

Wastewater Epidemiology COVID-19 Report

Updated: 21-Jun-2024 | Data Complete Through: 16-Jun-2024

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Boston Public Health Commission

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

Neighborhood Levels and Trends



COVID-19 Wastewater Levels & Trends (16-Jun-2024) CH EB BB Z RX JP N \rightarrow DOR 7 \rightarrow 7 **RS/WR** ÍMT 2-Week Trend HP Large Increase (0 sites) Increase (3 sites) 7 -Stable (5 sites) \rightarrow Decrease (2 sites) N Large Decrease (0 sites) For additional details see:

BOSTON CITYWIDE COVID-19 LEVEL & TRENDS					
COVID-19 LEVEL 2-WEEK TRENDS					
Moderate	\rightarrow				
873 copies/mL samples through 16-Jun-2024	Stable +113 copies/mL (+15%)				

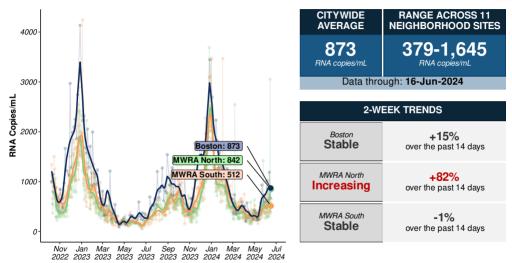
NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

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

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

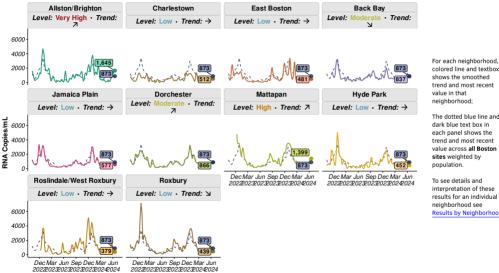
COVID-19 Level		6 sites	2 sites	1 sites	1 sites
(# sites)	Very Low	Low	Moderate	High	Very High

Citywide Overview and Trends



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (BPHC); 17-Jun-2024 (MWRA) | MWRA Data: https://www.mwra.com/biobot/biobotdata.htm

BPHC Trend Overview by Neighborhood

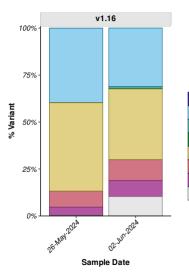


colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

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%
31.2%
1.1%
0.1%
37.6%
11.2%
8.5%
10.3%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 02-Jun-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

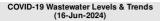
For Additional Info See:

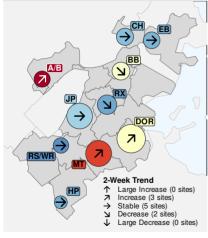
https://www.biobot.io/covid19-variants-report-notes/



Neighborhood Levels and Data Table







Conc (copies/mL				
				1,400 > 1,575

	COVID-19 Was	tewater Levels	vater Levels 2-Week Trends		
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	873	Moderate	Stable	+113	
A/B	1,645	Very High	Increase	+455	+38%
MT	1,399	High	Increase	+355	+34%
DOR	866	Moderate	Increase	+209	+32%
BB	837	Moderate	Decrease	-441	-35%
JP	577	Low	Stable	-29	-5%
CH	512	Low	Stable	+60	+13%
EB	481	Low	Stable	+61	+15%
HP	452	Low	Stable	+112	+33%
RX	439	Low	Decrease	-307	-41%
RS/WR	379	Low	Stable	-118	-24%

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

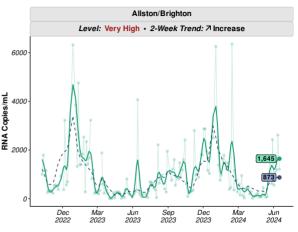


Level: Very High

- Average value in <u>A/B</u> over the past week: 1,645 copies/mL.
- This value is very high compared to past values and higher than the citywide average (873 copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in <u>A/B</u> are increasing.
- Change compared to two weeks ago: <u>+455</u> copies/mL (+38%).



