HISTORY OF THE GERM THEORY OF DISEASE

Man first thought disease to be punishment from God

Hippocrates 500 BC  
disease brought on by foul vapors (miasma). Malaria for instance.

Aristotle 350 BC  
Taught Alexander the Great to boil drinking water & bury feces to prevent disease.

Fracastorius 1546  
(1478-1553) Theory of contagion: disease infection can be caused by minute bodies (“germs”) capable of self-replication, transmitted from patient to new host. Named syphilis?

Leeuwenhoek 1670s  
improved microscope

Agostino Bassi 1834  
First to show that a microorganism could cause disease in case of a fungal disease of silkworms: contagious and could be transmitted naturally by direct contact or infected food, or experimentally by means of a pin previously sterilized in a flame

Oliver Wendle Holmes 1843  
Noted that it was safer to give birth at home than in hospital.

M.J. Berkeley 1845  
Showed Irish potato blight caused by a fungus

Ignaz Semmelweis 1848  

Childbirth death rate: Ward II midwives = 3%,

Ward I, medical faculty = ~10%.

Phys. friend died of autopsy wound, S&S same as puerperal fever. Proposed etiology: “cadaveric particles.” Smell not removed by hand washing, but calcium hypochlorite: Ca(OCl)$_2$ did. Chloride of lime wash reduced puerperal fever death rate 12.4% to 1.27%.

John Snow 1854  
(1813-1858) deduced contaminated Broad Street Pump caused cholera epidemic in London.

Joseph Lister 1860s  
(1827-1912) Introduced use of antiseptic during surgery: phenol in surgical dressings and sprayed into the air. Wound infections dropped dramatically, thus due to bacteria.