



Mark D. Sobsey



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Post-doc., Baylor Col. Medicine
PhD, U. of Calif.-Berkeley, 1971
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Title: Environmental Health Microbiology for WaSH & Food Safety

Research emphasis:

Detection, occurrence, characterization, environmental survival/transport/fate, treatment, human health effects characterization & risk assessment of viruses, bacteria & parasites of health concern in water, wastewater, biosolids, soil, air & food for prevention and control of water-, food- and excreta-borne disease. Recent focus on household water treatment for improved water quality & health, new & improved microbial detection methods for water & wastewater, wastewater reclamation & reuse, virus survival in fecal wastes and sewage, & antimicrobial resistant bacteria in the environment from key fecal sources

Selected publications: (limit 4)

Casanova LM, Sobsey MD. (2015) Reduction of Acid-Fast and Non-Acid-Fast Bacteria by Point of Use Coagulation-Flocculation-Disinfection. *Int J Environ Res Public Health*. 2015 Nov 13;12(11):14420-8.

Rodríguez RA, Polston PM, Wu MJ, Wu J, Sobsey MD. (2013) An improved infectivity assay combining cell culture with real-time PCR for rapid quantification of human adenoviruses 41 and semi-quantification of human adenovirus in sewage. *Water Res*. 2013 Jun 1;47(9):3183-91. doi: 10.1016/j.watres.2013.03.022.

McMahan L, Grunden AM, Devine AA, Sobsey MD. (2012) Evaluation of a quantitative H₂S MPN test for fecal microbes analysis of water using biochemical and molecular identification. *Water Res*. 2012 Apr 15;46(6):1693-704. doi: 10.1016/j.

Anderson ME, Sobsey MD. (2006) Detection and occurrence of antimicrobially resistant *E. coli* in groundwater on or near swine farms in eastern North Carolina. *Water Sci Tech*. 54:211–218.

Application:

- Microbial detection
- Water & Waste Rx
- Microbial survival/fate
- Antimicrobial resistance

Collaboration potential:

- Antimicrobial resistance
- Water and waste Rx
- Microbial diagnostics
- Health effects field studies