

Wastewater Epidemiology COVID-19 Report

Updated: 06-Mar-2024 | Data Complete Through: 03-Mar-2024

☑ wastewater@bphc.org



Boston Public Health Commission

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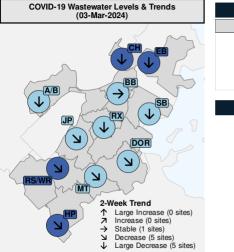
Level and Trend Category Definitions Recommendations and Resources by

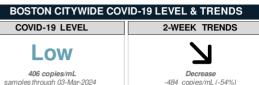
Level

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

Neighborhood Levels and Trends







NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

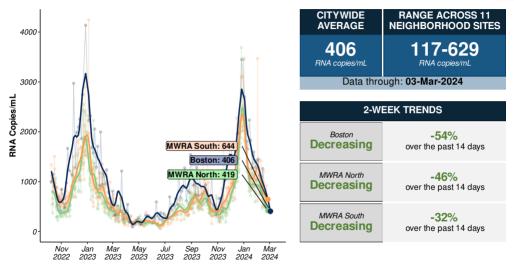
Level	Neighborhood/Site		Trend
	Mattapan (MT)	К	Decrease
	Back Bay (BB)	\rightarrow	Stable
	South Boston (SB)	\downarrow	Large Decrease
Low	Allston/Brighton (A/B)	\rightarrow	Large Decrease
	Dorchester (DOR)	И	Decrease
	Jamaica Plain (JP)	И	Decrease
	Roxbury (RX)	\downarrow	Large Decrease
	Roslindale/West Roxbury (RS/WR)	И	Decrease
Very Low	Hyde Park (HP)	И	Decrease
	East Boston (EB)	$\mathbf{+}$	Large Decrease
	Charlestown (CH)	$\mathbf{+}$	Large Decrease

For additional details see:

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

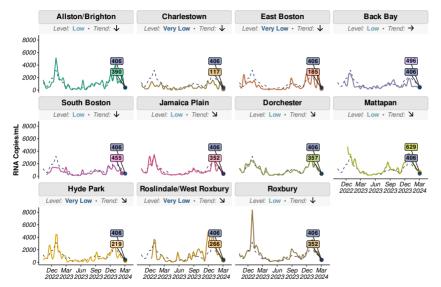
COVID-19 Level	4 sites	7 sites	0 sites	0 sites	0 sites
(# sites)	Very Low	Low	Moderate	High	Very High

Citywide Overview and Trends



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (BPHC); 26-Feb-2024 (MWRA) | MWRA Data: https://www.mwra.com/biobot/biobotdata.htm

BPHC Trend Overview by Neighborhood



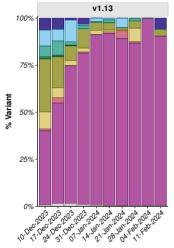
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood;

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	%
XBB	5.8%
XBB.1.5	0.0%
XBB.1.9	0.0%
FL.1.5.1	0.0%
EG.5	3.8%
	0.0%
BA.2.86	0.0%
JN.1	90.1%
Other	0.4%

Average variant percentage across all BPHC sites weighted by population size [Table shows variant percentages for samples collected the week of 11-Feb-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

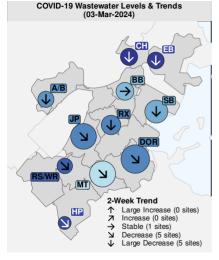
For Additional Info See:

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



Neighborhood Levels and Data Table





<175 350 525 700 875 1.050 1.225 1.400 >1.575

Conc. (copies/mL)

	COVID-19 Wastewater Levels		stewater Levels 2-Week Trends		
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	406	Low	Decrease	-484	-54%
MT	629	Low	Decrease	-312	-33%
BB	496	Low	Stable	+2	0%
SB	455	Low	Large Decrease	-559	-55%
A/B	390	Low	v Large Decrease -1,613 -81		-81%
DOR	357	Low	Decrease	-455	-56%
JP	352	Low	Decrease -428 -55%		-55%
RX	352	Low	Large Decrease	-686	-66%
RS/WR	266	Very Low	Decrease -317 -549		-54%
HP	219	Very Low	Decrease	-413	-65%
EB	185	Very Low	Large Decrease	-1,592	-90%
СН	117	Very Low	Large Decrease	-971	-89%

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

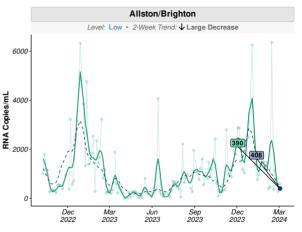


Level: Low

- Average value in <u>A/B</u> over the past week: <u>390</u> copies/mL.
- This value is low compared to past values and similar than the citywide average (406 copies/mL).

Trend: 🗸 Large Decrease

- Over the past two weeks, values in <u>A/B</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -1,613 copies/mL (-81%).



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (A/B);

Back Bay

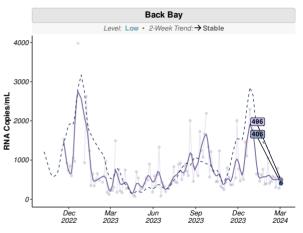


Level: Low

- Average value in **BB** over the past week: 496 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>406</u> copies/mL).

Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>BB</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>+2</u> copies/mL (0%).



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (BB);

Charlestown

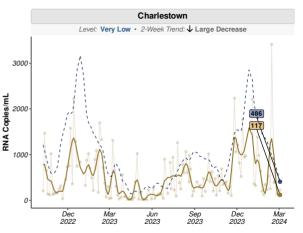


Level: Very Low

- Average value in <u>CH</u> over the past week: <u>117</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (406 copies/mL).

