

John Snow, MD (1813-1858)

Great Figures in Public Health

*Brought to you by the AMA-MSS Ad Hoc Committee
on Public Health*





“Father of Epidemiology”

- British physician leader in anesthesiology and public health/medical hygiene
- Identified etiology of cholera outbreak in Soho, London (1854)





Childhood



- Eldest of nine children¹
- Raised with modest resources¹



- Neighborhood in constant danger of flood from the Ouse River
- Father worked as a coal yard laborer

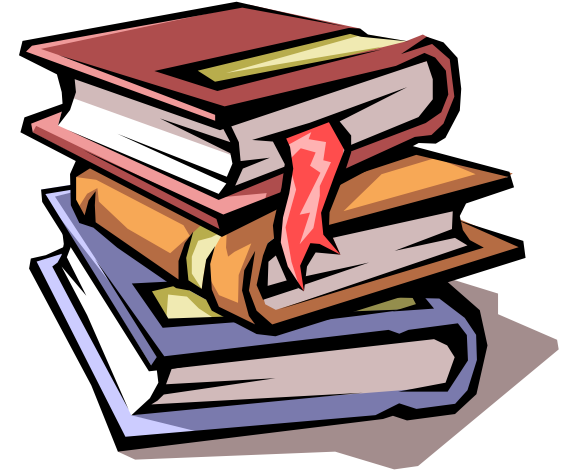




Education



- 1826: Began first of three consecutive apprenticeships with British physicians
- 1836: Enrolled in medical school
- 1844: Graduated from the University of London
- 1850: Admitted to the Royal College of Physicians





Medical Practice

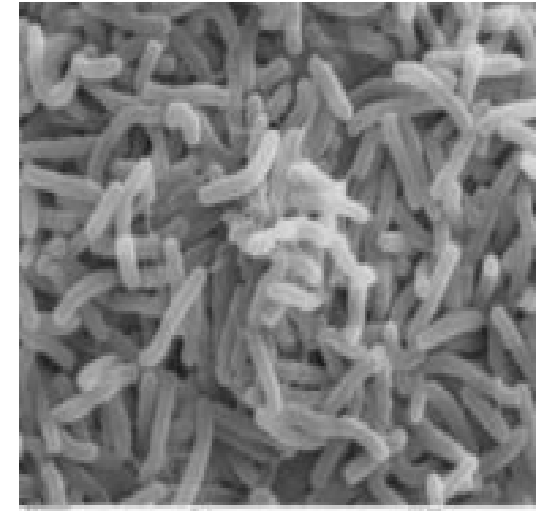
- Established a surgical and general practice²
- Administered ether to Queen Victoria for the births of Prince Leopold and Princess Beatrice³
 - At the time, ether was rarely used as a surgical anesthetic and obstetric anesthesia was not publicly accepted
- Lectured Westminster Medical Society on numerous topics, including:²
 - Alcoholism
 - Toxicology
 - Childhood deformities of the chest/spine



Cholera Outbreak of 1854 in Soho, London



- Fifth major wave of Asiatic cholera in the UK²
- Devastating outcomes²
 - >500 fatalities
 - Nearly all families lost at least one member, regardless of socioeconomic class





Theories of Disease



- Miasma theory predominated scientific thought
 - Disease spread through “noxious air”
- Snow doubted miasma theory and tied all cases to a water pump on Broad Street

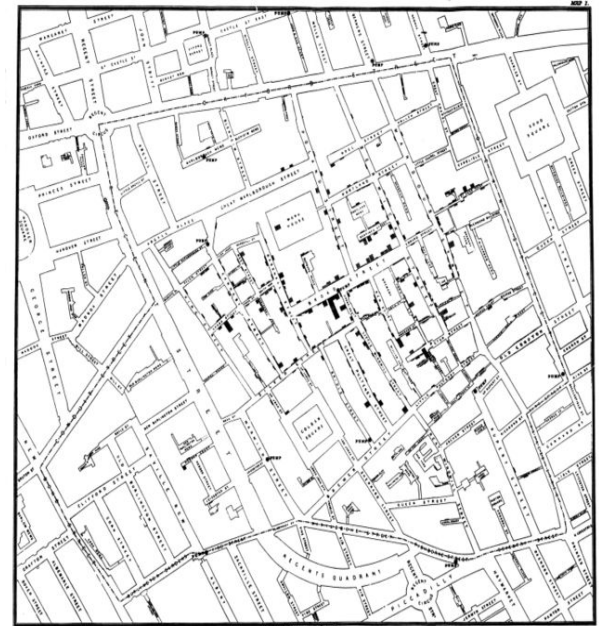


Photo from “Broad Street Pump,” Wikipedia, available at: http://en.wikipedia.org/wiki/Broad_Street_pump

Cholera and Water Quality



- Interviewed families of victims and developed a map to tie all fatalities to the water pump²
- Took water samples from pump and visualized microscopic impurities²
- Disabled Broad Street pump by removing its handle²





Final Years

- Chronic poor health
 - Suffered from TB and renal disease soon after graduating from medical school
- Frequently experimented with anesthetic agents on himself
- Died after stroke in 1858, at the age of 45 years
- Left his legacy in the fields of anesthesiology and public health





References



1. “John Snow,” Wikipedia, accessed at http://en.wikipedia.org/wiki/John_Snow_%28physician%29



2. “John Snow,” UCLA Epidemiology, accessed at <http://www.ph.ucla.edu/epi/snow.html>



3. “John Snow Society,” accessed at <http://www.johnsnowsociety.org/>