

Wastewater Epidemiology COVID-19 Report

Updated: 25-Mar-2024 | Data Complete Through: 20-Mar-2024

☑ wastewater@bphc.org



Boston Public Health Commission

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

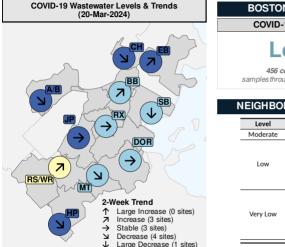
Level and Trend Category Definitions Recommendations and Resources by

Level

Level:	Very High	
Level:	High	
Level:	Moderate	
Level:	Low	
Level:	Very Low	

Neighborhood Levels and Trends





COVID-19

(# sites) Very Low

5 sites

1 mm

1 sites

Moderate

0 sites

Hiah

Verv Hiah

BOSTON CITYWIDE COVID-19 LEVEL & TRENDS COVID-19 LEVEL 2-WEEK TRENDS Low 456 copies/mL Stahle

samples through 20-Mar-2024

-53 copies/mL (-10%)

NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

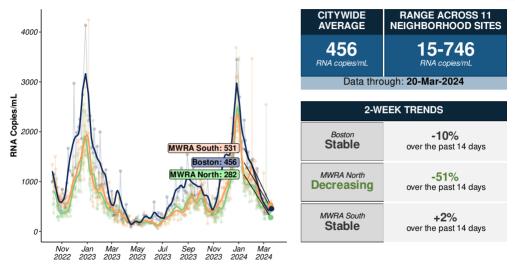
Level	Neighborhood/Site		Trend
Moderate	Roslindale/West Roxbury (RS/WR)	7	Increase
	Back Bay (BB)	7	Increase
	Dorchester (DOR)	\rightarrow	Stable
Low	Mattapan (MT)	И	Decrease
	South Boston (SB)	\rightarrow	Large Decrease
	Roxbury (RX)	\rightarrow	Stable
	East Boston (EB)	7	Increase
	Jamaica Plain (JP)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

For additional details see:

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

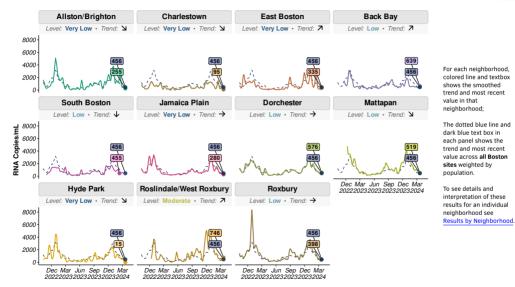
3/26

Citywide Overview and Trends

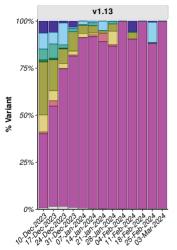


Updated: 25-Mar-2024 | Samples through: 20-Mar-2024 (BPHC); 18-Mar-2024 (MWRA) | MWRA Data: https://www.mwra.com/biobot/biobotdata.htm

BPHC Trend Overview by Neighborhood



Citywide Percent Variant Lineages



Variant	%
XBB	0.0%
XBB.1.5	0.0%
XBB.1.9	0.0%
FL.1.5.1	0.0%
EG.5	0.0%
	0.0%
BA.2.86	0.1%
JN.1	99.6%
Other	0.3%

Average variant percentage across all BPHC sites weighted by population size [Table shows variant percentages for samples collected the week of 03-Mar-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: v1.13 (05-Jan-2024):

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

Version Changes: Added: • BA.2.86 • JN.1

• Removed XBB.1.9.1, XBB.1.9.2, XBB.1.16

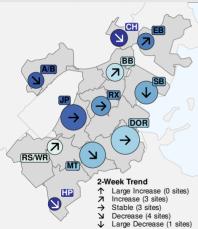
For Additional Info See:

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

Sample Date

Neighborhood Levels and Data Table





COVID-19 Wastewater Levels & Trends (20-Mar-2024)

	COVID-19 Wastewater Levels		2-Week Trends		
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	456	Low	Stable	-53	-10%
RS/WR	746	Moderate	Increase	+409	+121%
BB	639	Low	Increase	+248	+63%
DOR	576	Low	Stable	+122	+27%
MT	519	Low	Decrease	-276	-35%
SB	455	Low	Large Decrease	-559	-55%
RX	398	Low	Stable	-89	-18%
EB	335	Very Low	Increase	+201	+149%
JP	280	Very Low	Stable	-106	-27%
A/B	255	Very Low	Decrease	-159	-38%
CH	95	Very Low	Decrease	-293	-76%
HP	15	Very Low	Decrease	-446	-97%



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

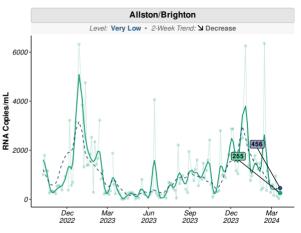


Level: Very Low

- Average value in <u>A/B</u> over the past week: <u>255</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (456 copies/mL).

