ANNUAL COMMUNICABLE DISEASE REPORT 2022



Licking County Health Department

675 Price Road Newark, Ohio 43055 *www.lickingcohealth.org*

SUMMARY OF EVENTS

The Licking County Health Department (LCHD) moved to the demobilization phase of the COVID-19 pandemic response in 2022. LCHD is still collecting data and has created an internal dashboard to track local case activity against historical data. Thresholds and activity levels have been established for surveillance purposes.

Reported cases of Lyme disease have increased and hit an all-time high of 162 cases. Tuberculosis remains an issue with 6 cases in 2022 after having 5 cases reported in 2021. In addition, LCHD responded to incidents involving Measles and Mpox but did not have any cases reported in Licking County.

COVID-19

COVID-19 was the top reportable disease in 2022 for Licking County with 19,484 cases reported. LCHD entered the demobilization phase of the pandemic response but continued to track data and prioritize sensitive settings including Long Term Care Facilities (LTCF). School age kids were also a top priority, but no issues were identified for any of the district schools in 2022. LCHD continues to dispense its stockpile of COVID-19 test kits to the community. Initially, kits were passed out to the community utilizing points of dispensing (POD) plans, but are now available by request as supplies last.

LYME DISEASE

Reported cases of Lyme disease in 2022 increased by 10.2% compared to 2021. Due to surge, cases were prioritized based on laboratory and clinical information for follow up investigations. Future plans are looking at increasing staffing to support full case investigations, environmental health field surveillance, and continued awareness in the community on Lyme disease regarding humans and pets.

MPOX

In May 2022, Ohio confirmed its first case of Mpox which prompted local investigations. LCHD responded to several incidents involving potential exposures and submitted specimens for laboratory testing. Ultimately, Licking County did not have any confirmed cases of Mpox. LCHD was able to secure small amounts of vaccine and distributed doses to individuals meeting criteria set by the Centers for Disease Control and Prevention (CDC).

MEASLES

A multi-jurisdictional outbreak of Measles was identified in October 2022 which originated in Columbus, Ohio. Impacted counties with confirmed cases included Clark, Fairfield, Franklin, Madison, Richland, Ross, and Union. LCHD was notified about 41 county residents that were possibly exposed to the virus, which required prompt investigations to evaluate levels of protection against Measles. In some situations, contacts were placed in quarantine to monitor their health status and see if they became infected with Measles. At the conclusion of the outbreak, LCHD did not have anyone test positive or develop Measles.

TUBERCULOSIS

LCHD continues to address an emergence of Tuberculosis cases in the county. Case investigations are intensive and require a significant amount of time, lab testing, and regimens of antibiotics. LCHD staff also evaluated several cases of latent tuberculosis which need a separate course of follow-up. Challenges are arising in the county with finding providers to effectively treat patients who do not have a primary care physician (PCP).

