Spring 2018

WISCONSIN EPI EXPRESS

IN THIS ISSUE

PROGRAM UPDATES

STAFF UPDATES:

BCD welcomes the following staff to their new positions:

Ashley Buys, HIV Surveillance Coordinator, ashley.buys@dhs.wisconsin.gov

Emily Lankau, HIV/STD/HCV Surveillance Unit Supervisor, emily.lankau@dhs.wisconsin.gov

Dhana Shrestha, Epidemiologist, STD Program, dhana.shrestha@dhs.wisconsin.gov

Retirements:

Jim Kazmierczak, State Public Health Veterinarian, retired on May 1, 2018. Please call the BCD main line, 608-267-9003, for any questions.

RABIES GRAND ROUNDS VIDEO RECORDING AVAILABLE

Wisconsin State Public Health Veterinarian, Jim Kazmierczak, gave a Grand Rounds presentation on rabies prevention at the University of Wisconsin-Madison School of Medicine and Public Health on February 15, 2018.

ONGOING OUTBREAK INVESTIGATIONS:

Check out the Department of Health Services new Outbreaks and Investigations webpage for up-to-date information on outbreaks and investigations with wide impact in Wisconsin.

NEW EDUCATIONAL MATERIALS:

There are new educational fact sheets on the topics of blastomycosis, cyclosporiasis, influenza, and West Nile Virus.

COMMUNICABLE DISEASE UPDATE WEBINAR SERIES:

The webinar is held on the second Tuesday of every month from 1-2 p.m. at https://connect.wisconsin.gov/monthly-webinar-series/. No registration is necessary.

Wisconsin HIV Partner Services Update

By: Dhana Malla Shrestha, Epidemiologist, STD Program

WHAT ARE HIV PARTNER SERVICES (PS)?

Partner services include a variety of services that are offered to individuals with HIV and their sexual or needle-sharing partners. The primary steps in the partner services process include:

Contacting the newly diagnosed individual to determine whether they are linked to medical services, including HIV treatment, and to provide risk reduction messages.

Discussing the need for the client to notify their sexual and needle-sharing partners about their possible exposure to HIV, and offering assistance in notifying partners.

Interviewing the client and their sexual and needle-sharing partners from the past 12 months. The purpose of the interview is to obtain information about each partner to ensure that they can be located and notified of their exposure to HIV.

Counseling locatable partners about their exposure to infection and providing or referring them to testing, medical care, and other prevention or social services. If a partner tests positive, they are promptly linked to HIV medical care. If a partner tests negative, they are referred for pre-exposure prophylaxis (PrEP) services.

WHAT ARE THE OVERALL GOALS of HIV PS?

Link people with HIV to HIV medical care in order to achieve optimal viral suppression.

Identify new HIV infection by testing partners identified by people with HIV.

WHO PROVIDES HIV PS IN WISCONSIN?

State law requires that all cases of HIV infection and AIDS be reported to the Division of Public Health (DPH).[1]

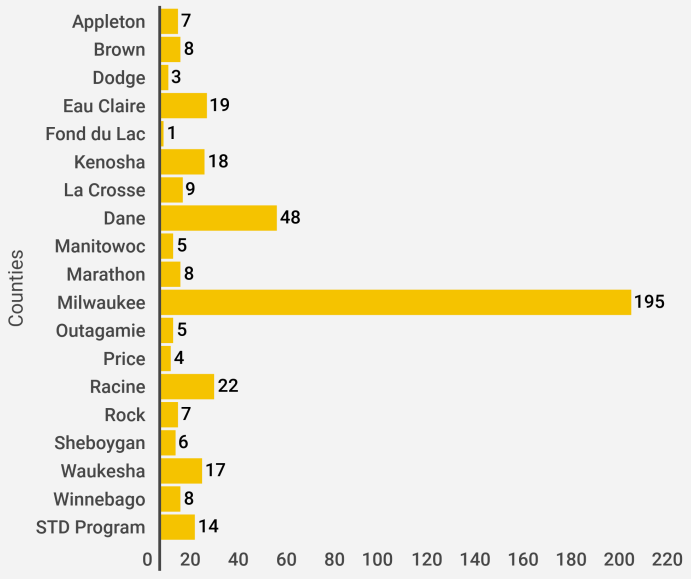
State law authorizes and requires DPH and local health departments (LHD) to conduct surveillance, follow-up, and other public health activities in order to manage and control communicable diseases.

