

Boston Wastewater Epidemiology Report

Updated: 28-Jan-2025 | **Data Complete Through**: 22-Jan-2025

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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





BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL

2-WEEK TRENDS

Moderate

723 copies/mL samples through 22-Jan-2025



NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

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

2-Week Trend

- Large Increase (1 sites) Increase (1 sites)
- Stable (0 sites)

DOR

- Decrease (3 sites)
- - Large Decrease (5 sites)
- 2 sites

Very Low

 \sim $\widetilde{\mathbf{MT}}$

JP

RS/WR

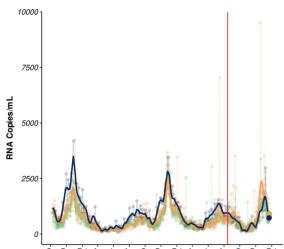
- 2 sites Moderate Hiah
 - Verv High

For additional details see:

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

Citywide Overview and Trends





CITYWIDE AVERAGE

723

RNA copies/mL

RANGE ACROSS 11
NEIGHBORHOOD SITES

164-1,372
RNA copies/mL

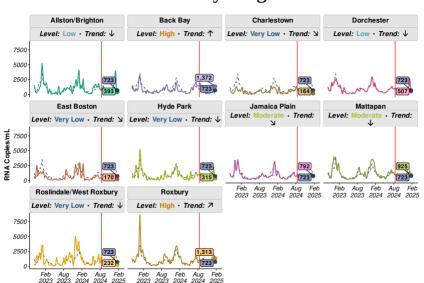
Data through: 22-Jan-2025

2-WEEK TRENDS				
Boston Decreasing	-57% over the past 14 days			
MWRA North Decreasing	-31% over the past 14 days			
MWRA South Decreasing	-49% over the past 14 days			

Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (BPHC); 23-Jan-2025 (MWRA) | MWRA Data: 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:

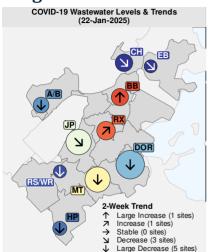
The dotted blue line and dark blue text box in each panel shows the trend and most recent value across all Boston sites weighted by population.

The vertical red 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	723	Moderate	Large Decrease	-948	
BB	1,372	High	Large Increase	+961	+234%
RX	1,313	High	Increase	+308	+31%
MT	925	Moderate	Large Decrease	-521	-36%
JP	792	Moderate	Decrease	-386	-33%
DOR	507	Low	Large Decrease	-2,166	-81%
A/B	393	Low	Large Decrease	-2,378	-86%
HP	315	Very Low	Large Decrease	-1,541	-83%
RS/WR	232	Very Low	Large Decrease	-525	-69%
EB	170	Very Low	Decrease	-305	-64%
CH	164	Very Low	Decrease	-243	-60%

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: s-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

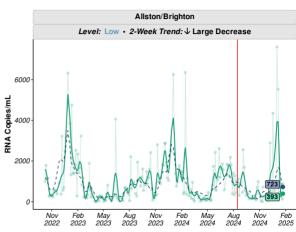


Level: Low

- Average value in <u>A/B</u> over the past week: 393 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (723 copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in <u>A/B</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -2,378 copies/mL (-86%).



Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (A/B);

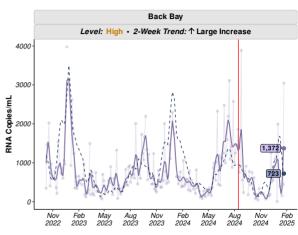
Back Bay



Level: High

- Average value in <u>BB</u> over the past week: 1,372 copies/mL.
- This value is high compared to past values and higher than the citywide average (723 copies/mL).

- Over the past two weeks, values in <u>BB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +961 copies/mL (+234%).



Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (BB);

Charlestown



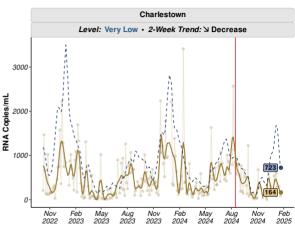
Level: Very Low

- Average value in <u>CH</u> over the past week: 164 copies/mL.
- This value is very low compared to past values and <u>lower</u> than the citywide average (723 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>CH</u> are <u>decreasing</u>.
- Change compared to two weeks ago:

 -243 copies/mL (-60%).



Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (CH);

Dorchester

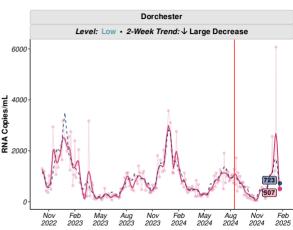


Level: Low

- Average value in <u>DOR</u> over the past week: <u>507</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (723 copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in <u>DOR</u> are <u>decreasing</u>.
- Change compared to two weeks ago:
 -2,166 copies/mL (-81%).



Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (DOR);

East Boston

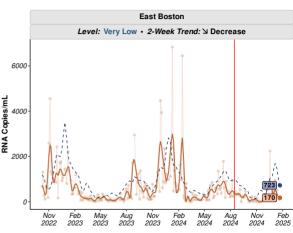


Level: Very Low

- Average value in <u>EB</u> over the past week: 170 copies/mL.
- This value is very low compared to past values and <u>lower</u> than the citywide average (723 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>EB</u> are <u>decreasing</u>.
- Change compared to two weeks ago:
 -305 copies/mL (-64%).



Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (EB);

Hyde Park



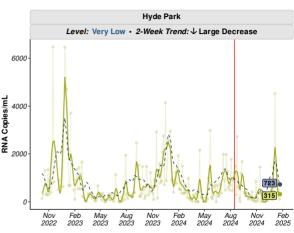
Level: Very Low

- Average value in <u>HP</u> over the past week: 315 copies/mL.
- This value is very low compared to past values and <u>lower</u> than the citywide average (723 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:

 1,541 copies/mL (-83%).



Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (HP);

Jamaica Plain

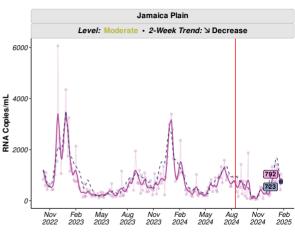


Level: **Moderate**

- Average value in <u>JP</u> over the past week: 792 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (723 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>JP</u> are <u>decreasing</u>.
- Change compared to two weeks ago: <u>-386</u> copies/mL (-33%).



Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (JP);

Mattapan

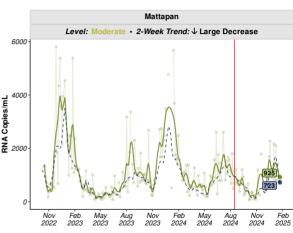


Level: **Moderate**

- Average value in <u>MT</u> over the past week: <u>925</u> copies/mL.
- This value is moderate compared to past values and similar than the citywide average (723 copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in <u>MT</u> are <u>decreasing</u>.
- Change compared to two weeks ago: <u>-521</u> copies/mL (-36%).



Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (MT);

Roslindale/West Roxbury

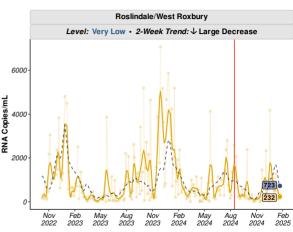


Level: Very Low

- Average value in <u>RS/WR</u> over the past week: <u>232</u> copies/mL.
- This value is very low compared to past values and <u>lower</u> than the citywide average (723 copies/mL).

Trend: ↓ Large Decrease

- Over the past two weeks, values in RS/WR are decreasing.
- Change compared to two weeks ago: <u>-525</u> copies/mL (-69%).



Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (RS/WR);

Roxbury

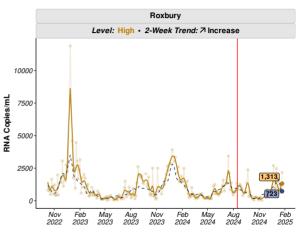


Level: High

- Average value in <u>RX</u> over the past week: 1,313 copies/mL.
- This value is <u>high</u> compared to past values and <u>higher</u> than the citywide average (723 copies/mL).

