

Wastewater Epidemiology COVID-19 Report

Updated: 12-Jun-2024 | **Data Complete Through**: 09-Jun-2024



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Level: Very High

Level: High

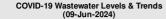
Level: Moderate

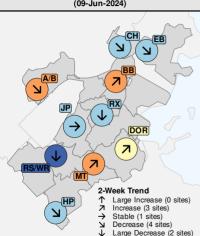
Level: Low

Level: Very Low

Neighborhood Levels and Trends







COVID-19
Level
(# sites)













COVID-19 LEVEL

Moderate

759 copies/mL samples through 09-Jun-2024

BOSTON CITYWIDE COVID-19 LEVEL & TRENDS





Stable +43 copies/mL (+6%)

NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

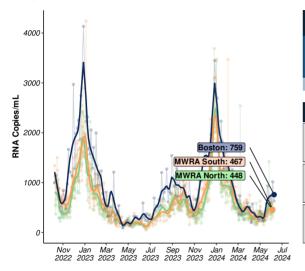
Level Neighborhood/Site			Trend
	Back Bay (BB)	7	Increase
High	Allston/Brighton (A/B)	7	Decrease
	Mattapan (MT)	7	Increase
Moderate	Dorchester (DOR)	7	Increase
	Jamaica Plain (JP)	\rightarrow	Stable
	Roxbury (RX)	$\overline{}$	Large Decrease
Low	Charlestown (CH)	Z	Decrease
	Hyde Park (HP)	7	Decrease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

759
RNA copies/mL

RANGE ACROSS 11
NEIGHBORHOOD SITES

240-1,224
RNA copies/mL

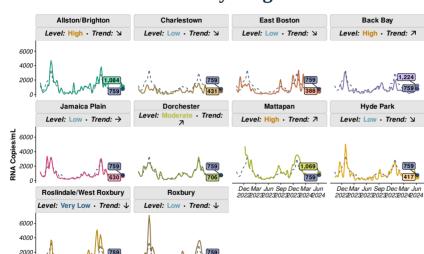
Data through: 09-Jun-2024

2-WEEK TRENDS			
Boston Stable	+6% over the past 14 days		
MWRA North Stable	-9% over the past 14 days		
MWRA South Stable	+12% over the past 14 days		

 $\textbf{Updated: } 12\text{-Jun-2024} \mid \textbf{Samples through: } 09\text{-Jun-2024 (BPHC); } 05\text{-Jun-2024 (MWRA)} \mid \textbf{MWRA Data: } \\ \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}}$

BPHC Trend Overview by Neighborhood





Dec Mar Jun Sep Dec Mar Jun 20220232023202320242024

Dec Mar Jun Sep Dec Mar Jun

20220230230230230230240024

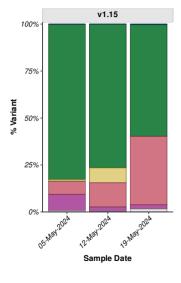
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

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





%
0.0%
0.0%
0.3%
59.5%
0.0%
36.4%
2.3%
1.6%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 19-May-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: v1.15 (24-May-2024):

XBB includes all XBB sublineages aside from those specifically reported
 "Other variants" contains all variants not explicitly quantified.

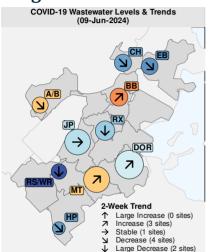
Version Changes: Added: KP.2, KP1.1 Removed: XBB.1.5, XBB.1.9

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	759	Moderate	Stable	+43	
BB	1,224	High	Increase	+267	+28%
A/B	1,084	High	Decrease	-312	-22%
MT	1,069	High	Increase	+280	+36%
DOR	706	Moderate	Increase	+201	+40%
JP	630	Low	Stable	+50	+9%
RX	556	Low	Large Decrease	-732	-57%
CH	431	Low	Decrease	-332	-43%
HP	417	Low	Decrease	-487	-54%
EB	388	Low	Decrease	-204	-34%
RS/WR	240	Very Low	Large Decrease	-1,437	-86%

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

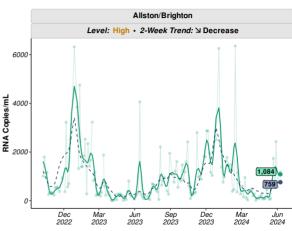


Level: High

- Average value in A/B over the past week: 1,084 copies/mL.
- This value is high compared to past values and similar than the citywide average (759 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>A/B</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -312 copies/mL (-22%).



Updated: 12-Jun-2024 | Samples through: 09-Jun-2024 (A/B);

Back Bay

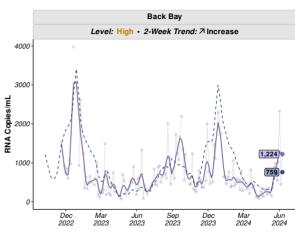


Level: High

- Average value in <u>BB</u> over the past week: 1,224 copies/mL.
- This value is <u>high</u> compared to past values and <u>higher</u> than the citywide average (759 copies/mL).

Trend: **↗** Increase

- Over the past two weeks, values in <u>BB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +267 copies/mL (+28%).