HIV PS were first implemented in Wisconsin in 1988 and are provided by PS providers who are trained public health professionals. Currently, there are 20 LHDs that provide local or regional HIV PS in Wisconsin. The AIDS/HIV Program, located in DPH, coordinates PS activities. A person with HIV is assigned to PS provider and is confidentially contacted by the PS provider. Participation in PS is voluntary. At the local level, HIV PS are conducted in coordination with other sexually transmitted disease notification services.

LHDs PROVIDING SINGLE OR MULTI-JURISDICTION HIV PS

Every year, 400-500 people with HIV are assigned and or reassigned for PS. Figure 1 shows the HIV PS cases assigned to the lead regional and local provider agencies in 2017.

Figure 1. HIV PS Cases Assigned to Lead Regional and Local Provider Agencies, 2017



Wisconsin HIV Partner Services Update

By: Dhana Malla Shrestha, Epidemiologist, STD Program

VALUE OF HIV PS

The value of PS in the control of HIV is widely accepted. However, such services are underused among partners of people with HIV infection. On the basis of evidence of effectiveness and cost-effectiveness of these services, the Centers for Disease Control and Prevention (CDC) strongly recommends that all people with newly diagnosed or reported HIV infection receive PS with active health department involvement. PS are an effective HIV prevention intervention to identify new HIV infection and then link people to care.

RESOURCES

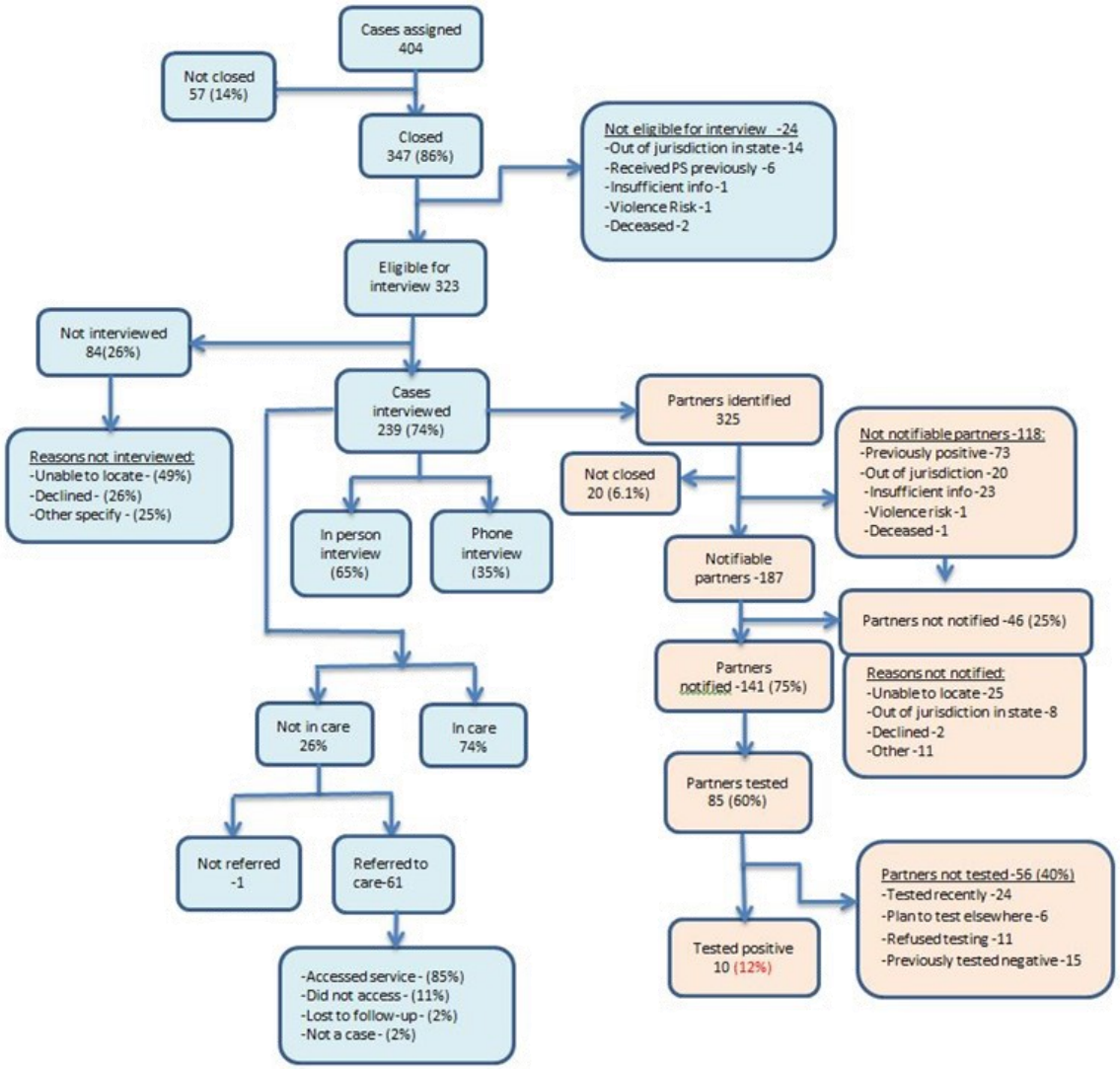
Please contact Tim Pilcher, 608-264-6514 or timothy.pilcher@dhs.wisconsin.gov with any questions or visit the following websites:

