

Boston Wastewater Epidemiology Report

Updated: 26-Sep-2024 | **Data Complete Through**: 22-Sep-2024



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Level

Level: Very High

Level: High

Level: Moderate

Level: Low

Level: Very Low

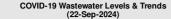
A Note About These Reports

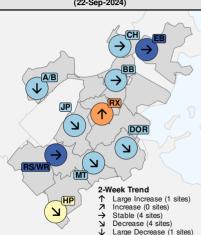


The laboratory that tests Boston's wastewater changed on August 1, 2024. Because of differences in the methods used at the old laboratory and the new one, data may not be comparable before and after the change. The change is marked with a vertical red line line on figures in this report. BPHC cautions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











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BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL

Low

623 copies/mL samples through 22-Sep-2024 2-WEEK TRENDS



Stable -66 copies/mL (-10%)

NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

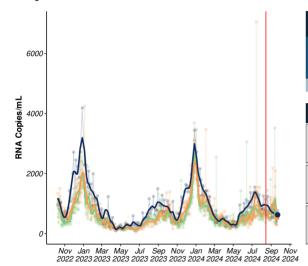
Level	Neighborhood/Site		Trend
High	Roxbury (RX)	1	Large Increase
Moderate	Hyde Park (HP)	7	Decrease
	Mattapan (MT)	7	Decrease
	Back Bay (BB)	\rightarrow	Stable
Low	Dorchester (DOR)	7	Decrease
LOW	Jamaica Plain (JP)	И	Decrease
	Charlestown (CH)	\rightarrow	Stable
	Allston/Brighton (A/B)	$\overline{}$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

For additional details see:

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

Citywide Overview and Trends





CITYWIDE AVERAGE

RANGE ACROSS 11
NEIGHBORHOOD SITES

623
RNA copies/mL

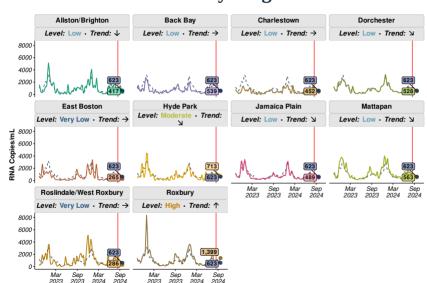
Data through: 22-Sep-2024

2-WEEK TRENDS			
Boston Stable	-10% over the past 14 days		
MWRA North Stable	-15% over the past 14 days		
MWRA South Decreasing	-45% over the past 14 days		

 $\textbf{Updated: } 26\text{-Sep-2024} \mid \textbf{Samples through: } 22\text{-Sep-2024 (BPHC); } 19\text{-Sep-2024 (MWRA)} \mid \textbf{MWRA Data: } \\ \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}}$

BPHC Trend Overview by Neighborhood





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

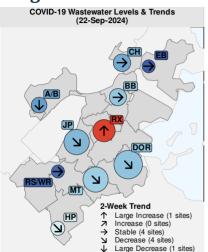
The dotted blue line and dark blue text box in each panel shows the trend and most recent value across all Boston sites weighted by population.

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-	2-Week Trends	
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	623	Low	Stable	-66	-10%
RX	1,399	High	Large Increase	+897	+179%
HP	713	Moderate	Decrease	-157	-18%
MT	563	Low	Decrease	-268	-32%
BB	539	Low	Stable	-42	-7%
DOR	528	Low	Decrease	-189	-26%
JP	489	Low	Decrease	-197	-29%
СН	452	Low	Stable	+98	+28%
A/B	417	Low	Large Decrease	-839	-67%
RS/WR	286	Very Low	Stable	-4	-1%
EB	265	Very Low	Stable	+48	+22%

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

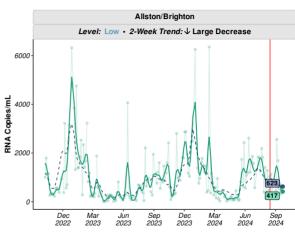


Level: Low

- Average value in <u>A/B</u> over the past week: <u>417</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (623 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: <u>-839</u> copies/mL (-67%).



Updated: 26-Sep-2024 | Samples through: 22-Sep-2024 (A/B);

Back Bay

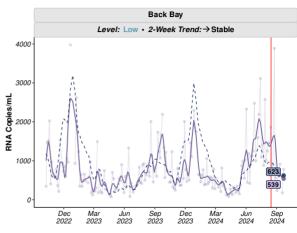


Level: Low

- Average value in <u>BB</u> over the past week: 539 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (623 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>BB</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-42</u> copies/mL (-7%).



Updated: 26-Sep-2024 | Samples through: 22-Sep-2024 (BB):

Charlestown

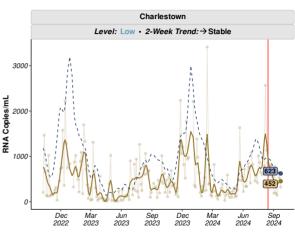


Level: Low

- Average value in <u>CH</u> over the past week: 452 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (623 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>CH</u> are <u>stable</u>.
- Change compared to two weeks ago: +98 copies/mL (+28%).



