

# **Calderdale in 1851**

## **Public Health and the Ranger Report of 1851**

### **with respect to Halifax**

( A piece of research conducted for the u3a of Todmorden, Local History group as part of their theme Calderdale in 1851)

**Sue Hayter Dec 2024**

## Public Health and the Ranger Report of 1851

The aim of this presentation is to review the implementation of the Public Health Act of 1848 in Halifax with particular reference to the Ranger report. It is necessary to explain the origins of the Public Health Act and its impact on Halifax pre 1851.

The data I shall discuss is from the report but relates to the year of 1850. I apologise for any errors incurred in the production of this review particularly with respect to Acts of Parliament and other legal references. This is not my area of expertise and I have endeavoured to interpret these to the best of my ability, in the light of the situation in Halifax in 1851.

I also apologise that any references to the meetings of the Town Council are taken from newspaper articles in local papers, although from experience I find these to be very reliable and thorough. It would have been interesting to have read the actual minutes of the meetings but due to personal issues of availability of time I was unable to do so,

I hope however that the review and the talk will stimulate some interest resulting in further research in what was happening in local politics at the time

The talk is a mere summary of this written review and the latter, also a summary of the information available, particularly in the Ranger Report which can be viewed in its entirety both online and at Halifax library. The information presented here has been mainly obtained from

1. **The British Newspaper Archives**
2. **Ranger Report 1851** available at the online visual archives of Calderdale History [www.calderdale.gov.uk](http://www.calderdale.gov.uk) or at the library itself as a hard copy . Its worth a read *Author William Ranger/Date 1851 /Location Halifax/Format Report/Document ID 100397/Library ID SPC87*
3. Google searches for definitions and explanations particularly of the various legal Acts referred to

## **Origins of the Public Health Act of 1848**

A key player in the introduction of the Public Health Act of 1848 was Edwin Chadwick, a social reformer. In 1834 the Poor Law Amendment Act, following a report by the Poor Law Commission since it was generally believed that relief was perpetuating poverty. The solution was deemed to be the removal of outdoor relief and the introduction of workhouses which was intended to reduce costs by '*making the provision of poor relief so unpleasant it would put off all but the most desperate*'. The Board of Guardians (referred to as Guardians) were set up and were appointed by the owners and occupiers of the land in the Parish who themselves had to pay taxes to support the poor.

Edwin Chadwick in his role of secretary to the Poor Law Commissioners investigated sanitation amongst the poor and in 1842 published a report called '*The Sanitary Condition of the Labouring Population of Great Britain*', This was at his own expense as the Poor Law Commission did not want to be associated with it. He believed that improving the health of the poor could result in less people seeking poor relief thus saving money on poor relief. Most relief was given to families following the death of the breadwinner from infectious diseases. He believed that spending money on improving public health was therefore cost effective, as it would save money in the long term. This idea of spending money on the poor was contrary to the present approach of trying to withhold it.

**The Public Health Act 1848** received Royal assent on 31 August 1848, based on the findings and recommendations made by Chadwick whose reports stimulated extensive debate on the poor sanitary conditions in Britain. After much campaigning by the Health of Towns Association, and, at the same time anxiety about a new cholera epidemic forced the government to act.

The Act established a Central Board of Health, but this had limited powers and no money. Those boroughs that had already formed a Corporation, were to be responsible for drainage, water supplies, removal of nuisances and paving. Although loans could be made to set up the public health measure the loans had to be paid back from the rates.

The main limitation of the Act was that it provided a framework that could be used by local authorities, to make conditions sanitary, but the key thing was **there were no legal obligations** to do so and many councils chose not to do so. It did however force towns to set up a Board of Health if the death rate was high (greater than 23 per 1000) and that the rates should be increased to cover the costs. It is interesting to note that the highest death rate in the Borough of Halifax at the time was 20.8 per 1000 thus avoiding this compulsion by a narrow margin.

**General Boards of Health** established by the Act were responsible for advising on public health matters such as epidemics and disease prevention and managing local boards of health. Local authorities were given the power to appoint an Officer of Health who had to be a legally qualified medical practitioner,

**In 1851** the General Board of Health issued a statement on the duties and responsibilities of these local officers of health

These duties included

- giving instructions
- directing the removal or prevention of the causes of widespread diseases
- removing 'nuisances' from streets such as refuse or bad paving. T
- being responsible for drainage and water supply, as well as other sanitary actions.

The Officers were required to report quarterly to the General Board of Health, providing information on illnesses and deaths in their areas and provide more detailed information in an annual report, including recommended actions.

The following is an extract from the Ranger Report ( pages 79 to 81)

### **'SUMMARY OF THE POWERS OF THE LOCAL BOARD OF HEALTH**

*The following are some of the powers with which the Local Board of Health will be invested by the provisions of the Public Health Act.*

*To undertake the removal (in case of default on the part of any owner or occupier) of dust, ashes, rubbish, filth, manure, dung, or soil, collected in any house, stable, or place,*

*To regulate the time and manner of emptying water-closets, privies, and cesspools.*

*To prevent or diminish the nuisances caused by the recent establishment of offensive trades.*

*To have the management of all slaughter-houses.*

*To regulate the number of occupants, and promote the cleanliness and ventilation of common lodging-houses.*

*To repair all sewers vested by the Public Health Act in the Local Board, and to cause such sewers to be made as may be required for the effectual draining of the district*

*To cause all drains, water-closets, privies, and cesspools to be constructed covered, and kept so as not to be a **nuisance, or injurious to health** and to be properly **cleared cleansed and emptied***

*To see that no house shall be built or rebuilt without a covered drain of a suitable size and fall for effectual drainage.*

