

Legionella and Cross Connection Controls Workshop: Legionella Basics – Philly, Flint and Beyond
Room 201

1:00 PM to 5:00 PM

Facilitators: Steve Fox, Dr. Jan Stout, and Ken Rotart

Objective:

The purpose of this workshop is to provide basic education on legionella and best management practices for legionella control/management, with a focus/emphasis on where it starts in our water source then moving to evaluating plumbing systems within a water user. The topics were developed with the possibility of presenting to multiple audiences/viewpoints; private water users (i.e. hotels) and city water suppliers:

Legionella Management - City Water Suppliers

- Legionella history and characteristics
- Potential sources, disease aspects
- EPA Regulations/Water Treatment/Control
- Responsibilities/Liability
- Managing legionella (chlorination method, dead leg elimination, system flushing, cross connection program, water quality, work on water mains, etc.)
- Working with private water systems (how to respond to potential outbreaks, etc.)

Legionella Management – Private Water Users

- Various water using systems susceptible to legionella growth (DHW, cooling towers, spas, swimming pools, etc.)
- Regulations/Liability
- Plumbing System Review/Analysis
 - DHW system (storage/type, turnover rates, pipe material, location and condition of piping and tank, temperature settings, recirculating systems, points of use that may be sources, etc.)
 - Potable cold water (pipe material and size, distribution flow characteristics, chlorine distribution, cross connections, stagnant plumbing/dead legs, points of use that may be sources, etc.)
- Other Systems Review/Analysis (cooling towers, swimming pools, spas)
- Managing Legionella
 - Plumbing/System Survey and Remediation Plan
 - Legionella Sampling/Monitoring Programs
 - Preventative Maintenance Programs: System flushing/cleaning, startup procedures, water treatment, temperature & chlorine verification, inspections, etc.
- Establish an ongoing, documented Water System Management Program
 - Qualified contractors/personnel
 - Document preventative maintenance efforts

Speaker Biographies

Steve Fox, HydroCorp

Steve has over twenty five years' experience in water and wastewater operations management and over ten years' experience dedicated to cross-connection control training and program management. His current position is Account Manager & Training Coordinator for HydroCorp™. Prior to joining HydroCorp™, Steve was a Zurn Wilkins territory manager for the Washington D.C. Metropolitan Area including MD, VA, DC and DE where he was instrumental in providing Cross Connection Control Training and Technical Assistance to various industries and public water systems. Steve proudly served 22 years in the District of Columbia Air National Guard (DC ANG) as a Water and Fuel Systems Maintenance specialist. Steve's last assignment was the Water/Wastewater Superintendent for 113th Civil Engineer Squadron located on Joint Base Andrews, MD where he retired as a Senior Master Sergeant. He served on many levels while a member of the DC ANG to include the Emergency Operation Center, Safety NCOIC and Backflow Prevention Program Manager. Steve still serves his community as a Lieutenant assigned to the Dover Squadron, Civil Air Patrol.

Dr. Janet Stout, Director of Special Pathogen Laboratory

Dr. Janet E. Stout is the Director of Special Pathogens Laboratory in Pittsburgh, Pa., and an Associate Professor at the University of Pittsburgh Swanson School of engineering in the Department of Civil and Environmental Engineering. Dr. Stout is an international authority on Legionnaire's disease, having studied Legionnaire's disease for more than 30 years. the first to make the definitive link between the disease and contaminated hospital water systems, she has developed disinfection and control methods and strategies for prevention of Legionnaire's disease and other waterborne pathogens. Dr. Stout is the author of more than 80 papers and book chapters on Legionnaires, TM disease in water systems of homes, buildings, hospitals, hotels and utility water systems. Her recent studies include evaluation of "green technology" for microbial control in water. She is a member of the American Society for Microbiology, the Association for Professionals in Infection Control, and the American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE), and a member of the ASHRAE Legionella Standards Committee. Dr. Stout received her master's degree and PhD in microbiology from the University of Pittsburgh, and a BS in biology from Clarion University, Clarion, PA.

Ken Rotart, EPA Office of Ground Water and Drinking Water

Ken is a physical scientist in the EPA Office of Ground Water and Drinking Water, where he's worked since 1998. His primary responsibilities are the development and review of drinking water regulations. He has worked on a wide range of topics, including drinking water distribution systems, the Revised Total Coliform Rule, EPA's review of existing regulations and the consideration of water governance in developing countries. He is also currently serving on a National Sanitation Foundation, International Committee for the Prevention of Injury and Disease Associated with Building Water Systems.