

Wastewater Epidemiology COVID-19 Report

Updated: 15-May-2024 | **Data Complete Through**: 12-May-2024



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Level: Very High

Level: High

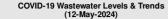
Level: Moderate

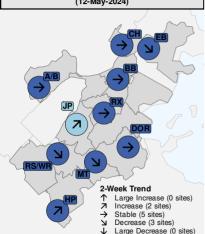
Level: Low

Level: Very Low

Neighborhood Levels and Trends







COVID-19 Level	9 sites	1 sites			
(# sites)	Very Low	Low	Moderate	High	Very High

BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL

2-WEEK TRENDS

Very Low



238 copies/mL samples through 12-May-2024

Stable -86 copies/mL (-27%)

NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

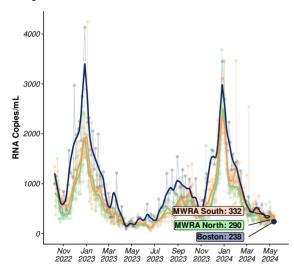
Level	Neighborhood/Site		Trend
Low	Jamaica Plain (JP)	7	Increase
	Dorchester (DOR)	\rightarrow	Stable
	Back Bay (BB)	\rightarrow	Stable
	Hyde Park (HP)	7	Increase
	Mattapan (MT)	7	Decrease
Very Low	Roxbury (RX)	\rightarrow	Stable
	Charlestown (CH)	\rightarrow	Stable
	Allston/Brighton (A/B)	\rightarrow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

238
RNA copies/mL

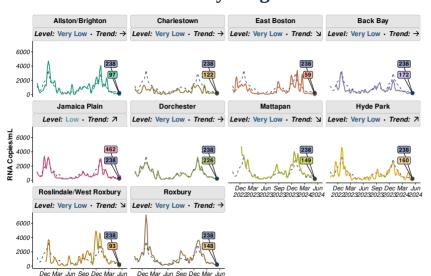
Pate through: 12-May-2024

2-WEEK TRENDS				
Boston Stable	-27% over the past 14 days			
MWRA North Stable	-10% over the past 14 days			
MWRA South Stable	+7% over the past 14 days			

 $\textbf{Updated: 15-May-2024 | Samples through: } 12-\text{May-2024 (BPHC); } 09-\text{May-2024 (MWRA)} | \textbf{MWRA Data: } \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}} \\ \textbf{15-May-2024 | Samples through: } 12-\text{May-2024 (BPHC); } 09-\text{May-2024 (MWRA)} | \textbf{MWRA Data: } \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}} \\ \textbf{15-May-2024 | Samples through: } 12-\text{May-2024 (BPHC); } 09-\text{May-2024 (MWRA)} | \textbf{MWRA Data: } \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}} \\ \textbf{15-May-2024 | Samples through: } 12-\text{May-2024 (BPHC); } 09-\text{May-2024 (MWRA)} | \textbf{MWRA Data: } \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}} \\ \textbf{15-May-2024 | Samples through: } 12-\text{May-2024 (BPHC); } 09-\text{May-2024 (MWRA)} | \textbf{MWRA Data: } \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}} \\ \textbf{15-May-2024 (BPHC); } 12-\text{May-2024 (BPHC); } 09-\text{May-2024 (MWRA)} | \textbf{MWRA Data: } \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}} \\ \textbf{15-May-2024 (BPHC); } 12-\text{May-2024 (BPHC); } 09-\text{May-2024 (MWRA)} | \textbf{MWRA Data: } \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}} \\ \textbf{15-May-2024 (BPHC); } 12-\text{May-2024 (BPHC); } 12-\text{M$

BPHC Trend Overview by Neighborhood





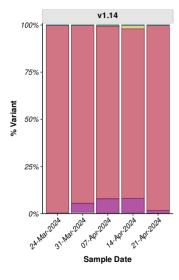
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

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	%
XBB	0.0%
XBB.1.5	0.0%
XBB.1.9	0.0%
EG.5	0.0%
BA.2.86	0.0%
JN.1	98.4%
JN.1.13	1.4%
Other	0.2%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 21-Apr-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: v1.14 (11-Apr-2024):

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

Version Changes: Added: JN.1.13 Removed: HV.1. FL.1.5.1

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	238	Very Low	Stable	-86	-27%
JP	462	Low	Increase	+256	+125%
SB	455	Low	Large Decrease	-559	-55%
DOR	226	Very Low	Stable	-72	-24%
BB	172	Very Low	Stable	-95	-36%
HP	160	Very Low	Increase	+159	+15,868%
MT	149	Very Low	Decrease	-441	-75%
RX	148	Very Low	Stable	-24	-14%
CH	122	Very Low	Stable	-55	-31%
A/B	97	Very Low	Stable	-36	-27%
RS/WR	93	Very Low	Decrease	-319	-77%
EB	59	Very Low	Decrease	-182	-75%

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

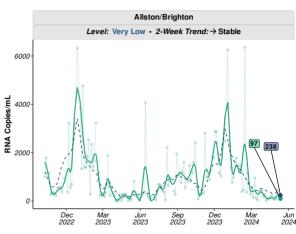


Level: Very Low

- Average value in <u>A/B</u> over the past week: <u>97</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (238 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>A/B</u> are <u>stable</u>.
- Change compared to two weeks ago: -36 copies/mL (-27%).



Updated: 15-May-2024 | Samples through: 12-May-2024 (A/B);

Back Bay

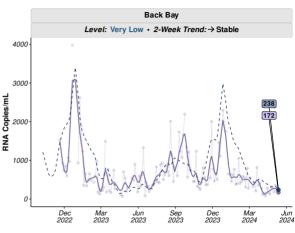


Level: Very Low

- Average value in <u>BB</u> over the past week: 172 copies/mL.
- This value is very low compared to past values and similar than the citywide average (238 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>-95</u> copies/mL (-36%).



