

Wastewater Epidemiology COVID-19 Report

Updated: 27-Jun-2024 | **Data Complete Through**: 23-Jun-2024



Report Contents



Summary

Neighborhood Levels and Trends Citywide Overview and Trends BPHC Trend Overview by Neighborhood Citywide Percent Variant Lineages

Detailed Results

Neighborhood Levels and Data Table Results by Neighborhood

Allston/Brighton

Back Bay

Charlestown

Dorchester

East Boston Hyde Park

Jamaica Plain

Mattapan

Roslindale/West Roxbury

Roxbury

South Boston

Additional Information

Site Status and Details Level and Trend Category Definitions Recommendations and Resources by Level

Level: Very High

Level: High

Level: Moderate

Level: Low

Level: Very Low

Neighborhood Levels and Trends





RS/WR

BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL

2-WEEK TRENDS

Moderate

928 copies/mL samples through 23-Jun-2024



+56 copies/mL (+6%)

NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

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

2-Week Trend

Large Increase (0 sites) Increase (7 sites)

DOR

- Stable (2 sites)
- Decrease (1 sites)
- - Large Decrease (0 sites)

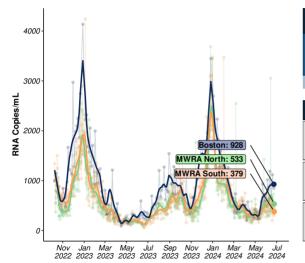


For additional details see:

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

Citywide Overview and Trends





CITYWIDE AVERAGE

928
RNA copies/mL

Pata through: 23-Jun-2024

2-WEEK TRENDS			
Boston Stable	+6% over the past 14 days		
MWRA North Stable	-11% over the past 14 days		
MWRA South Decreasing	-29% over the past 14 days		

 $\textbf{Updated: 27-Jun-2024 | Samples through: 23-Jun-2024 (BPHC); 24-Jun-2024 (MWRA) | \textbf{MWRA Data: } \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}}$

BPHC Trend Overview by Neighborhood

Dec Mar Jun Sep Dec Mar Jun

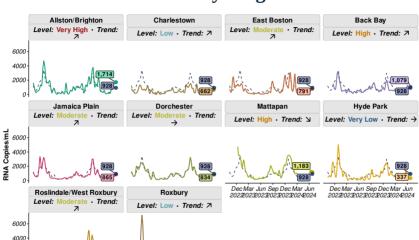
2022022022022022022024024

2000

DecMar Jun Sep DecMar Jun

2022022022022022022024024





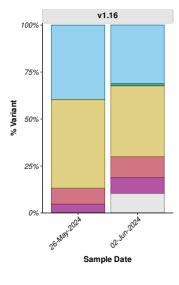
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

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.

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

Citywide Percent Variant Lineages





Variant	%
BA.2.86	0.0%
JN.1	31.2%
JN.1.13	1.1%
JN.1.7	0.1%
KP.2	37.6%
KP.1.1	11.2%
KP.3	8.5%
Other	10.3%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 02-Jun-2024 (most recent available data); Variant results are reported weekly with a 3-week lag due to laboratory processing and analysis.

Sequencing Analysis Protocol Version: v1.16 (13-Jun-2024):

• "Other variants" contains all variants not explicitly quantified.

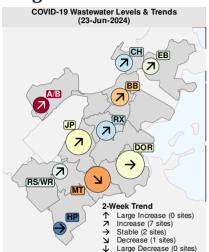
Version Changes: Added: JN.1.7, KP.3 Removed: XBB. EG.5

For Additional Info See:

https://www.biobot.io/covid19-variants-report-notes/

Neighborhood Levels and Data Table





	COVID-19 Wastewater Levels		2-Week Trends		
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	928	Moderate	Stable	+56	
A/B	1,714	Very High	Increase	+223	+15%
MT	1,183	High	Decrease	-284	-19%
BB	1,079	High	Increase	+174	+19%
JP	865	Moderate	Increase	+315	+57%
DOR	834	Moderate	Stable	-6	-1%
EB	791	Moderate	Increase	+319	+68%
RS/WR	742	Moderate	Increase	+442	+147%
CH	662	Low	Increase	+235	+55%
RX	647	Low	Increase	+198	+44%
HP	337	Very Low	Stable	-101	-23%