Trend: 🖌 Decrease

- Over the past two weeks, values in <u>A/B</u> are **decreasing**.
- Change compared to two weeks ago: <u>-159</u> copies/mL (-38%).



Updated: 25-Mar-2024 | Samples through: 20-Mar-2024 (A/B);

Back Bay

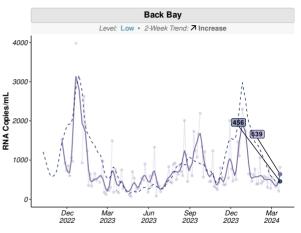


Level: Low

- Average value in **BB** over the past week: <u>639</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>456</u> copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in **BB** are **increasing**.
- Change compared to two weeks ago: <u>+248</u> copies/mL (+63%).



Updated: 25-Mar-2024 | Samples through: 20-Mar-2024 (BB);

Charlestown

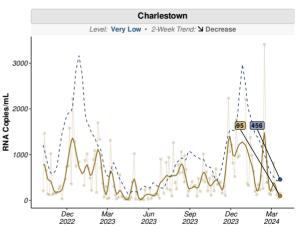


Level: Very Low

- Average value in <u>CH</u> over the past week:
 <u>95</u> copies/mL.
- This value is very low compared to past values and lower than the citywide average (456 copies/mL).

Trend: 🖌 Decrease

- Over the past two weeks, values in <u>CH</u> are decreasing.
- Change compared to two weeks ago: <u>-293</u> copies/mL (-76%).



Updated: 25-Mar-2024 | Samples through: 20-Mar-2024 (CH);

Dorchester

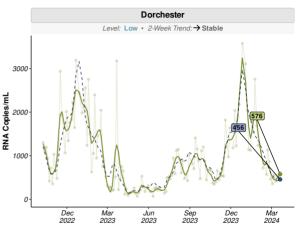


Level: Low

- Average value in <u>DOR</u> over the past week: <u>576</u> copies/mL.
- This value is low compared to past values and similar than the citywide average (456 copies/mL).

Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>DOR</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>+122</u> copies/mL (+27%).



Updated: 25-Mar-2024 | Samples through: 20-Mar-2024 (DOR);

East Boston

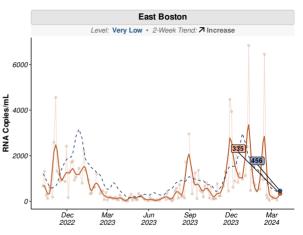


Level: Very Low

- Average value in <u>EB</u> over the past week: <u>335</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (456 copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in **EB** are **increasing**.
- Change compared to two weeks ago: <u>+201</u> copies/mL (+149%).



Updated: 25-Mar-2024 | Samples through: 20-Mar-2024 (EB);

Hyde Park

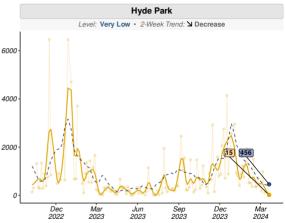


Level: Very Low

- Average value in <u>HP</u> over the past week: <u>15</u> copies/mL.
- This value is very low compared to past values and lower than the citywide average (456 copies/mL).

Trend: 🖌 Decrease

- Over the past two weeks, values in <u>HP</u> are **decreasing**.
- Change compared to two weeks ago: <u>-446</u> copies/mL (-97%).



Updated: 25-Mar-2024 | Samples through: 20-Mar-2024 (HP);

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

RNA Copies/mL

Jamaica Plain

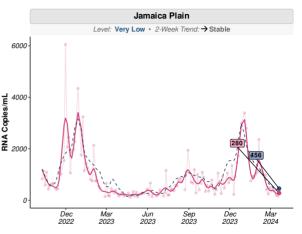


Level: Very Low

- Average value in <u>JP</u> over the past week: <u>280</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (456 copies/mL).

