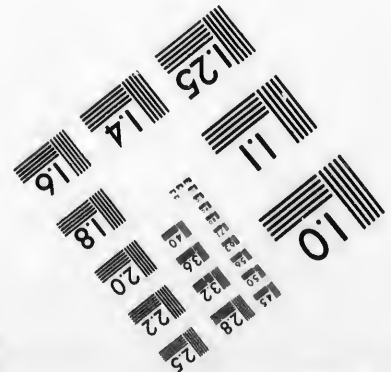
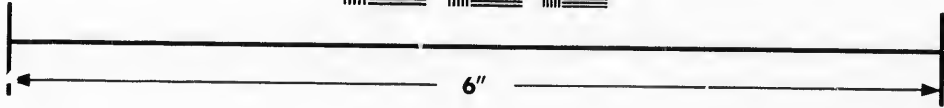
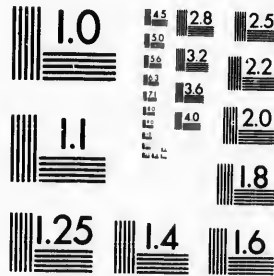


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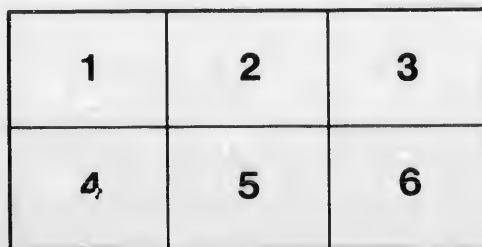
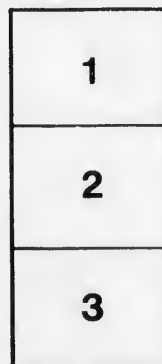
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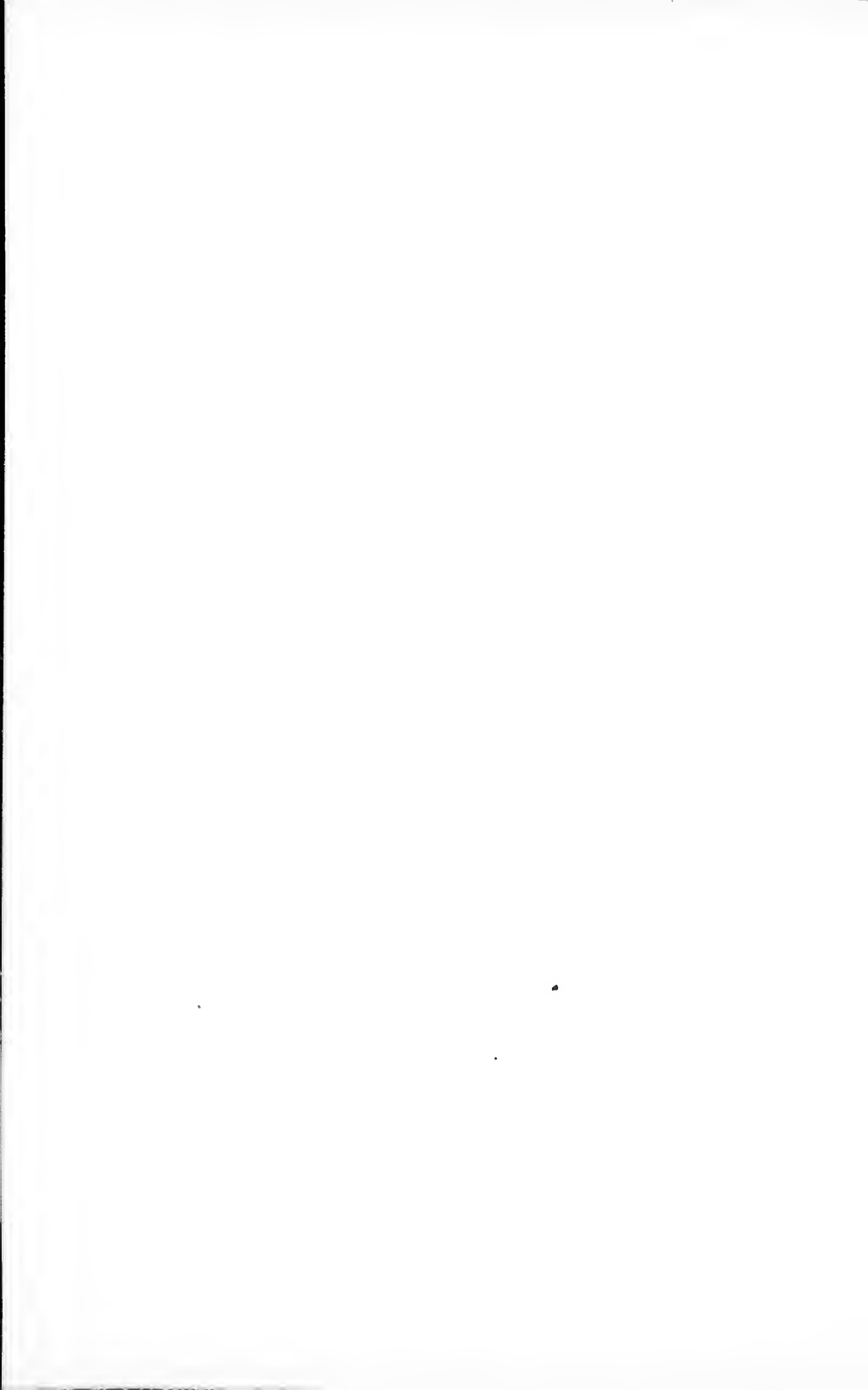
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ADDRESS