*To approve of the level of the lowest floor, and the situation and construction of the privies to be built in connexion with any house newly built or rebuilt.*

*To give **authority, in writing**, to the surveyor to examine premises, with reference to the state of any drain, water-closet, privy, cesspool, and ash-pit.*

*To provide conveniences for the temporary deposit and collection of dust, ashes, and rubbish, and the deposit of the sewage, dung, etc. collected by the Board.*

*To provide and maintain, if they think fit, water-closets, privies, and other similar conveniences for public accommodation.*

*To order a sufficient number of privies, or water-closets, for the separate use of each sex in factories.*

*To cause a water-closet, or privy and ash-pit, furnished with proper doors and coverings, to be erected at the owner's expense in any house (whether built before or after this time), which shall, on the surveyor's report, appear to be destitute of this convenience.*

*To provide that all the streets within the district, including the **foot pavements** are properly swept,cleansed and watered and the dust, ashes, rubbish, filth dung and soil there in collected and removed*

*To drain, cleanse, cover, or fill up, at the owner's or occupier's expense, all ponds, pools, open ditches, sewers, drains, and places used for the collection of any drainage, filth, water,matter or thing of an offensive nature, or likely to be prejudicial to health with power to pay the whole, or part, of these expenses out of the special or general district rates.*

*To order the removal, within twenty-four hours, of any nuisance arising from swine, or any pigsty being kept so as to be a nuisance to any person.*

*To proceed against any person who shall allow the contents of any water-closet, privy, or cesspool to overflow, or soak therefrom.*

*To take proceedings against the owner or occupier of any house which, on the certificate of the Officer of Health, shall appear to be in such a filthy or unwholesome condition that the health of any persons affected or endangered thereby, or that the whitewashing, cleansing, or purifying thereof would tend to prevent or check infectious or contagious disease.*

*To prevent the occupation of cellars as dwelling-houses, unless certain conditions be attended to.*

*To cause all highways to be levelled, paved, flagged, channelled, altered, and repaired, as and when occasion shall require.*

*To compel the owners or occupiers of premises fronting, adjoining, or abutting, upon any street (not now being a highway) to put the same into proper repair; and to declare any street not now being a highway, which shall be sewerred, levelled, paved, flagged, and channelled to the satisfaction of the Local Board, to be a high-way, unless the proprietors shall object, thereto.*

*To contract for lighting the streets, roads, and other open places, markets, and public buildings within the district, as authorized by the Confirmatory Act.*

*To fix the level and width of every new street.*

*To purchase property for widening or improving any street.*

*To provide, with the consent of the General Board, public walks and pleasure grounds*

*To provide such a supply of water as shall be sufficient for the purposes of the Act, and to lease or purchase any water-works, or to construct water-works, unless any water-works company shall be willing to supply water upon terms certified to be reasonable by the General Board, or settled by arbitration, with power to require every house to be supplied with water, where it can be furnished at a rate not exceeding 2d. per week, and to construct works for the gratuitous supply of water to public baths or wash-houses.*

*To purchase, or lease, by agreement, any land or premises for the purposes of the Act.'*

## **Now lets move to Halifax at the time that this was implemented.**

Historically life in Calderdale was harsh, being an area of remote farming and later an area hit by industrialisation and the problems it brought, i.e. pollution and poor living conditions with many multi occupancy homes packed into a small area, including numerous families living in cellars, and an inadequate waste disposal and water supply. One would think that the council would be keen to dispel the image of such poor living conditions. However they chose a different approach.

At this time the local government underwent a major change resulting in a charter of incorporation in 1848 and as previously stated were thus responsible for drainage, water supplies, removal of nuisances and paving. Prior to incorporation. Even after incorporation The Guardians were still the sole elective body for abating nuisances in Halifax (Nuisance Removals Act) and this continued until the introduction of the Public Health Act in the borough. It should be noted that at the time of incorporation the annual death rate was 1 in 42 of its inhabitants. In Northowram it was 1 in 47 and in Southowram 1 in 44 ( **Ranger Report page 10**)

## The roles of the Corporation

The first meeting of the Town Council took place on June 3rd 1848 with the newly formed corporation setting up a number of sub committees some of which took on the roles thus identified .

- General Purposes Committee
- Finance Committee
- Watch Committee ( Police and Fire)
- Water Works Committee ( waterworks and reservoirs)
- Board of works ( Street repairs sewers and water courses)
- Improvement Committee ( Widening and improving street)
- Sanitary Committee ( enforce the provision of the Nuisance Removals Act)

Shortly after Incorporation( I have been unable to identify when and how the subject was raised) the Town Council discussed the merits of applying for the Public Health Act to cover Halifax and the parts of Northowrom and Southowrom that were included in the borough. There was considerable opposition to this mainly on the grounds of

- Interference by the government in what was perceived by many to be a working system of their own
- Objection mainly by the richer inhabitants of paying more rates
- The cost of investment by the water companies, the reduction of their profit

However after considerable discussion in the town council meetings it was agreed to ask William Ranger to conduct a survey on the state of the population. It was agreed that if the inspector recommended improvements, (which Ranger did), the Council would then be entitled to borrow money to improve sanitation.

