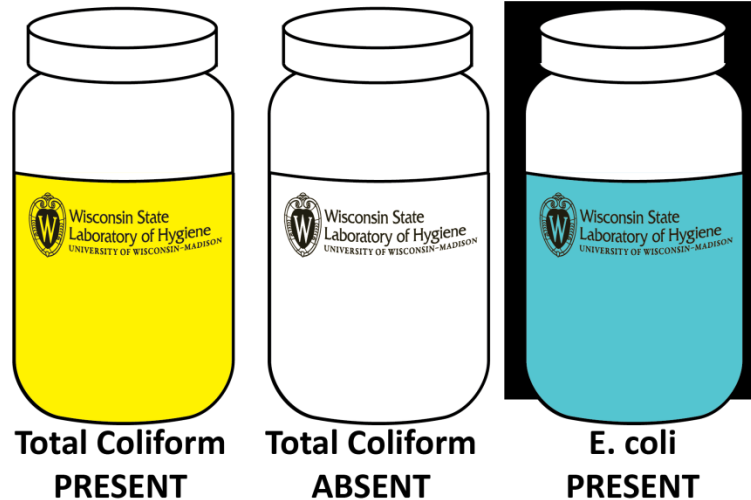


Beyond RTCR Assessment Requirements: Identifying Microbial Contaminants to Suggest Corrective Actions

Alyssa M. Beck, PhD
Wisconsin State Laboratory of Hygiene
Water Microbiology

Revised Total Coliform Rule

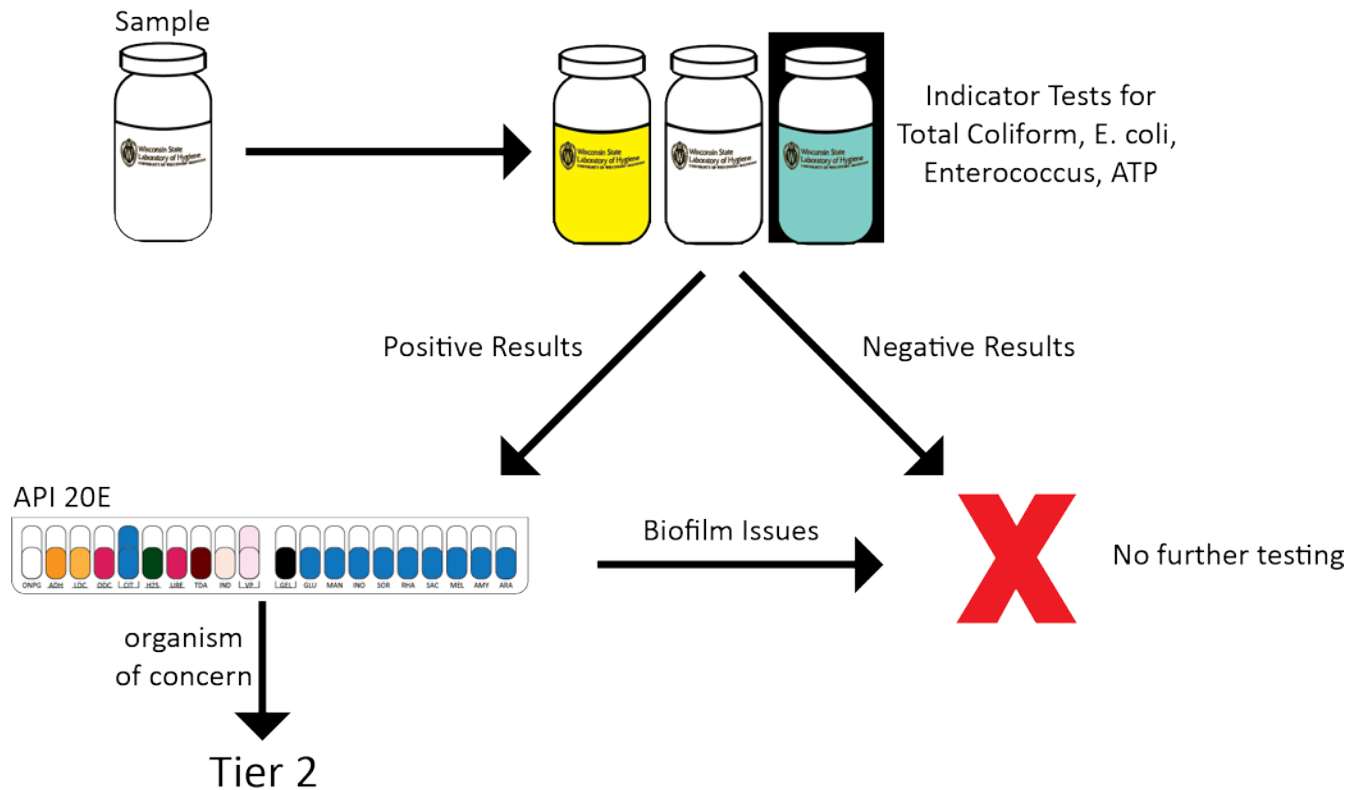


- Positive tests indicate the potential for fecal contamination, but do not identify contamination sources

