

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

**Updated**: 14-Aug-2024 | **Data Complete Through**: 07-Aug-2024

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Mattapan

Roslindale/West Roxbury

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South Boston

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

Level: Very High

Level: High

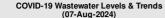
Level: Moderate

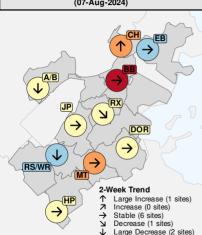
Level: Low

Level: Very Low

# **Neighborhood Levels and Trends**







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

COVID-19 LEVEL

2-WEEK TRENDS

## **Moderate**

1,036 copies/mL samples through 07-Aug-2024

Stable -75 copies/mL (-7%)

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

Level	Neighborhood/Site		Trend
Very High	Back Bay (BB)	$\rightarrow$	Stable
High	Charlestown (CH)	1	Large Increase
High	Mattapan (MT)	$\rightarrow$	Stable
	Roxbury (RX)	7	Decrease
	Hyde Park (HP)	$\rightarrow$	Stable
Moderate	Dorchester (DOR)	$\rightarrow$	Stable
	Jamaica Plain (JP)	$\rightarrow$	Stable
	Allston/Brighton (A/B)	$\neg$	Large Decrease
Low	Roslindale/West Roxbury (RS/WR)	$\overline{}$	Large Decrease
LOW	East Boston (EB)	$\rightarrow$	Stable

#### For additional details see:

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

COVID-19





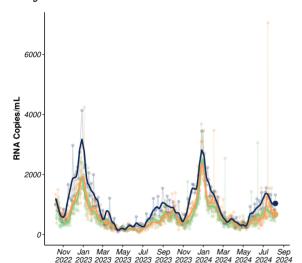






## **Citywide Overview and Trends**





CITYWIDE AVERAGE

1,036
RNA copies/mL

Pata through: 07-Aug-2024

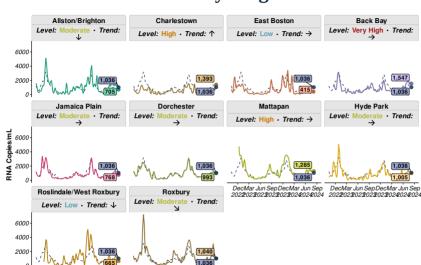
2-WEEK TRENDS			
Boston <b>Stable</b>	-7% over the past 14 days		
MWRA North Stable	<b>-9%</b> over the past 14 days		
MWRA South Decreasing	<b>-23</b> % over the past 14 days		

 $\textbf{Updated: } 14-\text{Aug-2024} \mid \textbf{Samples through: } 07-\text{Aug-2024 (BPHC); } 07-\text{Aug-2024 (MWRA)} \mid \textbf{MWRA Data: } \\ \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}}$ 

# **BPHC Trend Overview by Neighborhood**

DecMar Jun SepDecMar Jun Sep





DecMar Jun Sep DecMar Jun Sep

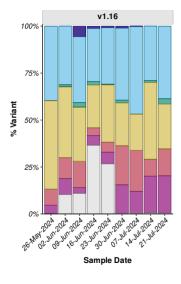
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

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	%
BA.2.86	0.0%
JN.1	38.6%
JN.1.13	2.8%
JN.1.7	0.0%
KP.2	23.8%
KP.1.1	14.4%
KP.3	19.8%
Other	0.5%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 21-Jul-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.

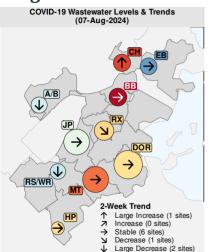
Version Changes: Added: JN.1.7, KP.3 Removed: XBB, EG.5

For Additional Info See:

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

# **Neighborhood Levels and Data Table**





COVID-19 Wastewater Levels		2-Week Trends			
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	1,036	Moderate	Stable	-75	
BB	1,547	Very High	Stable	+28	+2%
CH	1,393	High	Large Increase	+724	+108%
MT	1,285	High	Stable	-82	-6%
RX	1,040	Moderate	Decrease	-198	-16%
HP	1,005	Moderate	Stable	+51	+5%
DOR	993	Moderate	Stable	-12	-1%
JP	768	Moderate	Stable	+43	+6%
A/B	705	Moderate	Large Decrease	-693	-50%
RS/WR	665	Low	Large Decrease	-753	-53%
EB	415	Low	Stable	-112	-21%

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

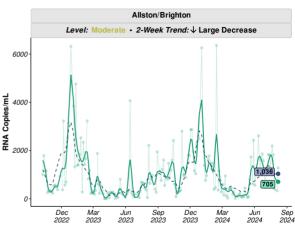


#### Level: **Moderate**

- Average value in <u>A/B</u> over the past week: 705 copies/mL.
- This value is moderate compared to past values and <u>similar</u> than the citywide average (1,036 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: <u>-693</u> copies/mL (-50%).