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

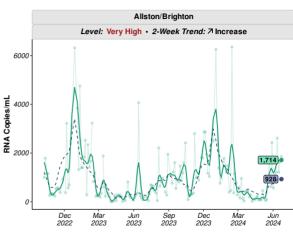


Level: Very High

- Average value in A/B over the past week: 1,714 copies/mL.
- This value is very high compared to past values and higher than the citywide average (928 copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in <u>A/B</u> are <u>increasing</u>.
- Change compared to two weeks ago: +223 copies/mL (+15%).



Updated: 27-Jun-2024 | Samples through: 23-Jun-2024 (A/B);

Back Bay

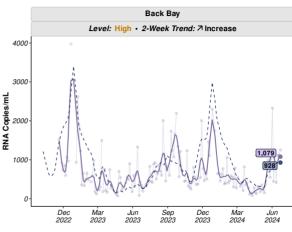


Level: High

- Average value in <u>BB</u> over the past week: 1,079 copies/mL.
- This value is <u>high</u> compared to past values and <u>similar</u> than the citywide average (<u>928</u> copies/mL).

Trend: **↗** Increase

- Over the past two weeks, values in <u>BB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +174 copies/mL (+19%).



Updated: 27-Jun-2024 | Samples through: 23-Jun-2024 (BB);

Charlestown

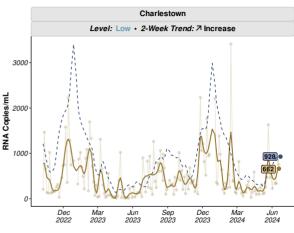


Level: Low

- Average value in <u>CH</u> over the past week: 662 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>928</u> copies/mL).

Trend: **↗ Increase**

- Over the past two weeks, values in <u>CH</u> are <u>increasing</u>.
- Change compared to two weeks ago: +235 copies/mL (+55%).



Updated: 27-Jun-2024 | Samples through: 19-Jun-2024 (CH);

Dorchester

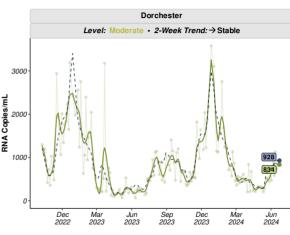


Level: Moderate

- Average value in <u>DOR</u> over the past week: <u>834</u> copies/mL.
- This value is moderate compared to past values and similar than the citywide average (928 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>DOR</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-6</u> copies/mL (-1%).



Updated: 27-Jun-2024 | Samples through: 23-Jun-2024 (DOR);

East Boston

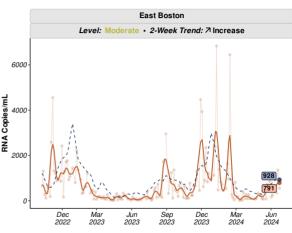


Level: **Moderate**

- Average value in <u>EB</u> over the past week: 791 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (928 copies/mL).

Trend: **↗ Increase**

- Over the past two weeks, values in <u>EB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +319 copies/mL (+68%).



Updated: 27-Jun-2024 | Samples through: 23-Jun-2024 (EB);

Hyde Park

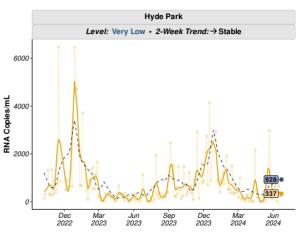


Level: Very Low

- Average value in <u>HP</u> over the past week: 337 copies/mL.
- This value is very low compared to past values and <u>lower</u> than the citywide average (928 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>HP</u> are <u>stable</u>.
- Change compared to two weeks ago:
 -101 copies/mL (-23%).



Updated: 27-Jun-2024 | Samples through: 23-Jun-2024 (HP);

Jamaica Plain

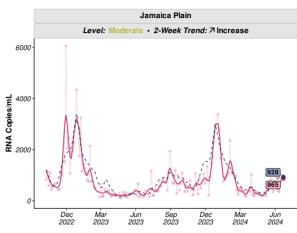


Level: **Moderate**

- Average value in <u>JP</u> over the past week: 865 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (928 copies/mL).

