# 18TH & 19TH CENTURY INDUSTRIAL BRITAIN

It's all about those Germs...



# Living Conditions

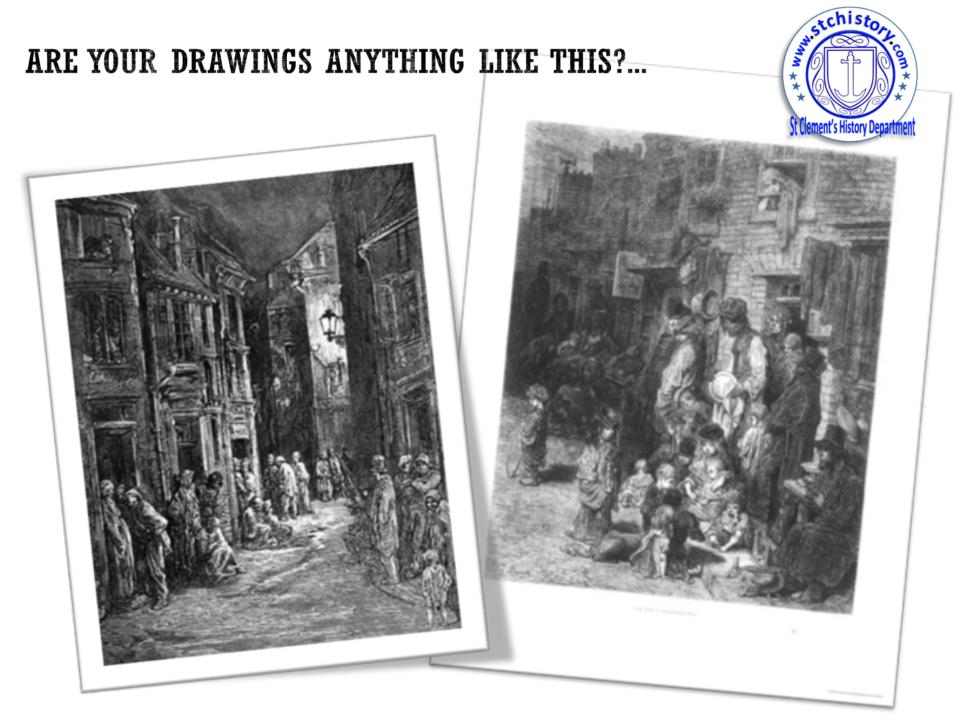


#### WHY WAS IT SO EASY FOR DISEASE TO SPREAD?

A travellers description of Leeds, reported in the THE MORNING CHRONICLE, 1848 (Scavengers were employed to take away refuse and empty the privies):

"The east and north-east districts of Leeds are, perhaps, the worst, a perfect wilderness of foulness... acre upon acre of little streets, run up with very poor planning or thoughts about health, acre upon acre of closely-built and very populated grounds, without a paving stone on the surface, or an inch of sewer beneath, deep trodden-churned up heaps of mud and waste. Streets and courts (estate) and yards which a scavenger never appears (suggesting nothing of value) which gives the idea of a town built on a slimy bog. The surface is drenched with the slop from each family's nightly fling. Pigs seem to be the natural inhabitants, more common in some parts of Leeds than dogs and cats!

Read the following description and draw the image or vision it creates in your heads, include as much detail as possible.



Let's look at some images that could represent Britain during this period of rapid change. Make a list of inferences as we go...