- https://www.dhs.wisconsin.gov/aids-hiv/ps.htm
- https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5709a1.htm
- https://effectiveinterventions.cdc.gov/en/HighImpactPrevention/PublicHealthStrategies/PartnerServices.aspx

REFERENCES

[1] Wisconsin Statues and Administrative Codes Related to AIDS and HIV Infection. Retrieved on April 3, 2018, from https://www.dhs.wisconsin.gov/publications/p4/p44295.pdf

Figure 2. Summary of HIV PS activities in 2017



Summary of Lyme Disease Surveillance Practices in Wisconsin

By: Lauren Jensen, Vectorborne Disease Assistant, Vectorborne Program

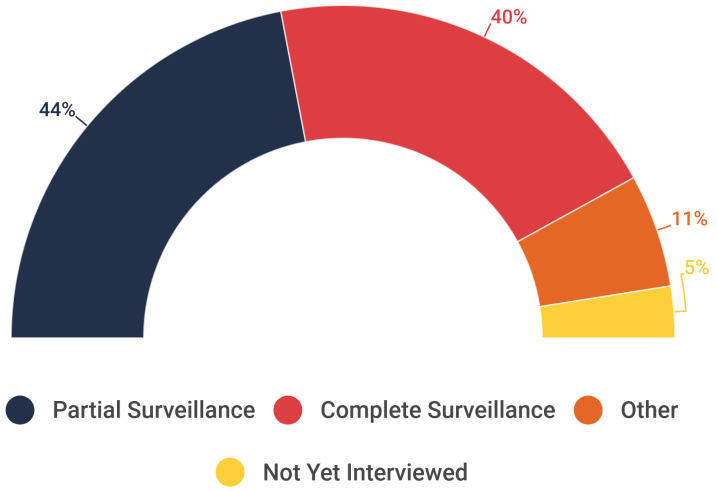
The Wisconsin Vectorborne Disease Program (VBDP) has been busy surveying local health departments (LHDs) across the state about their Lyme disease surveillance practices in order to gain a better understanding of local approaches for Lyme disease investigation, and to measure the burden of this high-incidence disease on public health resources. Interviewees from each local jurisdiction were contacted with questions about their Lyme disease case reporting and follow-up practices, their local surveillance burden for this disease, and any suggestions they might have to improve statewide surveillance. As a result of the interviews, educational materials have been shared by 10 jurisdictions to date, and the VBDP plans to share these materials with public health professionals statewide via SharePoint in the coming months.