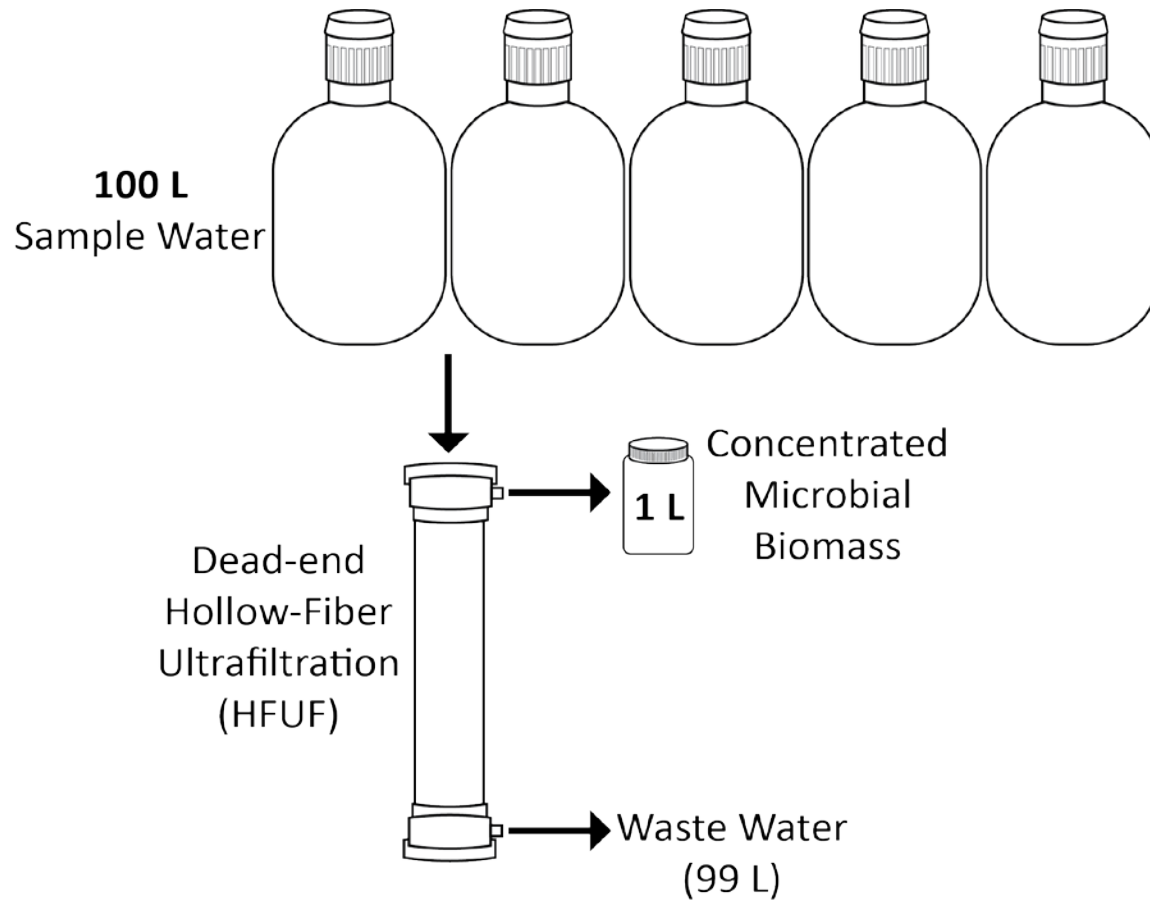
Well Assessments

- Assessments are triggered when a PWS has repeated total coliform presence in routine samples
- Goal: Identify potential contamination sources to determine need for further testing or to inform corrective action