Updated: 26-Sep-2024 | Samples through: 22-Sep-2024 (CH);

Dorchester

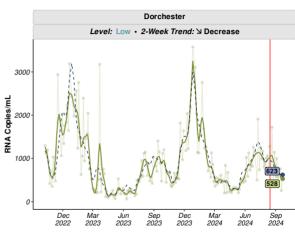


Level: Low

- Average value in <u>DOR</u> over the past week: <u>528</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (623 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>DOR</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -189 copies/mL (-26%).



Updated: 26-Sep-2024 | Samples through: 22-Sep-2024 (DOR);

East Boston

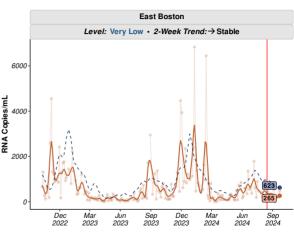


Level: Very Low

- Average value in <u>EB</u> over the past week: 265 copies/mL.
- This value is very low compared to past values and <u>lower</u> than the citywide average (623 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>EB</u> are <u>stable</u>.
- Change compared to two weeks ago: +48 copies/mL (+22%).



Updated: 26-Sep-2024 | Samples through: 22-Sep-2024 (EB);

Hyde Park

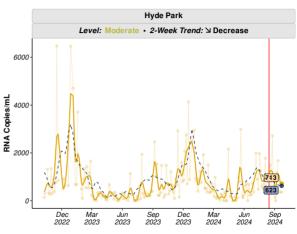


Level: **Moderate**

- Average value in <u>HP</u> over the past week: 713 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (623 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>HP</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -157 copies/mL (-18%).



Updated: 26-Sep-2024 | Samples through: 22-Sep-2024 (HP):

Jamaica Plain

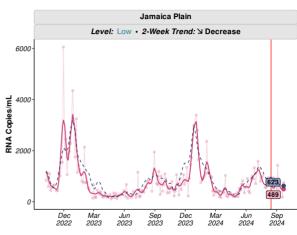


Level: Low

- Average value in <u>JP</u> over the past week: 489 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (623 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>-197</u> copies/mL (-29%).



Updated: 26-Sep-2024 | Samples through: 22-Sep-2024 (JP);

Mattapan

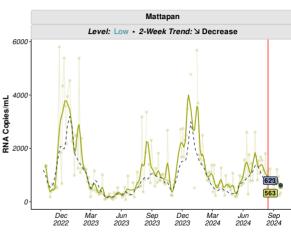


Level: Low

- Average value in <u>MT</u> over the past week: 563 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (623 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>MT</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -268 copies/mL (-32%).



Updated: 26-Sep-2024 | Samples through: 22-Sep-2024 (MT);

Roslindale/West Roxbury

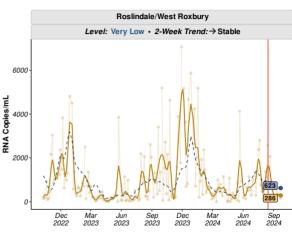


Level: Very Low

- Average value in <u>RS/WR</u> over the past week: <u>286</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (623 copies/mL).

Trend: \rightarrow Stable

- Over the past two weeks, values in RS/WR are <u>stable</u>.
- Change compared to two weeks ago: <u>-4</u> copies/mL (-1%).



Updated: 26-Sep-2024 | Samples through: 22-Sep-2024 (RS/WR);

Roxbury

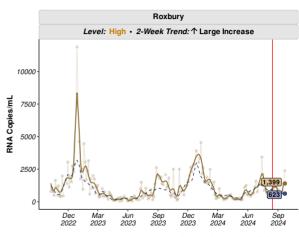


Level: High

- Average value in <u>RX</u> over the past week: 1,399 copies/mL.
- This value is high compared to past values and higher than the citywide average (623 copies/mL).

Trend: 1 Large Increase

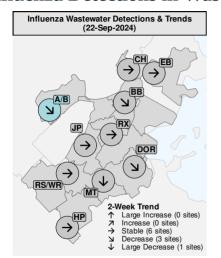
- Over the past two weeks, values in <u>RX</u> are <u>increasing</u>.
- Change compared to two weeks ago: +897 copies/mL (+179%).



Updated: 26-Sep-2024 | Samples through: 22-Sep-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







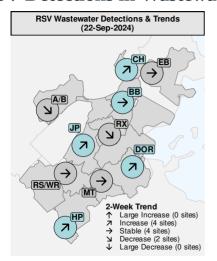






RSV Detections in Wastewater





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







1 positive



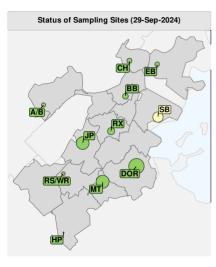






Site Status and Details





Site Status (N=11)

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