SURVEY FINDINGS (see Figure 1)

Partial Surveillance—44% of LHDs. Follow-up done on reports of erythema migrans (EM rash) or Lyme disease lab reports with accompanying clinical information.

Complete Surveillance—40% of LHDs. Follow-up done on all reports of Lyme disease, including positive Lyme disease lab reports *without* accompanying clinical information.

Figure 1. Local Health Department Lyme Disease Surveillance Practices



Other Surveillance Approach—11% of LHDs. Follow-up done is a combination of complete and partial surveillance, or another approach.

Not Yet Surveyed—Approximately 5% of local health departments have not yet been surveyed.

LHD SURVEILLANCE FEEDBACK

Many local health departments found provider follow-up to be the most burdensome aspect of Lyme disease surveillance, with patient follow-up also reported as contributing to the high burden on local surveillance practice. The most common suggestion interviewees shared when asked how the VBDP can improve surveillance and better support local Lyme disease investigation and outreach efforts was a request to provide additional education to health care providers, especially with regard to reporting requirements and guidelines.

Many local health departments found provider follow-up the most burdensome aspect of Lyme disease surveillance.

By: Lauren Jensen, Vectorborne Disease Assistant, Vectorborne Program

In particular, interviewees felt it was important for health care providers to be reminded of the requirement to report all cases of EM rash (even without laboratory evidence), as well as to provide all clinical information necessary for case closeout.

Additionally, there were many requests to educate providers on the public health importance of Lyme disease reporting, onboard additional providers for Wisconsin Electronic Disease Surveillance System (WEDSS) reporting of Lyme disease, and emphasize the need for providers to test for other tickborne diseases in addition to Lyme disease.

FUTURE PLANS

The VBDP plans to develop educational materials to aid in provider education, including an archived, easy-to-share webinar; a provider memo to be distributed at the beginning of each tick season; and a new provider fact sheet. Each of these materials will detail the reporting requirements for Lyme disease and emphasize the importance of thorough Lyme disease surveillance in Wisconsin. In addition to provider education, the VBDP also plans to develop similar educational materials for local health departments, including quick reference guides for test interpretations, surveillance requirements, and WEDSS reporting.

These materials will be designed to support training of new staff and provide annual refreshers for experienced public health professionals looking for a quick review at the beginning of the tick season.

We would like to thank each of our local public health partners for participating in our survey, and for everything you do to support Lyme disease surveillance and investigation in Wisconsin!

QUESTIONS?

For any questions regarding the survey project, educational materials, or Lyme disease surveillance, please reach out to Christine Muganda, Vectorborne Epidemiologist at:

