HAMILTON COUNTY PUBLIC HEALTH

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Hamilton County Chlamydia and Gonorrhea Quarterly Report

2022 4th Quarter

Hamilton County Public Health
Division of Epidemiology and Assessment

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Date Reported: March 2023

Chlamydia and Gonorrhea Surveillance Summary

This quarterly report was created as a surveillance effort to help track and prevent new cases of chlamydia and gonorrhea within Hamilton County. Chlamydia and gonorrhea are Class B reportable diseases. When an individual tests positive for chlamydia/gonorrhea, the results are sent to the Ohio Disease Reporting System (ODRS). This quarterly report features total case counts and demographic data. The purpose of collecting and distributing demographic data are to inform programming, community partners, and stakeholders so the best effort can be made to diagnose, prevent, and treat chlamydia and gonorrhea infections in our community. These data can provide a snapshot of chlamydia and gonorrhea surveillance in the region but does not always tell the entire story. To fully understand the situation, community voices, stakeholders, and other sources should be considered. These data are provisional and subject to change as there is lag time in reporting and cases may be added or removed. Ohio Department of Health specifically disclaims responsibility for analyses, interpretations or conclusions.

Email Jacob.Henderson@Hamilton-Co.Org with any questions regarding this report.

Data downloaded from Ohio Disease Reporting System (ODRS) on 3/9/2023.

Figure 1. Chlamydia Cases by Year in Hamilton County

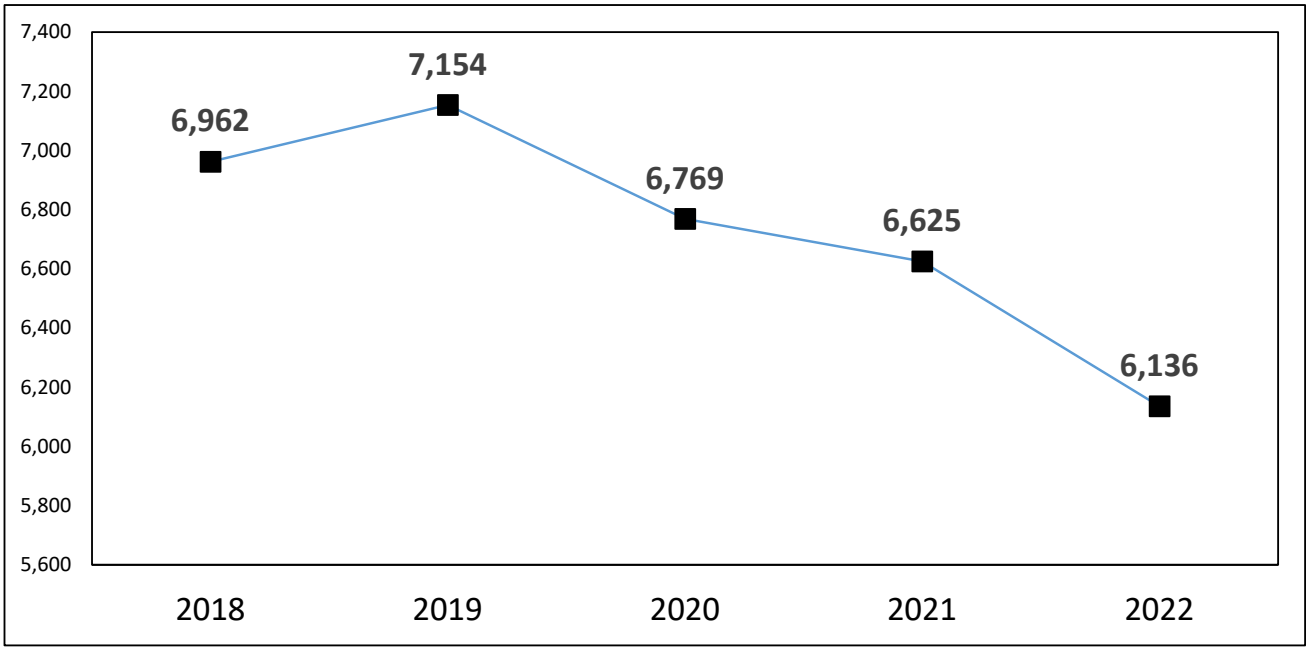


Table 1 displays the breakdown of new chlamydia cases for Hamilton County residents from January 2021 through December 2022 by month. Red text with a "up arrow" indicates a percent increase compared to the month of the prior year. There has been a **7.4%** decrease in year 2022 compared to year 2021.

