

Boston Wastewater Epidemiology Report

Updated: 05-Feb-2025 | **Data Complete Through**: 29-Jan-2025

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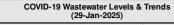
A Note About These Reports

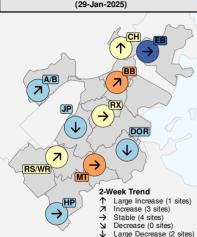


The laboratory that tests Boston's wastewater changed on August 1, 2024. Because of differences in the methods used at the old laboratory and the new one, data may not be comparable before and after the change. The change is marked with a vertical red line line on figures in this report. BPHC cautions 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







COVID-19
Level
(# sites)











Verv High

BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL 2-WEEK TRENDS

Moderate

793 copies/mL samples through 29-Jan-2025

Decrease -396 copies/mL (-33%)

NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

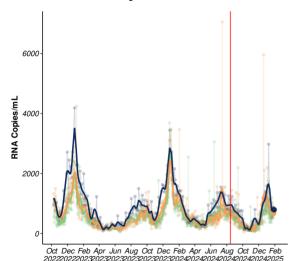
Level	Neighborhood/Site		Trend
High	Back Bay (BB)	7	Increase
High	Mattapan (MT)	\rightarrow	Stable
Moderate	Roxbury (RX)	\rightarrow	Stable
	Roslindale/West Roxbury (RS/WR)	7	Increase
	Charlestown (CH)	一个	Large Increase
Low	Dorchester (DOR)	$\overline{}$	Large Decrease
	Allston/Brighton (A/B)	7	Increase
	Jamaica Plain (JP)	$\overline{}$	Large Decrease
	Hyde Park (HP)	\rightarrow	Stable
Very Low	East Boston (EB)	\rightarrow	Stable

For additional details see:

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

COVID-19 Citywide Overview and Trends





CITYWIDE AVERAGE

793
RNA copies/mL

RANGE ACROSS 11
NEIGHBORHOOD SITES

174-1,208
RNA copies/mL

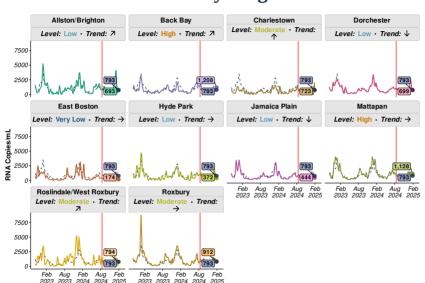
Data through: 29-Jan-2025

2-WEEK TRENDS			
Boston Decreasing	-33% over the past 14 days		
MWRA North Stable	+17% over the past 14 days		
MWRA South Stable	-15% over the past 14 days		

 $\textbf{Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (BPHC); 27-Jan-2025 (MWRA) | \textbf{MWRA Data: } \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}}$

BPHC Trend Overview by Neighborhood





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

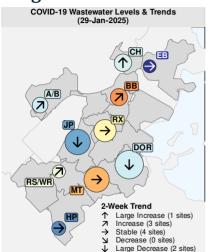
The dotted blue line and dark blue text box in each panel shows the trend and most recent value across all Boston sites weighted by population.

The vertical 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		COVID-19 Wastewater Levels 2-Week Trends			
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	793	Moderate	Decrease	-396	-33%
BB	1,208	High	Increase	+443	+58%
MT	1,128	High	Stable	-15	-1%
RX	912	Moderate	Stable	-58	-6%
RS/WR	794	Moderate	Increase	+400	+102%
CH	723	Moderate	Large Increase	+722	+72,201%
DOR	699	Low	Large Decrease	-956	-58%
A/B	693	Low	Increase	+406	+142%
JP	444	Low	Large Decrease	-592	-57%
HP	372	Low	Stable	-81	-18%
EB	174	Very Low	Stable	-61	-26%

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

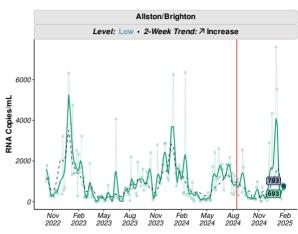


Level: Low

- Average value in <u>A/B</u> over the past week: 693 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (793 copies/mL).

