

Boston Wastewater Epidemiology Report

Updated: 08-Oct-2024 | **Data Complete Through**: 02-Oct-2024



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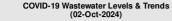
A Note About These Reports

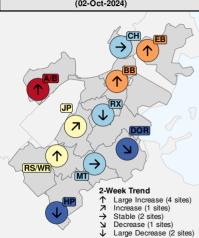


The laboratory that tests Boston's wastewater changed on August 1, 2024. Because of differences in the methods used at the old laboratory and the new one, data may not be comparable before and after the change. The change is marked with a vertical red line line on figures in this report. BPHC cautions against drawing conclusions by comparing data to the left and right of this line. BPHC closely monitors the data and the methods used to communicate these results, and presents the best understanding of the data in these reports. A report with more information about the lab change will be made available on the BPHC Wastewater Monitoring web page.

Neighborhood Levels and Trends







| COVID-19 |
|-----------|
| Level |
| (# sites) |













BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL

Low

619 copies/mL samples through 02-Oct-2024 2-WEEK TRENDS



Stable +32 copies/mL (+6%)

NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

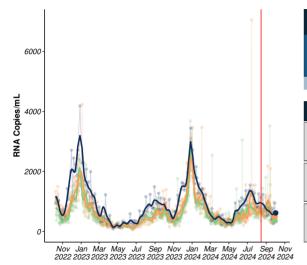
| Level | Neighborhood/Site | | Trend |
|-----------|---------------------------------|---------------|----------------|
| Very High | Allston/Brighton (A/B) | 个 | Large Increase |
| High | Back Bay (BB) | 1 | Large Increase |
| High | East Boston (EB) | 1 | Large Increase |
| Moderate | Roslindale/West Roxbury (RS/WR) | 1 | Large Increase |
| Moderate | Jamaica Plain (JP) | 7 | Increase |
| | Roxbury (RX) | $\overline{}$ | Large Decrease |
| Low | Charlestown (CH) | \rightarrow | Stable |
| | Mattapan (MT) | \rightarrow | Stable |
| Very Low | Dorchester (DOR) | Z | Decrease |
| | Hyde Park (HP) | $\overline{}$ | Large Decrease |

For additional details see:

- · Results by Neighborhood
- Detailed Neighborhood Levels and Trends Table
- Trend and Level Category Definitions

Citywide Overview and Trends





CITYWIDE AVERAGE

AVERAGE

619

RNA copies/mL

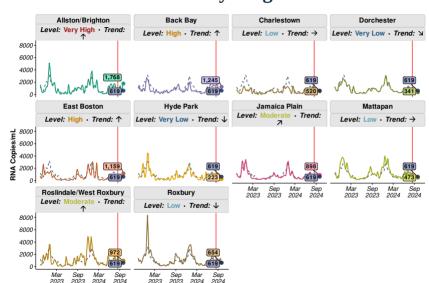
Data through: 02-Oct-2024

| 2-W | 2-WEEK TRENDS | | | |
|-------------------------|-------------------------------|--|--|--|
| Boston Stable | +6% over the past 14 days | | | |
| MWRA North Decreasing | -56% over the past 14 days | | | |
| MWRA South Decreasing | -31% over the past 14 days | | | |

 $\textbf{Updated: 08-0ct-2024 | Samples through: 02-0ct-2024 (BPHC); 30-Sep-2024 (MWRA) | \textbf{MWRA Data:} \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}}$

BPHC Trend Overview by Neighborhood





For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

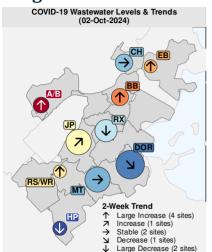
The dotted blue line and dark blue text box in each panel shows the trend and most recent value across all Boston sites weighted by population.

The vertical dashed grey line marks the date of August 1, 2024, when the laboratory that tests Boston's wastewater changed.

