

Yarmouth, Maine, SARS-CoV-2 (COVID-19) Wastewater Testing Results — December 15, 2023

Summary

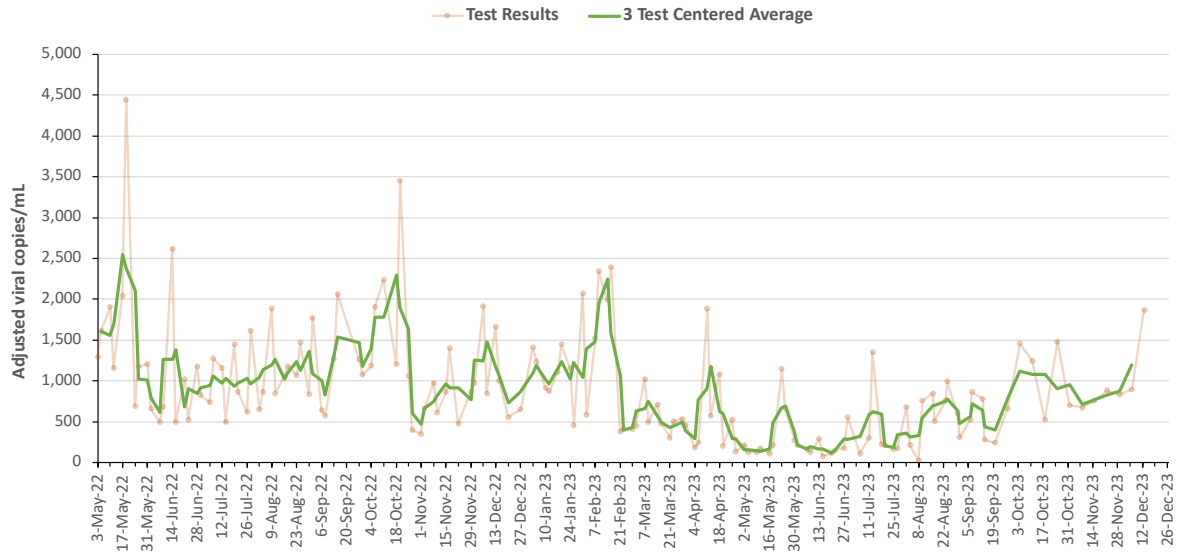
- Since the last report on November 1, wastewater SARS-CoV-2 viral levels have steadily increased and are now 3 times higher than levels were during June and July, when they averaged 278 copies/mL. This is consistent with past years, as during the fall people spend more time inside where viral transmission is more likely.
- The current sustained increase follows several higher levels during October and supports a change in the COVID-O-Meter to the MODERATE level.
- The most recent level of 1,869 copies/mL on December 13—if sustained by the December 20 test result—would warrant an increase of the COVID-O-Meter to the HIGH level, as levels approaching 2,000 copies/mL would match those seen during the peaks in May and October 2022 and February 2023.
- SARS-CoV-2 viral levels have also increased significantly in the past 6 weeks in Brunswick and Portland wastewater and are approaching levels seen in those two locations during late January and February 2023.
- COVID-19 related weekly hospitalizations in Maine increased from an average of 51 during October 2023 to 74 during November 2023 and were highest among people 70 years of age and older. These numbers of weekly hospitalizations are still much lower than the 170 seen during February 2023.



Wastewater Results for SARS-CoV-2

- From May 2022 to mid-September 2023 Yarmouth wastewater samples were collected twice weekly and tested at Biobot Analytics in Massachusetts. Since mid-September 2023 testing has occurred once a week while federal testing contracts are on hold pending a contract dispute. Biobot has continued to provide this weekly testing for free in the interim.
- Viral levels during November and the first two weeks of December fluctuated between 677 and 1,869 copies/mL. The overall trend during this period showed a steady increase (Figure, Table).
- The average wastewater viral level from November 1–December 15 was 947 copies/mL, which was higher than the average monthly viral levels for July through September 2023; these levels were 365, 571, and 560 copies/mL, respectively. October’s average level was 1,177 copies/mL.
- Yarmouth’s November 1–December 15 trend of increasing wastewater viral levels was similar to the trends seen in Portland’s and Brunswick’s wastewater viral levels.