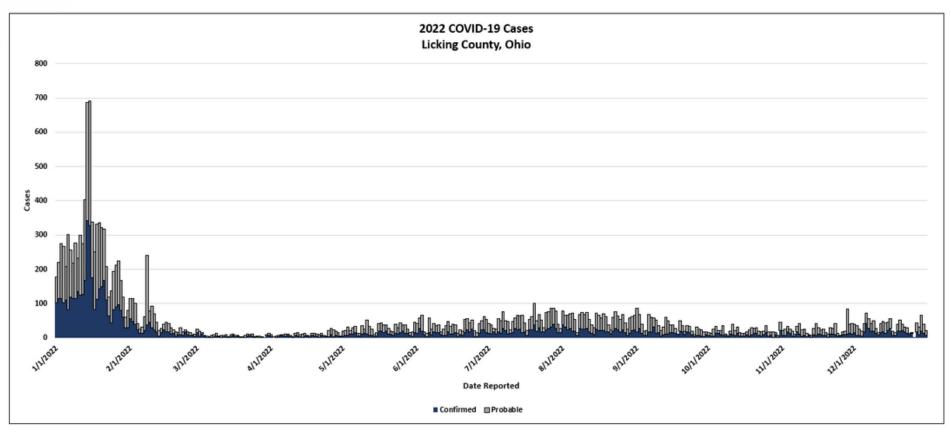


COVID-19

COVID-19

The seasonal trends LCHD identified with COVID-19 cases from previous years were not as evident in 2022. Increased case counts were seen early in 2022, but once they tapered off, activity levels remained consistent for the rest of the year. With at-home test kits being widely available, it is possible many individuals are not reporting positive COVID-19 test results.

FIGURE 1: COVID-19 EPI CURVE



COVID-19 DEATHS

COVID-19 deaths decreased by 59.4% going from 271 in 2021 to 110 in 2022. 90% of deaths in 2022 were over the age of 60 years old. The Centers for Disease Control and Prevention (CDC) note that age is one of the key risk factors for COVID-19 mortality with adults aged \geq 65 years having the highest mortality rates. In addition to age, differences between sex have been seen with males contributing higher deaths than females.

TABLE 1: COVID-19 CASE CLASSIFICATION

2022 COVID-19 Cases								
Licking County, Ohio								
Month	Suspected	Probable	Confirmed	Deaths				
January	5	4,485	3,723	48				
February	0	850	552	22				
March	0	138	126	5				
April	0	201	139	0				
May	1	559	346	1				
June	0	730	420	4				
July	0	1,061	636	5				
August	0	1,161	640	5				
September	1	730	383	6				
October	0	417	265	2				
November	1	524	266	5				
December	0	646	478	7				
TOTAL	8	11,502	7,974	110				

TABLE 2: COVID-19 DEATHS BY AGE

COVID-19 Age Breakdown Deaths							
Age Group	Death Count	Percent					
0-19	1	0.9%					
20-29	1	0.9%					
30-39	0	0.0%					
40-49	3	2.7%					
50-59	5	4.5%					
60-69	19	17.3%					
70-79	33	30.0%					
80+	48	43.6%					
TOTAL	110						

TABLE 3: COVID-19 DEATHS BY GENDER

COVID-19 Gender Breakdown Deaths							
М	ale	Fen	Female				
Count	Percent	Count	Percent	TOTAL			
60	54.5%	50	45.5%	110			



LYME DISEASE

LYME DISEASE

Reported cases of Lyme disease increased by 10.2% with 162 cases in 2022 compared to 147 cases in 2021. Around 93% of reported cases only met the "suspected" case definition and this was due to a variety of reasons. LCHD is working with providers to improve reporting and collect all needed information to classify cases as "confirmed".

Although Licking County's incidence rate increased in 2022, it's ranking amongst other counties in Ohio dropped to 19th from 16th in 2021. This indicates other counties in Ohio are seeing increases and this can be shown with the below map of Ohio plotting the top highest incidence rates. The Ohio Department of Health (ODH) along with local health department's continue to raise awareness on Lyme disease in Ohio.