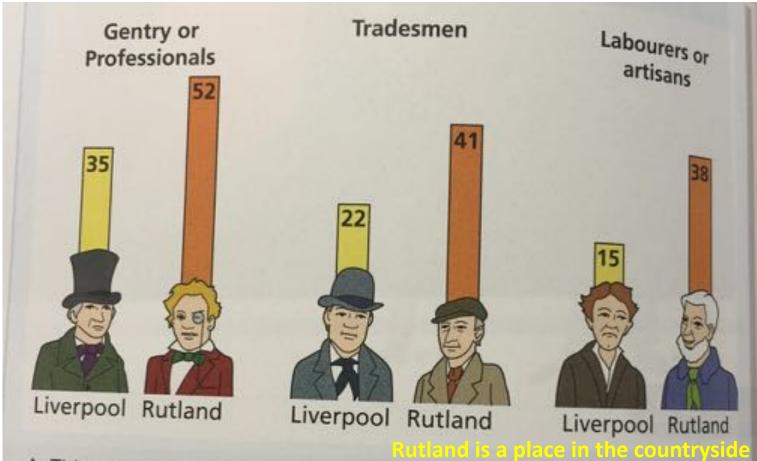


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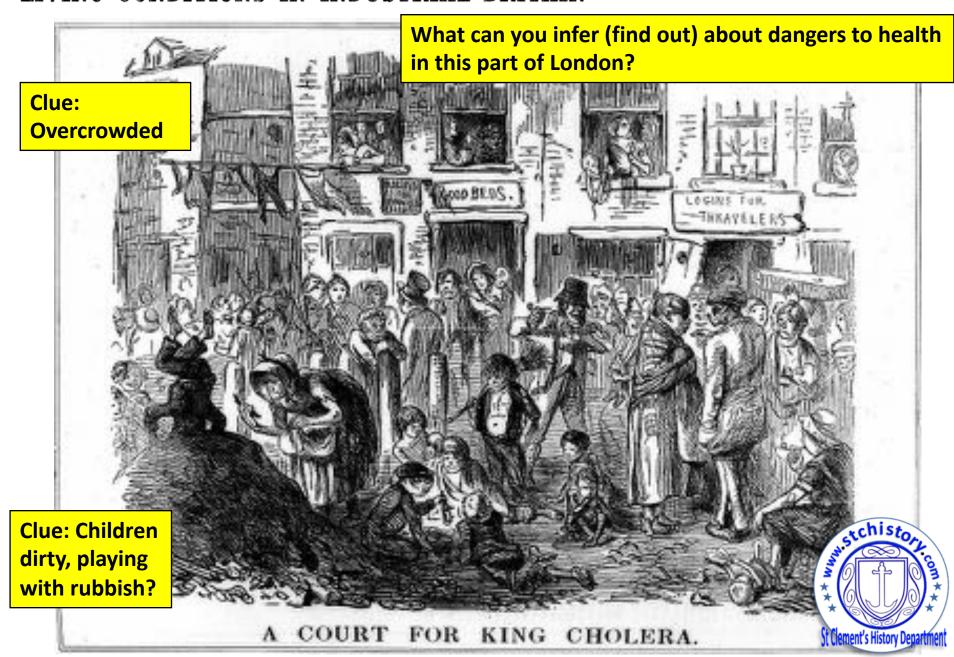


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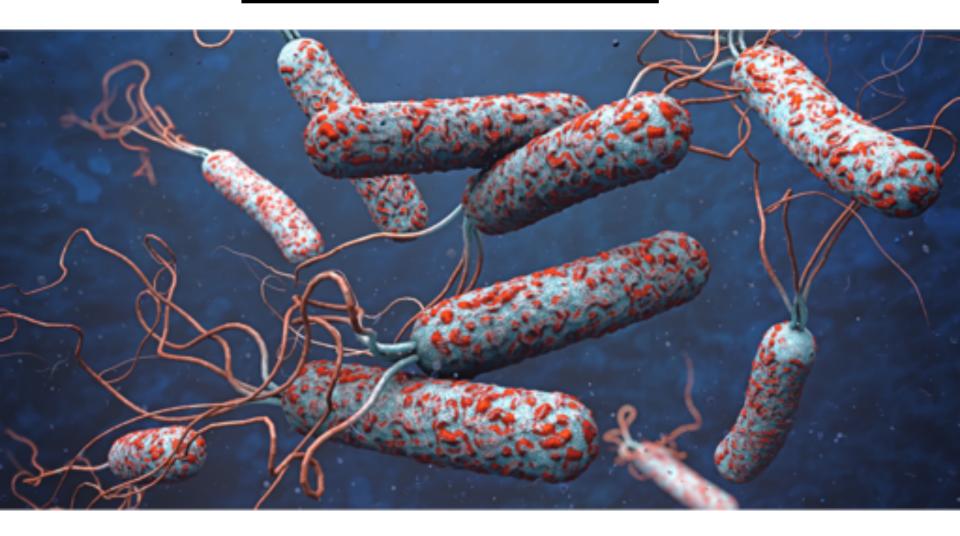




