Yarmouth, Maine, SARS-CoV-2 (COVID-19) Wastewater Testing Results — August 1, 2023

Summary

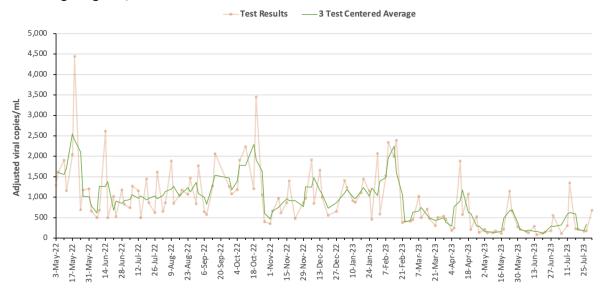
- In the two months since our last Yarmouth, Maine, COVID-19 report on June 1, 2023, wastewater levels of SARS-CoV-2 have generally remained low with a brief increase in mid-July similar to the brief increase during the last two weeks of May. During this period, we saw the lowest viral levels since testing by Biobot began in May 2022.
- From May 29–July 30, 2023, Maine CDC reported 9 cases of COVID-19, an average of 1 case per week.
- Based on the low levels and trend of SARS-CoV-2 in Yarmouth's wastewater during the past 2 months, we are keeping the COVID-O-Meter at the Low level.



Wastewater Results for SARS-CoV-2

- Since May 2022 Yarmouth wastewater samples have been collected twice weekly and tested by Biobot Analytics in Massachusetts.
- The adjusted viral levels were 176 and 687 copies/mL in the two most recent wastewater samples (July 26–27 and July 31–August 1, respectively).
- Viral levels from June 1 through August 1 fluctuated between 81 and 1,350 copies/mL. The overall trend during this period was relatively flat with a small peak during mid-July. (Figure, Table).
- June and July viral levels averaged 209 and 365 copies/mL, respectively, as compared to March, April, and May viral level averages of 554, 606, and 340 copies/mL.
- Yarmouth's June and July viral levels were similar to those measured in Portland's and Brunswick's wastewater samples. Viral levels remained low during June and July in Brunswick's, Portland's East End, and Portland's Westbrook-Gorham wastewater facilities.
- In late July 2023, the highest US state wastewater SARS-CoV-2 viral levels were in Alaska, Idaho, New Mexico, and Puerto Rico.

Figure. Results of weekly Wastewater Testing for SARS-CoV-2 for Yarmouth, Maine, from May 3, 2022, through August 1, 2023.



COVID-19 Case Reports

- Cases of COVID-19 for Yarmouth—as reported by Maine CDC—averaged 1 case per week for May 29 through July 30, 2023, with 1 case reported for July 24–30.
- The number and weekly average of case reports during this 8-week reporting period are the lowest since early August 2021 when there were no cases.
- Reported case counts are likely to be lower than the actual number of cases due to reduced testing and increased self-testing (home testing), which is not reported to Maine CDC. Anecdotally, we hear that many in the community are using home testing and management.

We recommend that the Yarmouth Community continue to exercise caution:

- Get vaccinated and boosted. Bivalent boosters with the original vaccine component and a
 component based on recently circulating variants (i.e., BA.4 and BA.5) are available from
 Moderna and Pfizer. The US CDC updated its COVID-19 recommendations recently to advise that
 persons aged 65 years and older and those with medical conditions have the option to receive a
 second bivalent booster if it has been more than 4 months since their last COVID-19 vaccine.
- With the public health emergency lifted and low COVID-19 case counts and deaths, it is left to
 individuals to decide what exposures and risks are acceptable. In some situations, individuals
 may want the lowest risk, while others may feel socialization is their highest priority. Note:
 persons who are immune compromised due to medical conditions or medical treatments should
 take particular care, as should those around them. To be cautious, when gathering with people
 at higher risk, test with a rapid antigen test.
- At a minimum, any time you have symptoms, isolate yourself from people and use a rapid antigen test for 2 days in a row to determine if you have COVID.
- If you test positive for COVID or believe you have a COVID infection, discuss the value of therapeutics with your doctor. These medications can shorten the course and severity of the illness and likely reduce transmission to others. In addition, tell the people you have been in contact with for 2 days prior to your positive test that they may have been exposed.
- If you have COVID, leave isolation only after you have a negative rapid antigen test.
- If you want the lowest risk of transmission,
 - Avoid crowded indoor spaces;
 - Consider wearing a mask in indoor public places, particularly if you are unvaccinated, 60 years of age or older, or immunocompromised; and
 - When indoors, ensure that there is good ventilation (air exchange).