608-266-6419 or

christine.muganda@dhs.wisconsin.gov

Investigating Legionellosis in Wisconsin

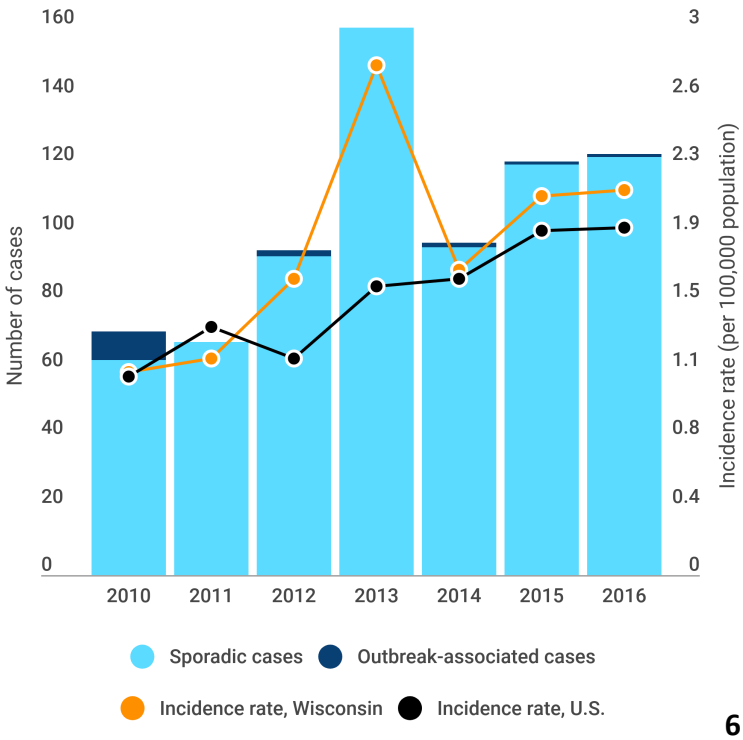
By: Amanda Koch, CSTE Applied Epidemiology Fellow and Anna Kocharian, Epidemiologist

WHAT IS LEGIONELLOSIS?

Legionellosis is a respiratory disease with increasing incidence in Wisconsin and nationwide. The illness, caused by *Legionella* bacteria, manifests in one of two distinct forms: Legionnaires' disease (LD) or Pontiac fever. While Pontiac fever is a mild, self-limiting febrile illness accompanied by cough and myalgia, LD is a severe illness characterized by pneumonia. Legionellosis is a reportable condition in Wisconsin.

During 2010-2016, 720 cases of legionellosis were reported to DPH (annual median: 96 cases; range: 63-160). Of these, 714 (99%) were classified as LD. The median annual incidence per 100,000 persons during these years was 1.67 (range: 1.11-2.79), which is slightly higher than the national reported median of 1.58 (range: 1.09-1.90). Annually reported cases in Wisconsin demonstrate a rising trend, with a peak noted in 2013 (Figure 1). Legionellosis follows a seasonal pattern with the highest number of cases identified during the summer and early fall.

Figure 1. Laboratory-confirmed cases of legionellosis reported annually, Wisconsin, 2010-2016



HOW IS LEGIONELLOSIS SPREAD?

Infection typically occurs after aerosolized droplets containing *Legionella* bacteria are inhaled. *Legionella* are found in natural, freshwater environments, but can become a health concern in man-made water systems (for example, plumbing systems, cooling towers, respiratory therapy devices, decorative fountains, and hot tubs) where certain conditions (for example, warm temperatures, low levels of disinfectant) allow the bacteria to multiply, become aerosolized, and come in contact with vulnerable persons.