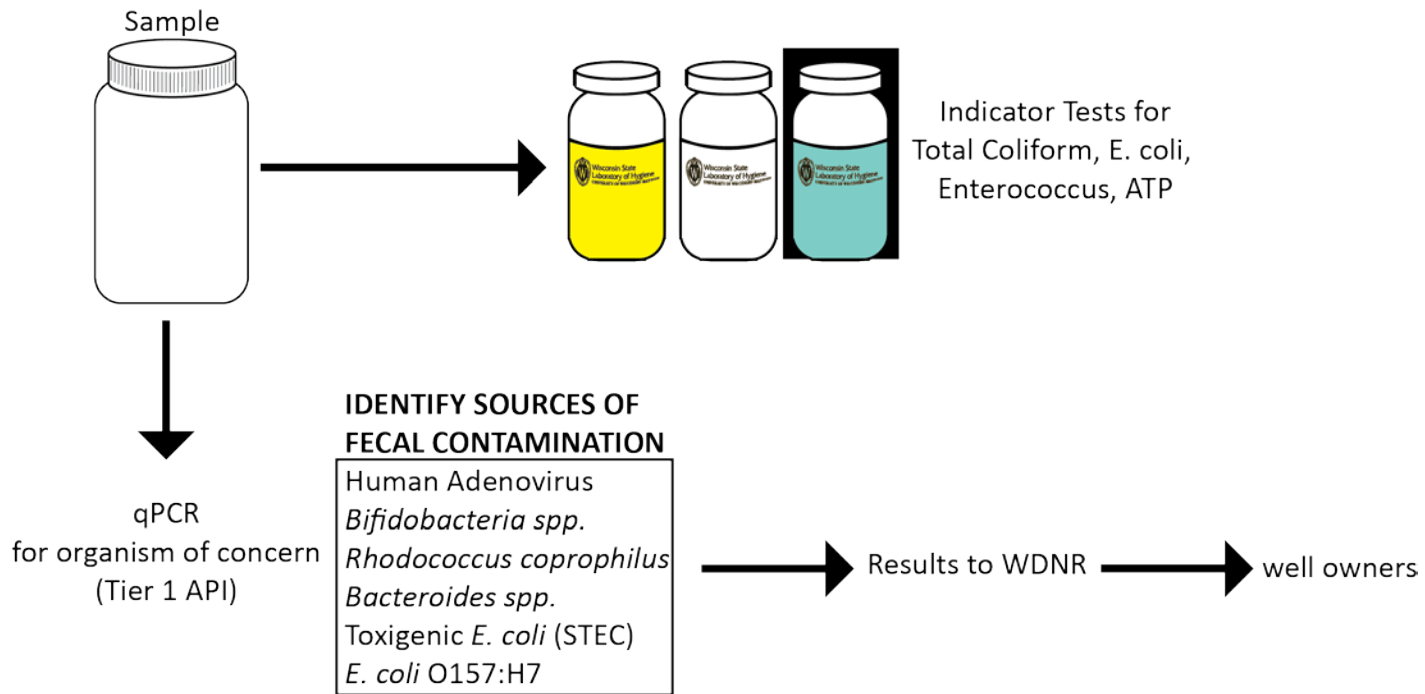
Tier 1 Assessment - Processing Steps



Tier 2 Assessment - Large Volume Sampling



Tier 2 Assessment - Processing Steps