The Yarmouth Wastewater Testing Team will continue to evaluate the testing results from the twice weekly samples. If there are significant changes, we will notify community members via the Town website, the YCCTF website (Be Well Yarmouth), and the YCCTF and Yarmouth Community Network Facebook sites.

Notes & Acknowledgement

Yarmouth's wastewater testing program for SARS-CoV-2 is currently collecting and testing two 24 hour wastewater samples each week: the first is collected from 7 am Monday to 7 am Tuesday, and the second from 7 am Wednesday to 7 am Thursday. Samples are sent to Biobot Analytics in Cambridge, Massachusetts for testing. The program is currently funded by the U.S. CDC.

The results of wastewater testing for Yarmouth and other locations in Maine are posted on the Maine CDC website: https://www.maine.gov/dhhs/mecdc/infectious-disease/epi/airborne/coronavirus/wastewater-reports.shtml. An overview of COVID-19 wastewater monitoring in the United States with graphs of testing data for the U.S. and selected U.S. counties, including 14 counties in Maine, is available from Biobot: https://biobot.io/data/#county-25025.

We would like to thank Chris Cline and Yarmouth Wastewater Treatment Facility staff for collecting and submitting the wastewater samples twice a week and Steve Johnson, Yarmouth's Town Engineer, for overseeing the wastewater testing program.

Table. Results of US CDC-Biobot wastewater testing for SARS-CoV-2 for Yarmouth, Maine, May 3, 2022-August 1, 2023

Sample Submission		Sample Submission		Sample Submission		Sample Submission	
date†	EVC‡	date†	EVC‡	date†	EVC‡	date†	EVC‡
3 May 2022	1,292	29 Sept	1,078	28 Feb	413	18 Jul	227
5 May	1,612	4 Oct	1,186	2 Mar	453	20 Jul	218
10 May	1,903	6 Oct	1,906	7 Mar	1,026	25 Jul	172
12 May	1,156	11 Oct	2,236	9 Mar	498	27 Jul	176
17 May	2,047	18 Oct	1,204	14 Mar	716	1 Aug	687
19 May	4,447	20 Oct	3,452	16 Mar	483	271008	
24 May	692	25 Oct	1,065	21 Mar	308		
26 May	1,174	27 Oct	398	23 Mar	504		
31 May	1,207	1 Nov	353	28 Mar	538		
2 June	660	3 Nov	667	30 Mar	462		
7 June	499	8 Nov	975	4 Apr	184		
9 June	684	10 Nov	617	6 Apr	248		
14 June	2,619	15 Nov	865	11 Apr	1,887		
16 June	502	17 Nov	1,398	13 Apr	571		
21 June	1,022	22 Nov*	477	18 Apr	1,084		
23 June	527	29 Nov	868	20 Apr	211		
28 June	1,180	1 Dec	976	25 Apr	528		
5 July	738	6 Dec	1,912	27 Apr	134		
7 July	1,271	8 Dec	851	2 May	219		
12 July	1,162	13 Dec	1,661	4 May	129		
14 July	497	15 Dec	1,000	9 May	130		
19 July	1,448	20 Dec*	556	11 May	179		
21 July	864	27 Dec*	648	16 May	111		
26 July	621	3 Jan 2023	1,409	18 May	213		
28 July	1,616	5 Jan	1,237	23 May	1,145		
2 Aug	652	10 Jan	915	25 May	659		
4 Aug	863	12 Jan	873	30 May	275		
9 Aug	1,887	17 Jan	1,114	1 Jun	212		
11 Aug	850	19 Jan	1,448	6 Jun	166		
16 Aug	1,052	24 Jan	1,158	8 Jun	133		
18 Aug	1,180	26 Jan	458	13 Jun	291		
25 Aug	1,468	31 Jan	2,072	15 Jun	81		
30 Aug	841	2 Feb	588	20 Jun	118		
1 Sept	1,775	7 Feb	1,524	22 Jun	151		
6 Sept	642	9 Feb	2,340	27 Jun	179		
8 Sept	578	14 Feb	1,993	29 Jun	554		
13 Sept	1,275	16 Feb	2,394	6 Jul	109		
15 Sept	2,063	21 Feb	377	11 Jul	307		
27 Sept	1,270	23 Feb	410	13 Jul	1,350		

^{† 24-}hour influent wastewater samples are collected proportional to flow from 7am on day 1 to 7am on day 2. Day 2 is the sample submission date.

[‡] EVC (Effective virus concentration expressed as copies/mL) is derived by adjusting the raw virus concentration to account for dilution and other factors.

^{*}There was no testing on November 24, December 22, December 29, 2022, and July 4, 2023, due to holidays.