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (A/B);

Back Bay

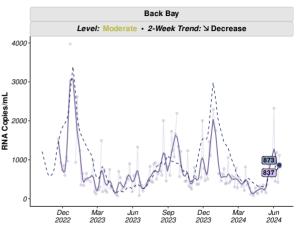


Level: Moderate

- Average value in **BB** over the past week: 837 copies/mL.
- This value is <u>moderate</u> compared to past values and <u>similar</u> than the citywide average (<u>873</u> copies/mL).

Trend: 🖌 Decrease

- Over the past two weeks, values in **BB** are **decreasing**.
- Change compared to two weeks ago: <u>-441</u> copies/mL (-35%).



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (BB);

Charlestown

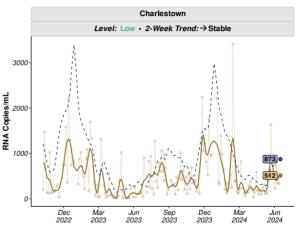


Level: Low

- Average value in <u>CH</u> over the past week: <u>512</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (873 copies/mL).

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

- Over the past two weeks, values in <u>CH</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>+60</u> copies/mL (+13%).



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (CH);

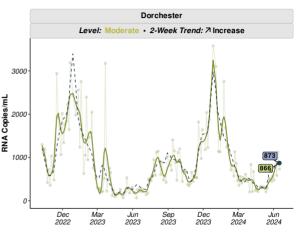
Dorchester

Level: Moderate

- Average value in <u>DOR</u> over the past week: <u>866</u> copies/mL.
- This value is <u>moderate</u> compared to past values and <u>similar</u> than the citywide average (<u>873</u> copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in **DOR** are **increasing**.
- Change compared to two weeks ago: <u>+209</u> copies/mL (+32%).



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (DOR);

East Boston

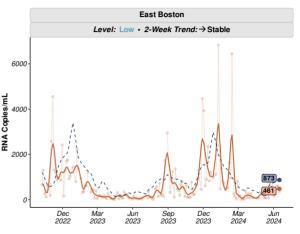


Level: Low

- Average value in **EB** over the past week: 481 copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (873 copies/mL).

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

- Over the past two weeks, values in <u>EB</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>+61</u> copies/mL (+15%).



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (EB);

Hyde Park

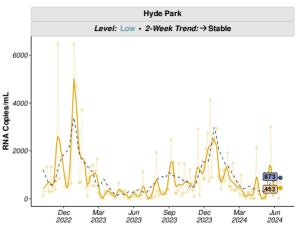


Level: Low

- Average value in <u>HP</u> over the past week: <u>452</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (873 copies/mL).

Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>HP</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>+112</u> copies/mL (+33%).



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (HP);

Jamaica Plain

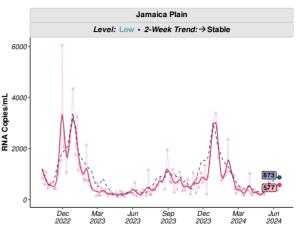


Level: Low

- Average value in <u>JP</u> over the past week: <u>577</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>873</u> copies/mL).

Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>JP</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-29</u> copies/mL (-5%).



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (JP);

Mattapan

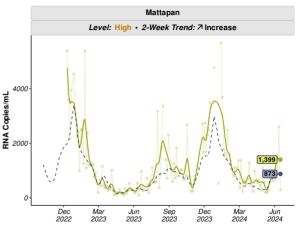


Level: High

- Average value in <u>MT</u> over the past week: 1,399 copies/mL.
- This value is high compared to past values and higher than the citywide average (873 copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in <u>MT</u> are **increasing**.
- Change compared to two weeks ago: <u>+355</u> copies/mL (+34%).



