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

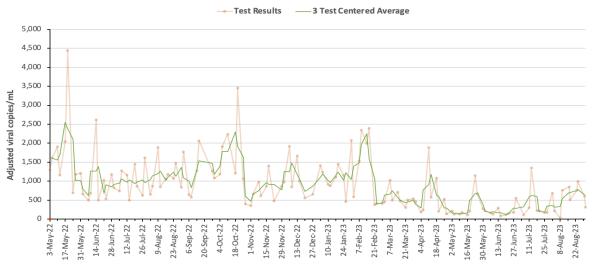
Summary

- During August, wastewater levels of SARS-CoV-2 fluctuated with a generally increasing trend. Levels were similar to those last seen in April 2023, but were much lower than those seen during previous increases in May and October 2022, and February 2023.
- From July 31–September 3, 2023, Maine CDC reported 3 cases of COVID-19 for Yarmouth, an average of less than one case per week. Reported case counts are likely to be lower than the actual number of cases due to reduced testing.
- Elsewhere in Maine, reported COVID-19 case rates increased during August with the greatest increases in Knox and Aroostook Counties. COVID-19 related hospitalizations also increased during August, principally among people 60 years of age and older.
- Based on the relatively low levels and trend of SARS-CoV-2 in Yarmouth's wastewater during the past month, we are keeping the COVID-O-Meter at the Low level.
- We will be closely monitoring wastewater viral levels during September for any further increase, which might warrant a change to moderate danger.

Wastewater Results for SARS-CoV-2

- Since May 2022 Yarmouth wastewater samples have been collected twice weekly and tested by Biobot Analytics in Massachusetts.
- Adjusted viral levels were 603 and 311 copies/mL in the two most recent wastewater samples (August 29–30 and August 30–31, respectively).
- Viral levels during August fluctuated between 29 and 992 copies/mL. The overall trend during August was increasing except for a decline during the last week of the month. (Figure, Table).
- The average August viral level of 571 copies/mL was higher than the viral averages for May, June, and July, which were 340, 209, and 365 copies/mL, respectively.
- Yarmouth's August viral levels were similar to those measured in Portland's and Brunswick's wastewater samples. Viral levels rose during the first half of the month and then plateaued or declined at Brunswick's and Portland's (East End) wastewater treatment facilities.

Figure. Results of weekly Wastewater Testing for SARS-CoV-2 for Yarmouth, Maine, from May 3, 2022, through August 31, 2023.





COVID-19 Case Reports and Hospitalizations

- Cases of COVID-19 for Yarmouth averaged less than one case per week for July 31–September 3, 2023, with a total of three cases reported to Maine CDC for this period.
- The number and weekly average of case reports for Yarmouth during August were the lowest since early August 2021 when no cases were reported.
- 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.
- Elsewhere in Maine, reported COVID-19 case rates increased during August with the greatest increases in Knox and Aroostook Counties. COVID-19 related hospitalizations also increased during August, principally among people 60 years of age and older.

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) will be available during September 2023. Appointments for vaccination with the updated booster are available at Walgreens 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 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 Tuesday to 7 am Wednesday, and the second from 7am 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 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 31, 2023

| Sample | | Sample | | Sample | | Sample | |
|------------|-------|------------|-------|------------|-------|------------|------|
| Submission | | Submission | | Submission | | 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 | 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 | | |
| 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 | 21 Feb | 410 | 13 Jul | 1,350 | | |
| Z/ Sept | 1,270 | 23 FED | 410 | 15 Jul | 1,330 | | |

^{† 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.