The main enquiry focused on areas in Halifax around Orange Street, Crib Lane, Cross Hills and the City. Also, Winding Road, Square and the north side of the Parish Church which were areas particularly industrialised with homes of unskilled workers. It was also where the homes of the unskilled workers were. Initially there was also a discussion on including the overcrowded areas of Northowram and Southowram townships included in the borough but the council deferred a decision until April 1851. This annoyed many of the ratepayers who wished the whole borough to be included .Thus in response to this action by the council they sent a petition to the Council in January 1851. It was the money raised by the rates that helped pay the Poor Relief and the general improvements of the area. The anger was that many lived in the areas not now to be included in the improvements but they would still be expected to pay

The research by William Ranger took place in February 1851 and was presented in April 1851 with a general conclusion that the Public Health Act should be introduced

## The Ranger Report

### A time line of its production and its presentation to the council

#### May 25th 1850 ( The Halifax Guardian page 3):

1. There was a special meeting of the Town Council in which problems with water supplies, drainage and the state of the graveyards particularly in Southowram were discussed. It was stated that some of the issues could be much improved with the adoption of the Public Health Act to the area as well as the Halifax township. This appears to have been a detailed and heated discussion about the state of Southowram
2. On the same page a notice entitled The Public Health Act announced an official enquiry by William Ranger Esq into the state of the regions of Northowram and Southowram with respect to a number of matters e.g. drainage, sewerage, burial grounds sanitary conditions etc. There was considerable attendance. Mr Ranger attended as an agent of the General Board of Health.. A number of locals described the lack of income spent on the area despite the amount that had been paid. Mr Ranger said he would investigate

**November 9th 1850 ( The Huddersfield Chronicle page 8):** A Council meeting took place in which were discussed the communications received by the Mayor from Mr Ranger an Inspector of General Board of Health on the subject of applying the Public Health Act to the various regions of the borough including those parts of Northowram and Southowram. In another paper it was reported that a copy of the Public Health Act be circulated to all

**December 7th 1850 ( The Leeds Mercury page 7):** At a special meeting of the town council the General Purposes Committee recommended that the Public Health Act be applied to the borough. This transpired to be a very important meeting in establishing a need and request to bring in the Act in the borough. (**Worth a read, too detailed to discuss here**) It was raised that the question of including Northowram and Southowram be deferred until April 1851, following consultation with the rate payers of the town. One objection raised stated that interference by the government '*was not liked and they had a specimen of it in the works going on for the new post office*' and Incorporation was applied for to prevent this

**January 8th 1851 ( page B Ranger Report):** A Petition was presented to the Board by 735 ( of the total of 450) inhabitants rated to the relief of the poor. No women were allowed to sign the petition.

**January 18th 1851 (The Leeds Times)** gives a detailed description of the council meeting describing the objections made to the increase in water rents and how the people were affected. The use of water was to be heavily taxed affecting businesses such as brewing, and the general cleanliness and sanitation of the town (*in a another meeting it was identified that about one fifth of people who used the water supply did not pay anything at all, and it was pointed out that the adoption of the Public Health Act would enforce everyone to pay*). A request was made for the council to reduce the burden of the water rent in so doing '*you are willing to wipe out that*

*stain cast upon our town by the commissioner of the Morning Chronicle when he reported it as the dirtiest town in Yorkshire'.*

**January 29th 1851(Extract from Ranger Report):** At a meeting of the Town Council a communication was read out from the General Board of Health and a notice signed by William Ranger Esq stating that a public enquiry should be held in Halifax with a view to the application of the Public Health Act. Three resolutions were passed

1. that the Mayor requested that Mr Ranger should be given all '*facilities*' to conduct the enquiry.
2. '*..., it is the opinion of this council that there exists no necessity to apply the Public Health Act to the township of Halifax'*
3. '*that a committee be appointed to collect such evidence and to submit such information and reasons at the proposed Public Enquiry as may be required to show that the inexpediency of applying the provisions of the Public Health Act to the township of Halifax and to adopt such other measures as such committee shall deem expedient'*

This latter decision was contrary to the wishes and expectations the large body of ratepayers who sent a petition in favour of adopting the Act. The petition expressed that a decision should be made by the '*general body of inhabitants*' instead of from the Town Council.

#### **February 8th 1851( Leeds Times):**

A notice was made stating that the enquiry would take place on the 5th of February but prior to this date several meetings took place opposing the introduction of the Public Health Act. Some of which are reported on pages 23 to 29 of the Ranger report. One such meeting was held on 5th February at the Woolsack Inn where resolutions were passed against it ( pages 7 8 and 9 of the Ranger report).

This was reported in the Leeds Times on February 8th

*'HALIFAX. The Public Health Act. —Considerable excitement has prevailed in the town during the past week in reference to the above measure, and the intended visit of William Ranger, Esq., to enquire into the sanitary condition of the whole township of Halifax, with a view of applying to it the above named act. If we remember rightly, almost the sole reason why the petition for a charter of incorporation was originated was in order to supersede the application of Lord Morpeth's act, and to maintain the local government of the town within itself. The bye-laws at present in force under our Municipal Act embrace all the subjects legislated for in the Health of Towns Act, and we think it will be a needless waste of money, should both the acts be brought into operation within the borough. Besides which, we have a Local Improvement Act, and it docs seem to us a multiplication of machinery (and that of an expensive character), with which to manage the affairs of any town'*

**April 16th 1851 :** The Ranger Report was presented to the General Board of Health on a Preliminary enquiry into the sewerage and water supply and sanitary conditions of individuals in Halifax



**June 21st 1851( Leeds Intelligencer):** It was reported that Mr Ranger had issued his report re the enquiry into the introduction of the The Public Health Act in Halifax . The article gives statistics on the death rates in different West Yorkshire boroughs and compares them to the unfavourable death rate in Halifax/ The article is a concise summary of the report. In conclusion he '*urges strong reasons for it*'

**July 31st 1851 ( Bradford Observer):** A description of the problems of the pollutants that build up just by daily living in crowded and ill ventilated quarters concludes with the following reference '*From Mr W Ranger a report on the Sanitary Conditions of Halifax a document that ought to be distributed in a cheap form amongst the whole of the inhabitants of that town in order, if possible to awaken all classes ...to the solemn obligation incumbent on them to labour incessantly for the removal of these terribly adverse influences*'

**August 16th 1851(Leeds Intelligencer/ Sheffield Independent):** A meeting of the Town Council announced that a provisional order for the application of the Public Health Act, 1848, to the Borough of Halifax, the county of York," has been issued by the General " Board of Health. It was stated that the inhabitants of the borough have got the whole of the Public Health Act with some exclusions . and that the areas of Northowram and Southowram are included.

