

Wastewater Epidemiology COVID-19 Report

Updated: 06-Jun-2024 | Data Complete Through: 02-Jun-2024

☑ wastewater@bphc.org



Boston Public Health Commission

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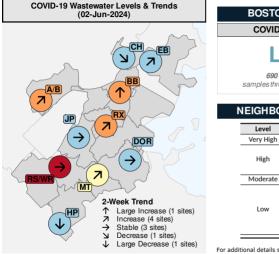
Level and Trend Category Definitions Recommendations and Resources by

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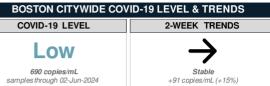
Level:	Very High		
Level:	High		
Level:	Moderate		
Level:	Low		
Level:	Very Low		

Neighborhood Levels and Trends





COVID-19 Level		5 sites	1 sites	3 sites	1 sites	
(# sites)	Very Low	Low	Moderate	High	Very High	



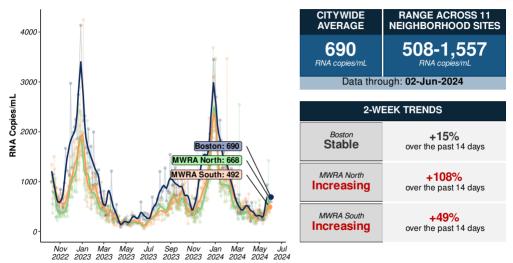
NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

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

For additional details see:

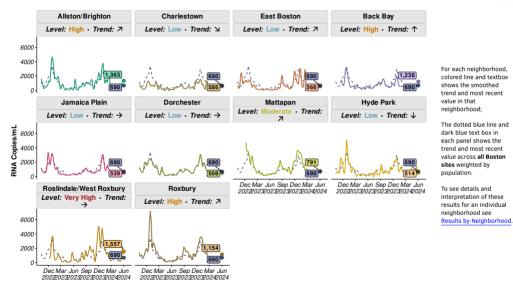
- Results by Neighborhood
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Citywide Overview and Trends

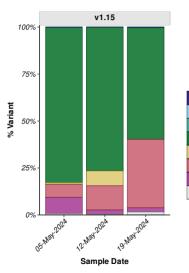


Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (BPHC); 29-May-2024 (MWRA) | MWRA Data: https://www.mwra.com/biobot/biobotdata.htm

BPHC Trend Overview by Neighborhood



Citywide Percent Variant Lineages



Variant	%
XBB	0.0%
EG.5	0.0%
BA.2.86	0.3%
JN.1	59.5%
JN.1.13	0.0%
KP.2	36.4%
KP.1.1	2.3%
Other	1.6%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 19-May-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: v1.15 (24-May-2024):

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

Version Changes: Added: KP.2, KP1.1 Removed: XBB.1.5, XBB.1.9

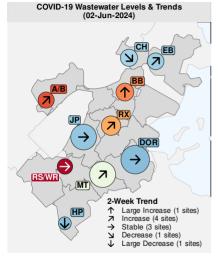
For Additional Info See:

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



Neighborhood Levels and Data Table





Conc. (copies/mL)

<175 350

525 700 875 1.050 1.225 1.400 > 1.575

	COVID-19 Wastewater Levels		2-Week Trends		
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	690	Low	Stable	+91	+15%
RS/WR	1,557	Very High	Stable	+41	+3%
A/B	1,363	High	Increase	+475	+53%
BB	1,238	High	Large Increase	+581	+89%
RX	1,154	High	Increase +366 +		+46%
MT	791	Moderate	Increase +203 +3		+35%
СН	586	Low	Decrease	-166	-22%
EB	566	Low	Increase	+161	+40%
JP	539	Low	Stable	-109	-17%
HP	514	Low	Large Decrease	-904	-64%
DOR	508	Low	Stable	+78	+18%

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: s-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

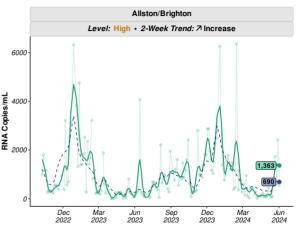


Level: High

- Average value in **A/B** over the past week: 1,363 copies/mL.
- This value is high compared to past values and higher than the citywide average (690 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>+475</u> copies/mL (+53%).



Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (A/B);

Back Bay

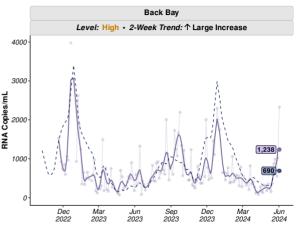


Level: High

- Average value in <u>BB</u> over the past week: 1,238 copies/mL.
- This value is high compared to past values and higher than the citywide average (690 copies/mL).

Trend: **↑ Large Increase**

- Over the past two weeks, values in **BB** are **increasing**.
- Change compared to two weeks ago: <u>+581</u> copies/mL (+89%).



Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (BB);

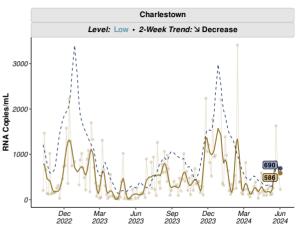
Charlestown

Level: Low

- Average value in <u>CH</u> over the past week: <u>586</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>690</u> copies/mL).

Trend: 🖌 Decrease

- Over the past two weeks, values in <u>CH</u> are **decreasing**.
- Change compared to two weeks ago: <u>-166</u> copies/mL (-22%).



Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (CH);

Dorchester

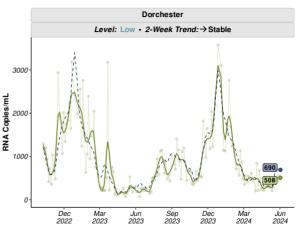


Level: Low

- Average value in **DOR** over the past week: **508** copies/mL.
- This value is low compared to past values and similar than the citywide average (690 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>+78</u> copies/mL (+18%).



Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (DOR);

East Boston

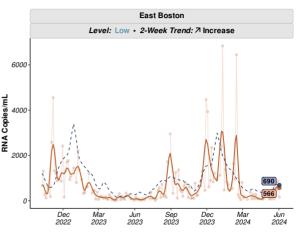


Level: Low

- Average value in **EB** over the past week: <u>566</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>690</u> copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in **EB** are **increasing**.
- Change compared to two weeks ago: <u>+161</u> copies/mL (+40%).



Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (EB);

Hyde Park

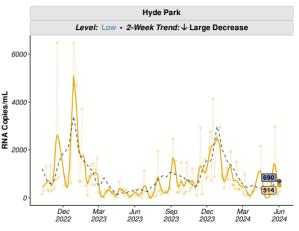


Level: Low

- Average value in <u>HP</u> over the past week:
 <u>514</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>690</u> copies/mL).

Trend: 🗸 Large Decrease

- Over the past two weeks, values in <u>HP</u> are **decreasing**.
- Change compared to two weeks ago: <u>-904</u> copies/mL (-64%).



Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (HP);

Jamaica Plain

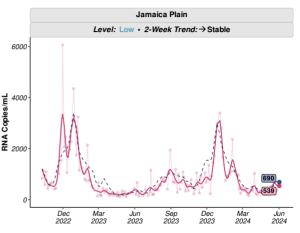


Level: Low

- Average value in <u>JP</u> over the past week: <u>539</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>690</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>-109</u> copies/mL (-17%).



Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (JP);

Mattapan

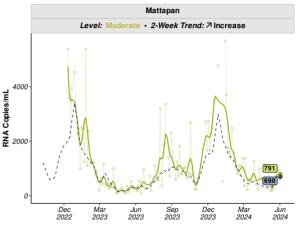


Level: Moderate

- Average value in <u>MT</u> over the past week: <u>791</u> copies/mL.
- This value is <u>moderate</u> compared to past values and <u>similar</u> than the citywide average (<u>690</u> copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in <u>MT</u> are increasing.
- Change compared to two weeks ago: <u>+203</u> copies/mL (+35%).



Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (MT);

Roslindale/West Roxbury

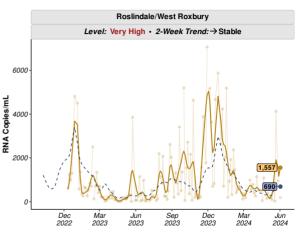


Level: Very High

- Average value in **RS/WR** over the past week: 1,557 copies/mL.
- This value is very high compared to past values and higher than the citywide average (690 copies/mL).

Trend: → <u>Stable</u>

- Over the past two weeks, values in RS/WR are <u>stable</u>.
- Change compared to two weeks ago: <u>+41</u> copies/mL (+3%).



Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (RS/WR);

Roxbury

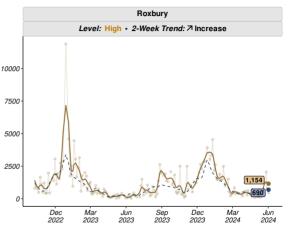


Level: High

- Average value in <u>**RX**</u> over the past week: 1,154 copies/mL.
- This value is high compared to past values and higher than the citywide average (690 copies/mL).

Trend: 7 Increase

- Over the past two weeks, values in **RX** are **increasing**.
- Change compared to two weeks ago: <u>+366</u> copies/mL (+46%).



Updated: 06-Jun-2024 | Samples through: 02-Jun-2024 (RX);

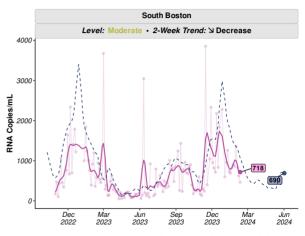
See recommended actions and resources based on levels and trends in this neighborhood.

RNA Copies/mL

South Boston



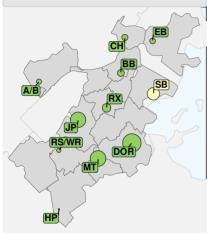
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



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

Site Status and Details

Status of Sampling Sites (06-Jun-2024)



a Active

(n=10)

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