

# **Wastewater Epidemiology COVID-19 Report**

Updated: 18-Mar-2024 | Data Complete Through: 10-Mar-2024



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

Level: Very High

Level: High

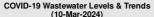
Level: Moderate

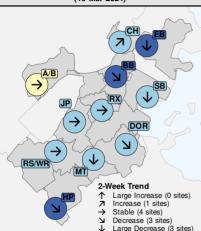
Level: Low

Level: Very Low

# **Neighborhood Levels and Trends**







COVID-19 LEVEL

2-WEEK TRENDS

Low

432 copies/mL samples through 10-Mar-2024

Постоясо -241 copies/mL (-36%)

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

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

#### For additional details see:

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









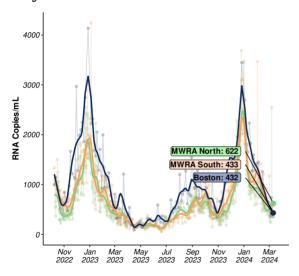






# **Citywide Overview and Trends**





CITYWIDE AVERAGE

432
RNA copies/mL

RANGE ACROSS 11
NEIGHBORHOOD SITES

164-755
RNA copies/mL

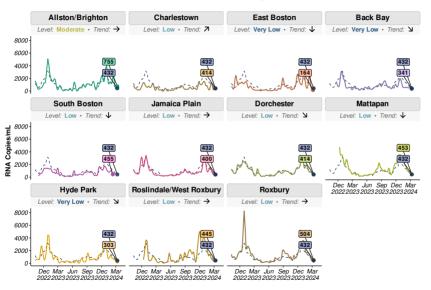
Data through: 10-Mar-2024

2-WEEK TRENDS		
Boston Decreasing	-36% over the past 14 days	
MWRA North Stable	+30% over the past 14 days	
MWRA South Decreasing	-32% over the past 14 days	

 $\textbf{Updated: 18-Mar-2024 | Samples through: 10-Mar-2024 (BPHC); 11-Mar-2024 (MWRA) | \textbf{MWRA Data: } \underline{https://www.mwra.com/biobot/biobotdata.htm}$ 

## **BPHC Trend Overview by Neighborhood**





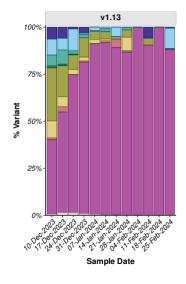
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

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	0.6%
XBB.1.5	10.8%
XBB.1.9	0.0%
FL.1.5.1	0.0%
EG.5	0.0%
HV.1	0.0%
BA.2.86	0.6%
JN.1	87.6%
Other	0.4%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 25-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):

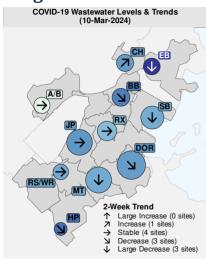
- XBB includes all XBB sublineages aside from those specifically reported
- "Other variants" contains all variants not explicitly quantified.

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**





	COVID-19 Wastewater Levels		2-Week Trends		
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	432	Low	Decrease	-241	-36%
A/B	755	Moderate	Stable	+92	+14%
RX	504	Low	Stable	+32	+7%
SB	455	Low	Large Decrease	-559	-55%
MT	453	Low	Large Decrease	-605	-57%
RS/WR	445	Low	Stable	+78	+21%
CH	414	Low	Increase	+169	+69%
DOR	414	Low	Decrease	-318	-43%
JP	400	Low	Stable	-19	-5%
BB	341	Very Low	Decrease	-164	-33%
HP	303	Very Low	Decrease	-189	-38%
EB	164	Very Low	Large Decrease	-697	-81%

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

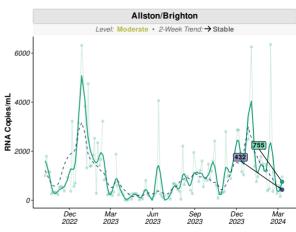


#### Level: **Moderate**

- Average value in <u>A/B</u> over the past week: <u>755</u> copies/mL.
- This value is moderate compared to past values and <u>similar</u> than the citywide average (432 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: +92 copies/mL (+14%).



Updated: 18-Mar-2024 | Samples through: 10-Mar-2024 (A/B);

# **Back Bay**



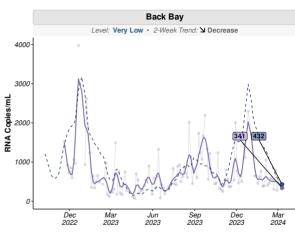
### Level: Very Low

- Average value in <u>BB</u> over the past week: 341 copies/mL.
- This value is very low compared to past values and similar than the citywide average (432 copies/mL).

#### Trend: > Decrease

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

   164 copies/mL (-33%).



Updated: 18-Mar-2024 | Samples through: 10-Mar-2024 (BB);

### Charlestown

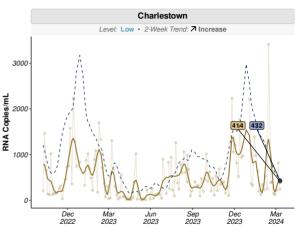


## Level: Low

- Average value in <u>CH</u> over the past week: 414 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>432</u> copies/mL).

#### Trend: **↗ Increase**

- Over the past two weeks, values in <u>CH</u> are <u>increasing</u>.
- Change compared to two weeks ago: +169 copies/mL (+69%).



