

## **Wastewater Epidemiology COVID-19 Report**

**Updated**: 06-May-2024 | **Data Complete Through**: 01-May-2024

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Site Status and Details Level and Trend Category Definitions Recommendations and Resources by Level

Level: Very High

Level: High

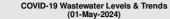
Level: Moderate

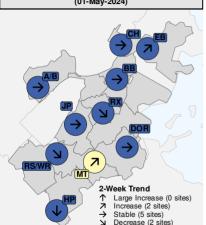
Level: Low

Level: Very Low

# **Neighborhood Levels and Trends**







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

Large Decrease (1 sites)

#### **BOSTON CITYWIDE COVID-19 LEVEL & TRENDS**

COVID-19 LEVEL 2-WEEK TRENDS

LOW

375 copies/ml.

Stable

+19 copies/mL (+5%)

#### **NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS**

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

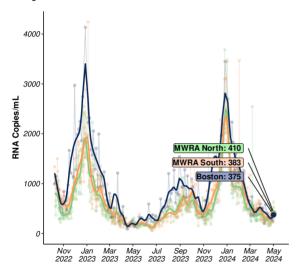
#### For additional details see:

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

samples through 01-May-2024

## **Citywide Overview and Trends**





CITYWIDE AVERAGE

375
RNA copies/mL

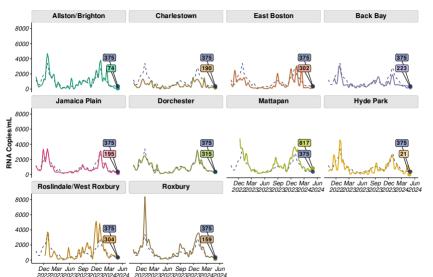
Pata through: 01-May-2024

2-WEEK TRENDS			
Boston Stable	+5% over the past 14 days		
MWRA North <b>Stable</b>	+51% over the past 14 days		
MWRA South Stable	+31% over the past 14 days		

 $\textbf{Updated: } 06-\textbf{May-2024} \mid \textbf{Samples through: } 01-\textbf{May-2024 (BPHC); } 02-\textbf{May-2024 (MWRA)} \mid \textbf{MWRA Data: } \\ \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}}$ 

## **BPHC Trend Overview by Neighborhood**





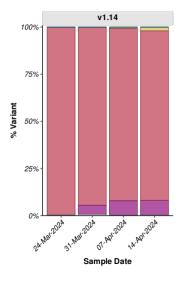
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

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	0.0%
XBB.1.5	0.0%
XBB.1.9	0.0%
EG.5	0.0%
BA.2.86	2.0%
JN.1	90.0%
JN.1.13	7.7%
Other	0.4%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 14-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.

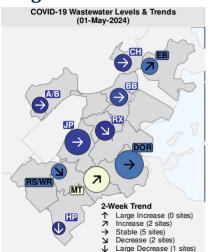
Version Changes: Added: JN.1.13 Removed: HV.1. FL.1.5.1

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	375	Low	Stable	+19	+5%
MT	817	Moderate	Increase	+210	+35%
DOR	315	Very Low	Stable	+31	+11%
RS/WR	304	Very Low	Decrease	-226	-43%
EB	302	Very Low	Increase	+237	+363%
BB	223	Very Low	Stable	+29	+15%
JP	195	Very Low	Stable	-82	-30%
CH	190	Very Low	Stable	-81	-30%
RX	159	Very Low	Decrease	-164	-51%
A/B	74	Very Low	Stable	-61	-45%
HP	21	Very Low	Large Decrease	-1,116	-98%

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

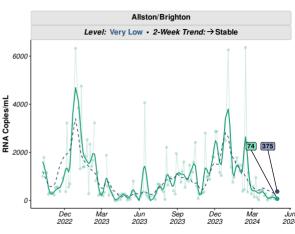


## Level: Very Low

- Average value in A/B over the past week: 74 copies/mL.
- This value is very low compared to past values and similar than the citywide average (375 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: <u>-61</u> copies/mL (-45%).



Updated: 06-May-2024 | Samples through: 01-May-2024 (A/B);

## **Back Bay**

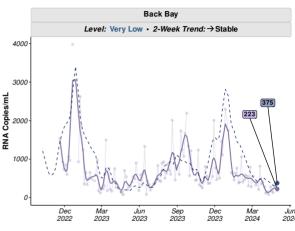


#### Level: Very Low

- Average value in <u>BB</u> over the past week: 223 copies/mL.
- This value is very low compared to past values and similar than the citywide average (375 copies/mL).

#### Trend: → Stable

- Over the past two weeks, values in <u>BB</u> are <u>stable</u>.
- Change compared to two weeks ago: +29 copies/mL (+15%).



Updated: 06-May-2024 | Samples through: 01-May-2024 (BB);

### Charlestown

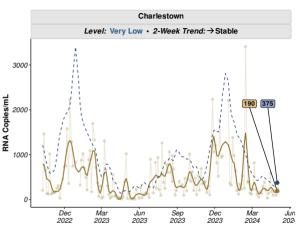


### Level: Very Low

- Average value in <u>CH</u> over the past week: 190 copies/mL.
- This value is very low compared to past values and similar than the citywide average (375 copies/mL).

#### Trend: → Stable

- Over the past two weeks, values in <u>CH</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-81</u> copies/mL (-30%).