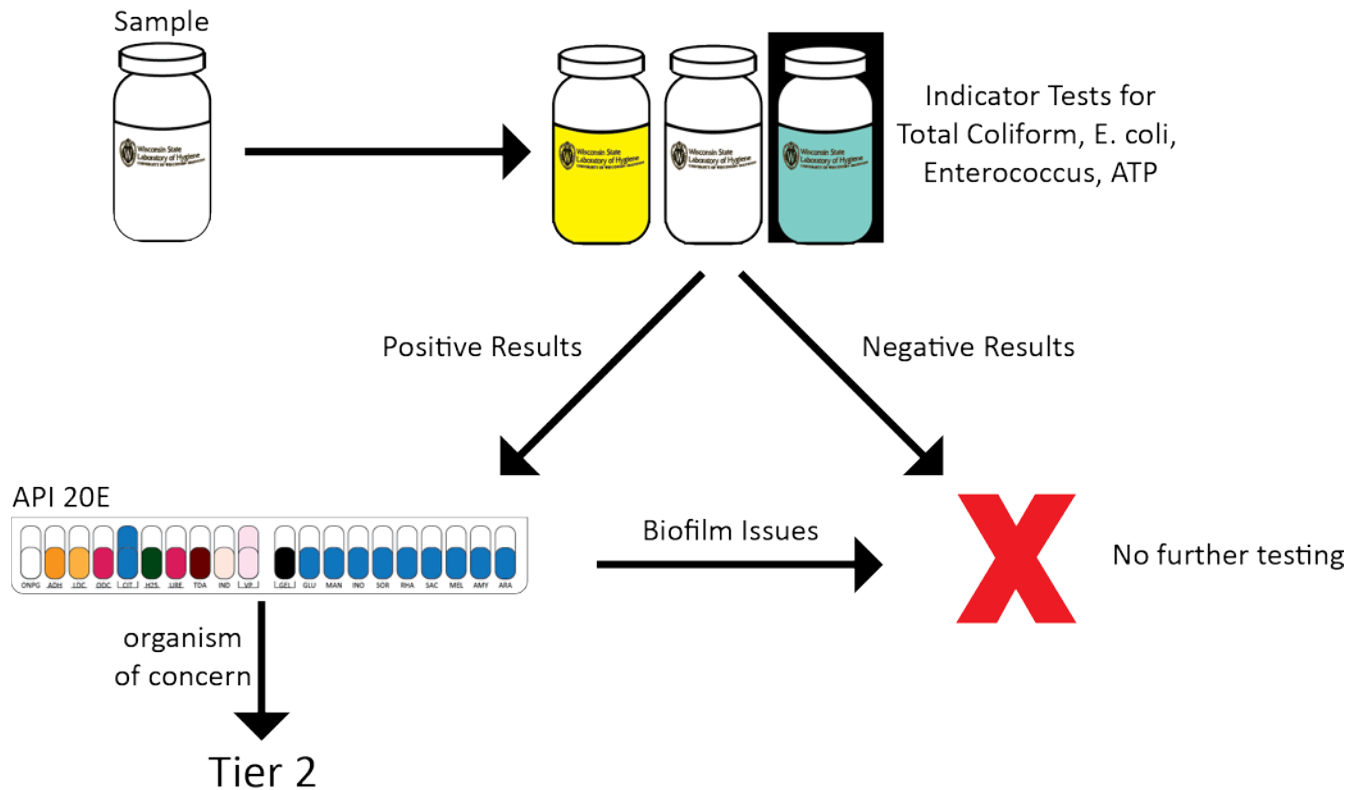


Corrective Action

- Once a contamination source is identified, well owners work with WDNR to come up with a plan for corrective action