ON

THE EXPEDIENCY OF THE CHANGE FROM MUNICIPAL
TO COUNTY MEDICAL HEALTH OFFICERS FOR
PROMOTING EFFICIENCY AND ECONOMY
IN THE PUBLIC HEALTH SERVICE.

BY P. H. BRYCE, M.A., M.D.

Secretary, Provincial Board of Health of Ontario.

Being a paper read before the Association of Executive Health Officers
of Ontario, held at Belleville, August 14, 1895.

ISSUED BY THE PROVINCIAL BOARD OF HEALTH.

TORONTO:

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X



THE EXPEDIENCY OF THE CHANGE FROM MUNICIPAL
TO COUNTY MEDICAL HEALTH OFFICERS, FOR
PROMOTING EFFICIENCY AND ECONOMY IN THE
PUBLIC HEALTH SERVICE.

BY P. H. BRYCE, M.A., M.D., SECRETARY PROVINCIAL BOARD OF
HEALTH OF ONTARIO.

*To the President and Members of the Association of Executive
Health Officers of Ontario :*

Gentlemen : I propose in my paper to urge some reasons for giving our medical health officers a special training in chemistry and biology ; but before doing so I shall make some remarks concerning a phase of the problem upon which the practical results of any facilities made for the training of health officers must necessarily depend. This, as may naturally be supposed, is the position and present status of the Medical Officer of Health in Ontario.

It will be remembered that at the annual meeting of this Association held in Trenton in 1891, Dr. J. Coventry, Medical Health Officer of Windsor, read a paper on "Auxiliaries to the Health Office," and, amongst the many apt remarks therein made, I quote the following :—

"At the other end of the line legislators have been most lavish with the executive powers conferred upon him (the M. H. O.) ; but at this point they have deserted him and left him at the mercy of the municipal council to remunerate him for his services."

And again, "the Medical Health Officer should become familiar with the methods of examining foods and other articles of daily use, and his salary might be made contingent on his ability to pass an examination, a reasonable time being given him to enable him to fit himself for the work.

"All the foregoing anticipates an increase of the burdens of the most overburdened and unremunerated of public servants, and I

will breathe easier if I am assured that there is not present in the audience a member of the Society for Prevention of Cruelty to Animals, otherwise I might be ordered under immediate arrest.