**September 27th 1851( Leeds Mercury):.** A report of the General Purposes Committee was submitted containing the following paragraph. *Your committee begs to submit the following letter from the Inspector Mr Ranger on the subject of the survey of the Borough ' I have now much pleasure in stating that a communication has been received from the Secretary of the Board from the Ordnance Survey Office that the survey of Halifax on the 5 foot scale was completed* A resolution was passed that that the Board of Ordnance should provide tracings of a 5 feet scale at a cost at £3 per sheet and the committee was instructed to order them, the tracings to be used to survey for sanitary work, depth of cellars , position of privies etc.

**October 4th 1851( The Leeds Times):** In the latest Town Council meeting there was a discussion re the Town Clerks salary and a proposal to increase it '*in consequence of the extra duties entailed upon the officer by the introduction of the General Health Act*' The motion was passed after some debate.

**January 3rd 1852 ( The Halifax Guardian page 4) :** An article headed Dawn of a new Era in Halifax describes the meeting of the town council on the last day of 1851 '*was one of the most important that has ever been held in Halifax*'. A detailed description of the development of the water system and the financial impact of the Act followed . There was some unrest and discussion about the future implications

**January 10th 1852 ( The Halifax Guardian page 7):**A letter to the Editor by G Buckstone Browne objecting to the sale of the waterworks of Halifax to the Borough of Halifax following the Act of Parliament ( The Public Health Act)

## The Contents of the Report

The report being 168 pages long contains a compilation of detailed studies made by experts on various aspects of the borough of Halifax plus an appendix of data and other relevant items

- Introduction to the report presented to the Corporation and dated April 16th 1851 and referring to the condition of the town when the study was carried out in February 1851
- A Section on the proceedings of the Corporation prior to the enquiry and opening the enquiry
- The physical characteristics of the district
- The government of the town
- A report on the proceedings of the Trustees from its formation in 1823 and its closure in 1849 after the Charter of Corporation
- The population of the borough and townships
- Trade and number of hands employed in the mills
- Medical evidence: a review by My Garlick one of the medical officers of the union
- Charges for widowhood and orphanage
- Report by the sanitary committee
- Evidence in opposition to the enquiry
- The Character of the streets
- Condition of sewerage
- Useful application of town refuse
- Slaughter houses and special trades
- Description of reservoirs
- Paving and lighting
- Markets and burial grounds
- Public baths and washhouses
- Summary of powers of local board of health

- Cost of sanitary improvements
- Conclusions and recommendations
- Appendix containing medical data and a summary of all the local Acts affecting the area from the mid 1700s to the date of the report, and a detailed medical report from the Medical Officer

## **Conclusions and recommendations made by William Ranger in the report.**

### **Conclusions**

It is not my intention to discuss all of this report as each of these sections would make a good basis for further research. Throughout the report various references are made to the impact on the health of the population and the conclusions drawn from the investigation cover many pages. I have not read the report in full detail but some key points have been extracted and commented on particularly the data in the Appendix relating to the medical report by Mr Garlick.

### **Health data used**

The data provided by Dr. Garlick gave a detailed analysis of the death rate and causes of death in the year 1850. Limited comparisons were made with other years but these analyses were not so in depth. The causes of death in the population was identified across several categories and analysed with respect to the population as a whole and broken down into the three age groups of 0-15 years, 15 to 60 years and over 60 years. There was some comparison made between life expectancy and occupations but this seemed to refer to data from 1846. The medical report describes this data in detail and there is a very interesting comparison street by street. However I will restrict my analysis to the area as a whole (*See the end of this review to see the data and graphs used in my presentation*)

### **All deaths**

1. 59.6% of all deaths occurred in the age group 0 -15 years
2. the least deaths occurred in the over 60s,

### **Causes of all deaths**

1. 28.5% of deaths occurred due to infectious diseases, referred to as Zymotic diseases
2. 14.9% of deaths were caused by diseases of the brain
3. 13.5% of deaths were caused Tubercular diseases
4. 12.8% of deaths were caused by diseases of the lungs

These are the most significant causes of disease in any age group

### **Infectious diseases**

1. 52.7 % of deaths from infectious disease was caused by Scarlatina
2. 11.3% from measles
3. 5.4 from whooping cough.
4. 1.5 % from smallpox
5. A total of 70.9% of all infectious diseases .

The above named diseases are not the cause of death in the older age groups. In our present era these diseases can largely be prevented or treated successfully diseases.

