

Extract from Garrett, Laurie. *The Coming Plague: Newly Emerging Diseases in a World Out of Balance*. New York: Penguin, 1995.

During London's devastating 1849 cholera epidemic, physician John Snow demonstrated that cholera was transmitted via water by removing the handle of the Broad Street pump, the sole water source for an impoverished and cholera-ridden community. The local epidemic, of course, came to a halt.

Authorities were unconvinced, however, so during London's 1854 epidemic Snow mapped cholera cases and traced their water supplies. He showed that those neighborhoods with little cholera were receiving water drawn from the upper Thames, while cholera-plagued areas drew their water from the lower Thames, which included human waste from upstream.

Snow failed to convince authorities directly of the need to clean up water supplies, but the epidemics of cholera and other devastating diseases spurred improvements in basic urban hygiene all over the industrializing world. Citizens' sanitary action groups cropped up in many cities, garbage- and waste-disposal practices improved dramatically, outhouses were replaced by in-house toilet systems, and "cleanliness" became "next to godliness" (242).