

In conclusion, the disease undoubtedly comes to us from the East, and most probably from Northern or North-Eastern Asia. Omitting the question of mortality, the disablement of individuals, and the consequent loss of time, labour, and skill, must in the aggregate amount to an immense loss to the community, more especially as adults, and not children, are the sufferers. Its incidence amongst horses alone is a serious inconvenience and cost. There is room for little doubt that the incidence of the disease upon horses and upon human beings is closely connected; the prevalence of the disease amongst horses previous to attacking man appears to have been generally noted, although no general statistics are forthcoming.

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REMARKS ON A PAPER READ BEFORE  
THE SOCIETY OF MEDICAL OFFICERS  
OF HEALTH ON FRIDAY, FEBRUARY  
14TH, 1890, ON EPIDEMIC INFLUENZA.

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Epidemiological Society, etc.

DR. CLEWOW's contribution to the literature of the present influenza epidemic is one of the most—if not the most—important that has yet appeared, both as to the facts and dates he himself has observed, and as to others so ably collected. So valuable and clear a statement invites comment, and will not suffer loss by remarks that may seem over-critical; for the intrinsic worth remains when the conventional terms used are displaced or discredited. An epidemic should mean the presence of a special disease in a community, and not be used also in treating of the characters of the disease which is becoming, or is actually, epidemic. The views of Parkes, published twenty-five years ago, are as fully accepted by the author who quotes them as they now are generally; they involve the idea of a continual vital reproduction of the agent of infection in each place where it becomes epidemic, not of a mass of molecules evolved at some distant spot and propelled by some unknown force in waves that follow mechanical or physical rather than vital laws, that advance and divide, retire or reach our shores, and send forward some detached particles of their imaginary mass; moreover such sparse agents of infection are not looked upon as multiplying where they fall and making an epidemic out of the materials present, but as this first drop of the storm and harmless particles of the destructive clouds to follow. Imagination has its place in science and imagery in teaching, but if the flowers of spring were always attributed to Flora sprinkling flowers from her lap or from clouds, the science of botany would suffer. The use of a "wave" in epidemiology is past. We can no longer suppose a generally diffused medium of infecting particles through which a wave is advancing; nor of some enormous store of specific

molecules propelled over thousands of miles, still less of an adequate propelling power acting either equally in all directions, capriciously, or in one direction only. Again, the conventional north-western course of epidemics is of very limited value. Do the Japanese ascribe their epidemics to the east, or was it possible before the discovery of America for epidemics to come to us, or at least to Ireland, from the west? Looking at the details of the epidemics usually appealed to in support of this very general statement, we find that the cholera of 1832 extended from Asia Minor southward and to the north-west. The present epidemic of influenza is traced south-eastward from Malta and Italy to Alexandria, and from Austria to the places south of the Danube. We hear of it last December in North America, from Boston, New York, and Mexico sooner than from Canada, but it was reported from the extreme north-west in the previous spring, and later as extending among the Esquimaux. From this knowledge we need not imagine a progress of influenza across Behrings Straits and Siberia any more than from China, where it was not known, across the steppes of Tartary; the sparse population of such districts is more opposed than the physical obstacles to this passing on of the epidemic torch.

The evidence of influenza in Siberia before its occurrence in Russia is not yet established. Kolomna, south of Moscow, and Wassili-Ostrow to the south-west of St. Petersburg, at the end of October had half their population attacked within three weeks (*Med. Press and Circ.*, 1890, p. 635); thence influenza extended to St. Petersburg and both south-east and to the north-east of Russia. The outbreak at Cronstadt, under the eyes of Dr. Clewov, was on November 15th, with isolated cases in both these places during the previous fortnight, yet the earliest report we have from Siberia is on October 27th, from Tomsk. It is interesting to note that the earlier epidemics advanced from Italy. We may conclude from our recent records, first, that the conditions favourable for a recurrence of another of the great influenza epidemics occurred in Russia sooner than in some other countries, where the germs of an old-established enemy had long lingered ready to be rekindled into activity; and second, these conditions so widely extended that in many and distant places, where the disease has been rarely or never before known, it has been widely developed soon after the importation of the infective "ens" or germ, in such manner and at such times as can best be explained by an importation of this kind following the course of traffic. By omitting to notice the earlier cases of influenza, some of women and children, the subsequent wider notice of attacks among postmen, or railway employés, or in barracks, has led to an erroneous idea of its incidence. In the school at Lambeth girls were not exempt. As one attack of the disease

is not protective against a recurrence, adults are not exempt as they mostly are in epidemics of a disease like scarlet fever or measles, consequently the proportion of adults to children seized in an epidemic of this kind must be markedly greater than is observed in the directly infectious epidemic diseases.

## RULES OF THE HEALTH DEPARTMENT OF THE CORPORATION OF NEW- CASTLE-ON-TYNE.

*Adopted by the City Council, February 5th, 1890.*

THE rules of the Health Department of Newcastle-upon-Tyne are so complete and good, that they merit publication here as a model set of regulations:—

1. The Health Department comprises the following divisions:

- (a) The department proper of the medical officer of health with the special inspectors for infectious diseases, clerks, etc.
- (b) The hospitals for infectious diseases and the requisite staffs.
- (c) The work of the inspector of nuisances, and the inspectors of dairies, slaughterhouses, food of all kinds, and adulterations, with the requisite staffs.