"If you will bear with me for a few minutes longer I will tell you a tale of unrequited love. I have for a long time felt a great curiosity to know just what the Medical Health Officer received for his services, and how long a so-called Christian people would stand by and see him grow fat on the east wind.

"For the purpose of getting information on this subject, I recently addressed a circular to thirty-five cities and towns in the Dominion having a population of 5,000 and upwards. Replies from twenty-seven of these give Medical Health Officers' salaries ranging from zero to \$3,000 :--

1	gives.....	\$3,000
1	"	2,400
3	"	1,000
1	"	800
1	"	400
1	"	300
1	"	250
4	"	200
1	"	120
4	"	100
1	"	25
1	"	1
7	"	0

"The last of these, no doubt, are men who have discovered some pabulum other than bread and butter on which to sustain life in this cold, cold world.

"The aggregate sum paid to Medical Health Officers is \$11,496. The Inspectors fare a little better. There are more of them. Six manage to maintain the dignity of their office on no salary. The whole sum paid Inspectors is \$25,326. But it is the secretary who

is the Cæsus of the health office. This officer has actually absorbed \$2,725 of the people's money, and nineteen of them 'cut no figure at all' on pay day.

"The population on which these figures are based gives a total of 809,061, representing an assessment of \$418,160,672. This would show five cents per capita, and one-tenth of a mill on assessment to sustain our present municipal health organization. If the public ever blushed this statement should make its face scarlet."

These statistics sufficiently illustrate the situation as it existed in 1891, and which has not, so far as I am aware, improved since in any notable degree in the matter of increased grants as salaries to Medical Health Officers, although a general improvement in the character of the work of Local Boards can, I think, on the whole be seen.

Comparison of the health work of our municipalities with that of other branches of municipal work during the last ten years, may, I think, be made, and I believe it may be fairly asserted that progress in it is as great as in other directions; but we have only to examine into the details of the work in any except our cities and perhaps larger towns in order to see how little exact health work is done.

Let me summarize the work of a Medical Health Officer as it exists in England and elsewhere.

(a) To inform himself respecting all influences affecting or threatening to injuriously affect the public health within the district.

(b) Ascertain causes and distribution of diseases actually existing within district.

(c) He shall inspect periodically, and as emergency may require, his whole district.

(d) He shall advise the Local Board on all matters and supply data for prosecution wherever nuisances exist.

(e) Shall advise in the framing and execution of by-laws.

(f) On being informed of infectious disease, he shall investigate and take such action as shall limit its spread.

(g) He shall superintend the Inspector of Nuisances.

(h) He shall inspect meat, fish, vegetables, etc., personally if the occasion demands it.

(i) He shall examine into all classes of offensive trades within the district, as factories, dairies, cow-sheds, milk-shops.

(j) He shall report of all matters from time to time, giving such returns of outbreaks and causes as is possible.

(k) He shall report to the Central Board any dangerous outbreak, and annually on all matters, including schools.

In France the district Councils of Hygiene are charged in addition to such as above, specifically :—

(1) With powers for formulating plans for the suppression of epizootic diseases of animals.

(2) The spread of vaccination.

(3) The care of the indigent sick.

(4) Local inspection of hospitals, asylums, prisons, etc.

(5) Construction of public buildings, as schools, prisons, reservoirs, sewers, cemeteries.

(6) Obtain statistics of mortality, morbidity, topographical conditions, etc.

This is certainly a very liberal bill of fare for a local health authority, and one cannot fail to think that if such matters demand public attention at all, they will demand not only all the time, but all the energies and intelligence of a Medical Officer of Health with accomplishments of no mean order.

If we group the work we see that it includes :—

1. General inspection. With regard to drainage, an officer must know accurately about soils and ground water ; with regard to mill-ponds, standing water, and organic deposits and refuse, he must be in a position to positively state what conditions are and have been proved, scientifically, positively injurious and give his reasons.