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (MT);

Roslindale/West Roxbury

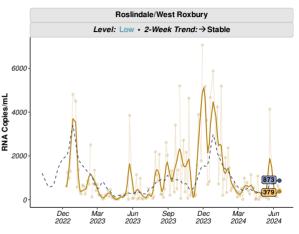


Level: Low

- Average value in <u>RS/WR</u> over the past week: <u>379</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (<u>873</u> copies/mL).

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

- Over the past two weeks, values in RS/WR are <u>stable</u>.
- Change compared to two weeks ago: <u>-118</u> copies/mL (-24%).



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (RS/WR);

Roxbury

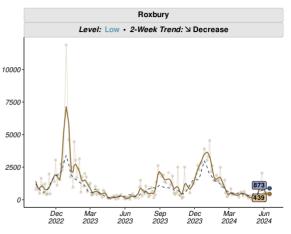


Level: Low

- Average value in **RX** over the past week: <u>439</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (873 copies/mL).

Trend: 🖌 Decrease

- Over the past two weeks, values in **RX** are **decreasing**.
- Change compared to two weeks ago: <u>-307</u> copies/mL (-41%).



Updated: 21-Jun-2024 | Samples through: 16-Jun-2024 (RX);

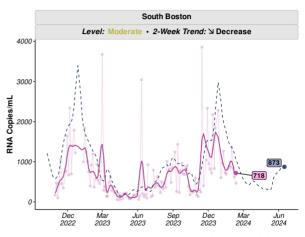
See recommended actions and resources based on levels and trends in this neighborhood.

RNA Copies/mL

South Boston



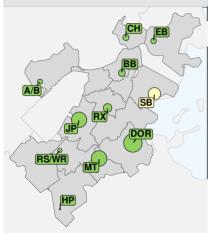
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



Updated: 21-Jun-2024 | Samples through: 11-Feb-2024 (SB);

Site Status and Details

Status of Sampling Sites (21-Jun-2024)



a Active

(n=10)

Paused

(n=1)

Site Status

(N=11)

Neighborhood	Date Site Confirmed	Site Status	Pop. Covered	% Neighborhood Covered
A/B	02-Oct-2022	Active	2,684	4.0%
СН	02-Oct-2022	Active	3,736	18.3%
EB	02-Oct-2022	Active	3,178	6.3%
BB	20-Nov-2022	Active	4,551	8.1%
SB	30-Oct-2022	Paused*	14,962	35.8%
JP	02-Oct-2022	Active	23,573	56.9%
DOR	02-Oct-2022	Active	34,562	23.8%
MT	11-Dec-2022	Active	24,441	80.5%
HP	02-Oct-2022	Active	1,262	3.5%
RS/WR	11-Dec-2022	Active	2,165	3.5%
RX	02-Oct-2022	Active	7,036	16.5%
	A/B CH EB BB SB JP DOR MT HP RS/WR	Neighborhood Confirmed A/B 02-Oct-2022 CH 02-Oct-2022 EB 02-Oct-2022 BB 20-Nov-2022 SB 30-Oct-2022 JP 02-Oct-2022 DOR 02-Oct-2022 MT 11-Dec-2022 RS/WR 11-Dec-2022	Neighborhood Confirmed Status A/B 02-Oct-2022 Active CH 02-Oct-2022 Active EB 02-Oct-2022 Active BB 20-Nov-2022 Active SB 30-Oct-2022 Paused* JP 02-Oct-2022 Active DOR 02-Oct-2022 Active HP 02-Oct-2022 Active RS/WR 11-Dec-2022 Active	Neighborhood Confirmed Status Covered A/B 02-Oct-2022 Active 2,684 CH 02-Oct-2022 Active 3,736 EB 02-Oct-2022 Active 3,736 BB 20-Nov-2022 Active 4,551 SB 30-Oct-2022 Active 14,962 JP 02-Oct-2022 Active 23,573 DOR 02-Oct-2022 Active 34,562 MT 11-Dec-2022 Active 1,262 RS/WR 11-Dec-2022 Active 1,265



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