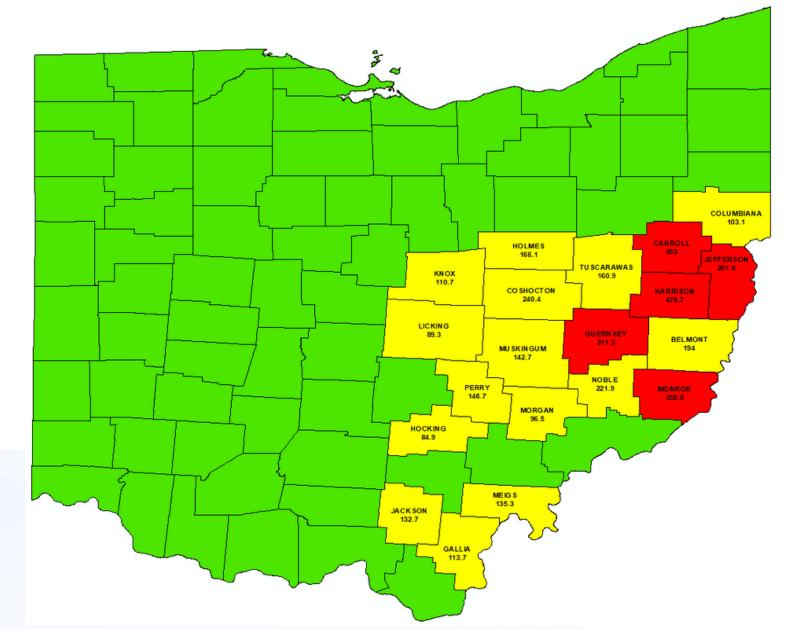


FIGURE 2: OHIO LYME DISEASE RATES

FIGURE 3: BLACK-LEGGED DEER TICK



TABLE 4: TOP COUNTIES FOR LYME DISEASE

2022 Top 20 Counties in Ohio for Lyme Disease							
	Rate	per 100,000					
Rank	County	Cases	Rate				
1	Harrison	72	478.7				
2	Monroe	49	358.9				
3	Carroll	95	353.0				
4	Guernsey	121	311.3				
5	Jefferson	171	261.8				
6	Coshocton	88	240.4				
7	Noble	32	221.9				
8	Belmont	130	194.0				
9	Holmes	73	166.1				
10	Tuscarawas	148	160.9				
11	Perry	53	146.7				
12	Muskingum	123	142.7				
13	Meigs	31	135.3				
14	Jackson	43	132.7				
15	Gallia	34	113.7				
16	Knox	69	110.7				
17	Columbiana	105	103.1				
18	Morgan	14	96.5				
19	Licking	162	89.3				
20	Hocking	24	84.9				



INFLUENZA

INFLUENZA

LCHD collects flu data through the department's Influenza Reporting Information System (IRIS) and has data going back to 2010. Data is used to forecast flu seasons and detect any unusual incidents that may occur outside of seasonal trends. Historical data is used to develop thresholds and measure against current data.

Flu activity in 2022 hit slightly early with cases peaking around Week 48. Per LCHD's Flu Dashboard, peak activity reached an activity level of "moderate-high" and maintained this level for six weeks. No other spikes of activity were seen during the 2022-2023 season which resulted in a shorter timeframe compared to prior flu seasons.

TABLE 5: FLU TOTALS BY TYPE

2022 Flu Cases - Licking County, Ohio								
Туре	Rapid A	Rapid B	Symptomatic	Hospitalized				
TOTAL	876	167	54	45				

FIGURE 4: FLU EPI CURVE

	2022 Flu Cases - Licking County, Ohio	
160		
140		
120		
100		
Cases 08		
60		





SEXUALLY TRANSMITTED INFECTIONS (STIs)

Chlamydia and Gonorrhea continue to be two of the top reportable diseases in Licking County, but both decreased in 2022 compared to 2021. Chlamydia decreased by 13.5% and Gonorrhea by 47.6%. When looking at reinfections among Chlamydia cases, around 33.7% of cases had prior STI infections. For Gonorrhea cases, 18.6% of cases were coinfected with Chlamydia at the time of diagnosis and 44.9% of cases had prior STI infections.

