

Year of epidemic	Total cholera-related deaths in England and Wales
1831–32	21,882
1848–49	53,293
1853–54	20,097
1865–66	14,378

Attempts to prevent the spread of cholera

Some steps were taken to try to clean up the filthiest areas of the cities and so prevent the spread of cholera. The belief that miasmata and rotting material caused disease was still widespread, so local councils and populations turned their attentions to the mess in which they were living. The government encouraged cities to set up boards of health and provide clean water supplies. However, this did not have a great effect on people's living conditions.

Source B

This letter was printed in *The Times* in 1849, during the second cholera outbreak. It was written by a group of residents of Soho, London.

Sir, May we be and beseech your protection and power. We are Sir, as it may be, living in a wilderness, so far as the rest of London knows anything of us, or as the rich and great people care about. We live in muck and filth. We ain't got no privies [toilets], no dust bins, no drains, no water-supplies, and no drain or sewer in the whole place. The Sewer Company, in Greek Street, Soho Square, all great, rich powerful men take no notice whatsoever of our complaints. The stench of a gully-hole is disgusting. We all of us suffer, and numbers are ill, and if the cholera comes Lord help us all.

John Snow

John Snow was a surgeon who had moved to Soho in 1836 and had become London's leading anaesthetist. It was Snow who gave Queen Victoria chloroform during the birth of Prince Leopold in 1851. He was popular and well-respected.

Source C

This cartoon was published in *Punch* in 1858. In it, the River Thames is offering his 'children' to London – the diseases diphtheria, scrofula (a type of tuberculosis) and cholera.



Snow observed cholera during the epidemic of

1848–49. He wrote up his theories in *On the Mode of Communication of Cholera*. In it, he suggested that:

- cholera could not be transmitted by a miasma, because it affected the guts, not the lungs
- drinking water was being contaminated by the cholera-ridden faeces being disposed of in the city's drains.

Snow concluded that cholera was transmitted by dirty drinking water.

The 1854 epidemic

In August of 1854, cholera broke out in Soho, where Snow lived. This prompted Snow to investigate the 93 deaths in his local area.

Snow created a spot map to show where the deaths had occurred in the area around Golden Square and Broad Street. He took a street map and drew spots onto it to represent the deaths that had taken place (see Source D).

Source D

A section of John Snow's cholera spot map, 1854.



After looking at the map, John Snow realised that there was a pattern: the number of deaths seemed to be centred around the water pump on Broad Street.

To Snow, it was clear that the water pump was the source of the infection. He removed the handle from the pump, preventing locals from pumping water, and the cholera outbreak went away as quickly as it had arrived.

Later inspections of the well underneath the water pump revealed that it was extremely close to a cesspit* – less than one metre away. Although the cesspit had a brick lining, it had cracked, meaning waste from the cesspit was seeping into the well and spreading cholera.

Key term

Cesspit*

A pit for storing sewage or waste.



Figure 3.11 How John Snow proved that the Broad Street pump was spreading cholera.