steamboats and shipping interests, materially assisted commerce by sooner opening ports closed against us. Another result has been the continuance of the work inaugurated by the Marine Hospital Service, of gathering and disseminating intelligence of the appearance and progress of infectious diseases, in addition to which circulars have been issued, giving instructions in detail for performing works of a sanitary character, and forms for carrying out the inspection of persons, merchandise, and their carriers on routes of travel. There can be no doubt that the bulletin and circulars issued by the National Board of Health have greatly contributed to a general awakening to the importance of the subject of public hygiene, and that trustworthy intelligence has tended to remove apprehension, and obviate interruption of intercourse. It is desirable that the Board should largely extend its system of health reports from foreign ports, so that our maritime quarantine restrictions may hereafter be removed or relaxed against localities of whose health we are still mainly in ignorance. The pecuniary aid from the National Board to State and Municipal Boards has been employed in works of local sanitation where means

were wanting to the local authorities, and this has amounted in New Orleans to a little more than \$3,800, and elsewhere in Louisiana to about \$2,000 more. It would be difficult to estimate the immediate results of this sanitary work, for the effect of disinfecting agents upon the progress of yellow fever is still an open question. The work of cleansing however, has had a good moral effect both by inspiring confidence and by the force of a good example. With reference to the second head of the subject, your committee find so good ground for satisfaction in the working of the National Board of Health—in other words, they find its success so much greater than they had reason to hope, that they would not undertake to suggest any changes of magnitude in its functions or *powers*. It was supposed by many that the usefulness of the National Board of Health would be proportional to its powers, but the result seems not to have justified that opinion. The character and reputation of the men selected for this responsible position, together with the acknowledged wisdom of the plans and regulations framed by them, speedily won the public confidence, especially in the regions visited by the epidemic of 1878. Their regulations have been generally adopted throughout the States east of Texas, and the moral influence of the National Board, there is good reason to believe, has been more effectual than any authority which could have been conferred by the Federal government. Having confidence that the Board will hereafter rectify whatever defects of administration the operations of the first year have brought to their attention, we deem it unnecessary to make any specific suggestions.

Respectfully submitted,

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