2. The Health Department as above constituted and every officer connected therewith is placed under the entire control and direction of the medical officer of health.

3. The medical officer of health has power to suspend until next meeting of the Sanitary Committee any officer in his department, and to dismiss any officer (except the inspector of nuisances) who shall be guilty of gross breach of duty or shall refuse to carry out the instructions of the medical officer of health; such suspension or dismissal to be reported to next meeting of the committee.

4. No officer in the Health Department shall absent him or herself from duty without the permission of the medical officer of health.

5. The medical officer of health, as medical superintendent of the hospitals for infectious diseases, has authority to engage and terminate the engagement of the officers and staff, reporting any change in the office of resident medical assistant and matron to the next meeting of the Sanitary Committee; and to make, and cause to be carried out, regulations for the proper and efficient management of the said hospitals.

6. Each inspector, assistant inspector, nurse, or other officer for whom uniform is provided shall whilst on duty wear the uniform provided.

### SPECIAL RULES FOR THE INSPECTOR OF NUISANCES.

1. The inspector of nuisances shall attend at the offices of the Health Department from 9 to 9.30 a.m. each week-day; also from 1.30 to 2.30 p.m. and from 5 to 5.30 p.m. during the months of March to October inclusive; and from 4.30 to 5 p.m. during the months of November to February inclusive in winter, on each week-day except Saturday, on which day he shall attend from 12.30 to 1 p.m. He shall also remain in his office during all meetings of the Sanitary Committee, and at such other times as may be required by the medical officer of health.

2. He shall perform, under the directions of the medical officer of health, or in cases where no such directions are required, without such directions, all the duties specially imposed upon an inspector of nuisances by the Public Health Act, 1875, or any amendment thereof, so far as the same

may apply to his office; and such other duties as are required of him under any Acts or Bye-laws.

3. He shall by personal inspection of the city, both systematically at certain periods and at intervals as occasion may require, and also by supervision of the work of the assistant inspectors, keep himself informed in respect of the nuisances existing therein that require abatement; and for these purposes he shall, by appointment or otherwise in his discretion, meet each of the district inspectors in his district at least once in each week. On receiving notice of the existence of any nuisance in the city, or of the breach of any bye-laws or regulations for the suppression of nuisances, he shall, either personally or by an assistant, as early as practicable visit the spot and inquire into such alleged nuisance or breach of the bye-laws or regulations. He shall also superintend the inspection and regulation, by the assistant inspectors, of tenement dwellings under the bye-laws.

4. He shall report to the medical officer of health, for the information of the Sanitary Committee, any obnoxious or offensive businesses, trades, or manufactories established in the city, and the breach or non-observance of any bye-laws or regulations made in respect of the same.

5. He shall enter from day to day in the book provided for the purpose, particulars of his inspections and of the action taken by him in the execution of his duties, and shall submit the same at least once in each fortnight to the medical officer of health. He shall also keep the book or books provided and so arranged as to form as far as possible a continuous record of the sanitary condition of each of the premises in respect of which any action has been taken under the Public Health Act, 1875, the Newcastle-upon-Tyne Improvement Acts, the Tenement Bye-Laws, or specific instructions given by the Sanitary Committee or the medical officer of health; such records to show the date when each nuisance or sanitary defect was reported to him, by whom such report was made, the dates respectively of his action in relation thereto, the commencement and completion of the work necessary to abate or remedy such nuisance or defect, and such other particulars as may be required. He shall prepare and submit to the medical officer of health for his examination and signature, at least once in each month, a special statement of all nuisances or sanitary defects respecting the abatement or remedy of which, after due notice from him, the owner or agent is in default. He shall also keep any other systematic records the medical officer of health may require.

6. He shall see that each district inspector keeps a diary showing the inspections of tenement dwellings made by him under the bye-laws, the routine and special inspections made in his district, and any other duties performed by such district inspector, with their result. He shall examine such diaries every day, and, after examination, sign and date the same, and give the necessary instructions thereon.

7. He shall see that each of the district inspectors submits to him, at least once in every month, a report on the nuisances unabated and sanitary defects unremedied after due notice. He shall examine all such reports, and sign and affix to each the date of such examination.

8. He shall, once in each fortnight, report in the proper book provided for the purpose, on the duties performed by himself and the assistant inspectors of nuisances. Such reports shall be submitted to the medical officer of health, one full day at least before the meeting of the Sanitary Committee, for his observations thereon, and shall then be laid before the Sanitary Committee.

9. He shall duly observe and carry out any instruction of the medical officer of health pertaining to the duties of his office, and shall produce to him his books or any of them, and render to him such information as he may be able to furnish with respect to any matter to which the duties of an inspector of nuisances relate.

10. He shall make himself thoroughly acquainted with the provisions of the Public Health Act, 1875, and any amendment thereof, the Newcastle-upon-Tyne Improvement Acts, and the different bye-laws for the regulation of tenement dwellings, bakehouses, and any other premises, in so far as such provisions relate to his office.