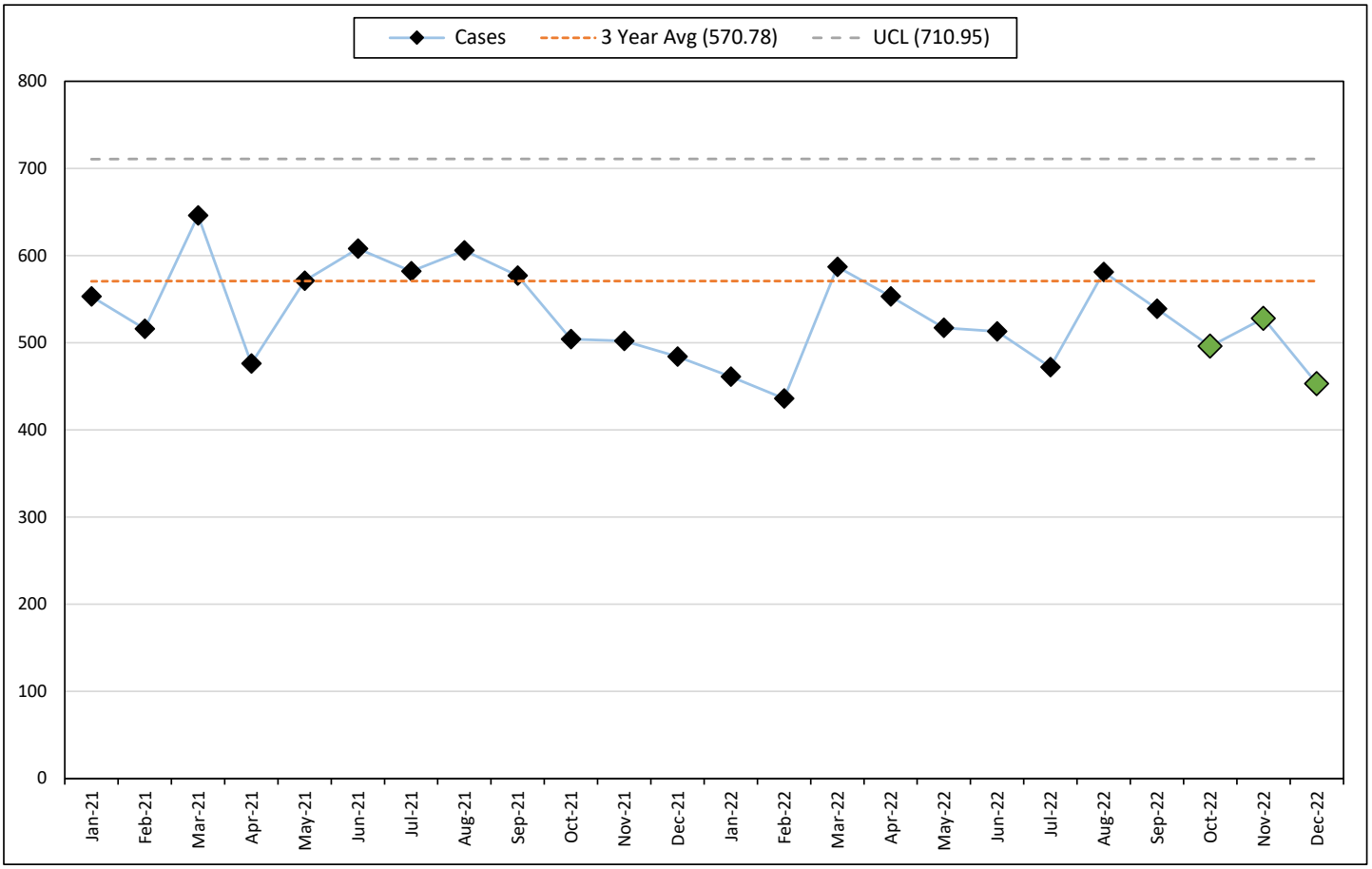
Table 1. Hamilton County New Chlamydia Infections by Month