6. Diarrhoea, dysentery, fever and typhus and the next highest causes of death , these now occurring across all age groups.
7. It is interesting that influenza is **NOT** a significant cause of death in any age group
8. I was interested that polio was not included in this list, but perhaps its cause was not known precisely and it was included in other categories

All the above **named** diseases are known to be prevalent in crowded living conditions with poor sanitation . On page 83 of the report Mr Ranger discusses the life expectancy of other areas in the West Riding and states that '*the duration of life of every individual born and reared in Halifax is about one sixth less than it ought to be*'

### **Other Causes**

1. In the 15 to 60 age group the highest cause of death is Tubercular disease of which Phthisis is the most common, causing 44.8% of these deaths in that age group and 63,5% of the tubercular deaths overall Phthisis is what we now refer to as tuberculosis. Also an infectious disease prevalent in crowded unsanitary conditions and now largely preventable or treatable
2. As stated 12.8% of all deaths were caused by diseases of the lungs of these bronchitis caused 53% of these deaths in the over 60 age group 40.5 % in the 15 to 60 year old and 32.4 % in the 0 to 15 year old
3. 30.9% of respiratory diseases were caused by a broad category referred to as *diseases of the lung* which with present day knowledge leads me to think that they may have been cancer and other irritant induced diseases caused by a variety of atmospheric pollutants
4. 14.9% of all deaths were caused by diseases of the brain of which the highest was convulsions in Th 0 to 15 year old In the over 60 age group the main causes of diseases

of the brain is referred to as paralysis which may have been the effects of a stroke or other cerebral haemorrhage

In general it can be concluded that the causes of death are very related to the living and working conditions of the population. The early death of so many children is known to be related to the ease of cross infection in close knit communities and families. Whilst the prevailing environmental conditions cannot be ignored in their contribution to these deaths particularly of the elderly many could have been avoided by improved living and working conditions.

Such is the predominant conclusion made by William Ranger. He was obviously abhorred by the number and reasons for the objections to the introduction of the Act and I feel a single statement in this section relays the misery of the conditions at the time of the investigation. He appealed to the conscience of individuals rather than their public office and personal gains or losses

*'if the evidence adduced by the medical men of the town supported as it is by the mortuary returns of the Superintendent Registrar, should be insufficient to satisfy any of the local authorities of the necessity of the introduction of the Public Health Act, I would ask them to visit the habitations of the their poorer fellow creatures and I would appeal to their own feelings whether it is not a privilege to aid in procuring them a greater prospect of immunity from sickness and in addition to their too scanty comforts*

AND if each individual did so from a personal rather than an official point of view

*'I should not fear the result of the verdict which would be pronounced on behalf of the thousands whose abodes might be rendered more comfortable and whose future chances of sickness might be diminished by the introduction of a measure calculated to accomplish both of these results* ( pages 82 to 83 of the Ranger Report)

## **Recommendations**

It is easier to demonstrate the recommendations by Ranger by extracting the appropriate section from the report as the implications and future intended outcomes are precisley stated

*'The medical evidence, the mortuary returns, and the cases of sickness which prevail in Halifax, are sufficient to prove that the present system requires to be entirely remodeled, and that-*

- 1.It will be requisite for the Local Board, on their first appointment, to prepare bye-laws for the proper regulation of cellar dwellings and common lodging houses of such easy and certain applications to render these dwellings as little hurtful as possible to the health of their occupants.*
- 2.That it will be necessary to lay down a complete plan of combined sewerage and drainage, as the existing sewers and drains have been laid down on no regular principle, but piecemeal, for particular objects, and altered or arranged for different houses without any regard to the situation or position of others near to them. Instead however of constructing large square-shaped sewers and drains, impermeable stoneware tubular pipes may in every instance be used, none of which need exceed 18 inches, whilst the*

*greater part need not be more than from 12 to 4 inches in diameter For house drains similar pipes of the last-named dimensions will be sufficient. The cost of these works can, if necessary, be distributed over a period of 30 years.*

- 3. That the present position of the outfalls for the sewage is such as to render them highly objectionable and prejudicial to health; it is therefore most desirable that steps should be taken to free the water-courses from the liquid refuse of the town, and in lieu of discharging it as at present, to apply it to its legitimate use, the irrigation of the farm-lands in the neighbourhood, which are peculiarly well adapted for its easy application*
- 4. That the solid refuse should no longer be permitted to accumulate in the middensteads and dunghills, but should be regularly removed to a considerable distance beyond the populated quarters of the borough, so that it may not continue, as at present to be a nuisance in its second as well as in its first place of deposit.*
- 5. That all slaughter-houses, pigsties, and places where offensive trades are carried on, should be placed under proper superintendence, that they may be regularly cleansed and prevented from becoming injurious to the health of persons residing near them.*
- 6. that the present water supply is not sufficiently cheap or abundant, so that the existing works will require considerable adjustment before they can be made capable of fulfilling the requirements of the Public Health Act in respect to a good cheap and constant water supply. To specify the nature of this adjustment would require a detailed investigation in addition to the one I have recently made, which was only of a general nature. I may state, however, that in towns of very similar character to Halifax, which have fallen within my own experience, where works for water supply by means of engine-power have been contracted for under the provisions of the Public Health Act, the average cost per house for the entire supply (including a sinking fund for the repayment of capital in 30 years) will not require a rate of more than 6s. 9d. per house per annum.*
- 7. That it is most desirable, both for the public health and convenience, that the present cattle market should be removed to the outskirts of the town, although the change may entail some loss upon the owners or occupiers of public-house property in the neighbourhood of the present market places*
- 8. That the burial grounds being greatly over crowded it is highly desirable that the present cemetery should be made suitable for its intended purpose, or that a fresh site should be selected, care being taken in either case to secure the poorer classes from any additional charge for funeral expenses on account of the increased distance of the cemetery from the town or any other contingencies.*
- 9. That the establishment of public baths and washhouses is much to be desired , as they cannot fail, if properly constructed . to be of the most essential use to all but particularly to the poorer classes, and because their institution, if judiciously managed, can be made entirely self supporting.*
- 10. That , instead of the authorities procuring compulsory powers to take possession of property not already scheduled in the Local Act, for the purpose of widening or otherwise improving the public thoroughfares, I am of the opinion that the requisite powers, under proper securities, might be combined with the provisions of the Public Health Act.*