2. Suppression of contagious disease. He must have method and nerve enough to see that dangerous contagious diseases are

reported to him, whether of men or of animals, and must have so thoroughly the confidence of his medical confreres and the public as to his disinterestedness, scientific attainments and practical abilities, as that all excuse from any standpoint for oversight on the part of practitioners or public will be removed. To dwell on this for a moment, we see that his work demands (*a*) medical experience; (*b*) training and skill to diagnose in the laboratory by microscope, bacteriological cultures and chemical examinations, the special cause and source of diseases, principally the following:—Diphtheria, typhoid, tuberculosis, actinomycosis, trichina, cysticercus (measles in hogs), hog cholera, ptomaines in cases of poisoning from cheese, meat, milk, etc.

It is needless to say that this work not only demands the highest skill, but it also demands laboratory facilities. (*c*) The isolation, and, where necessary, the removal of infectious disease to hospitals, the destruction of infected animals, and the disinfection of infected centres, whether houses, schools, workshops, stables, etc. This necessarily demands isolation hospitals and sufficient assistance by Inspectors to have work systematically carried out.

3. Inspection of foods, noxious trades, etc. This work, both difficult and constant, demands that slaughter-houses and their surroundings, cheese factories, cow byres, piggeries, knackeries, and other specially noxious trades be kept under the strictest supervision. The Medical Health Officer must know, and have Inspectors who know, diseased meat, and how diseased, must be able to accurately state what foods are injurious to milch cows, what stable surroundings are good and what bad, and be able to diagnose diseased conditions in cows. He must be fully informed on the most recent appliances for testing milk as to quality, butter-fat, and its general fitness for children's food, and must know what to suggest for the reduction to a minimum of the effects arising from noxious trades.

4. Inspection of schools and public buildings as to dampness, plumbing, heating, ventilation, overcrowding, lighting, etc.

5. The regular supervision of the public water supply of the district, and the control of drains, sewers, as regards the direct effects upon health, from sewer-gas in streets, etc., and the disposal of excreta.

Enough then has been indicated to show that the work to be done is extended and of a most exacting character. At present we have this work distributed over the municipalities as given in the following table:—

1894.—Table showing number Boards of Health and Health Officers to population in Ontario.

Total organized municipalities in Province.	Total number of Boards reported organized.	Total M. H. Officers.	Total Sanitary Inspectors.	Total population.	Rates of population to number of M. H. Officers.
743	425	374	205	2,167,460	1 to every 5,795

Returns from Reports received in 1894.

	Total number of Boards reported organized.	Total M. H. Officers.	Total Sanitary Inspectors.	Total population.	Rates of population to number of M. H. Officers.
Cities	9	9	.....	384,303	1 to every 38,700
Towns	58	50	.....	189,190	1 " 3,780
Villages	87	87	.....	81,431	1 " 1,000
Townships	271	235	.....	663,494	1 " 2,822

In England, by the Local Government Act of 1888, the population necessary for a County Council (Health District) was 50,000; but as the area of England, compared with that of the organized municipalities in Ontario is 32,554,880 to 23,154,551 acres in Ontario, while the

population is 29,000,000 compared with 2,167,460, in Ontario, it is plain that the extent of area must in a large degree limit the extent of population for which a medical health officer's services would be available. That 20,000 of a population seems to be a practical working limit in Ontario is seen in the following comparison:—

Members of House of Assembly for Ontario numbered in 1893—
 54 in population of 2,167,460.

Inspectors of schools—

Cities separate from counties.. 8 in 358,972 of population.

Towns 7 in 35,694 “

Counties (less cities and towns). 60 in 1,772,794 “

Included in their respective county inspectorates are, Brantford, Belleville, Stratford, St. Catharines and Windsor. Excluded from county inspectorates are, Chatham, Forest, Collingwood, Oshawa, Peterboro', Waterloo, Welland and Niagara Falls.

I find that in 1894 there was expended upon our educational system \$5,233,115.00, this includes \$89,490.00 as salaries to county school inspectors.