Updated: 12-Jun-2024 | Samples through: 09-Jun-2024 (BB);

Charlestown

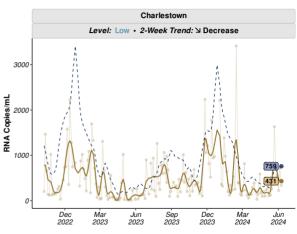


Level: Low

- Average value in <u>CH</u> over the past week: 431 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (759 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>CH</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -332 copies/mL (-43%).



Updated: 12-Jun-2024 | Samples through: 09-Jun-2024 (CH);

Dorchester

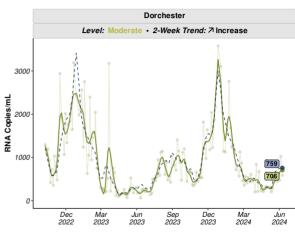


Level: Moderate

- Average value in <u>DOR</u> over the past week: <u>706</u> copies/mL.
- This value is moderate compared to past values and similar than the citywide average (759 copies/mL).

Trend: **↗** Increase

- Over the past two weeks, values in <u>DOR</u> are <u>increasing</u>.
- Change compared to two weeks ago: +201 copies/mL (+40%).



Updated: 12-Jun-2024 | Samples through: 09-Jun-2024 (DOR);

East Boston

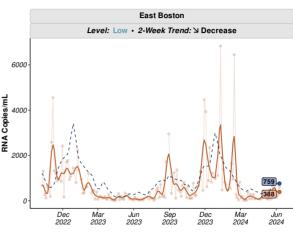


Level: Low

- Average value in <u>EB</u> over the past week: 388 copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (759 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>EB</u> are <u>decreasing</u>.
- Change compared to two weeks ago: <u>-204</u> copies/mL (-34%).



Updated: 12-Jun-2024 | Samples through: 09-Jun-2024 (EB);

Hyde Park

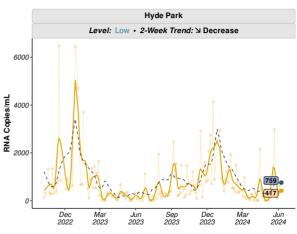


Level: Low

- Average value in <u>HP</u> over the past week: 417 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (759 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>HP</u> are <u>decreasing</u>.
- Change compared to two weeks ago: <u>-487</u> copies/mL (-54%).



Updated: 12-Jun-2024 | Samples through: 09-Jun-2024 (HP):

Jamaica Plain

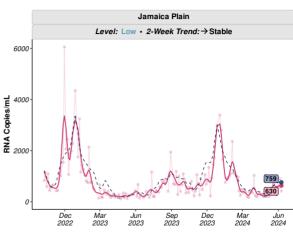


Level: Low

- Average value in <u>JP</u> over the past week: 630 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (759 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>JP</u> are <u>stable</u>.
- Change compared to two weeks ago: +50 copies/mL (+9%).



Updated: 12-Jun-2024 | Samples through: 09-Jun-2024 (JP);

Mattapan

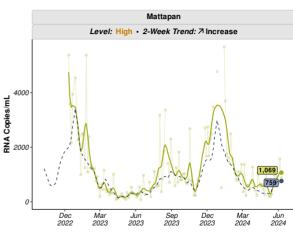


Level: High

- Average value in <u>MT</u> over the past week: 1,069 copies/mL.
- This value is <u>high</u> compared to past values and <u>similar</u> than the citywide average (759 copies/mL).

Trend: **↗ Increase**

- Over the past two weeks, values in <u>MT</u> are <u>increasing</u>.
- Change compared to two weeks ago: +280 copies/mL (+36%).



Updated: 12-Jun-2024 | Samples through: 09-Jun-2024 (MT);

Roslindale/West Roxbury



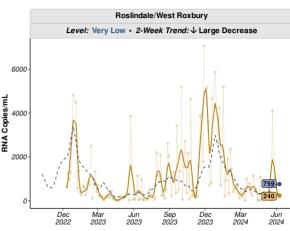
Level: Very Low

- Average value in RS/WR over the past week: 240 copies/mL.
- This value is very low compared to past values and <u>lower</u> than the citywide average (759 copies/mL).

Trend: ↓ Large Decrease

- Over the past two weeks, values in RS/WR are decreasing.
- Change compared to two weeks ago:

 1,437 copies/mL (-86%).



Updated: 12-Jun-2024 | Samples through: 09-Jun-2024 (RS/WR);

Roxbury

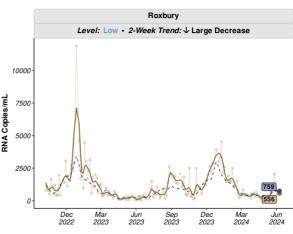


Level: Low

- Average value in <u>RX</u> over the past week: 556 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (759 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>-732</u> copies/mL (-57%).

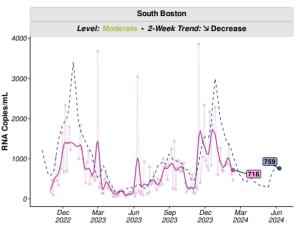


Updated: 12-Jun-2024 | Samples through: 09-Jun-2024 (RX);

South Boston



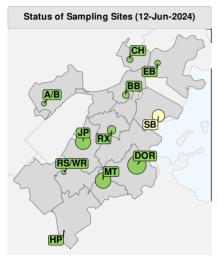
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



Updated: 12-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%
08	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)

ıs a

Active

а

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