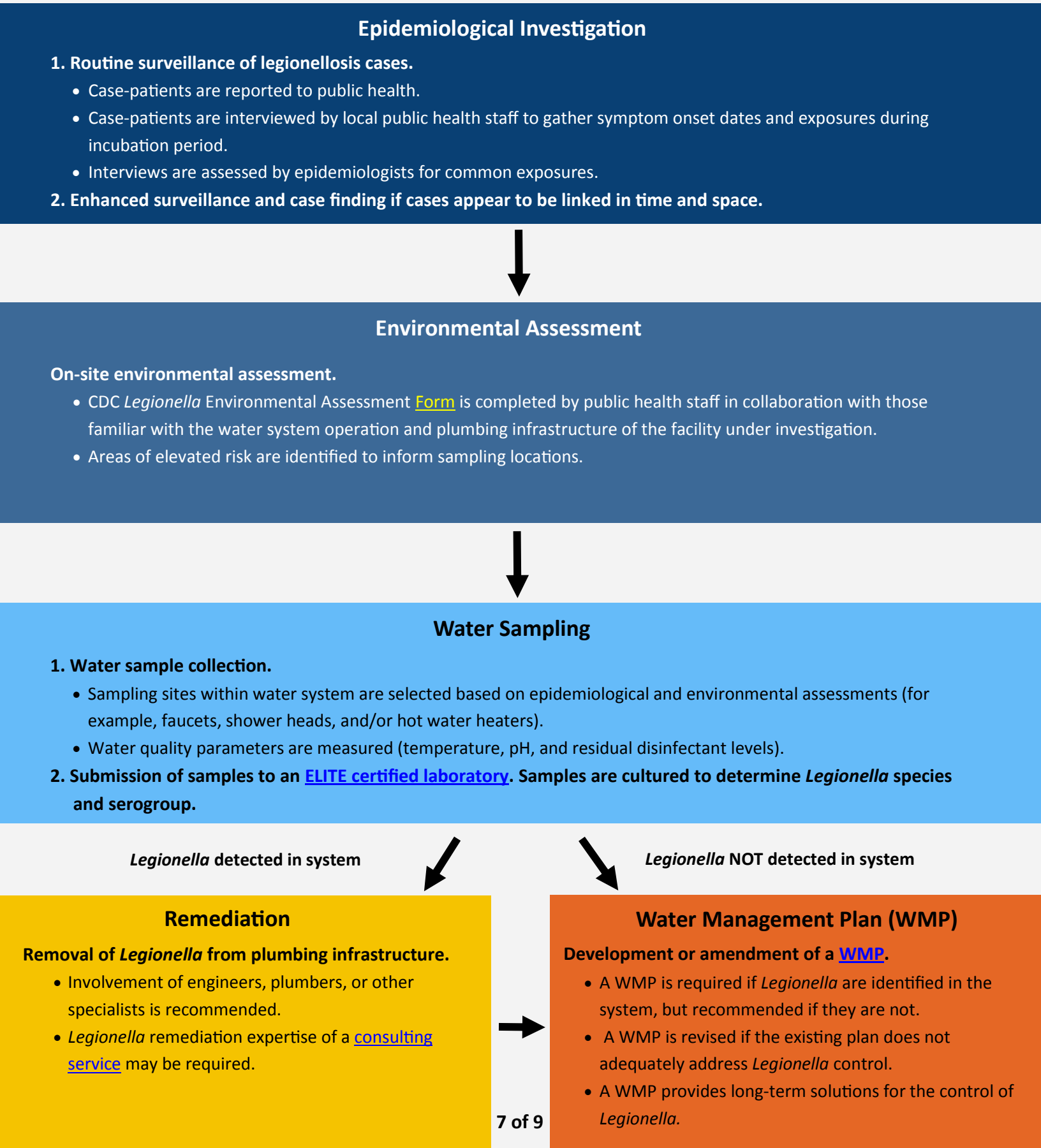
WHO IS AT HIGH RISK FOR BECOMING SICK?

While most healthy individuals do not become ill after exposure to *Legionella*, the illness can be serious for older individuals and those who are immunocompromised. Those at greatest risk for developing legionellosis include people who smoke (current or previous history), those who are 50 years of age or older, and those who have health conditions or use medications that lower the immune system.

Recent *Legionella* investigations at DPH during 2016-2018 have involved various settings, including lodging facilities (for example, motel, hotel, and resort), health care and long-term care facilities, a gaming establishment, and a correctional facility. All investigations have involved an epidemiological investigation, an environmental assessment, water sampling, and, if indicated, remediation and the development or amendment of a water management plan (Figure 2).

Figure 2 summarizes important steps during a *Legionella* investigation. Please note that processes and the involvement of local health departments or tribal health clinics and other state agencies (for example, Department of Agriculture, Trade and Consumer Protection; Department of Safety and Professional Services; Department of Natural Resources) may vary based on exposure setting and other relevant factors. Generally, two or more cases linked to one exposure source and single nosocomial cases are investigated as suspected outbreaks.