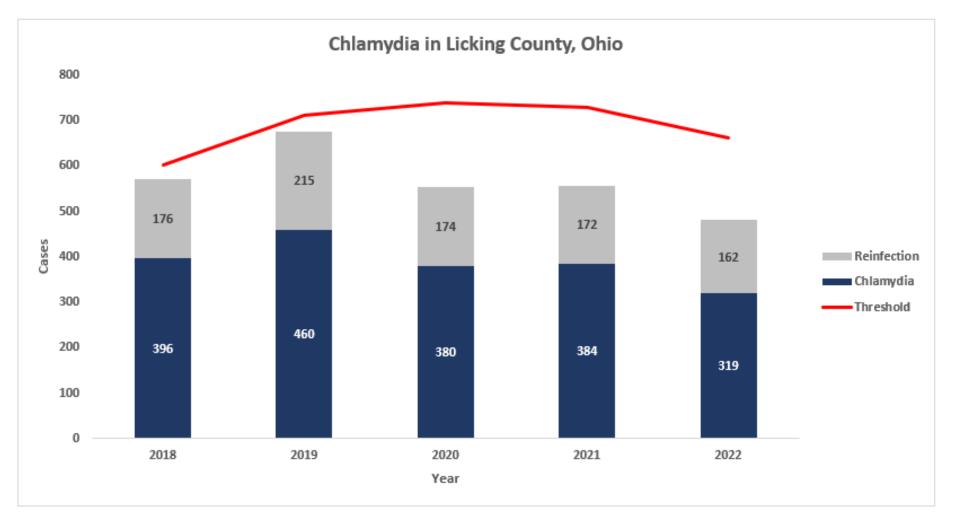
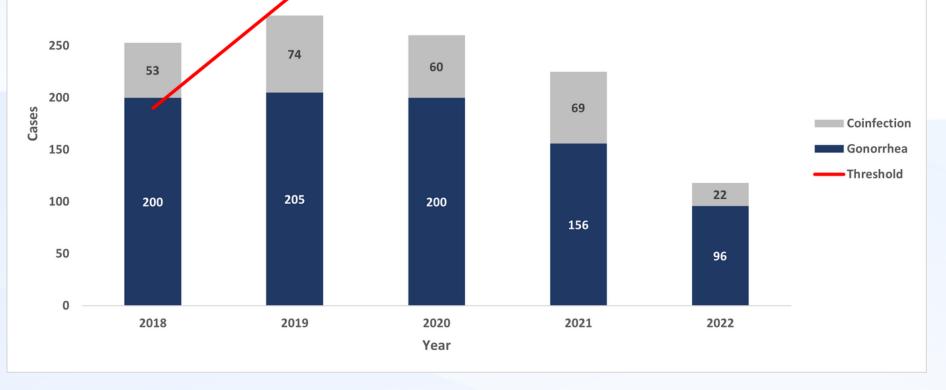


FIGURE 5: CHLAMYDIA LICKING COUNTY

FIGURE 6: GONORRHEA LICKING COUNTY

Gonorrhea in Licking County, Ohio







TOP REPORTABLE DISEASES

TOP REPORTABLE DISEASES - REGIONAL COMPARISON

The top reportable diseases in Licking County were compared to other counties within the Central Ohio region. For an even comparison, incidence rates were converted to per 100,000 to account for population differences between counties. Based on population in the Central Region, Licking County ranks 3rd behind Franklin and Delaware Counties. Communicable disease rates should coincide with population and the only disease where Licking County exceeded it's ranking of 3rd was for Lyme disease. Licking County ranked 2nd in the region with the eastern portion making up the highest rates.

Lyme disease cases continue to increase across Ohio as the range of blacklegged tick populations expand to the west in the state. LCHD is attempting to collect additional data on Lyme disease and raise awareness in the community on early detection and prevention.