*Accordingly I have to recommend that the provisions of the Public Health Act (except section 50) be applied to the entire borough of Halifax, and not merely to those portions of it included in Northowram and Southowram, the Report on which was published in July last, and that a Provisional Order be issued accordingly.*

*I have the honour to remain,  
My lords and gentlemen,  
Your most obedient humble servant,  
W. RANGER,  
Superintending inspector to the General Board of Health.*

## **Outcome**

Following the Incorporation of the Borough and the Ranger report the physical appearance of the town was considerably improved by two major phases of development. One in the 1850s and 60s and the other in the 1880s and the 1890s ( **Halifax Civic Trust**)

This seems an appropriate place to stop, leaving food for thought for further research and the changes carried out that have created the Halifax of today

## **Appendix**

### **Charts and graphs of Health data from 1850**



## The Causes of death in Calderdale in 1850, data and graphs

Here are the reported causes of death in Halifax in 1850. I have analysed this data using the age group categories identified. As well as using raw data I have converted the data to percentage death rate by both age groups and causes of disease.

For ease the causes of death are referred to by a number explained in the key in relevant tables

### All causes of death

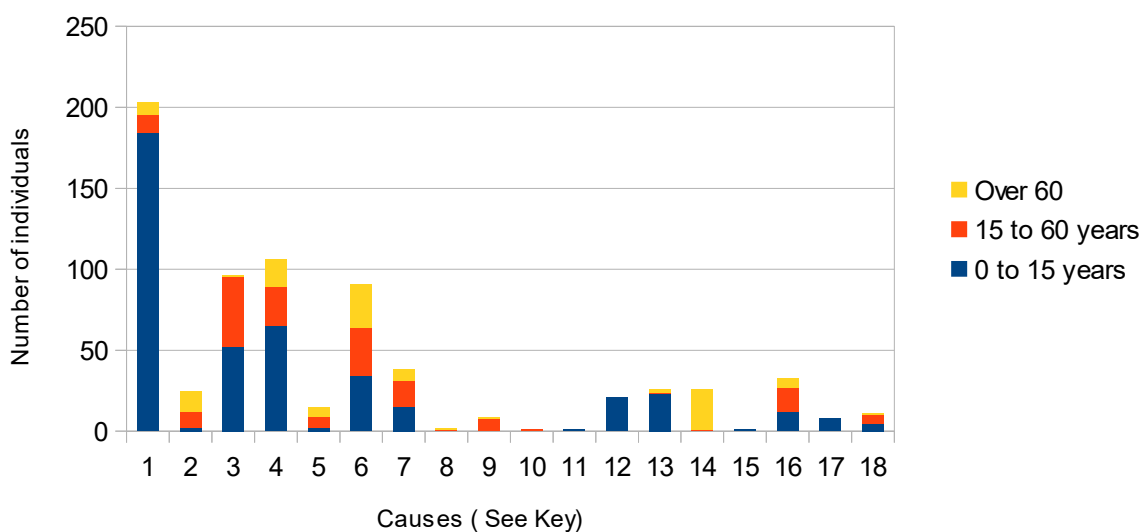
#### Numbers of deaths by age group

CAUSES OF DEATH	0 to 15 years	15 to 60 years	Over 60
Zymotic disease	184	11	8
Dropsy, cancer etc	2	10	13
Tubercular disease	52	43	1
Diseases of brain	65	24	17
Diseases of heart and blood vessels	2	7	6
Diseases of lungs etc	34	30	27
Diseases of stomach liver etc	15	16	7
Diseases of kidney		1	1
Diseases of uterus , childbirth		8	1
Rheumatism etc		1	
Malformation	1		
Premature birth and debility	21		
Atrophy	23	1	2
Age		1	25
Sudden death	1		
Violence, privation	12	15	6
Unkown	8		
Died in Union house Halifax paupers only	5	5	1
<b>TOTAL NUMBER OF DEATHS</b>	<b>425</b>	<b>173</b>	<b>115</b>
<b>% of total deaths</b>	<b>59.6</b>	<b>24.3</b>	<b>16.1</b>

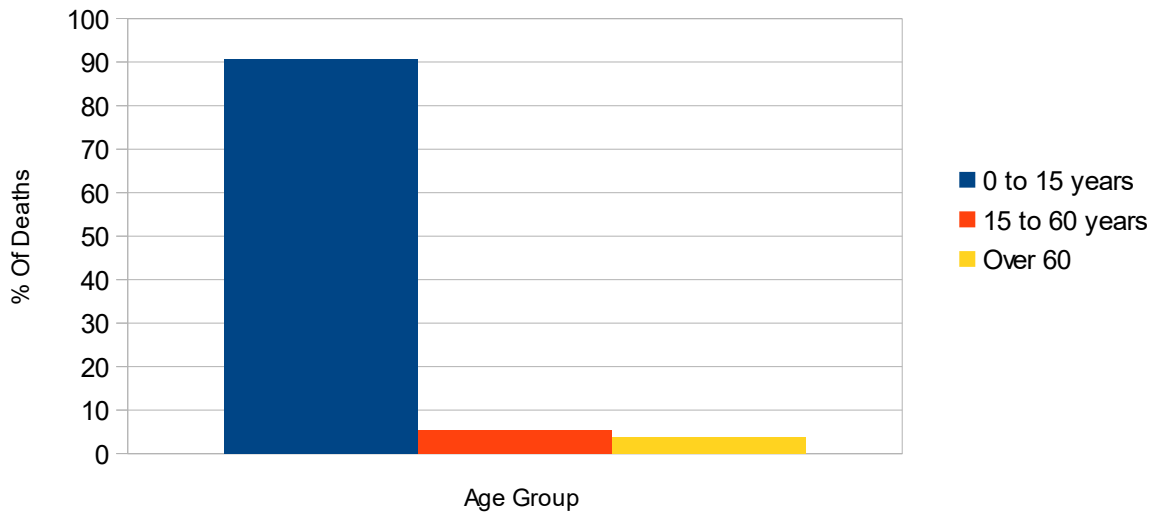
**Cause reference numbers and total and % deaths in each category**