Month	Chlamydia Cases 2021	Chlamydia Cases 2022	% Change
January	553	461	-16.6%↓
February	516	436	-15.5%↓
March	646	587	-9.1%↓
April	476	553	16.2%↑
May	571	517	-9.5%↓
June	608	513	-15.6%↓
July	582	472	-18.9%↓
August	606	581	-4.1%↓
September	577	539	-6.6%↓
October	504	496	-1.6%↓
November	502	528	5.2%↑
December	484	453	-6.4%↓
Total	**6,625**	**6,136**	**-7.4%↓**

These data are provisional and subject to change.

Figure 2 shows a surveillance control chart. The dashed orange line is the previous 3-year average (2019, 2020, and 2021) for new chlamydia infections by month. The previous 3-year average is 570.78 new chlamydia infections per month. The dashed gray line is the upper control limit (UCL) with a value of 710.95. The diamonds on the blue line graph show the actual number of new chlamydia infections by month. The green diamonds are the months from the most recent quarter. A single point above or near the UCL or consecutive points above the average may signal anomalies that need to be investigated. When there are a small number of cases it may be difficult to distinguish random fluctuations in disease/injury incidence from true changes in the underlying risk for the disease/injury.

Figure 2. Hamilton County New Chlamydia Infections Control Chart



The average is found using chlamydia counts by month for the previous 3 years (2019, 2020, and 2021). A standard deviation is calculated using the same time frame. The upper control limit is determined by multiplying the standard deviation by 2 and adding the 3-year average. These data are provisional and subject to change.

Table 2 shows demographic data in Hamilton County. Highest number percentages are highlighted in blue. For 2022, Female (69.5%), Black (58.6%), and 15-24year olds (63.6%) were the demographics that made up the highest percentages of new chlamydia infections.

Table 2. Hamilton County Chlamydia Morbidity

	2021		2022	
	#	%	#	%
Gender				
Male	2,145	32.4%	1,868	30.4%
Female	4,480	67.6%	4,265	69.5%
Unknown/Null	0	0.0%	3	0.1%
Race				
Black	3,512	53.0%	3,596	58.6%
White	1,162	17.5%	1,091	17.8%
Multi	247	3.7%	255	4.2%
Other	391	5.9%	374	6.1%
Unknown/Null	1,313	19.8%	820	13.4%
Age Group				
<14	27	0.4%	32	0.5%
15-24	4,140	62.5%	3,900	63.6%
25-34	1,811	27.3%	1,636	26.7%
35-44	440	6.6%	371	6.1%
45-54	106	1.6%	111	1.8%
55-64	34	0.5%	20	0.3%
65+	15	0.2%	15	0.2%
Unknown/Null	52	0.8%	51	0.8%

Percentages may not total to 100 due to rounding. Percentages are based on availability of data for all cases. These data are provisional and subject to change.