Central Region	Chlamydia		Gonorrhea		Lyme Disease Hepatiti		Hepatitis	Hepatitis C - chronic Ca	Campylobacteriosis		Hepatitis B - chronic		Salmonellosis	
Counties	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Crawford	63	151.7	22	53.0	4	9.6	25	60.2	6	14.5	6	14.5	6	14.5
Delaware	342	151.1	78	34.5	16	7.1	44	19.4	40	17.7	38	16.8	20	8.8
Fairfield	271	166.4	69	42.4	56	34.4	89	54.6	24	14.7	34	20.9	21	12.9
Fayette	59	204.6	20	69.4	0	0.0	25	86.7	14	48.5	5	17.3	1	3.5
Franklin	9,852	745.3	4,813	364.1	108	8.2	898	67.9	273	20.7	555	42.0	172	13.0
Hardin	65	213.7	12	39.5	4	13.2	29	95.3	7	23.0	10	32.9	1	3.3
Knox	103	163.0	20	31.7	71	112.4	24	38.0	17	26.9	6	9.5	6	9.5
Licking	481	265.2	118	65.1	162	89.3	97	53.5	42	23.2	21	11.6	20	11.0
Logan	128	278.0	18	39.1	7	15.2	32	69.5	12	26.1	4	8.7	8	17.4
Madison	83	190.6	31	71.2	4	9.2	53	121.7	12	27.6	9	20.7	8	18.4
Marion	231	357.4	57	88.2	1	1.5	73	112.9	18	27.8	64	99.0	8	12.4
Morrow	67	189.6	14	39.6	5	14.1	13	36.8	10	28.3	3	8.5	12	34.0
Pickaway	153	254.9	35	58.3	8	13.3	346	576.4	13	21.7	22	36.7	8	13.3
Union	159	237.7	37	55.3	4	6.0	140	209.3	12	17.9	16	23.9	12	17.9
Wyandot	53	245.7	8	37.1	2	9.3	11	51.0	10	46.4	4	18.5	3	13.9

TABLE 6: TOP REPORTABLE DISEASES - REGIONAL COMPARISON

TABLE 7: TOP REPORTABLE DISEASES - LICKING COUNTY VS. OHIO

2022 Top Reportab	le Diseases				
Licking County	, Ohio				
Class A	Lickin	g County	Ohio		
	Cases	Rate	Cases	Rate	
COVID-19	19,484	10,743.3	1,223,217	10,405.0	
Sexually Transmitted Infections (STIs)	Lickin	g County	Oh	io	
Sexually Hulisinittee intections (Shay	Cases	Rate	Cases	Rate	
Chlamydia	481	265.2	56,639	481.8	
Gonorrhea	118	65.1	24,331	207.0	
Influenza Cases	Lickin	g County	Ohio		
	Cases	Rate	Cases	Rate	
influenza (IRIS)	1,097	604.9	N/	/Α	
Influenza-associated hospitalization	45	24.8	9,580	81.5	
Vector-Borne Diseases	Lickin	g County	Ohio		
	Cases	Rate	Cases	Rate	
Lyme Disease	162	89.3	3,119	26.5	
Hepatitis	Licking County		Ohio		
nepatitis	Cases	Rate	Cases	Rate	
Hepatitis A	10	5.5	366	3.1	
Hepatitis B (including delta) - acute	2	1.1	144	1.2	
Hepatitis B (including delta) - chronic	21	11.6	3,422	29.1	
Hepatitis B - Perinatal Infection	4	2.2	179	1.5	
Hepatitis C - acute	3	1.7	120	1.0	
Hepatitis C - chronic	97	53.5	10,702	91.0	
Hepatitis E	0	0.0	18	0.2	
Enteric Diseases	Lickin	g County	Ohio		
	Cases	Rate	Cases	Rate	
Campylobacteriosis	42	23.2	2,184	18.6	
Salmonellosis	20	11.0	1,404	11.9	
E.coli, Shiga Toxin Producing (O157:H7, Not O157, Unknown Serotype)	7	3.9	549	4.7	
Waterborne Diseases	Lickin	Licking County		iio	
	Cases	Rate	Cases	Rate	
Giardiasis	15	8.3	735	6.3	
Cryptosporidiosis	8	4.4	537	4.6	
*Rates are per 100,000 persons					
Licking County population: 181,359 (Source: July 1, 2022 US Census Quick	Facts)				
*Ohio population: 11,756,058 (Source: July 1, 2022 US Census QuickFacts)					