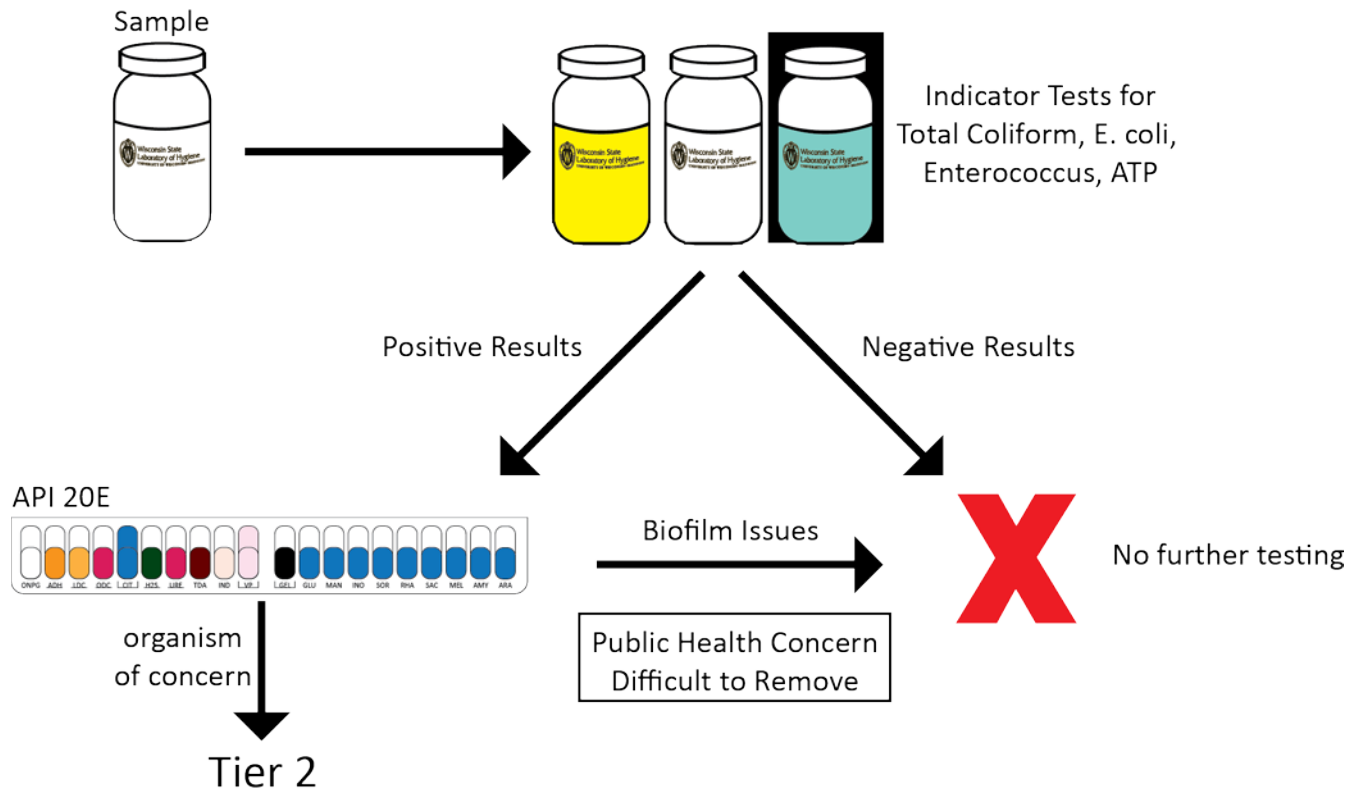
Future Directions - Biofilms

Tier 1 Assessment

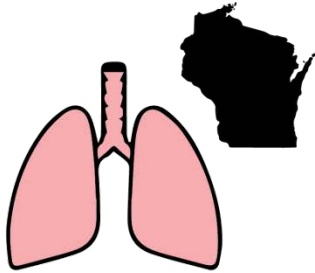


Future Directions - Biofilms

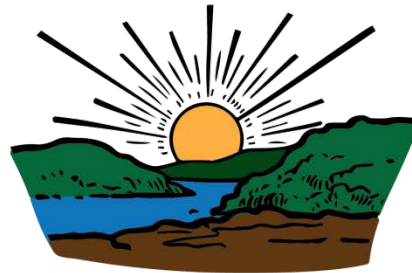
Tier 1 Assessment



Future Directions – *Mycobacterium* spp.



Nontuberculous *Mycobacterium* spp.
(NTM) Lung Disease



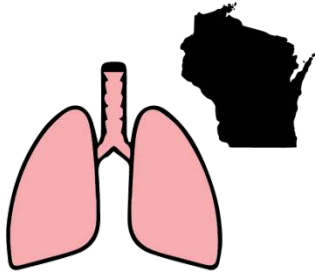
Common in Environment



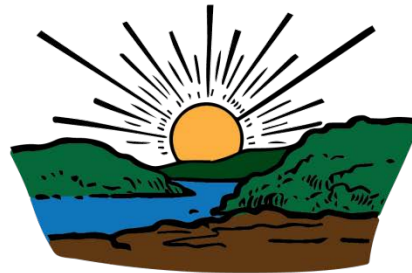
Common in Household Water



Future Directions – *Mycobacterium* spp.



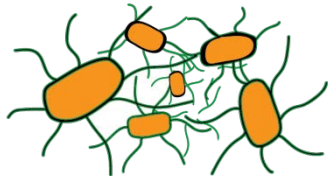
Nontuberculous *Mycobacterium* spp.
(NTM) Lung Disease



Common in Environment



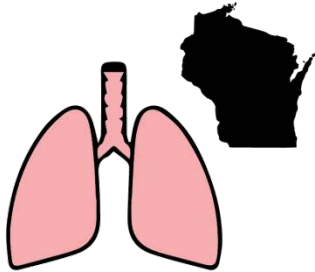
Common in Household Water



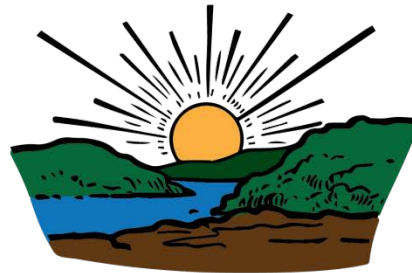
Biofilms
Difficult to Remove



Future Directions – *Mycobacterium* spp.



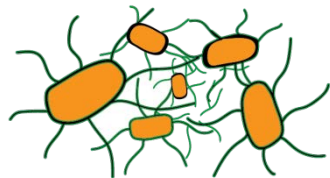
Nontuberculous *Mycobacterium* spp.
(NTM) Lung Disease



Common in Environment



Common in Household Water



Biofilms
Difficult to Remove



Next-generation
Sequencing



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