Updated: 15-May-2024 | Samples through: 12-May-2024 (BB):

Charlestown

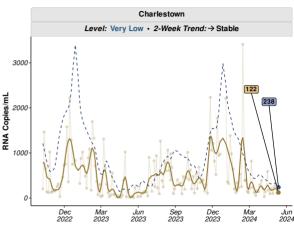


Level: Very Low

- Average value in <u>CH</u> over the past week: 122 copies/mL.
- This value is very low compared to past values and similar than the citywide average (238 copies/mL).

Trend: → Stable

- Over the past two weeks, values in <u>CH</u> are <u>stable</u>.
- Change compared to two weeks ago:
 -55 copies/mL (-31%).



Updated: 15-May-2024 | Samples through: 12-May-2024 (CH);

Dorchester



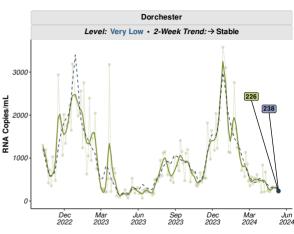
Level: Very Low

- Average value in <u>DOR</u> over the past week: <u>226</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (238 copies/mL).

Trend: → Stable

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

 -72 copies/mL (-24%).



Updated: 15-May-2024 | Samples through: 12-May-2024 (DOR);

East Boston

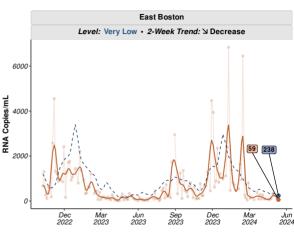


Level: Very Low

- Average value in <u>EB</u> over the past week: 59 copies/mL.
- This value is very low compared to past values and similar than the citywide average (238 copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>EB</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -182 copies/mL (-75%).



Updated: 15-May-2024 | Samples through: 12-May-2024 (EB);

Hyde Park

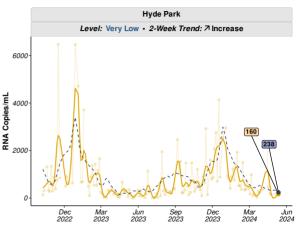


Level: Very Low

- Average value in <u>HP</u> over the past week: 160 copies/mL.
- This value is very low compared to past values and similar than the citywide average (238 copies/mL).

Trend: **↗ Increase**

- Over the past two weeks, values in <u>HP</u> are <u>increasing</u>.
- Change compared to two weeks ago: +159 copies/mL (+15,868%).



Updated: 15-May-2024 | Samples through: 12-May-2024 (HP);

Jamaica Plain

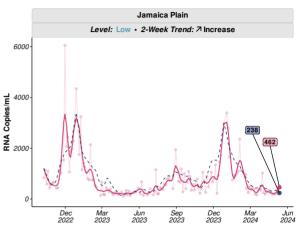


Level: Low

- Average value in <u>JP</u> over the past week: 462 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>238</u> copies/mL).

Trend: **↗ Increase**

- Over the past two weeks, values in <u>JP</u> are <u>increasing</u>.
- Change compared to two weeks ago: +256 copies/mL (+125%).



Updated: 15-May-2024 | Samples through: 12-May-2024 (JP);

Mattapan

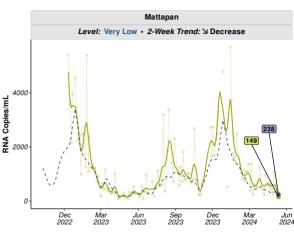


Level: Very Low

- Average value in <u>MT</u> over the past week: 149 copies/mL.
- This value is very low compared to past values and <u>similar</u> than the citywide average (<u>238</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: <u>-441</u> copies/mL (-75%).



Updated: 15-May-2024 | Samples through: 12-May-2024 (MT):

Roslindale/West Roxbury

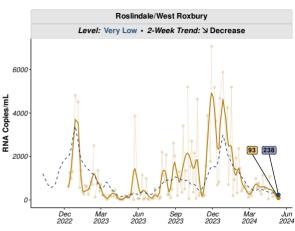


Level: Very Low

- Average value in RS/WR over the past week: 93 copies/mL.
- This value is very low compared to past values and <u>similar</u> than the citywide average (<u>238</u> copies/mL).

Trend: > Decrease

- Over the past two weeks, values in <u>RS/WR</u> are <u>decreasing</u>.
- Change compared to two weeks ago:
 -319 copies/mL (-77%).



Updated: 15-May-2024 | Samples through: 12-May-2024 (RS/WR);

Roxbury



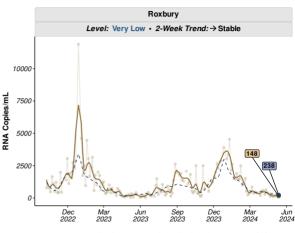
Level: Very Low

- Average value in <u>RX</u> over the past week: 148 copies/mL.
- This value is very low compared to past values and similar than the citywide average (238 copies/mL).

Trend: → Stable

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

 -24 copies/mL (-14%).

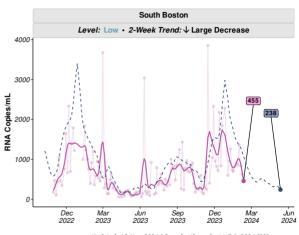


Updated: 15-May-2024 | Samples through: 12-May-2024 (RX);

South Boston



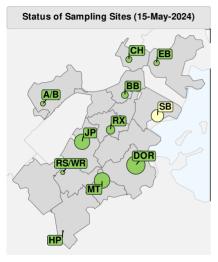
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



Updated: 15-May-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)



Active



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