

Wastewater Epidemiology COVID-19 Report

Updated: 19-Aug-2024 | **Data Complete Through**: 11-Aug-2024

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Level: Very High

Level: High

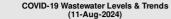
Level: Moderate

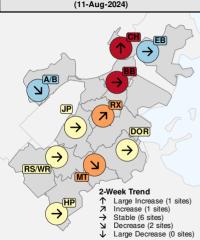
Level: Low

Level: Very Low

Neighborhood Levels and Trends







COVID-19 Level		2 sites	4 sites	2 sites	2 site
(# sites)	Very Low	Low	Moderate	Hiah	Very His

BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL

2-WEEK TRENDS

Moderate

Stable

973 copies/mL samples through 11-Aug-2024

-88 copies/mL (-8%)

NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

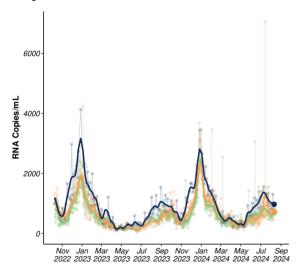
Level	Level Neighborhood/Site		Trend
Very High	Charlestown (CH)	1	Large Increase
very nign	Back Bay (BB)	\rightarrow	Stable
High	Roxbury (RX)	7	Increase
High	Mattapan (MT)	7	Decrease
	Hyde Park (HP)	\rightarrow	Stable
Moderate	Dorchester (DOR)	\rightarrow	Stable
Moderate	Roslindale/West Roxbury (RS/WR)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

973
RNA copies/mL

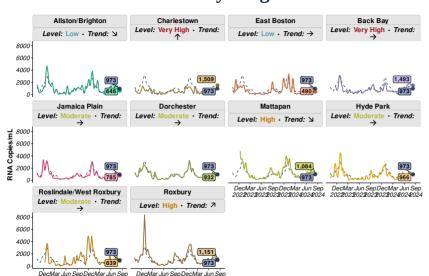
Pata through: 11-Aug-2024

2-WEEK TRENDS				
Boston Stable	-8% over the past 14 days			
MWRA North Stable	+6% over the past 14 days			
MWRA South Stable	+3% over the past 14 days			

 $\textbf{Updated: } 19-\text{Aug-2024} \mid \textbf{Samples through: } 11-\text{Aug-2024 (BPHC); } 12-\text{Aug-2024 (MWRA)} \mid \textbf{MWRA Data: } \\ \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}}$

BPHC Trend Overview by Neighborhood





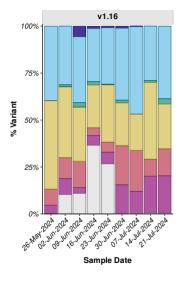
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

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.

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	38.6%
JN.1.13	2.8%
JN.1.7	0.0%
KP.2	23.8%
KP.1.1	14.4%
KP.3	19.8%
Other	0.5%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 21-Jul-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.

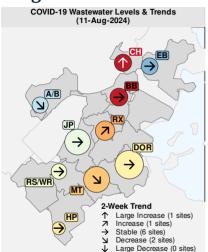
Version Changes: Added: JN.1.7, KP.3 Removed: XBB, EG.5

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	973	Moderate	Stable	-88	
CH	1,509	Very High	Large Increase	+677	+81%
BB	1,493	Very High	Stable	-79	-5%
RX	1,151	High	Increase	+307	+36%
MT	1,084	High	Decrease	-365	-25%
HP	966	Moderate	Stable	+83	+9%
DOR	932	Moderate	Stable	-67	-7%
RS/WR	839	Moderate	Stable	-38	-4%
JP	785	Moderate	Stable	+57	+8%
A/B	646	Low	Decrease	-434	-40%
EB	490	Low	Stable	+10	+2%

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

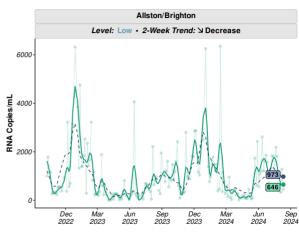


Level: Low

- Average value in A/B over the past week: 646 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>973</u> 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: <u>-434</u> copies/mL (-40%).



Updated: 19-Aug-2024 | Samples through: 11-Aug-2024 (A/B);

See <u>recommended actions and resources</u> based on levels and trends in this neighborhood.

Back Bay

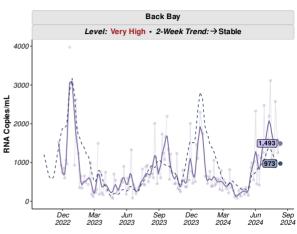


Level: Very High

- Average value in <u>BB</u> over the past week: 1,493 copies/mL.
- This value is very high compared to past values and higher than the citywide average (973 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>BB</u> are <u>stable</u>.
- Change compared to two weeks ago:
 -79 copies/mL (-5%).



Updated: 19-Aug-2024 | Samples through: 11-Aug-2024 (BB):

See <u>recommended actions and resources</u> based on levels and trends in this neighborhood.

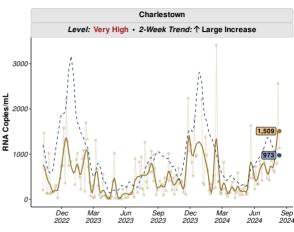
Charlestown



Level: Very High

- Average value in <u>CH</u> over the past week: 1,509 copies/mL.
- This value is very high compared to past values and higher than the citywide average (973 copies/mL).

