



Butler County Monthly Communicable Disease Surveillance Report

September 2018

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Notifiable Communicable Diseases

September 2018's reported incidence of notifiable communicable diseases increased from the previous month (August 2018) in the jurisdictions of the Butler County General Health District and Hamilton City by 0.6% and 70.0%, respectively. Middletown City's incidence decreased by 30.6%.

Incidence of Hepatitis A increased in Butler County from the previous month (August 2018, n=24) by 254.2%. The cases of Ehrlichiosis (tick-borne), Spotted Fever Rickettsiosis including Rocky Mountain Spotted Fever (tick-borne), and Psittacosis (avian-borne), were all found in the same case. The case of Tularemia (Class A disease) has exposure history to rabbits and lab samples are currently undergoing confirmatory testing at the ODH lab as of 10/5/2018.

Table 1.* Communicable Disease Counts by Jurisdiction (September 2018)

Jurisdiction	Count	Rate per 100,000	Change from Previous Month
Butler County General Health District	163	60.5	↓0.6% from August 2018 (n=164)
Middletown City	59	121.2	↓30.6% from August 2018 (n=85)
Hamilton City	153	244.9	↑70.0% from August 2018 (n=90)
Butler County (all inclusive)	375	98.5	↑10.6% from August 2018 (n=339)

Table 2.* Diseases Reported in Butler County (September 2018)

Disease Name	Jurisdictions:	Butler County General Health District	Middletown City	Hamilton City	Butler County (all inclusive)
Campylobacteriosis		1	0	0	1
Chlamydia Infection		41	16	30	87
CP-CRE		3	0	0	3
Cryptosporidiosis		1	0	0	1
Ehrlichiosis- Ehrlichia chaffeensis		0	1	0	1
Giardiasis		3	0	0	3
Gonococcal Infection		29	16	14	59
Hepatitis A		27	5	53	85
Hepatitis B - acute/chronic/perinatal		11	2	11	24
Hepatitis C – acute/chronic		32	14	33	79
Influenza-associated Hospitalization		0	0	1	1
Legionellosis – Legionnaires' Disease		3	0	0	3
Listeriosis		1	0	0	1
Lyme Disease		2	1	0	3
Malaria		1	0	0	1
Meningitis – aseptic/viral		1	0	0	1
Mumps		1	0	0	1
Pertussis		1	0	0	1
Psittacosis		0	1	0	1
Salmonellosis		1	0	2	3
Shigellosis		1	0	4	5
Spotted Fever Rickettsiosis, including Rocky Mountain Spotted Fever (RMSF)		0	1	0	1
Streptococcal – Group A – invasive		1	1	0	2
Streptococcus pneumoniae – Invasive		1	0	1	2
Syphilis		0	1	4	5
Tularemia		1	0	0	1
Total:		163	59	153	375

*Data is provisional – suspected, probable, & confirmed cases are included in counts except for cases of arboviral encephalitis such as Zika virus disease of which only probable and confirmed cases are reported and Novel Influenza A of which only confirmed cases are reported. Report reflects time period of September 1-30, 2018 unless otherwise noted. Data accessed from the Ohio Disease Reporting System (ODRS) on 10/5/2018.

**Data accessed from the EpiCenter Syndromic Surveillance System (maintained by Health Monitoring Systems, Inc.) on 10/5/2018.

Table 3 outlines most reportable disease counts for Butler County during the month of September 2018 by subgroup categories “Viral Hepatitis”, “STDs”, “Enteric Diseases”, and “Vaccine-Preventable Diseases”. Figure 1 outlines a 5-year view of these counts, broken down by their respective classifications. Viral Hepatitis includes counts for Hepatitis B and C, while excluding counts for Hepatitis A. Sexually-Transmitted Diseases include counts for Chlamydia, Gonorrhea, and Syphilis. Enteric Diseases include counts for Amebiasis, Campylobacteriosis, Cryptosporidiosis, Cyclosporiasis, Shiga Toxin-Producing E. coli O157:H7, Giardiasis, Hepatitis A, Salmonellosis, Shigellosis, and Vibriosis. Vaccine-Preventable Diseases include counts for Influenza-associated hospitalizations, Haemophilus influenzae, Bacterial meningitis, Mumps, Pertussis, invasive Streptococcus pneumoniae, Tetanus, and Varicella, while excluding counts for Hepatitis.