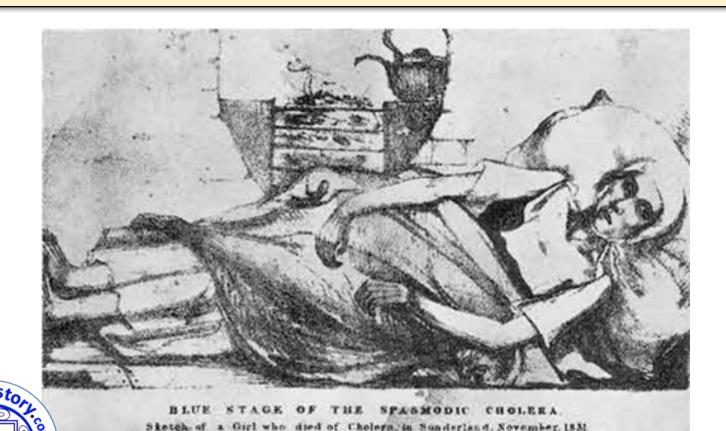
▲ This shows the differences in average age at death among different groups of people in 1840. Chadwick collected these statistics for his report. Liverpool was chosen as an example of a large, rapidly growing town. Rutland was chosen as a country area.



# What was Cholera?

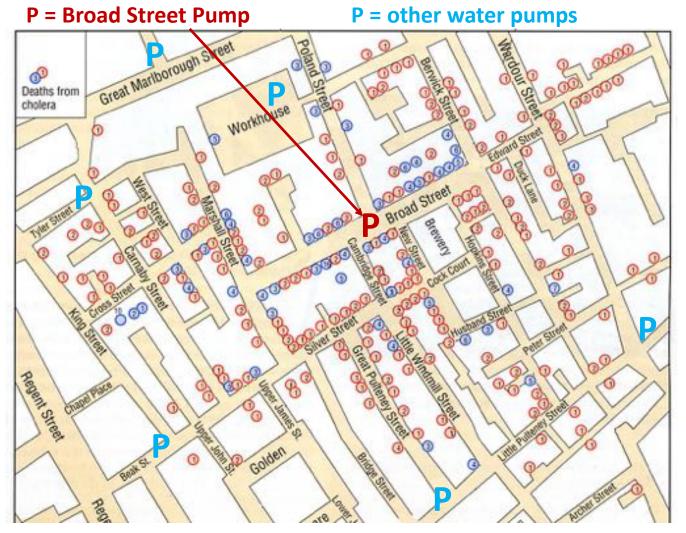


There was concern about deaths from killer diseases in the new large towns and cities, but in 1831, a new and even more terrifying disease appeared-cholera. Although cholera had been known in India for many centuries, it does not seem to have been known in Britain before this time. No-one knew what caused it or how to treat it. If you caught cholera you were likely to be dead within a few days and it spread so quickly that thousands could die within a few weeks.



Sunderland Museum

ONE OF THE FIRST CHOLERA VICTIMS IN GREAT BRITAIN. A GIRL WHO DIED OF CHOLERA IN SUNDERLAND, NOVEMBER, 1831

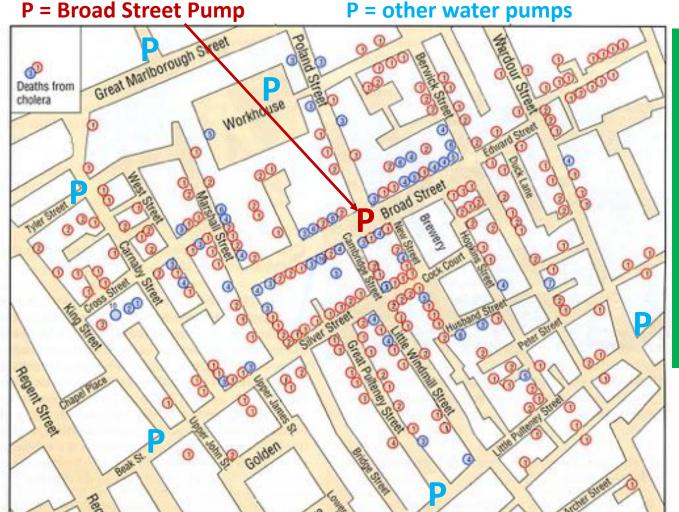


This is a copy of John Snow's map from which he worked out the cause of Cholera. Your task is to try to work out the cause and to explain the anomalies that Snow found.

