Cholera

- Infection of small intestine
- Caused by bacterium *Vibrio cholerae*
- Symptoms include:
  - diarrhea ("rice water" or "faucet butt")
  - vomiting
  - dehydration
- Transmitted by contaminated food or water
- Contamination typically occurs when untreated diarrheal discharge allowed to get into drinking water supply
- With treatment, mortality <1%
- Without treatment, 50-60%
- Certain strains (i.e. 2010 epidemic in Haiti) cause death within 2 hours of onset of symptoms
- Mainly disease of the developing world

Theories of Disease

- Miasma Theory
  - Infectious diseases were caused by a *miasma*
  - Miasma was a form of "bad air"
  - Caused by pollution, filth
  - Widely accepted until the 20th century
- Germ Theory
  - Microorganisms were the cause of infectious diseases

John Snow (1813-1858)

- British physician
- Pioneered the use of anesthetics during surgery
- Was a skeptic of miasma theory
Broad Street Epidemic
- August 31, 1951
- In the first 3 days, 127 people had died
- ¾ of the population fled during the following week
- 500 dead by September 10
- 616 died total

Snow's Investigation
- Believed cause was "cholera poison" in the water
- Mapped out deaths by location