<b>CAUSES OF DEATH</b>	<b>Cause Reference</b>	<b>Total</b>	<b>% Of total deaths</b>
Zymotic disease	<b>1</b>	203	<b>28.5</b>
Dropsy, cancer etc	<b>2</b>	25	<b>3.5</b>
Tubercular disease	<b>3</b>	96	<b>13.5</b>
Diseases of brain	<b>4</b>	106	<b>14.9</b>
Diseases of heart and blood vessels	<b>5</b>	15	<b>2.1</b>
Diseases of lungs etc	<b>6</b>	91	<b>12.8</b>
Diseases of stomach liver etc	<b>7</b>	38	<b>5.3</b>
Diseases of kidney	<b>8</b>	2	<b>0.3</b>
Diseases of uterus , childbirth	<b>9</b>	9	<b>1.3</b>
Rheumatism etc	<b>10</b>	1	<b>0.1</b>
Malformation	<b>11</b>	1	<b>0.1</b>
Premature birth and debility	<b>12</b>	21	<b>2.9</b>
Atrophy	<b>13</b>	26	<b>3.6</b>
Age	<b>14</b>	26	<b>3.6</b>
Sudden death	<b>15</b>	1	<b>0.1</b>
Violence, privation	<b>16</b>	33	<b>4.6</b>
Unkown	<b>17</b>	8	<b>1.1</b>
Died in Union house Halifax paupers only	<b>18</b>	11	<b>1.5</b>
<b>TOTAL NUMBER OF DEATHS</b>		<b>713</b>	

**Causes of death by age group in Halifax in 1850**



### % Deaths in each age Group



### Causes of death by Zymotic diseases

#### NB Definition of a zymotic disease

A 19th century medical term for acute infectious and contagious diseases and fevers .

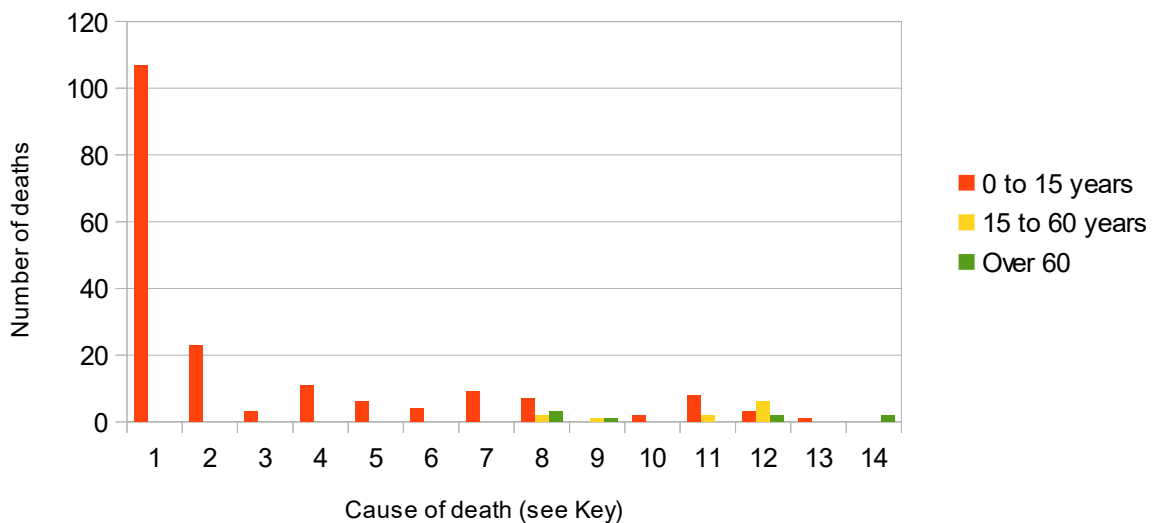
#### Numbers of deaths by age groups

ZYMOTIC DISEASES	0 to 15 years	15 to 60 years	Over 60
Scarlatina	107		
Measles	23		
Smallpox	3		
(W)Hooping Cough	11		
Croup	6		
Thrush	4		
Diarrhoea	9		
Disentery	7	2	3
Influenza		1	1
Remittant Fever	2		
Fever	8	2	
Typhus	3	6	2
Cachexia sypilitica	1		
Erysepelis			2
<b>TOTAL NUMBER OF DEATHS</b>	<b>184</b>	<b>11</b>	<b>8</b>
<b>% of total deaths</b>	<b>90.6</b>	<b>5.4</b>	<b>3.9</b>

## Cause reference numbers and total and % deaths in each category

ZYMOTIC DISEASES	Cause Reference	Total	% Of total deaths
Scarlatina	1	107	52.7
Measles	2	23	11.3
Smallpox	3	3	1.5
(W)Hooping Cough	4	11	5.4
Croup	5	6	2.9
Thrush	6	4	1.9
Diarrhoea	7	9	4.4
Disentery	8	12	5.9
Influenza	9	2	0.98
Remittant Fever	10	2	0.98
Fever	11	10	4.9
Typhus	12	11	5.4
Cachexia syphilitica	13	1	0.49
Erysepelis	14	2	0.98
<b>TOTAL NUMBER OF DEATHS</b>		203	

Number of deaths from Zymotic diseases



## Causes of death by Tubercular diseases

Phthisis is pulmonary Tuberculosis

Tabes Mesenterica is tuberculosis of the mesenteric membrane attached the bowel

Hydrocephalus is fluid on the brain present either at birth or caused by an infection