Try to answer the following anomalies

#### Anomalies (things that don't seem to fit in):

- There was a factory just off Broad Street, eighteen people who did not live in the area but who worked there died of Cholera.
- 535 people lived in the Workhouse, but only 5 died.
- 70 people worked at the brewery, none of them died.
- An old lady, who used to live in the Broad Street area but who now lived away from the area, died of Cholera, even though there was no outbreak in her area.



#### Anomalies:

- Factory workers drank water from the Broad St Pump
- The workhouse had their own water supply – the victims drank from the Broad St. pump
- Brewery has it's own water supply but also the drank their beer more than water (to make beer you have to boil the water which kills the bacteria)
- The old lady liked the taste of the water from the Broad St Pump so got her sons to bring her a bottle of water from the pump



Dr John Snow worked this out and took the handle off the Broad St. pump, the cholera deaths stopped almost immediately – PROVING Cholera was waterborne not airborne as they thought previously.

Using all of your knowledge from the last 2 lessons, why was Cholera so easy to spread during this period?

# What problems were there with living conditions during the Industrial Revolution?

The towns grew extremely rapidly. The huge amount of extra people, moving from the countryside for work, meant that the sewers and ways of dealing with rubbish couldn't cope. A town of a million people with no sewers swims with excrement.

Greedy landlords built 'back to back' houses, with flimsy walls, no water, no drains, and, in some cases, no foundations.

Huge rubbish heaps (middens) collected on the streets. Many people complained about the lack of toilets. Sewage simply drained into the nearest river; but the river was the only place where poor people could get their water.

People had to crowd together, whole families in one room.

People who lived in such awful conditions tended to be immoral and violent. Sex and alcohol were their only ways of escaping from the dreadful world in which they existed.

Disease flourished in these conditions. There were many epidemics of cholera (a disease of the bowels) and typhus (a disease spread by lice and TB (a disease of the lungs) was all around.

To start with today, can you please write WHAT (eg. can I learn) WHO WHERE WHY WHEN W



Source Skills

THE O

W – WHAT does it show? – A skeleton on a river

W – WHAT does the skeleton represent? – Death



W – WHERE is this source? London How do you know?

St. Pauls Cathedral





W - WHY was it made?
W - WHEN was it made?

W-WHO made it?
W-WHO made it?

# Some key information before we evaluate our sources...

- Cholera was a <u>very</u> deadly disease that killed many thousands in the first half of the 19<sup>th</sup> Century (1800-1850).
- No one knew what caused it until 1854
- There was a 'Great Stink' in London in 1858

Let us see if we can work out the message of these 19th Century sources





In 1855, a letter from Michael Faraday in *The Times* newspaper, London, described the polluted state of the River Thames he had observed on a boat trip:
"The whole of the river was an opaque pale brown fluid. ...... surely the river which flows for so many miles through London ought not to be allowed to become a fermenting sewer."

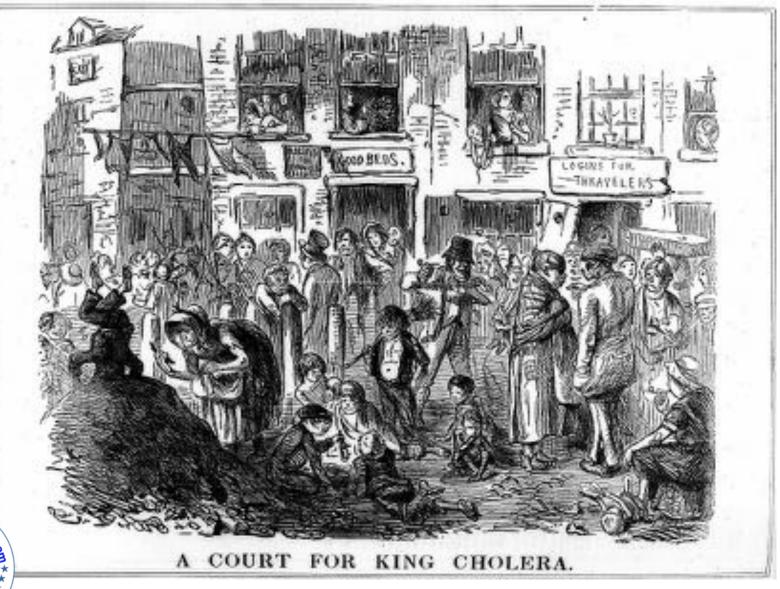
# [Image: 1855 *Punch* cartoon of Father Thames greeting Faraday.]