Trend: 🗸 Large Decrease

- Over the past two weeks, values in <u>CH</u> are decreasing.
- Change compared to two weeks ago: <u>-971</u> copies/mL (-89%).



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (CH);

Dorchester

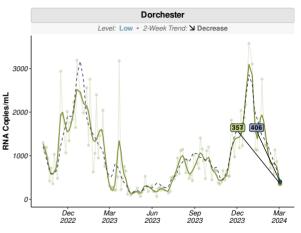


Level: Low

- Average value in <u>DOR</u> over the past week: <u>357</u> copies/mL.
- This value is low compared to past values and similar than the citywide average (406 copies/mL).

Trend: Y Decrease

- Over the past two weeks, values in **DOR** are **decreasing**.
- Change compared to two weeks ago: <u>-455</u> copies/mL (-56%).



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (DOR);

East Boston

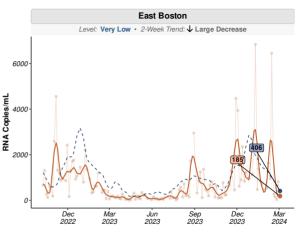


Level: Very Low

- Average value in **EB** over the past week: <u>185</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (406 copies/mL).

Trend: $\mathbf{\mathbf{\forall}}$ Large Decrease

- Over the past two weeks, values in **EB** are **decreasing**.
- Change compared to two weeks ago: -1,592 copies/mL (-90%).



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (EB);

Hyde Park

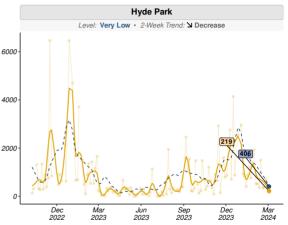


Level: Very Low

- Average value in <u>HP</u> over the past week: <u>219</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (406 copies/mL).

Trend: 🖌 Decrease

- Over the past two weeks, values in <u>HP</u> are **decreasing**.
- Change compared to two weeks ago: <u>-413</u> copies/mL (-65%).



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (HP);

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

RNA Copies/mL

Jamaica Plain

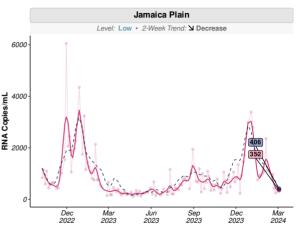


Level: Low

- Average value in <u>JP</u> over the past week: <u>352</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>406</u> copies/mL).

Trend: 🖌 Decrease

- Over the past two weeks, values in <u>JP</u> are **decreasing**.
- Change compared to two weeks ago: <u>-428</u> copies/mL (-55%).



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (JP);

Mattapan

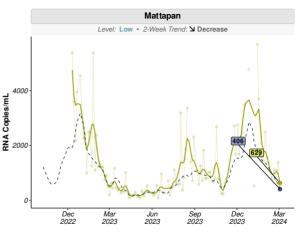


Level: Low

- Average value in <u>MT</u> over the past week: <u>629</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>406</u> copies/mL).

Trend: La Decrease

- Over the past two weeks, values in <u>MT</u> are **decreasing**.
- Change compared to two weeks ago: <u>-312</u> copies/mL (-33%).



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (MT);

Roslindale/West Roxbury

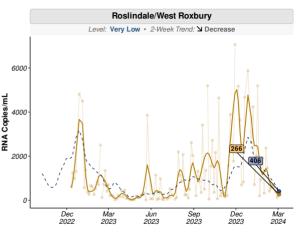


Level: Very Low

- Average value in **RS/WR** over the past week: <u>266</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (406 copies/mL).

Trend: 🖌 Decrease

- Over the past two weeks, values in **RS/WR** are **decreasing**.
- Change compared to two weeks ago: <u>-317</u> copies/mL (-54%).



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (RS/WR);

Roxbury

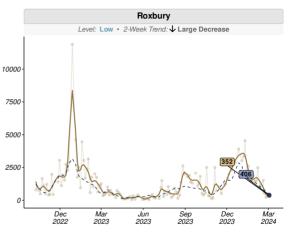


Level: Low

- Average value in **RX** over the past week: <u>352</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>406</u> copies/mL).

Trend: 🗸 Large Decrease

- Over the past two weeks, values in **RX** are **decreasing**.
- Change compared to two weeks ago: <u>-686</u> copies/mL (-66%).



Updated: 06-Mar-2024 | Samples through: 03-Mar-2024 (RX);

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

RNA Copies/mL

South Boston

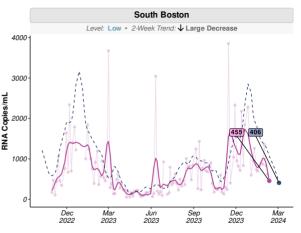


Level: Low

- Average value in <u>SB</u> over the past week: <u>455</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>406</u> copies/mL).

Trend: 🗸 Large Decrease

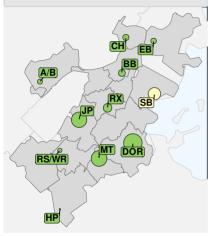
- Over the past two weeks, values in <u>SB</u> are **decreasing**.
- Change compared to two weeks ago: <u>-559</u> copies/mL (-55%).



Updated: 06-Mar-2024 | Samples through: 11-Feb-2024 (SB);

Site Status and Details

Status of Sampling Sites (06-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