Updated: 06-May-2024 | Samples through: 01-May-2024 (CH);

## Dorchester

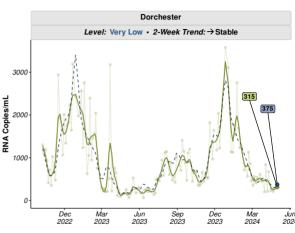


### Level: Very Low

- Average value in <u>DOR</u> over the past week: 315 copies/mL.
- This value is very low compared to past values and similar than the citywide average (375 copies/mL).

#### Trend: → Stable

- Over the past two weeks, values in <u>DOR</u> are <u>stable</u>.
- Change compared to two weeks ago: +31 copies/mL (+11%).



Updated: 06-May-2024 | Samples through: 01-May-2024 (DOR);

### **East Boston**

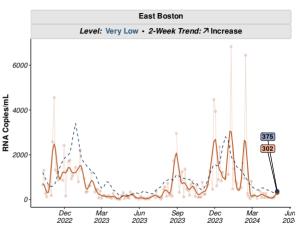


## Level: Very Low

- Average value in <u>EB</u> over the past week: 302 copies/mL.
- This value is very low compared to past values and similar than the citywide average (375 copies/mL).

#### Trend: 7 Increase

- Over the past two weeks, values in <u>EB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +237 copies/mL (+363%).



Updated: 06-May-2024 | Samples through: 01-May-2024 (EB);

## **Hyde Park**



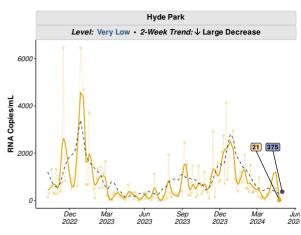
## Level: Very Low

- Average value in <u>HP</u> over the past week:
   21 copies/mL.
- This value is very low compared to past values and <u>lower</u> than the citywide average (375 copies/mL).

## Trend: **↓ Large Decrease**

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

   -1,116 copies/mL (-98%).



Updated: 06-May-2024 | Samples through: 24-Apr-2024 (HP);

## Jamaica Plain

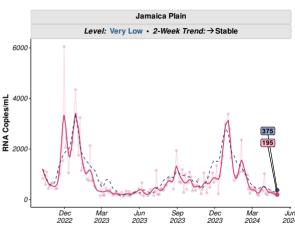


### Level: Very Low

- Average value in <u>JP</u> over the past week: 195 copies/mL.
- This value is very low compared to past values and similar than the citywide average (375 copies/mL).

#### Trend: → Stable

- Over the past two weeks, values in <u>JP</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-82</u> copies/mL (-30%).



Updated: 06-May-2024 | Samples through: 01-May-2024 (JP);

## Mattapan

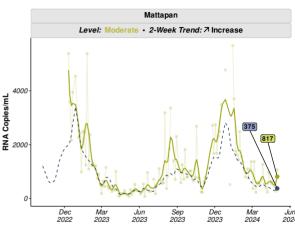


#### Level: Moderate

- Average value in <u>MT</u> over the past week: <u>817</u> copies/mL.
- This value is moderate compared to past values and higher than the citywide average (375 copies/mL).

#### Trend: 7 Increase

- Over the past two weeks, values in <u>MT</u> are <u>increasing</u>.
- Change compared to two weeks ago: +210 copies/mL (+35%).



Updated: 06-May-2024 | Samples through: 01-May-2024 (MT);

# **Roslindale/West Roxbury**

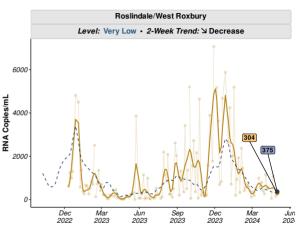


## Level: Very Low

- Average value in RS/WR over the past week: 304 copies/mL.
- This value is very low compared to past values and <u>similar</u> than the citywide average (<u>375</u> copies/mL).

#### Trend: \(\sigma\) Decrease

- Over the past two weeks, values in RS/WR are decreasing.
- Change compared to two weeks ago:
   -226 copies/mL (-43%).



Updated: 06-May-2024 | Samples through: 01-May-2024 (RS/WR);

## **Roxbury**



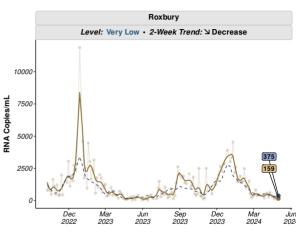
### Level: Very Low

- Average value in <u>RX</u> over the past week: 159 copies/mL.
- This value is very low compared to past values and similar than the citywide average (375 copies/mL).

#### Trend: > Decrease

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

   164 copies/mL (-51%).

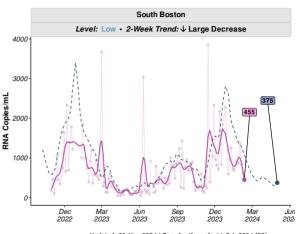


Updated: 06-May-2024 | Samples through: 01-May-2024 (RX);

### **South Boston**



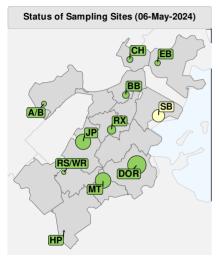
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



Updated: 06-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)





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)
$\overline{}$	Large Increase	>+500
7	Increase	+150 to +500
$\rightarrow$	Stable	-150 to +150
7	Decrease	-500 to -150
<b>→</b>	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