A few years later the curtains in the Houses of Parliament had to be soaked in lime to stop the odours (bad smells) from preventing government from carrying on.

5 Ws

# A Court for King Cholera

1 5 Ws





### ctim of Cholera



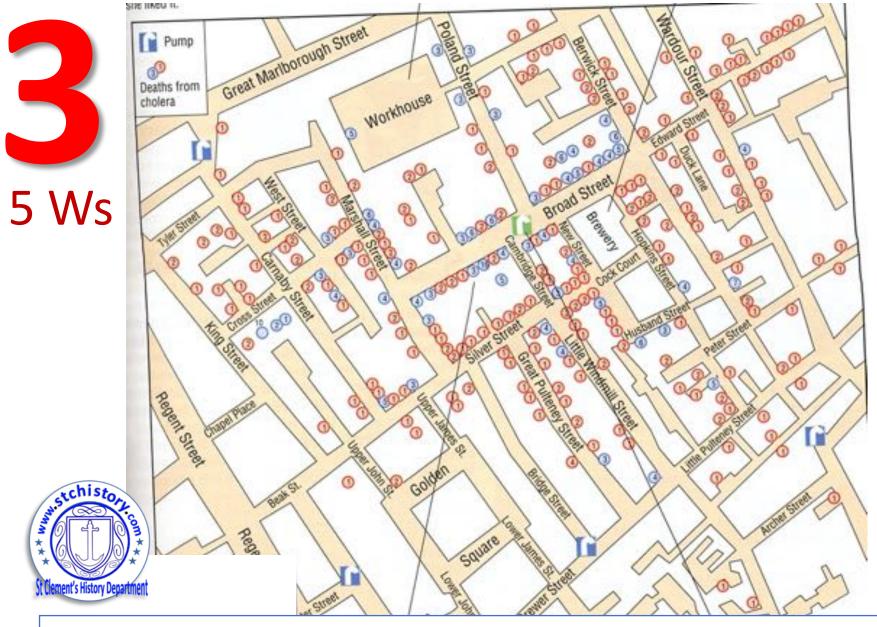


ONE OF THE FIRST CHOLERA VECTORS IN GREAT BRITAIN. A GIRL WHO DEED OF CHOLERA IN SUNDEBLAND, NOVEMBER, 1831

duck who died of Cholega in Sunderland Resember 1831

Seederland Mooran

What can you learn from this source about the Cholera outbreak?



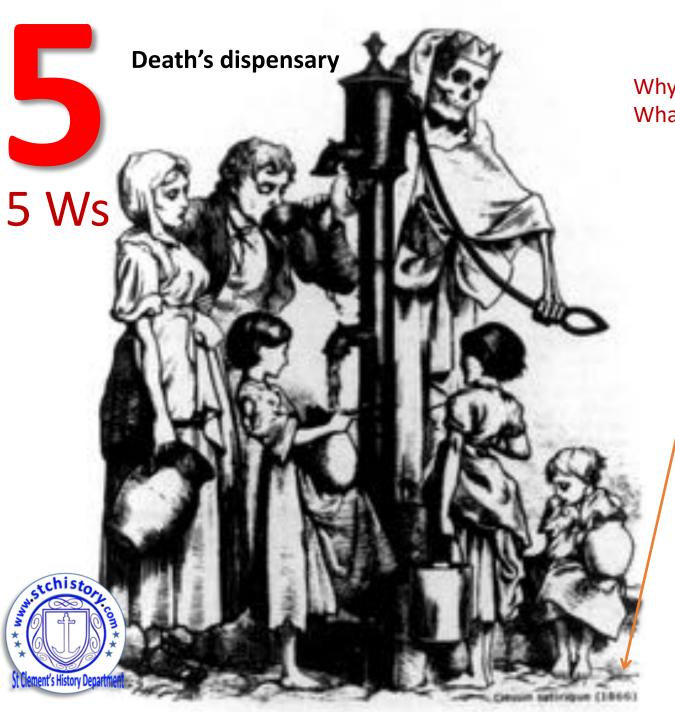
Using your observations, what can you infer from this source? Focus around the Broad Street Pump



What is the significance of this 'monument' in Soho London (Broad Street)







Why was this source made? What is it suggesting / saying?

Clue: Look at the date
And conditions of clothes



(A Design for a Frence on the New House of Perliment.)

5 Ws



Punch Magazine, 10<sup>th</sup> July 1858