To see details and interpretation of these results for an individual neighborhood see Results by Neighborhood.

Neighborhood Levels and Data Table





| | COVID-19 Wastewater Levels | | 2-Week Trends | | |
|--------|----------------------------|-----------|----------------|----------------------|-------------|
| NH | Conc. (copies/mL) | Level | Trend | Diff. (copies/mL) | % Change |
| BOSTON | 619 | Low | Stable | +32 | +6% |
| A/B | 1,768 | Very High | Large Increase | +1,380 | +355% |
| BB | 1,245 | High | Large Increase | +700 | +128% |
| EB | 1,159 | High | Large Increase | +877 | +312% |
| RS/WR | 972 | Moderate | Large Increase | +656 | +207% |
| JP | 898 | Moderate | Increase | +451 | +101% |
| RX | 654 | Low | Large Decrease | -584 | -47% |
| CH | 520 | Low | Stable | +84 | +19% |
| MT | 473 | Low | Stable | -96 | -17% |
| DOR | 341 | Very Low | Decrease | -158 | -32% |
| HP | 223 | Very Low | Large Decrease | -514 | -70% |

Concentration Levels: Very High: >1,400 copies/mL; High: 1,050-1,400 copies/mL; Moderate: 700-1,050 copies/mL; Low: 350-700 copies/mL; Very Low: ≤350 copies/mL

2-Week Trend Categories: Large Increase: >+500 copies/mL; Increase: +150 to +500 copies/mL; Stable: -150 to +150 copies/mL; Decrease: -500 to -150 copies/mL; Large Decrease: ≤-500 copies/mL



Results by Neighborhood



- Allston-Brighton (A/B)
- Back Bay (BB)
- Charlestown (CH)
- Dorchester (DOR)
- East Boston (EB)
- Hyde Park (HP)
- Jamaica Plain (JP)
- Mattapan (MT)
- Roslindale/West Roxbury (RS/WR)
- Roxbury (RX)
- South Boston (SB)

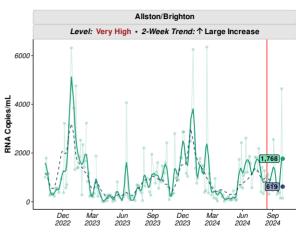
Allston/Brighton



Level: Very High

- Average value in A/B over the past week: 1,768 copies/mL.
- This value is very high compared to past values and higher than the citywide average (619 copies/mL).

- Over the past two weeks, values in <u>A/B</u> are <u>increasing</u>.
- Change compared to two weeks ago: +1,380 copies/mL (+355%).



Updated: 08-Oct-2024 | Samples through: 02-Oct-2024 (A/B);

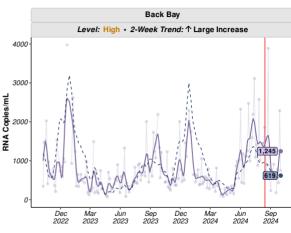
Back Bay



Level: High

- Average value in <u>BB</u> over the past week: 1,245 copies/mL.
- This value is <u>high</u> compared to past values and <u>higher</u> than the citywide average (619 copies/mL).

- Over the past two weeks, values in <u>BB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +700 copies/mL (+128%).



Updated: 08-0ct-2024 | Samples through: 02-0ct-2024 (BB);

Charlestown

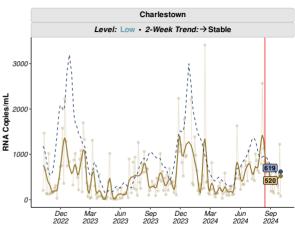


Level: Low

- Average value in <u>CH</u> over the past week: 520 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (619 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>CH</u> are <u>stable</u>.
- Change compared to two weeks ago: +84 copies/mL (+19%).