Updated: 18-Mar-2024 | Samples through: 10-Mar-2024 (CH);

### Dorchester

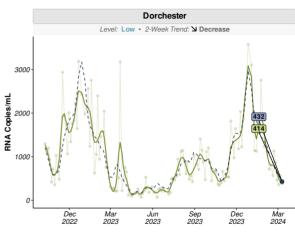


## Level: Low

- Average value in <u>DOR</u> over the past week: <u>414</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>432</u> copies/mL).

#### Trend: > Decrease

- Over the past two weeks, values in <u>DOR</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -318 copies/mL (-43%).



Updated: 18-Mar-2024 | Samples through: 10-Mar-2024 (DOR);

## **East Boston**

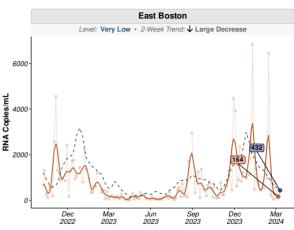


## Level: Very Low

- Average value in <u>EB</u> over the past week: 164 copies/mL.
- This value is very low compared to past values and <u>similar</u> than the citywide average (<u>432</u> copies/mL).

### Trend: **↓ Large Decrease**

- Over the past two weeks, values in <u>EB</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -697 copies/mL (-81%).



Updated: 18-Mar-2024 | Samples through: 06-Mar-2024 (EB);

# **Hyde Park**



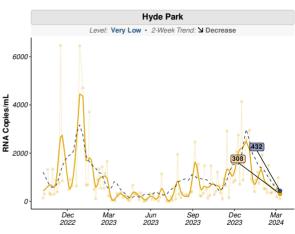
#### Level: Very Low

- Average value in <u>HP</u> over the past week: 303 copies/mL.
- This value is very low compared to past values and similar than the citywide average (432 copies/mL).

#### Trend: > Decrease

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

   -189 copies/mL (-38%).



Updated: 18-Mar-2024 | Samples through: 10-Mar-2024 (HP);

## Jamaica Plain

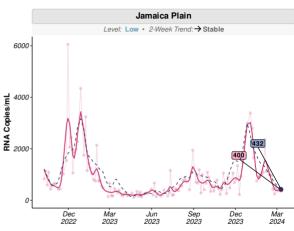


### Level: Low

- Average value in <u>JP</u> over the past week: 400 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (432 copies/mL).

#### Trend: → Stable

- Over the past two weeks, values in <u>JP</u> are <u>stable</u>.
- Change compared to two weeks ago: -19 copies/mL (-5%).



Updated: 18-Mar-2024 | Samples through: 10-Mar-2024 (JP);

# Mattapan

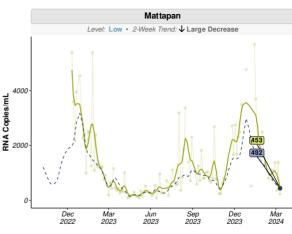


## Level: Low

- Average value in <u>MT</u> over the past week: <u>453</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>432</u> copies/mL).

## Trend: ↓ Large Decrease

- Over the past two weeks, values in <u>MT</u> are <u>decreasing</u>.
- Change compared to two weeks ago: <u>-605</u> copies/mL (-57%).



Updated: 18-Mar-2024 | Samples through: 10-Mar-2024 (MT);

# **Roslindale/West Roxbury**

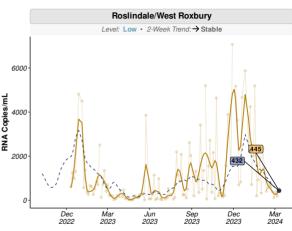


## Level: Low

- Average value in RS/WR over the past week: 445 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>432</u> copies/mL).

#### Trend: → Stable

- Over the past two weeks, values in RS/WR are <u>stable</u>.
- Change compared to two weeks ago: +78 copies/mL (+21%).



Updated: 18-Mar-2024 | Samples through: 10-Mar-2024 (RS/WR);

# Roxbury

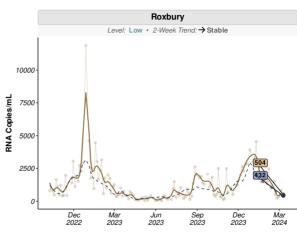


### Level: Low

- Average value in <u>RX</u> over the past week: 504 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (432 copies/mL).

#### Trend: → Stable

- Over the past two weeks, values in <u>RX</u> are <u>stable</u>.
- Change compared to two weeks ago: +32 copies/mL (+7%).



Updated: 18-Mar-2024 | Samples through: 10-Mar-2024 (RX);

## **South Boston**

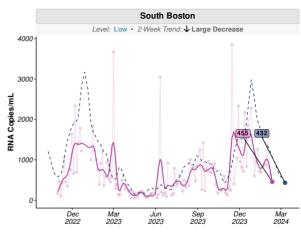


## Level: Low

- 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>432</u> copies/mL).

## Trend: **↓ Large Decrease**

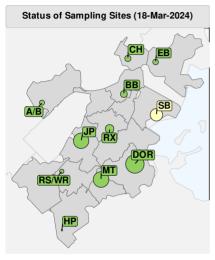
- Over the past two weeks, values in <u>SB</u> are <u>decreasing</u>.
- Change compared to two weeks ago:
   -559 copies/mL (-55%).



Updated: 18-Mar-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) Active (n=10) Paused (n=1)

# **Level and Trend Category Definitions**



#### **Concentration Levels**

Concentration	<b>Concentration Value</b>	
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