Trend: \rightarrow <u>Stable</u>

- Over the past two weeks, values in <u>JP</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-106</u> copies/mL (-27%).



Updated: 25-Mar-2024 | Samples through: 20-Mar-2024 (JP);

Mattapan

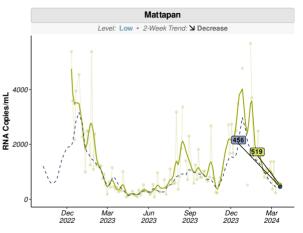


Level: Low

- Average value in <u>MT</u> over the past week: <u>519</u> copies/mL.
- This value is low compared to past values and similar than the citywide average (456 copies/mL).

Trend: 🖌 Decrease

- Over the past two weeks, values in <u>MT</u> are **decreasing**.
- Change compared to two weeks ago: <u>-276</u> copies/mL (-35%).



Updated: 25-Mar-2024 | Samples through: 20-Mar-2024 (MT);

Roslindale/West Roxbury

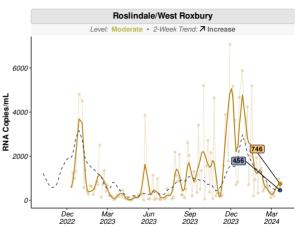


Level: Moderate

- Average value in **RS/WR** over the past week: <u>746</u> copies/mL.
- This value is <u>moderate</u> compared to past values and <u>similar</u> than the citywide average (<u>456</u> copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in **RS/WR** are **increasing**.
- Change compared to two weeks ago: <u>+409</u> copies/mL (+121%).



Updated: 25-Mar-2024 | Samples through: 20-Mar-2024 (RS/WR);

Roxbury

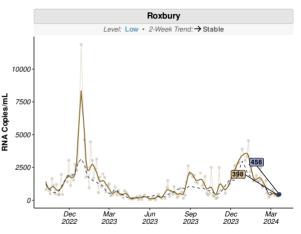


Level: Low

- Average value in **RX** over the past week: <u>398</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>456</u> copies/mL).

Trend: → <u>Stable</u>

- Over the past two weeks, values in **RX** are **<u>stable</u>**.
- Change compared to two weeks ago: <u>-89</u> copies/mL (-18%).



Updated: 25-Mar-2024 | Samples through: 17-Mar-2024 (RX);

South Boston

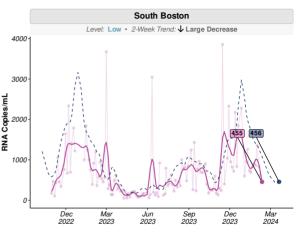


Level: Low

- Average value in <u>SB</u> over the past week: 455 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>456</u> copies/mL).

Trend: 🗸 Large Decrease

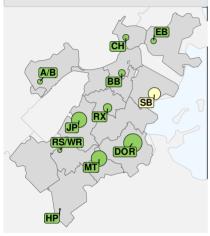
- Over the past two weeks, values in <u>SB</u> are **decreasing**.
- Change compared to two weeks ago: <u>-559</u> copies/mL (-55%).



Updated: 25-Mar-2024 | Samples through: 11-Feb-2024 (SB);

Site Status and Details

Status of Sampling Sites (25-Mar-2024)



a Active

(n=10) a

Paused

(n=1)

Site Status

(N=11)

#	Neighborhood	Date Site Confirmed	Site Status	Pop. Covered	% Neighborhood Covered
01	A/B	02-Oct-2022	Active	2,684	4.0%
02	СН	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%



Level and Trend Category Definitions



Concentration Levels

Concentration Level	Concentration Value (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)
\uparrow	Large Increase	>+500
7	Increase	+150 to +500
\rightarrow	Stable	-150 to +150
И	Decrease	-500 to -150
\downarrow	Large Decrease	≤-500





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 <u>high risk of getting very sick</u>, 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 isolation if you have COVID-19 and for what to do if you are exposed 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 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 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 isolation if you have COVID-19 and for what to do if you are exposed 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 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 <u>high risk of getting very sick</u>, consider self-testing to <u>detect infection before contact</u>, 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 isolation if you have COVID-19 and for what to do if you are exposed 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 isolation if you have COVID-19 and for what to do if you are exposed 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 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: 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 <u>vaccination clinic</u> 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