Updated: 08-Oct-2024 | Samples through: 02-Oct-2024 (CH);

Dorchester

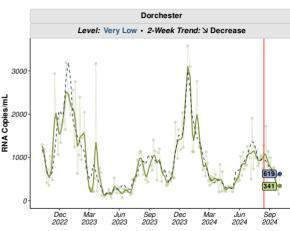


Level: Very Low

- Average value in <u>DOR</u> over the past week: <u>341</u> copies/mL.
- This value is very low compared to past values and <u>similar</u> than the citywide average (619 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>DOR</u> are <u>decreasing</u>.
- Change compared to two weeks ago:
 -158 copies/mL (-32%).



Updated: 08-Oct-2024 | Samples through: 02-Oct-2024 (DOR);

East Boston

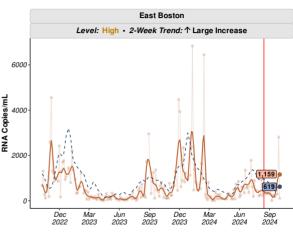


Level: High

- Average value in <u>EB</u> over the past week: 1,159 copies/mL.
- This value is <u>high</u> compared to past values and <u>higher</u> than the citywide average (619 copies/mL).

Trend: 1 Large Increase

- Over the past two weeks, values in <u>EB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +877 copies/mL (+312%).



Updated: 08-Oct-2024 | Samples through: 02-Oct-2024 (EB);

Hyde Park

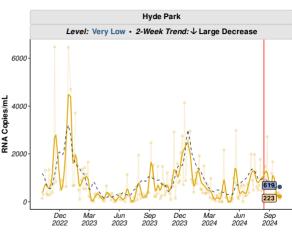


Level: Very Low

- Average value in <u>HP</u> over the past week:
 223 copies/mL.
- This value is very low compared to past values and <u>lower</u> than the citywide average (619 copies/mL).

Trend: ↓ Large Decrease

- Over the past two weeks, values in <u>HP</u> are <u>decreasing</u>.
- Change compared to two weeks ago:
 -514 copies/mL (-70%).



Updated: 08-Oct-2024 | Samples through: 02-Oct-2024 (HP);

Jamaica Plain

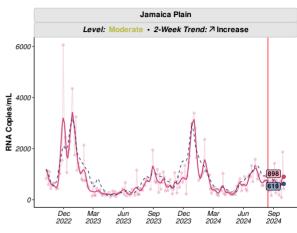


Level: **Moderate**

- Average value in <u>JP</u> over the past week: 898 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (619 copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in <u>JP</u> are <u>increasing</u>.
- Change compared to two weeks ago: +451 copies/mL (+101%).



Updated: 08-0ct-2024 | Samples through: 02-0ct-2024 (JP);

Mattapan

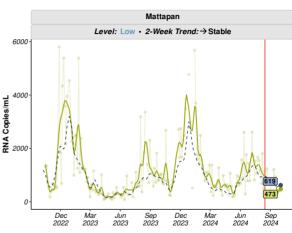


Level: Low

- Average value in <u>MT</u> over the past week: <u>473</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (619 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>MT</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-96</u> copies/mL (-17%).



Updated: 08-Oct-2024 | Samples through: 02-Oct-2024 (MT);

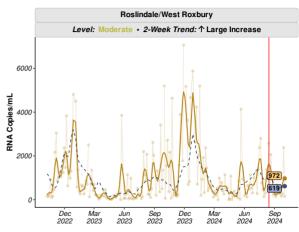
Roslindale/West Roxbury



Level: **Moderate**

- Average value in RS/WR over the past week: 972 copies/mL.
- This value is moderate compared to past values and higher than the citywide average (619 copies/mL).

- Over the past two weeks, values in RS/WR are increasing.
- Change compared to two weeks ago: +656 copies/mL (+207%).



Updated: 08-0ct-2024 | Samples through: 02-0ct-2024 (RS/WR);

Roxbury

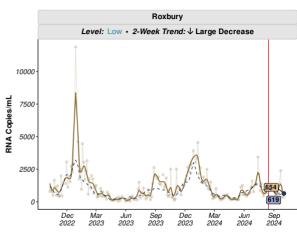


Level: Low

- Average value in <u>RX</u> over the past week: 654 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (619 copies/mL).