## Cause reference numbers

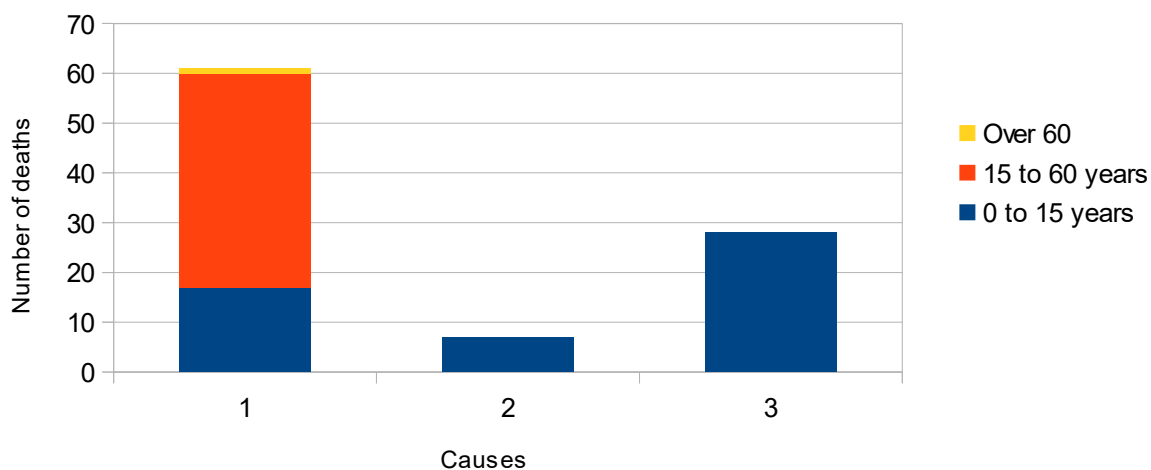
TUBERCULAR DISEASES	Cause Reference
Phthisis	1
Tabes Mesenterica	2
Hydrocephalus	3

## Total deaths by age group and % deaths

Cause Reference	0 to 15 years	15 to 60 years	Over 60	Total	% Of total deaths
1	17	43	1	61	63.5
2	7			7	7.3
3	28			28	29.2
	52	43	1	96	
	54.1	44.8	1		

## Causes of death

### Tubercular Diseases



## Cause of death by diseases of the brain

Apoplexy referred to the rupture of an internal organ which covered strokes, brain haemorrhage

### Cause reference numbers

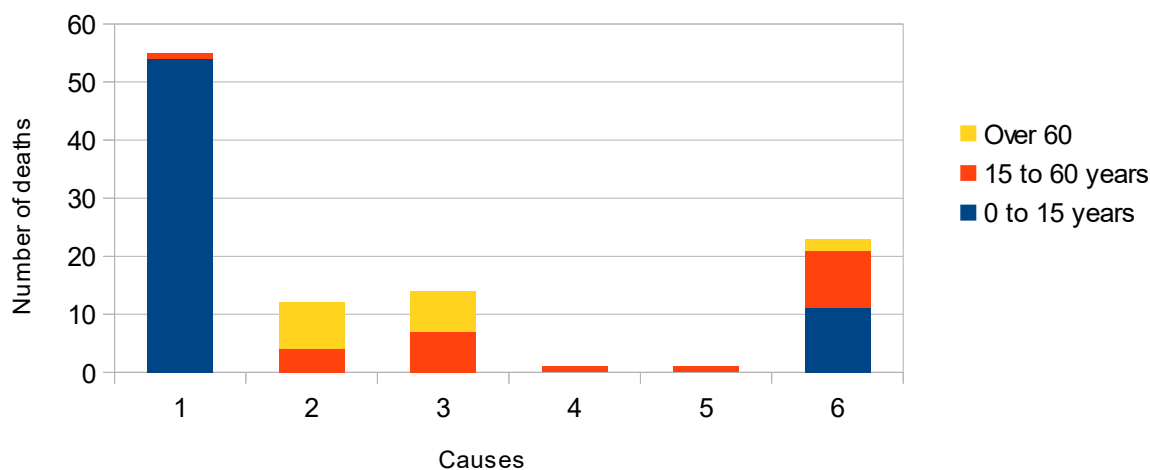
DISEASES OF THE BRAIN	Cause Reference
Convulsions	1
Apoplexy	2
Paralysis	3
Delirium Tremens	4
Myelitis	5
Diseases of brain etc	6

### Total deaths by age group and % deaths

Cause Reference	0 to 15 years	15 to 60 years	Over 60	Total	% Of total deaths
1	54	1		55	<b>51.8</b>
2		4	8	12	<b>11.3</b>
3		7	7	14	<b>13.2</b>
4		1		1	<b>0.9</b>
5		1		1	<b>0.9</b>
6	11	10	2	23	<b>20.5</b>
	65	24	17	106	
	<b>61.3</b>	<b>22.6</b>	<b>16</b>		

### Causes of death

#### Diseases of the brain



## Causes of death from lung diseases

Causes reference numbers

DISEASES OF THE LUNGS	Cause Reference
Bronchitis	1
Pleurisy	2
Pneumonia	3
Asthma	4
Diseases of lungs etc	5

### Total deaths by age group and % deaths

Cause Reference	0 to 15 years	15 to 60 years	Over 60	Total	% Of total deaths
1	11	15	9	35	43.2
2	1			1	1.2
3	9	4		13	16
4		2	5	7	8.6
5	13	9	3	25	30.9
	34	30	17	81	
	41.9	37	20.9		

### Causes of Death

#### Diseases of the Lungs