Figure 3. Gonorrhea Cases by Year in Hamilton County

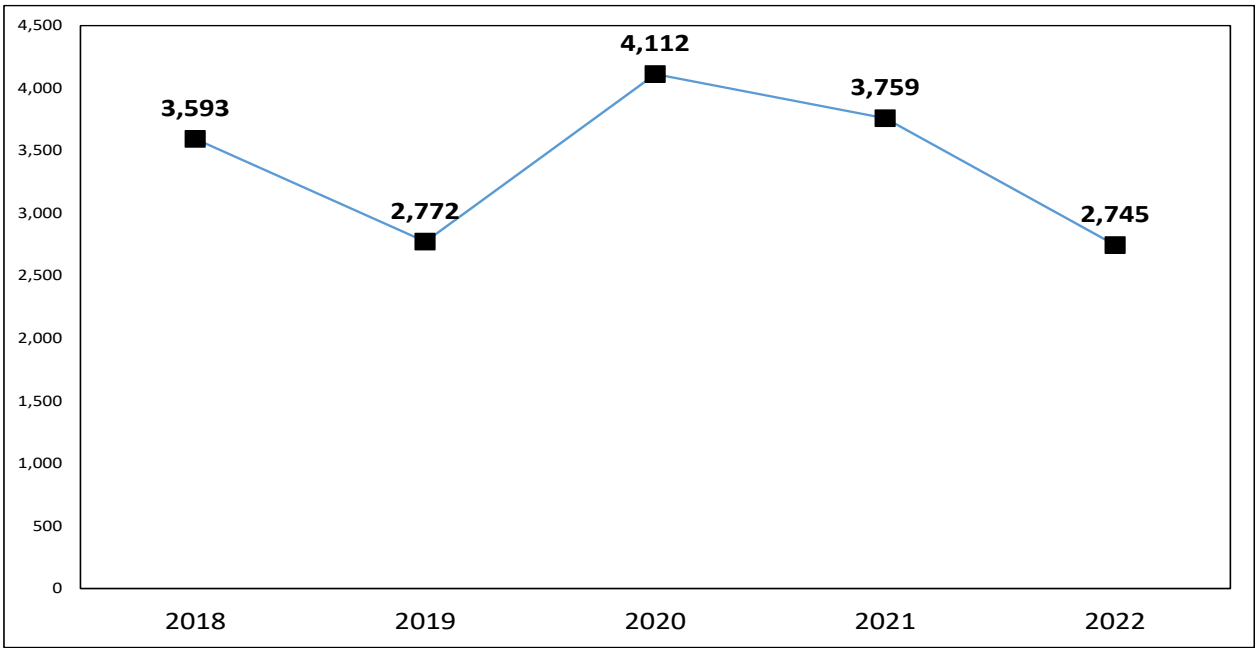


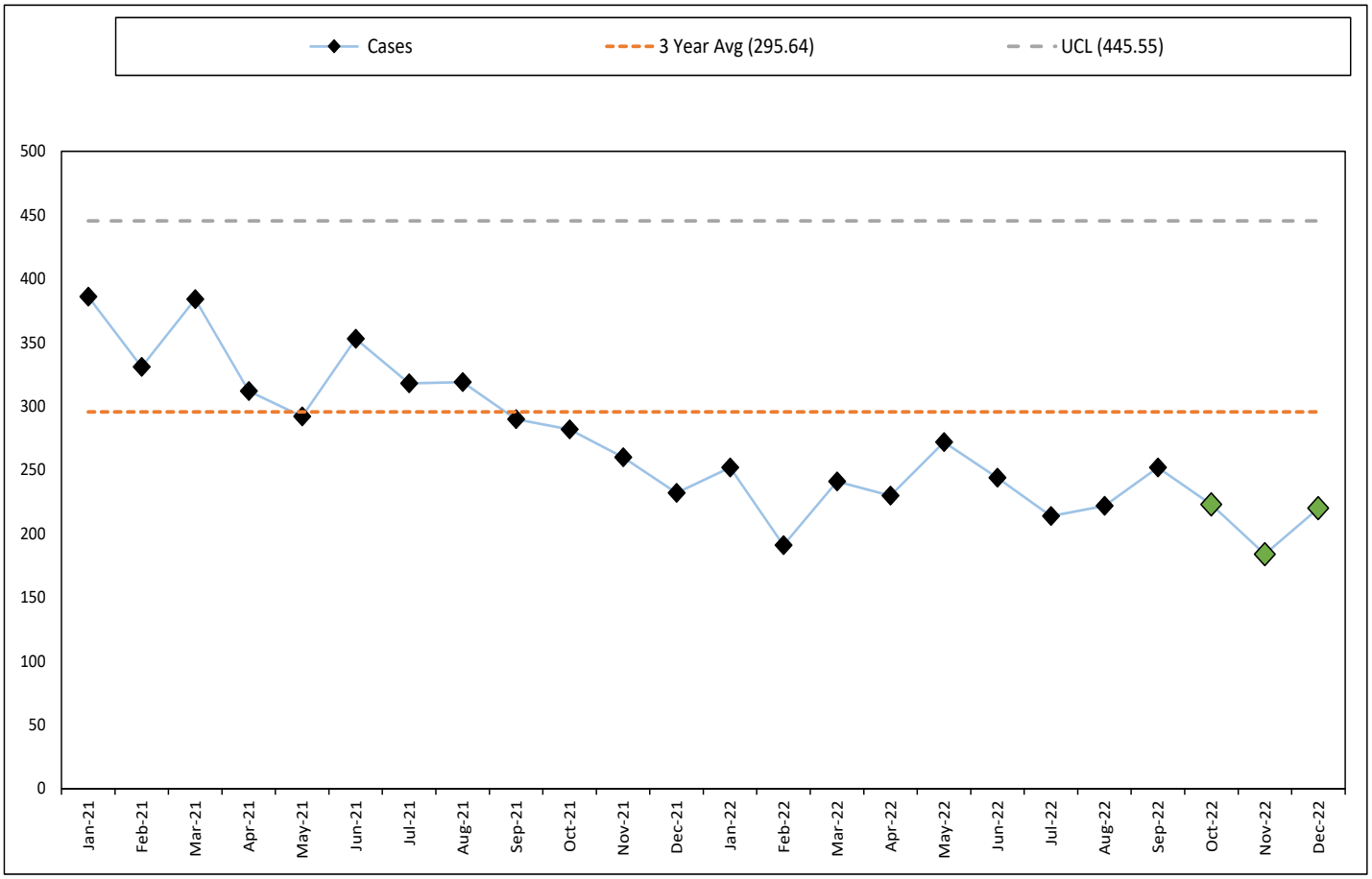
Table 5 displays the breakdown of new gonorrhea cases for Hamilton County residents from January 2021 through December 2022 by month. There has been a **27%** decrease in year 2022 cases compared to year 2021.