Assuming then that we have some 550 organized townships in Ontario, it would mean that there are now nominally in office some 400 medical health officers in the Province in 750 municipalities. We have seen to what extent the public moneys are expended in matters of education, and by comparison with the following we shall be able to estimate what is spent specifically in an average county on public health work.

Under the heading, Local Board of Health, in the municipal returns made to the Department of Agriculture for the year 1893, from two of our oldest and most prosperous counties, we have the following:—

The Expenditure under Local Boards of Health in the county of Oxford varied:

In 11 townships, from 0 to \$97; total, \$481.

In towns and villages, from \$5.97 to \$481.

In the county of Grey it varied :

In 16 townships, from 0 in 4 townships to \$75, with a total of \$286.

In towns and villages, from \$6 to \$344.

Roughly calculated, therefore, we may say, that, excepting the large cities, the total expenditure in the counties of the Province would amount, on the above basis, to some \$50,000 per year, to which we may add some \$2,500,000, assuming there are 2,500 physicians in the Province, and that they receive \$1,000 per year.

Now, these figures mean either that almost no attention is given to public health in these districts or that the amounts of money thus expended have not been returned under the proper heading. As a matter of fact, both explanations are correct. With regard to the returns, I find in those for one of our largest villages, which I visited in 1894, on account of a serious outbreak of diphtheria, that the return under local board was but \$24, while under poor relief were charged sums for diphtheria, nurses, etc., amounting to \$121.95. This will doubtless explain how in many places the amounts returned for public health work are so small.

When, however, I find \$5 for the sanitary inspector and \$5 for the medical health officer, in examining details of expenditure in a village, it must be concluded that the public health of such municipalities has been most satisfactory, or that Local Boards of Health in many instances exist only in name. When I find such amounts set down, however, for townships where correspondence shows public funerals to have taken place in cases of diphtheria, and where schools finally were closed on account of the disease, it would seem a fair inference that, from the public health standpoint, improvements are not only possible but seem to be greatly needed.

From the figures and comparisons which have been made, it must be very apparent that, while the number of medical health officers in the Province is nominally very considerable, under existing conditions they are not in a position to effectively accomplish the work,

the extended and scientific character of which has been briefly indicated. It is probable, however, that were the remuneration received by them sufficient to secure their active services, and the municipal grant enough to carry on their work, difficulties would arise, owing to the uncertain tenure of office under the present methods of appointment, which would seriously affect their independence of action. According to the usual interpretation of section 47 of the Health Act, the medical health officer is appointed annually at the time of the appointment of the Local Board of Health. While it is difficult to frame a clause which would make such an appointment independent of the prejudices which too frequently affect the status of any official who has served under a council, succeeded by another hostile to it, especially politically, nevertheless it does seem possible that some court of reference should be appointed, such as a standing committee of this association, which might be called in instances where temporary feeling was liable to injuriously affect the independent action of an efficient officer. This might be supplemented by legislation, to the effect that some per capita basis of remuneration of medical health officers be established, preventing the possibility of a hostile council by reducing the salary of an officer to thereby force his resignation. A provision at present exists in the School Act whereby a county inspector cannot be dismissed by a county council without the assent of the Department of Education, without the danger of a withdrawal of the governmental portion of his salary.

We may now very properly discuss the desirability and possibility of a change in the appointment of medical health officers, which has been provided for by the following amendment to the Public Health Act, contained in the Ontario Statutes of 1891 :—

“Whereas it may be desirable, in the interest of the public health, that there should be instituted a system of health inspection more thorough than is at present practicable, owing to the expense

attendant upon the appointment of an active and efficient medical health officer for every municipality, any county council may appoint one or more county or district medical health officers.

“Where a county council appoints a county health officer or officers, the powers now possessed by medical health officers within the county or portion of a county, for which such county health officer is appointed, shall be deemed to be thereby transferred to and vested in such county health officer or officers, and all sanitary inspectors within the jurisdiction to be defined in the by-law appointing a county health officer shall be subject to his direction and control.”