Trend: **↓ Large Decrease**

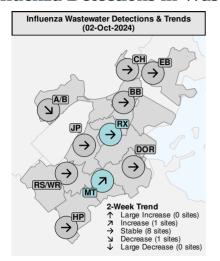
- Over the past two weeks, values in <u>RX</u> are <u>decreasing</u>.
- Change compared to two weeks ago: <u>-584</u> copies/mL (-47%).



Updated: 08-Oct-2024 | Samples through: 02-Oct-2024 (RX);

Influenza Detections in Wastewater





This map depicts the number of times influenza virus was detected in wastewater at the 3 most-recent samples (approximately the past week) at each of the neighborhood sampling locations.

Samples Positive for Flu (Past 3 Samples) Not Measured 0 positive







1 positive

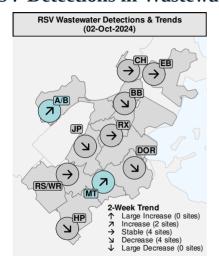






RSV Detections in Wastewater





RSV = Respiratory Syncytial Virus

This map depicts the number of times RSV was detected in wastewater at the 3 most-recent samples (approximately the past week) at each of the neighborhood sampling locations.

Samples







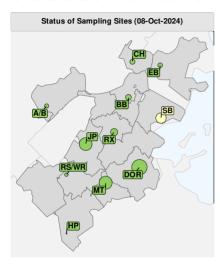






Site Status and Details





Site Status (N=11) Active

a

Paused (n=1)

COVID-19 Wastewater Level and Trend Category Definitions



Concentration Levels

| Concentration | Concentration Value | |
|---------------|---------------------|--|
| Level | (Copies/mL) | |
| Very High | >1,400 | |
| High | 1,050-1,400 | |
| Moderate | 700-1,050 | |
| Low | 350-700 | |
| Very Low | ≤350 | |

2-Week Trend Categories

| | Trend Category | Trend Value (Copies/mL) |
|---------------|----------------|----------------------------|
| \land | Large Increase | >+500 |
| 7 | Increase | +150 to +500 |
| \rightarrow | Stable | -150 to +150 |
| 7 | Decrease | -500 to -150 |
| $\overline{}$ | Large Decrease | ≤-500 |

Level: Very High



Wastewater viral levels in your neighborhood indicate **very high risk** of COVID-19 infection.

Based on this level, BPHC urgently recommends the following practices to prevent COVID-19 in your community:

- Wear a high-quality mask or respirator
- If you are at high risk of getting very sick, consider limiting non-essential indoor activities in public where you could be exposed.
- If you have close contact with someone at high risk of getting very sick, consider self-testing to detect infection before contact, and consider wearing a high-quality mask when indoors with them

- Stay up-to-date on vaccinations.
- · Seek testing and possible treatment if you get sick
- Stay home when sick and avoid contact with others who are sick
- Improve indoor airflow and ventilation
- · Wash your hands often and cover coughs and sneezes
- Follow CDC recommendations for <u>isolation</u> if you have COVID-19 and for <u>what to do if you are exposed</u> to someone with COVID-19

- Find a vaccination clinic in your neighborhood
- Find a testing site or pickup a free at-home test kit in your neighborhood
- Find <u>treatment</u> for COVID-19 including <u>free telehealth</u> and <u>in home treatment</u>.
- Call or visit the Mayor's Health Line
- Learn more about COVID-19 and find additional resources: COVID-19: Know the Facts Find the Truth

Level: High



Wastewater viral levels in your neighborhood indicate high risk of COVID-19 infection.