Figure. Results of weekly Wastewater Testing for SARS-CoV-2 for Yarmouth, Maine, from May 3, 2022, through December 15, 2023.



COVID-19 Weekly Hospitalizations

- COVID-19 related weekly hospitalizations in Maine increased from an average of 51 during October 2023 to 74 during November 2023 and were highest among people 70 years of age and older. These numbers of weekly hospitalizations are still much lower than the 160 to 180 seen during February 2023.
- COVID-19 related hospitalization rates and deaths are much higher among people 70 years of age and older than any other age group (5 to 10 times higher).

We recommend that the Yarmouth Community continue to exercise caution:

- Get vaccinated and boosted. An updated monovalent booster based on the recently circulating variant (XBB.1.5) is now available in Maine. Appointments for vaccination with the updated booster are available at pharmacies in Yarmouth.
- 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 weekly samples. If there are significant changes, we will notify community members via the Yarmouth Public Health Council website (Be Well Yarmouth), the Yarmouth Community Coronavirus Task Force (YCCTF) Facebook site, and the Yarmouth Community Network Facebook sites.

Notes & Acknowledgement

Yarmouth's wastewater testing program for SARS-CoV-2 is currently collecting and testing one 24-hour composite wastewater sample each week. Samples are collected from 7 am Tuesday to 7 am Wednesday. Samples are sent to Biobot Analytics in Cambridge, Massachusetts for free testing.

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 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–December 15, 2023

Sample Submission date†	EVC‡	Sample Submission date†	EVC‡	Sample Submission date†	EVC‡	Sample Submission 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	3 Aug	215
24 May	692	25 Oct	1,065	21 Mar	308	8 Aug	29
26 May	1,174	27 Oct	398	23 Mar	504	10 Aug	759
31 May	1,207	1 Nov	353	28 Mar	538	16 Aug	848
2 June	660	3 Nov	667	30 Mar	462	17 Aug	512
7 June	499	8 Nov	975	4 Apr	184	23 Aug	757
9 June	684	10 Nov	617	6 Apr	248	24 Aug	992
14 June	2,619	15 Nov	865	11 Apr	1,887	30 Aug	603
16 June	502	17 Nov	1,398	13 Apr	571	31 Aug	311
21 June	1,022	22 Nov*	477	18 Apr	1,084	6 Sep	523
23 June	527	29 Nov	868	20 Apr	211	7 Sep	866
28 June	1,180	1 Dec	976	25 Apr	528	13 Sep	780
5 July	738	6 Dec	1,912	27 Apr	134	14 Sep	283
7 July	1,271	8 Dec	851	2 May	219	20 Sep	244
12 July	1,162	13 Dec	1,661	4 May	129	27 Sep	660
14 July	497	15 Dec	1,000	9 May	130	4 Oct	1,459
19 July	1,448	20 Dec*	556	11 May	179	11 Oct	1,246
21 July	864	27 Dec*	648	16 May	111	18 Oct	523
26 July	621	3 Jan 2023	1,409	18 May	213	25 Oct	1,481
28 July	1,616	5 Jan	1,237	23 May	1,145	1 Nov	703
2 Aug	652	10 Jan	915	25 May	659	8 Nov	677
4 Aug	863	12 Jan	873	30 May	275	15 Nov	760
9 Aug	1,887	17 Jan	1,114	1 Jun	212	22 Nov	883
11 Aug	850	19 Jan	1,448	6 Jun	166	29 Nov	836
16 Aug	1,052	24 Jan	1,158	8 Jun	133	6 Dec	900
18 Aug	1,180	26 Jan	458	13 Jun	291	13 Dec	1,869
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.