Trend: **↗ Increase**

- Over the past two weeks, values in <u>JP</u> are increasing.
- Change compared to two weeks ago: +315 copies/mL (+57%).



Updated: 27-Jun-2024 | Samples through: 23-Jun-2024 (JP);

Mattapan



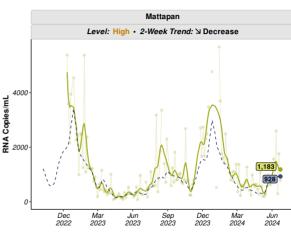
Level: High

- Average value in <u>MT</u> over the past week: 1,183 copies/mL.
- This value is <u>high</u> compared to past values and <u>similar</u> than the citywide average (<u>928</u> copies/mL).

Trend: > Decrease

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

 -284 copies/mL (-19%).



Updated: 27-Jun-2024 | Samples through: 23-Jun-2024 (MT);

Roslindale/West Roxbury

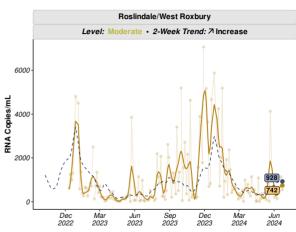


Level: **Moderate**

- Average value in RS/WR over the past week: 742 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (928 copies/mL).

Trend: **↗** Increase

- Over the past two weeks, values in RS/WR are increasing.
- Change compared to two weeks ago: +442 copies/mL (+147%).



Updated: 27-Jun-2024 | Samples through: 23-Jun-2024 (RS/WR);

Roxbury

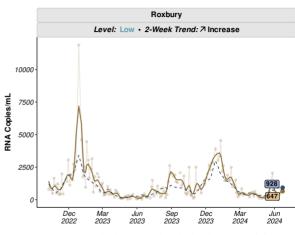


Level: Low

- Average value in <u>RX</u> over the past week: 647 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>928</u> copies/mL).

Trend: **↗** Increase

- Over the past two weeks, values in <u>RX</u> are <u>increasing</u>.
- Change compared to two weeks ago: +198 copies/mL (+44%).

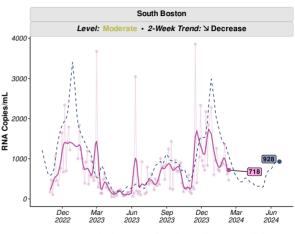


Updated: 27-Jun-2024 | Samples through: 23-Jun-2024 (RX);

South Boston



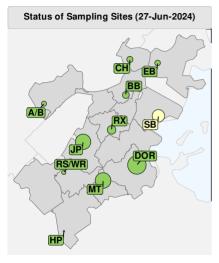
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



Updated: 27-Jun-2024 | Samples through: 11-Feb-2024 (SB);

Site Status and Details





#	Neighborhood	Date Site Confirmed	Site Status	Pop. Covered	% Neighborhood Covered
01	A/B	02-Oct-2022	Active	2,684	4.0%
02	CH	02-Oct-2022	Active	3,736	18.3%
03	EB	02-Oct-2022	Active	3,178	6.3%
04	BB	20-Nov-2022	Active	4,551	8.1%
05	SB	30-Oct-2022	Paused*	14,962	35.8%
07	JP	02-Oct-2022	Active	23,573	56.9%
80	DOR	02-Oct-2022	Active	34,562	23.8%
09	MT	11-Dec-2022	Active	24,441	80.5%
10	HP	02-Oct-2022	Active	1,262	3.5%
11	RS/WR	11-Dec-2022	Active	2,165	3.5%
12	RX	02-Oct-2022	Active	7,036	16.5%

Site Status (N=11)





Paused (n=1)

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)
<u></u>	Large Increase	>+500
7	Increase	+150 to +500
\rightarrow	Stable	-150 to +150
7	Decrease	-500 to -150
→	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 <u>vaccination clinic</u> in your neighborhood
- Find a testing site or pickup 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: 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 <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





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