Based on this level, BPHC strongly recommends the following practices to prevent COVID-19 in your community:

- . Wear a high-quality mask or respirator
- If you have close contact with someone at high risk of getting very sick, consider self-testing to detect infection before contact, and consider wearing a high-quality mask when indoors with them
- Stay up-to-date on vaccinations.
- · Seek testing and possible treatment if you get sick
- Stay home when sick and avoid contact with others who are sick
- Improve indoor airflow and ventilation
- Wash your hands often and cover coughs and sneezes
- Follow CDC recommendations for <u>isolation</u> if you have COVID-19 and for <u>what to do if you are exposed</u> to someone with COVID-19

- · Find a vaccination clinic in your neighborhood
- Find a testing site or pickup a free at-home test kit in your neighborhood
- Find treatment for COVID-19 including free telehealth and in home treatment.
- · Call or visit the Mayor's Health Line
- · Learn more about COVID-19 and find additional resources: COVID-19: Know the Facts Find the Truth

Level: Moderate



Wastewater viral levels in your neighborhood indicate **moderate risk** of COVID-19 infection.

Based on this level, BPHC recommends the following practices to prevent COVID-19 in your community:

- If you are at high risk of getting very sick, wear a high-quality mask or respirator in public indoor spaces
- If you have close contact with someone at high risk of getting very sick, consider self-testing to detect infection before contact, and consider wearing a high-quality mask when indoors with them
- Stay up-to-date on vaccinations.
- · Seek testing and possible treatment if you get sick
- Stay home when sick and avoid contact with others who are sick
- · Improve indoor airflow and ventilation
- · Wash your hands often and cover coughs and sneezes
- Follow CDC recommendations for <u>isolation</u> if you have COVID-19 and for <u>what to do if you are exposed</u> to someone with COVID-19

- Find a vaccination clinic in your neighborhood
- Find a testing site or pickup a free at-home test kit in your neighborhood
- Find treatment for COVID-19 including free telehealth and in home treatment.
- · Call or visit the Mayor's Health Line
- Learn more about COVID-19 and find additional resources: COVID-19: Know the Facts Find the Truth





Wastewater viral levels in your neighborhood indicate **low risk** of COVID-19 infection.

Based on this level, BPHC recommends the following practices to prevent COVID-19 in your community:

- . Continue to monitor wastewater levels and trends
- Stay up-to-date on vaccinations.
- Seek testing and possible treatment if you get sick
- · Stay home when sick and avoid contact with others who are sick
- · Improve indoor airflow and ventilation
- · Wash your hands often and cover coughs and sneezes
- Follow CDC recommendations for <u>isolation</u> if you have COVID-19 and for <u>what to do if you are exposed</u> to someone with COVID-19

- Find a <u>vaccination clinic</u> in your neighborhood
- Find a testing site or pickup a free at-home test kit in your neighborhood
- Find <u>treatment</u> for COVID-19 including <u>free telehealth</u> and <u>in home treatment</u>.
- Call or visit the Mayor's Health Line
- Learn more about COVID-19 and find additional resources: COVID-19: Know the Facts Find the Truth

Level: Very Low



Wastewater viral levels in your neighborhood indicate **very low risk** of COVID-19 infection.

Based on this level, BPHC recommends the following practices to prevent COVID-19 in your community:

- . Continue to monitor wastewater levels and trends
- Stay up-to-date on vaccinations.
- · Seek testing and possible treatment if you get sick
- Stay home when sick and avoid contact with others who are sick
- · Improve indoor airflow and ventilation
- Wash your hands often and cover coughs and sneezes
- Follow CDC recommendations for <u>isolation</u> if you have COVID-19 and for <u>what to do if you are exposed</u> to someone with COVID-19

- Find a vaccination clinic in your neighborhood
- Find a testing site or pickup a free at-home test kit in your neighborhood
- Find treatment for COVID-19 including free telehealth and in home treatment.
- Call or visit the Mayor's Health Line
- Learn more about COVID-19 and find additional resources: COVID-19: Know the Facts Find the Truth