Figure 2.



Communicable Disease Case Counts

This report contains a selection of reportable conditions with inclusion based on public health significance and frequency of occurrence. The case counts reflect confirmed and probable cases, for all process statuses. These numbers are not final and are subject to change as confirmatory testing and case follow-up are completed.

***Quarterly case counts should not be considered final and are subject to change.**

Disease	2017 Case Counts	2018 Case Counts				
	Total	Q1	Q2	Q3	Q4	2018 YTD
Enteric/ Gastrointestinal (also includes suspect cases)						
Campylobacteriosis	1,728	264				264
Cryptosporidiosis	725	101				101
Cyclosporiasis	23	1				1
E. coli, Shiga toxin-producing (STEC)	253	5				5
Giardiasis	693	101				101
Hemolytic uremic syndrome	13	0				0
Listeriosis	11	1				1
Salmonellosis	1,040	38				38
Shigellosis	272	28				28
Typhoid fever	3	1				1
Vibriosis (non-cholera)	31	2				2
Yersiniosis	51	0				0
Invasive Bacteria						
Group A Streptococcal disease	289	91				91
Group B Streptococcal disease	533	111				111
Mycotic						
Blastomycosis	114	5				5
Coccidioidomycosis	15	2				2
Histoplasmosis	22	1				1
Respiratory						
Please refer to the weekly respiratory virus surveillance report: https://www.dhs.wisconsin.gov/influenza/weekly-influenza-report.pdf						
Influenza-associated hospitalizations	4,886	5,419				5,419
Influenza, novel	0	0				0
Legionellosis	176	24				24
Tuberculosis	49	15				15
Sexually Transmitted						
Chlamydia trachomatis	27,971	6,865				6,865
Gonorrhea	7,739	1,828				1,828
HIV	245	56				56
Syphilis (all stages)	648	128				128
Vaccine Preventable						
Diphtheria	0	0				0
Haemophilus influenzae invasive disease	126	36				36
Hepatitis B, acute (confirmed cases only)	13	2				2
Hepatitis B, perinatal	0	0				0

Communicable Disease Case Counts (cont.)

Disease	2017 Case Counts	2018 Case Counts				
	Total	Q1	Q2	Q3	Q4	2018 YTD
Vaccine Preventable (continued)						
Measles (rubeola)	0	0				0
Meningococcal disease	4	3				3
Mumps	49	4				4
Pertussis (whooping cough)	756	51				51
Poliomyelitis	0	0				0
Rubella	0	0				0
Streptococcus pneumoniae invasive disease	497	171				171
Tetanus	1	0				0
Varicella (chickenpox)	285	56				56
Vectorborne						
Babesiosis	87	1				1
Ehrlichiosis/ Anaplasmosis	840	11				11
Jamestown Canyon virus infection	44	0				0
La Crosse virus infection	2	0				0
Lyme disease	2,820	90				90
Malaria[1]	10	0				0
Powassan virus infection	2	0				0
Rocky Mountain spotted fever	22	1				1
West Nile virus infection	51	0				0
Yellow fever[1]	0	0				0
Zika virus infection[1,2]	9	1				1
Zoonotic						
Brucellosis	2	1				1
Hantavirus infection	1	0				0
Leptospirosis	2	0				0
Psittacosis	0	0				0
Q Fever (acute)	6	1				1
Rabies (human)	0	0				0
Toxoplasmosis	15	1				1
Transmissible spongiform encephalopathy (human)	17	0				0
Tularemia	0	0				0
Other						
Hepatitis A	16	7				7
Hepatitis C, acute	95	8				8
Hepatitis E, acute	1	0				0
Kawasaki disease	18	0				0
Lymphocytic choriomeningitis virus infection	0	0				0

[1] Denotes diseases where all cases in Wisconsin residents are travel-associated. No local transmission occurs.
[2] Due to enhanced surveillance, asymptomatic confirmed cases are included.