Trend: **↗ Increase**

- Over the past two weeks, values in <u>A/B</u> are <u>increasing</u>.
- Change compared to two weeks ago: +406 copies/mL (+142%).



Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (A/B);

Back Bay

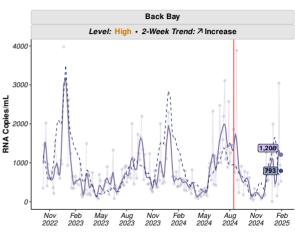


Level: High

- Average value in <u>BB</u> over the past week: 1,208 copies/mL.
- This value is high compared to past values and higher than the citywide average (793 copies/mL).

Trend: **↗** Increase

- Over the past two weeks, values in <u>BB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +443 copies/mL (+58%).



Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (BB);

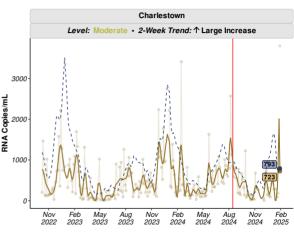
Charlestown



Level: Moderate

- Average value in <u>CH</u> over the past week: 723 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (793 copies/mL).

- Over the past two weeks, values in <u>CH</u> are <u>increasing</u>.
- Change compared to two weeks ago: +722 copies/mL (+72,201%).



Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (CH);

Dorchester

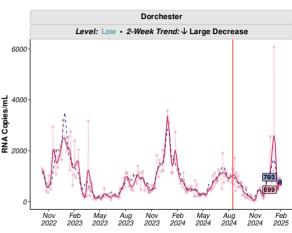


Level: Low

- Average value in <u>DOR</u> over the past week: 699 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (793 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: <u>-956</u> copies/mL (-58%).



Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (DOR);

East Boston



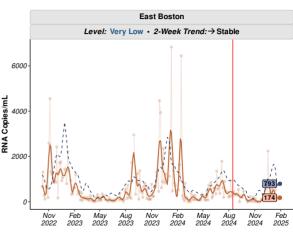
Level: Very Low

- Average value in <u>EB</u> over the past week: 174 copies/mL.
- This value is very low compared to past values and <u>lower</u> than the citywide average (793 copies/mL).

Trend: → Stable

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

 61 copies/mL (-26%).



Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (EB);

Hyde Park

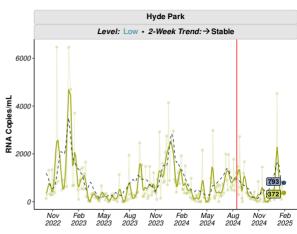


Level: Low

- Average value in <u>HP</u> over the past week: 372 copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (793 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>HP</u> are <u>stable</u>.
- Change compared to two weeks ago: -81 copies/mL (-18%).



Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (HP);

Jamaica Plain

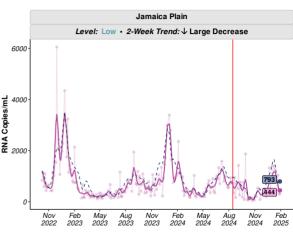


Level: Low

- Average value in <u>JP</u> over the past week: 444 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (793 copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in <u>JP</u> are <u>decreasing</u>.
- Change compared to two weeks ago: <u>-592</u> copies/mL (-57%).



Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (JP);

Mattapan

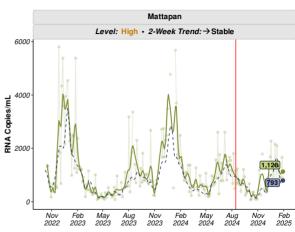


Level: High

- Average value in <u>MT</u> over the past week: 1,128 copies/mL.
- This value is high compared to past values and similar than the citywide average (793 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>MT</u> are <u>stable</u>.
- Change compared to two weeks ago:
 -15 copies/mL (-1%).



Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (MT);

Roslindale/West Roxbury

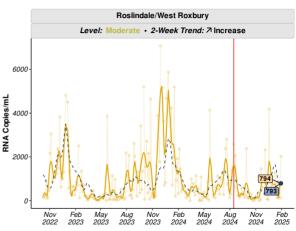


Level: **Moderate**

- Average value in RS/WR over the past week: 794 copies/mL.
- This value is <u>moderate</u> compared to past values and <u>similar</u> than the citywide average (793 copies/mL).

Trend: **↗** Increase

- Over the past two weeks, values in RS/WR are increasing.
- Change compared to two weeks ago: +400 copies/mL (+102%).



Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (RS/WR);

Roxbury

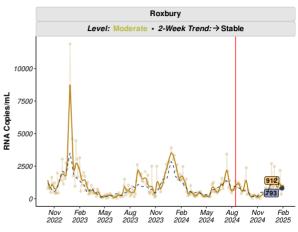


Level: **Moderate**

- Average value in <u>RX</u> over the past week: 912 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (793 copies/mL).

Trend: → Stable

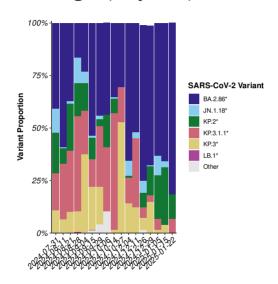
- Over the past two weeks, values in <u>RX</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-58</u> copies/mL (-6%).



Updated: 05-Feb-2025 | Samples through: 29-Jan-2025 (RX);

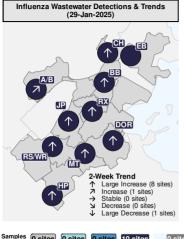
Percent Variant Lineages (Citywide)

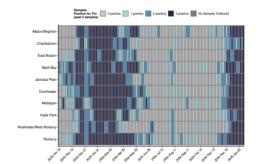




Influenza Detections in Wastewater







Positive for Flu (Past 3 Samples) 0 positive 1 positive

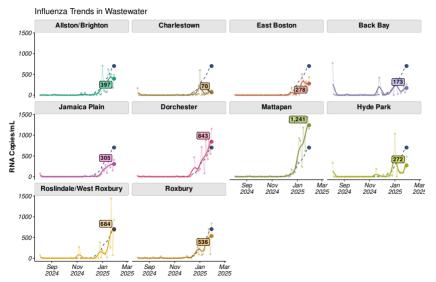
2 positive 3 positive No Samples Collected

0 sites

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.

Influenza Trends in Wastewater by Neighborhood



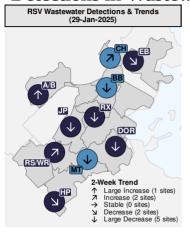


For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood;

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

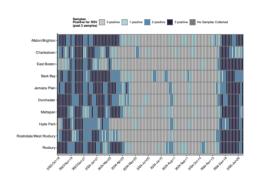
2 positive

0 sites

3 positive No Samples Collected

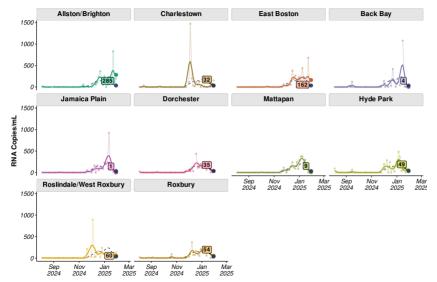
RSV = Respiratory Syncytial Virus

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)
\uparrow	Large Increase	>+500
7	Increase	+150 to +500
\rightarrow	Stable	-150 to +150
7	Decrease	-500 to -150
<u> </u>	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 <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: 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