- Over the past two weeks, values in <u>CH</u> are <u>increasing</u>.
- Change compared to two weeks ago: +677 copies/mL (+81%).



Updated: 19-Aug-2024 | Samples through: 11-Aug-2024 (CH):

See recommended actions and resources based on levels and trends in this neighborhood.

Dorchester

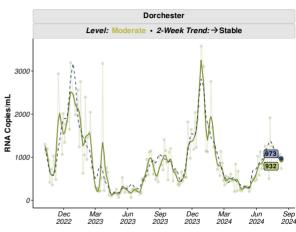


Level: **Moderate**

- Average value in <u>DOR</u> over the past week: <u>932</u> copies/mL.
- This value is moderate compared to past values and similar than the citywide average (973 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>-67</u> copies/mL (-7%).



Updated: 19-Aug-2024 | Samples through: 11-Aug-2024 (DOR);

See <u>recommended actions and resources</u> based on levels and trends in this neighborhood.

East Boston

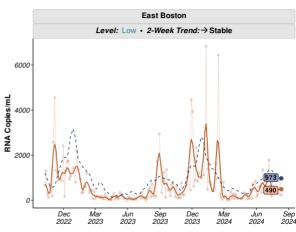


Level: Low

- Average value in <u>EB</u> over the past week: 490 copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (<u>973</u> copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>EB</u> are <u>stable</u>.
- Change compared to two weeks ago: +10 copies/mL (+2%).



Updated: 19-Aug-2024 | Samples through: 11-Aug-2024 (EB);

See <u>recommended actions and resources</u> based on levels and trends in this neighborhood.

Hyde Park

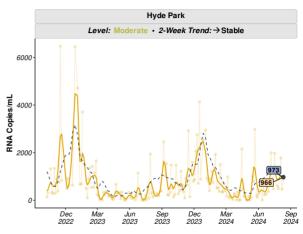


Level: **Moderate**

- Average value in <u>HP</u> over the past week: 966 copies/mL.
- This value is moderate compared to past values and <u>similar</u> than the citywide average (973 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>HP</u> are <u>stable</u>.
- Change compared to two weeks ago: +83 copies/mL (+9%).



Updated: 19-Aug-2024 | Samples through: 11-Aug-2024 (HP);

See recommended actions and resources based on levels and trends in this neighborhood.

Jamaica Plain

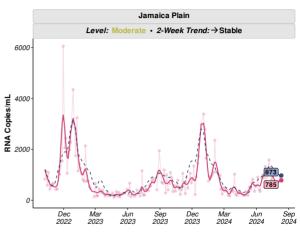


Level: **Moderate**

- Average value in <u>JP</u> over the past week: 785 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (973 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>JP</u> are <u>stable</u>.
- Change compared to two weeks ago: +57 copies/mL (+8%).



Updated: 19-Aug-2024 | Samples through: 11-Aug-2024 (JP);

See recommended actions and resources based on levels and trends in this neighborhood.

Mattapan

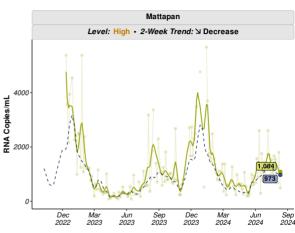


Level: High

- Average value in <u>MT</u> over the past week: 1,084 copies/mL.
- This value is <u>high</u> compared to past values and <u>similar</u> than the citywide average (<u>973</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: -365 copies/mL (-25%).



Updated: 19-Aug-2024 | Samples through: 11-Aug-2024 (MT);

See <u>recommended actions and resources</u> based on levels and trends in this neighborhood.

Roslindale/West Roxbury

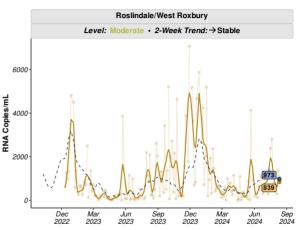


Level: **Moderate**

- Average value in RS/WR over the past week: 839 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (973 copies/mL).

Trend: → Stable

- Over the past two weeks, values in RS/WR are <u>stable</u>.
- Change compared to two weeks ago:
 <u>-38</u> copies/mL (-4%).



Updated: 19-Aug-2024 | Samples through: 11-Aug-2024 (RS/WR);

See recommended actions and resources based on levels and trends in this neighborhood.

Roxbury

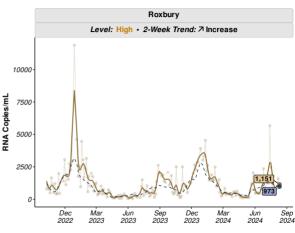


Level: High

- Average value in <u>RX</u> over the past week: 1,151 copies/mL.
- This value is <u>high</u> compared to past values and <u>similar</u> than the citywide average (<u>973</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: +307 copies/mL (+36%).



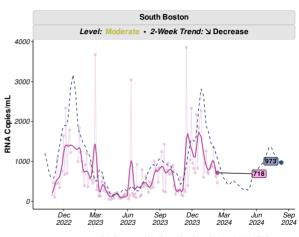
Updated: 19-Aug-2024 | Samples through: 11-Aug-2024 (RX);

See recommended actions and resources based on levels and trends in this neighborhood.

South Boston



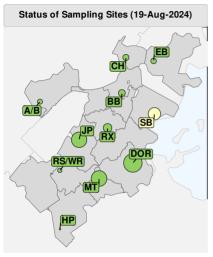
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



Updated: 19-Aug-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)



ctive = 10)



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)
$\overline{}$	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 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: 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

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.
- 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: 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