

CONNECTICUT DEPARTMENT *of* PUBLIC HEALTH
DRINKING WATER SECTION

Legionella
Role of the Drinking Water Section

Presented by:
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CT DPH Drinking Water Section

Healthy People in Healthy Connecticut Communities

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- Protect the public health of Connecticut residents and visitors that consume public drinking water in Connecticut
- Responsible for purity and adequacy oversight statewide for all public water systems



CT DPH Drinking Water Section Responsibilities

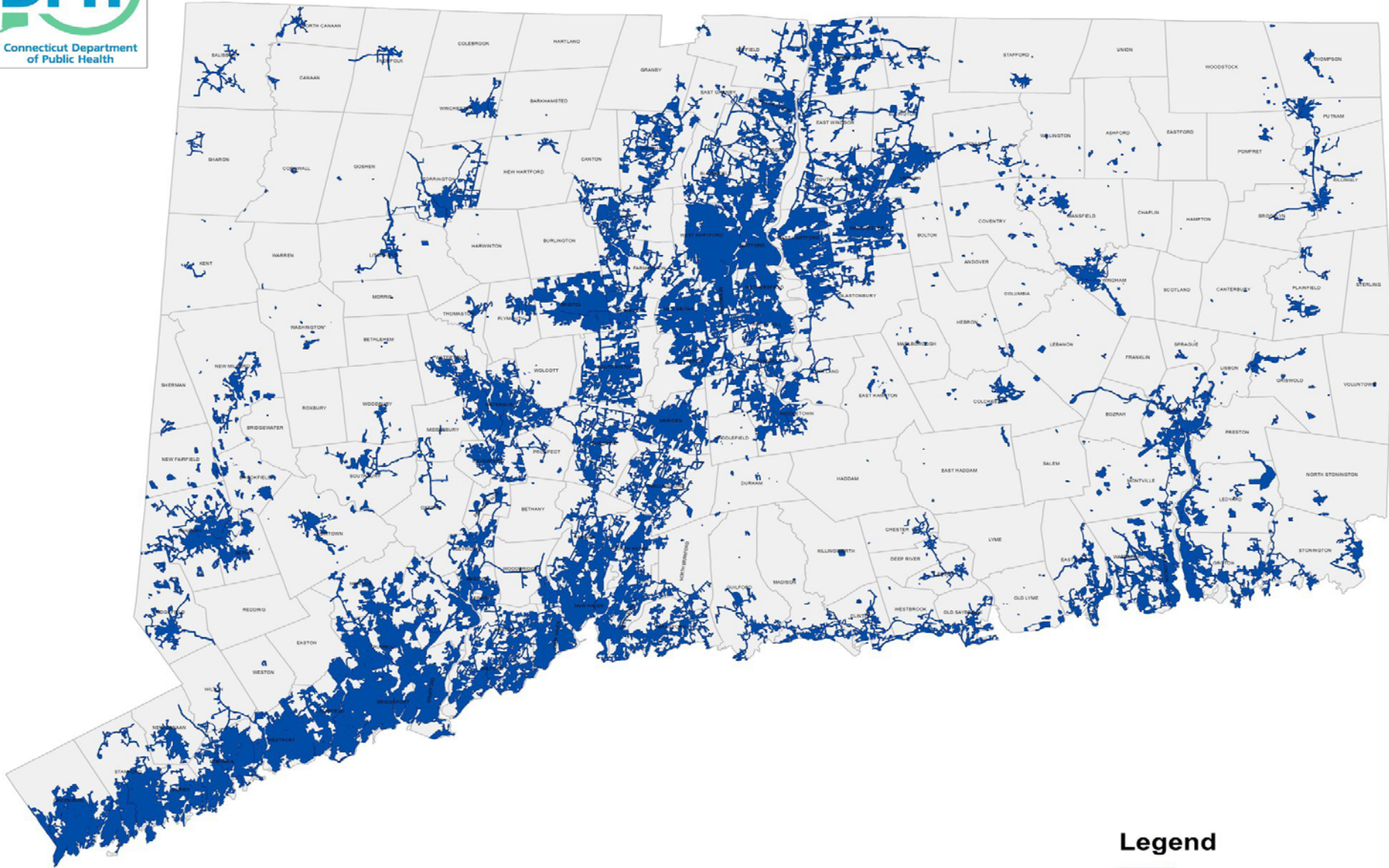
- Responsible - Implementation & Enforcement of the Safe Drinking Water Act and related drinking water State law
- Regulate 2,550 Public Water Systems (PWS)
- 2.8 million CT residents served – 3.5 million total population
- 150 reservoir systems, over 4,000 ground water sources