Trend: **↗** Increase

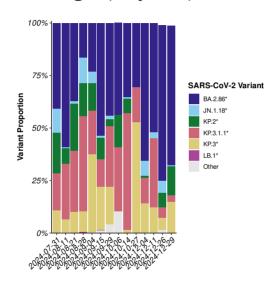
- Over the past two weeks, values in <u>RX</u> are <u>increasing</u>.
- Change compared to two weeks ago: +308 copies/mL (+31%).



Updated: 28-Jan-2025 | Samples through: 22-Jan-2025 (RX);

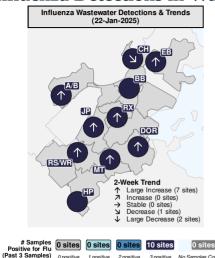
Percent Variant Lineages (Citywide)

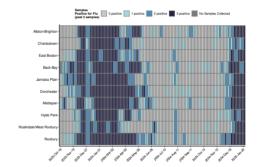




Influenza Detections in Wastewater







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.

2 positive

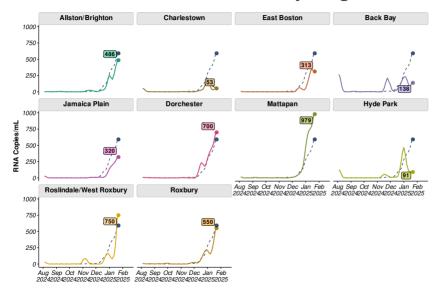
3 positive No Samples Collected

1 positive

0 positive

Influenza Trends in Wastewater by Neighborhood



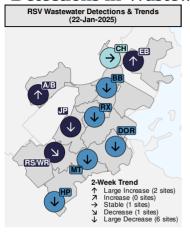


For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

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

RSV Detections in Wastewater





Samples Positive for RSV (Past 3 Samples)

0 nositive

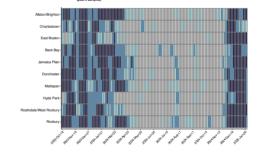
1 positive

2 positive

0 sites

3 positive No Samples Collected

RSV = Respiratory Syncytial Virus

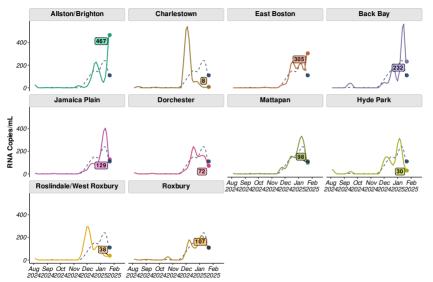


Samples
Positive for RSV 0 positive 1 1 positive 2 positive 3 positive No Samples Collected

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.

RSV Trends in Wastewater by Neighborhood





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

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

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.
- Recognize the <u>symptoms</u> of COVID-19 and 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>preventing spread</u> if you have COVID-19

- Find a vaccination clinic in your neighborhood
- Pick up a <u>free at-home test kit</u> 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 in Boston

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.
- Recognize the <u>symptoms</u> of COVID-19 and 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>preventing spread</u> if you have COVID-19

- Find a <u>vaccination clinic</u> in your neighborhood
- Pick up a <u>free at-home test kit</u> 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 in Boston

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.
- Recognize the <u>symptoms</u> of COVID-19 and 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>preventing spread</u> if you have COVID-19

- Find a <u>vaccination clinic</u> in your neighborhood
- Pick up 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 in Boston

Level: Low



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.
- Recognize the symptoms of COVID-19 and 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 preventing spread if you have COVID-19

- Find a vaccination clinic in your neighborhood
- · Pick up 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 in Boston

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.
- Recognize the symptoms of COVID-19 and 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 preventing spread if you have COVID-19

- Find a vaccination clinic in your neighborhood
- · Pick up 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 in Boston