Viral Hepatitis (B and C), sexually-transmitted disease, and vaccine-preventable disease rates in Butler County have stayed fairly consistent from the previous month (August 2018) with no considerable changes and look to be similar to the amount typically seen during this time of year. Enteric disease incidence rates in Butler County continue to see a rise with the current multi-jurisdictional state outbreak of Hepatitis A. Amongst these 98 observed enteric diseases, there were 1 Campylobacteriosis, 1 Cryptosporidiosis, 3 Giardiasis, 85 Hepatitis A, 3 Salmonellosis, and 5 Shigellosis cases. See Figure 1.

Table 4 outlines outbreaks for Butler County during the month of September 2018. On September 17, 2018, there was one reported outbreak of Suspected Norovirus, consisting of 2 staff members and 5 children at a daycare center in Fairfield, OH. No further cases have been reported.

Table 3.* Butler County Reportable Diseases by Subgroups (September 2018)	
Reportable Disease Subgroup	Count
Viral Hepatitis (B and C)	103
Sexually-Transmitted Diseases	151
Enteric Diseases (Including Hepatitis A)	98
Vaccine-Preventable Diseases	5

Communicable Diseases (5 Year View)

Butler County (August 2013 - September 2018)

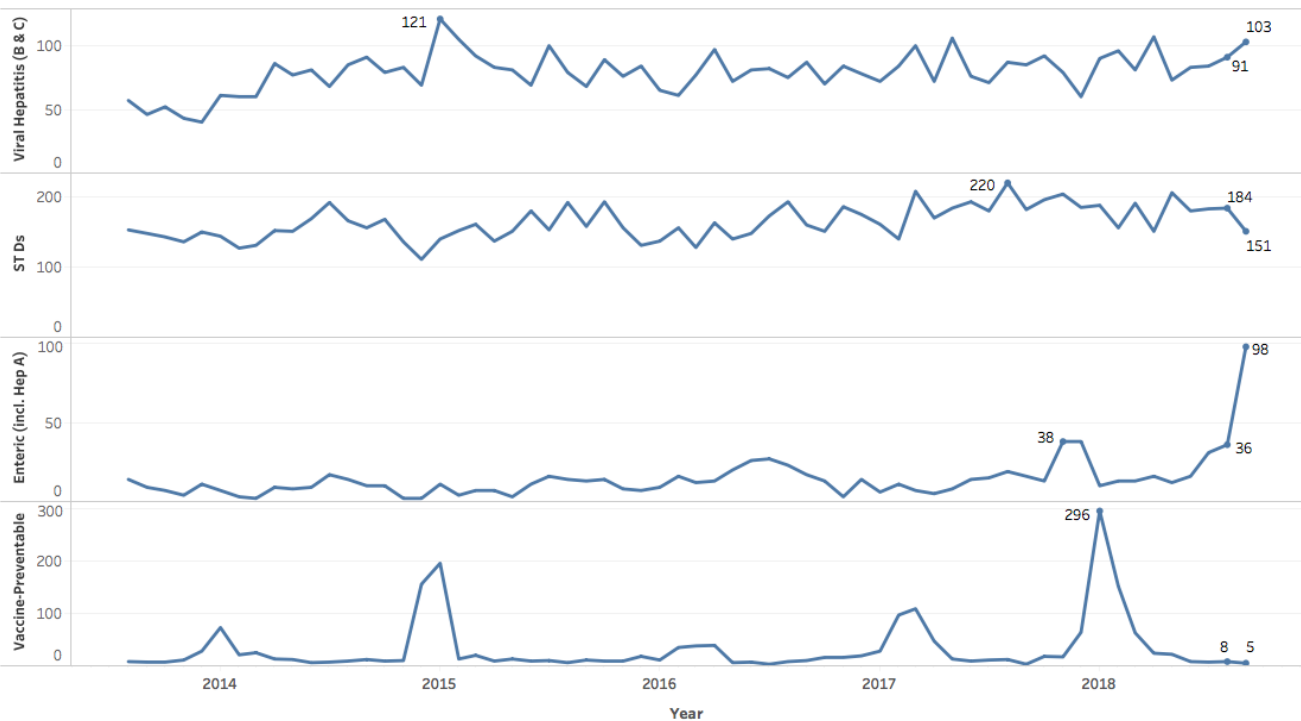


Figure 1.* 5-Year-View of Communicable Disease Counts in Butler County (August 2013 – September 2018)