From this it will be seen that while the change is purely voluntary on the part of the several municipalities in any county, its insertion in the Act is upon the assumption that public health work can in some, if not all, instances be made more efficient by transferring to one medical health officer the public health work of a number of municipalities. Assuming that a number of the larger cities be excepted from the general operation of the clause, as is the case now where a number of city and town inspectors of schools exist, we would say that, with the present political division of the Province, we have roughly the unit supposed of 20,000 of a population as a possible health district. At present, even with the paltry sums paid to medical health officers in the municipalities, we have a total expenditure in some counties equal to what would be a minimum salary for a medical health officer who would devote all his time and energies to public health work. It is to be regretted that all purely scientific work is at present so inadequately remunerated; but I think we may, from experience, find grounds for the belief that a sufficient number of young, active and trained applicants for such positions could be found willing to accept opportunities as county or district medical health officers, with the hope of their salary being gradually supplemented, if the primary condition of permanency in the position were supplied. Allow me to briefly summarize the advantages of such a change.

1. The position would be permanent during good conduct and efficiency.

2. The devotion of all his time to the duties of the position would serve largely to remove one of the greatest of existing difficulties to effective action on the part of medical health officers, owing to their being in general practice, and therefore professional rivals to other practitioners, who are naturally sensitive to interference on his part.

3. By being engaged in investigations in a laboratory equipped for the purpose, he would be brought into friendly intimacy with local practitioners, whose time and opportunities are too limited to enable them to satisfactorily prosecute microscopic, chemical and bacteriological work.

4. By being within easy reach of all parts of his district he could, without delay or expense, have sent to him specimens of diseased tissue, membrane, sputum, suspected water, milk, etc., and promptly determine the true nature of the disease, or its cause.

5. His laboratory would become a local depot of supply for vaccine, anti-toxin, culture tubes, disinfectants, etc., and the means for their prompt and efficient use.

6. He would be within telephone call or an hour or two's ride of the several municipal sanitary inspectors, who would be placed under his authority, and prompt action in any outbreak of disease would be possible.

7. He would systematically attend to and practice vaccination in all the schools of his district, and be in a position to attend the occasional cases of smallpox, which from time to time occur, to the great relief of the local practitioners, and the notable saving of expense, such as during the past year, amounted occasionally to \$20 per diem for attendance upon a single case.

8. He would gradually accumulate data for the preparation of a sanitary topographical map of the Province, in which the character of the soil, the drainage areas, the height above sea-level, the mill-ponds, and much other invaluable information, from the sanitary standpoint, would be supplied.

9. He would, through his inspectors, be able to obtain an accurate registration of mortality and morbidity statistics, and thus supply the only means by which we shall ever be able to adequately interpret local conditions in their effect upon the public health.

I am afraid to add further details, for fear that we shall not be able to find anyone to apply for such onerous positions ; but surely enough have been supplied to illustrate what I believe the situation demands, and the many good reasons why this Association should lend all its influence to the attainment of the end in view.

Where, it may be asked, shall we now find men fitted to do this work, or schools provided with means for their instruction and training ? On enquiry, I am led to the conclusion that none of our medical schools are supplying such training as would be required by such positions ; but, in justice to them, it must be stated that there have not hitherto been any such positions to look forward to which young men could profitably devote their time in preparing for.

I learn that in two, at any rate, of the medical schools in Toronto, short courses of bacteriology are given ; and I have little doubt but that special chemical courses in water analysis, etc., would be instituted if demanded. We have, in addition, in the provincial laboratory, a centre of work which could readily be made available for giving practical direction to such courses of instruction.

Remembering the starting point of our public health work, some thirteen years ago, and the achievements which, even under the imperfect conditions which we all have been familiar with, have been attained, I do not believe you will think me too sanguine if I look upon this work as an accomplished fact within this the second decade of organized public health work. Most here are more familiar than myself with the crude character of the educational system of the Province prior to our present system of county inspection and organization under a provincial department, and this, too, in a matter as old as the centuries. Have we not a right to expect not only that