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Public Water Supply Service Area



Legend

 PWS Service Areas

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Water Supply to Health Care Facilities

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- 46 healthcare facilities (HCF) are regulated Public Water Systems by DPH DWS
- HCF's with an on-site well or source of water supply (with or without treatment) are public water systems
- HCF that is dependent on a public water system (municipal or private) for its water supply but has a treatment within its facility is a PWS per RCSA Sec.19-13-B102(20), 19-13-B102(92) and 19-13-B102(e)(7)(O) *Example: VA Hospital in Newington*
- HCF with no treatment are not considered a PWS, however should know who is the water quality manager for the public water system that supplies water to the facility



Expectations of HCF Administrators – WMP and Water Supply

- Invite the PWS manager to be a member of the HCF water management team
- Consult with the PWS manager as you develop your water management plan (WMP)
- Retain a licensed qualified engineer to assist in developing the WMP and the flushing plan
- Have a flushing plan to reduce stagnation and includes thorough flushing after the PWS notification
- Prevent cross-contamination between hot and cold water pipes, and between cooling towers and domestic water lines

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Expectations of HCF Administrators

- Water Management Plan must include the following:
 - Identify areas where Legionella could grow & spread (e.g. distant sinks & showers, hot tubs, decorative fountains, etc...)
 - Determine what control measures & corrective actions you want to use (e.g. Temperature levels is a control measure; and elevate the temp is a corrective action)
 - Decide how to monitor your control measures (e.g. water tests, temp check, visual inspection, etc...)
 - Establish ways to intervene when control limits are not met
 - Make sure the water management program is periodically verified and validated (testing for legionella is a form of validation)

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Expectations of HCF Administrators

If a HCF that is a customer of a PWS wishes to install permanent treatment on the domestic water supply (cold or hot) because it's deemed necessary per the WMP then:

- 1) talk first to your public water provider
- 2) Consult with DPH/DWS for the regulatory process and approval
- 3) After DPH approval, HCF will be classified as a PWS subject to drinking water regulations (i.e. RCOSA Sections 19-13-B102, 19-13-B51, etc...)

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Water Treatment for Legionella

- Chlorine as a disinfectant
- Monochloramine
- Chlorine Dioxide
- Copper-Silver Ionization
- Ozone
- Ultraviolet Light Disinfection

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Chlorine Treatment System

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Permanently installed and
continuously operated.

Treatment for Legionella

- Treatment will alter water quality characteristics inside the facility and lead to unintended public health consequences such as:
- Elevated lead
- Elevated copper
- Elevated DBPs, Trihalomethanes & THAAs
- Elevated DBPs, chlorite & chlorate
- Elevated nitrate & nitrite
- Corrosion to medical devices & equipment

Recommendations

- Know who's your public water provider
- Talk to your public water provider
- Invite your public water provider to be a member of your water management team
- Consult with your water provider and DPH/DWS before considering water treatment to your facility
- Installing water treatment may make your facility a PWS, subject to rules and regulations

Legionella National Projects -Association of State Drinking Water Administrators

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- Study regulation of installed treatment and SDWA requirements
- Study treatment oversight and operation certification and SDWA requirements
- Connecticut DPH DWS a member of both project teams
- Projects outcomes due late Summer 2019



DPH Drinking Water Section – Water Management Plan Draft Strategy

- How to address existing treatment systems?
- What level of regulation should be in place if treatment exists?
- Who should operate treatment?
- How to address new proposed treatment?
- How to assure that water companies are part of the Water Management Plan (WMP) Team?
- How to assure the WMP's at regulated public water systems recognize current SDWA regulatory requirements?
- How to best work with all parties to assure that WMP's are comprehensively implemented?

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THANK YOU

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