Table 4.* Butler County Outbreaks (September 2018)				
Disease	Location/Facility Type	# of People Ill	Jurisdiction	City/Township
Norovirus (Suspected)	Day Care Center	7	Butler County General Health District	Fairfield, OH

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Legionellosis – Legionnaires’ Disease

Legionnaires’ (LEE-juh-nares) disease is a serious type of pneumonia (lung infection) caused by *Legionella* bacteria. *Legionella* can also cause a milder illness called Pontiac fever. People can get sick when they breathe in mist or accidentally swallow water into the lungs containing *Legionella*. Most people exposed to *Legionella* do not get sick. However, people 50 years or older, current or former smokers, and people with a weakened immune system or chronic disease are at increased risk.

Legionella is a type of bacterium found naturally in freshwater environments, like lakes and streams. It can become a health concern when it grows and spreads in human-made building water systems like showerheads and sink faucets, cooling towers (structures that contain water and a fan as part of centralized air cooling systems for building or industrial processes), hot tubs that aren’t drained after each use, decorative fountains and water features, hot water tanks and heaters, and large plumbing systems. Home and car air-conditioning units do not use water to cool the air, so they are not a risk for *Legionella* growth.

There are no vaccines that can prevent Legionnaires’ disease. Instead, the key to preventing Legionnaires’ disease is to make sure that building owners and managers maintain building water systems in order to reduce the risk of *Legionella* growth and spread. Legionnaires’ disease requires treatment with antibiotics, and most cases of this illness can be treated successfully. Healthy people usually get better after being sick with Legionnaires’ disease, but they often need care in the hospital.

According to the CDC, about 1 out of every 10 people who gets sick with Legionnaires’ disease will die due to complications from their illness. For those who get Legionnaires’ disease during a stay in a healthcare facility, about 1 out of every 4 will die.

Butler County has observed an increase in the number of Legionnaires’ disease cases in recent years. See Figure 2. However, this can be due to a multitude of factors. A shift towards awareness of Legionnaires’ disease by physicians in recent years is a likely reason for the observed increase in cases.

Legionnaires' Disease Cases by Year Reported

Butler County Residents, 2013-2018 (up to 10/3/2018)

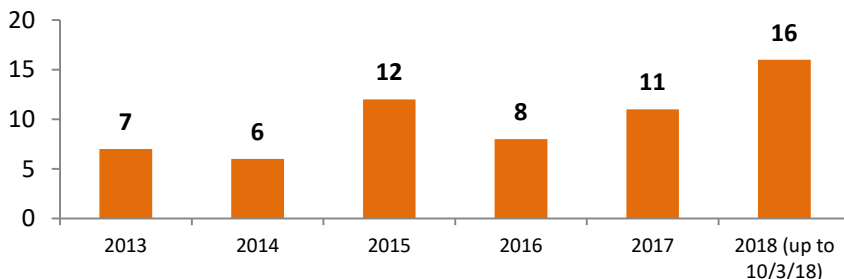


Figure 2.* Butler County Legionnaires’ Disease Cases by Year Reported (2013 – 2018, up to 10/3/18)

A *Legionella* water management program consists of:

- 1 Establishing a water management program team.
- 2 Describing the building water systems using words and diagrams.
- 3 Identifying areas where *Legionella* could grow and spread.
- 4 Deciding where control measures should be applied and how to monitor them.
- 5 Establishing ways to intervene when control limits are not met.
- 6 Making sure the program is running as designed and is effective.
- 7 Documenting and communicating all the activities.

www.cdc.gov/legionella/WMPtoolkit

SOURCE: ASHRAE 188: Legionellosis: Risk Management for Building Water Systems June 26, 2015.

Legionnaires’ disease is on the rise

SOURCE: National Notifiable Diseases Surveillance System, CDC, 2000–2014.

Figure 3.* Legionnaires’ Disease Water Management Program Infographic and Chart (Reported Cases/100,000 people, 2000-2014) Source: CDC

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