Table 3. Hamilton County New Gonorrhea Infections by Month			
Month	**Gonorrhea Cases 2021**	**Gonorrhea Cases 2022**	**% Change**
January	386	252	-34.7%↓
February	331	191	-42.3%↓
March	384	241	-37.2%↓
April	312	230	-26.3%↓
May	292	272	-6.8%↓
June	353	244	-30.9%↓
July	318	214	-32.7%↓
August	319	222	-30.4%↓
September	290	252	-13.1%↓
October	282	223	-20.9%↓
November	260	184	-29.2%↓
December	232	220	-5.2%↓
Total	**3,759**	**2,745**	**-27.0%↓**

These data are provisional and subject to change.

Figure 4 shows a surveillance control chart. The dashed orange line is the previous 3-year average (2019, 2020, and 2021) for new gonorrhea infections by month. The previous 3-year average is 295.64 new gonorrhea infections per month. The dashed gray line is the upper control limit (UCL) with a value of 445.55. The diamonds on the blue line graph show the actual number of new gonorrhea infections by month. The green diamonds are the months from the most recent quarter. A single point above or near the UCL or consecutive points above the average may signal anomalies that need to be investigated. When there are a small number of cases it may be difficult to distinguish random fluctuations in disease/injury incidence from true changes in the underlying risk for the disease/injury.

Figure 4. Hamilton County New Gonorrhea Infections Control Chart



The average is found using gonorrhea counts by month for the previous 3 years (2019, 2020, and 2021). A standard deviation is calculated using the same time frame. The upper control limit is determined by multiplying the standard deviation by 2 and adding the 3-year average. These data are provisional and subject to change.

Table 6 shows demographic data in Hamilton County. Highest number percentages are highlighted in blue. For 2022, Female (51%), Black (70.2%), and 15-24 year olds (51.8%) were the demographics that made up the highest percentages of new gonorrhea infections.

Table 4. Hamilton County Gonorrhea Morbidity

	2021		2022	
	#	%	#	%
Gender				
Male	1,787	47.5%	1,344	49.0%
Female	1,972	52.5%	1,401	51.0%
Race				
Black	2,542	67.6%	1,927	70.2%
White	460	12.2%	331	12.1%
Multi	139	3.7%	143	5.2%
Other	113	3.0%	99	3.6%
Unknown/Null	505	13.4%	245	8.9%
Age Group				
<14	7	0.2%	16	0.6%
15-24	1,936	51.5%	1,422	51.8%
25-34	1,217	32.4%	862	31.4%
35-44	420	11.2%	301	11.0%
45-54	105	2.8%	75	2.7%
55-64	43	1.1%	41	1.5%
65+	13	0.4%	11	0.4%
Unknown/Null	18	0.5%	17	0.6%

Percentages may not total to 100 due to rounding. Percentages are based on availability of data for all cases. These data are provisional and subject to change.