Updated: 14-Aug-2024 | Samples through: 07-Aug-2024 (A/B);

# **Back Bay**

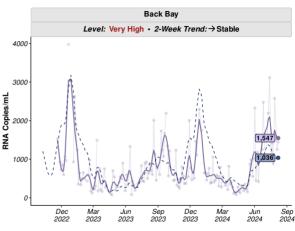


## Level: Very High

- Average value in <u>BB</u> over the past week: 1,547 copies/mL.
- This value is very high compared to past values and higher than the citywide average (1,036 copies/mL).

## Trend: $\rightarrow$ Stable

- Over the past two weeks, values in <u>BB</u> are <u>stable</u>.
- Change compared to two weeks ago: +28 copies/mL (+2%).



Updated: 14-Aug-2024 | Samples through: 07-Aug-2024 (BB);

## Charlestown

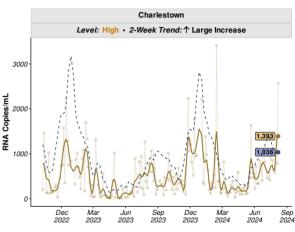


## Level: High

- Average value in <u>CH</u> over the past week: 1,393 copies/mL.
- This value is <a href="high-right">higher</a> compared to past values and <a href="high-right">higher</a> than the citywide average (1,036 copies/mL).

## 

- Over the past two weeks, values in <u>CH</u> are <u>increasing</u>.
- Change compared to two weeks ago: +724 copies/mL (+108%).



Updated: 14-Aug-2024 | Samples through: 07-Aug-2024 (CH);

## Dorchester

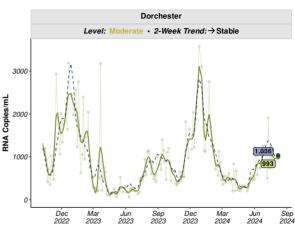


#### Level: **Moderate**

- Average value in <u>DOR</u> over the past week: <u>993</u> copies/mL.
- This value is moderate compared to past values and similar than the citywide average (1,036 copies/mL).

### Trend: → Stable

- Over the past two weeks, values in <u>DOR</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-12</u> copies/mL (-1%).



Updated: 14-Aug-2024 | Samples through: 07-Aug-2024 (DOR);

## **East Boston**

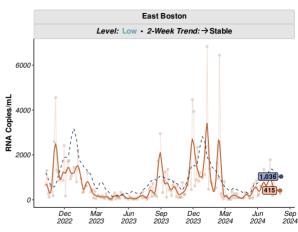


## Level: Low

- Average value in <u>EB</u> over the past week: 415 copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (1,036 copies/mL).

#### Trend: → Stable

- Over the past two weeks, values in <u>EB</u> are <u>stable</u>.
- Change compared to two weeks ago: -112 copies/mL (-21%).



Updated: 14-Aug-2024 | Samples through: 04-Aug-2024 (EB);

# **Hyde Park**

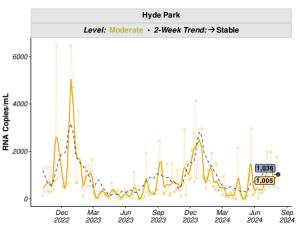


#### Level: Moderate

- Average value in <u>HP</u> over the past week: 1,005 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (1,036 copies/mL).

### Trend: → Stable

- Over the past two weeks, values in <u>HP</u> are <u>stable</u>.
- Change compared to two weeks ago: +51 copies/mL (+5%).



Updated: 14-Aug-2024 | Samples through: 07-Aug-2024 (HP);

## Jamaica Plain

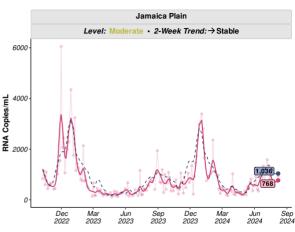


#### Level: **Moderate**

- Average value in <u>JP</u> over the past week: 768 copies/mL.
- This value is moderate compared to past values and <u>similar</u> than the citywide average (1,036 copies/mL).

### Trend: → Stable

- Over the past two weeks, values in <u>JP</u> are <u>stable</u>.
- Change compared to two weeks ago: +43 copies/mL (+6%).



Updated: 14-Aug-2024 | Samples through: 07-Aug-2024 (JP);

# Mattapan

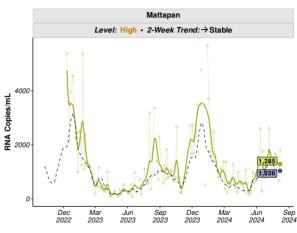


## Level: High

- Average value in <u>MT</u> over the past week: 1,285 copies/mL.
- This value is <u>high</u> compared to past values and <u>similar</u> than the citywide average (1,036 copies/mL).

### Trend: → Stable

- Over the past two weeks, values in <u>MT</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-82</u> copies/mL (<u>-6%</u>).



Updated: 14-Aug-2024 | Samples through: 07-Aug-2024 (MT);

# **Roslindale/West Roxbury**

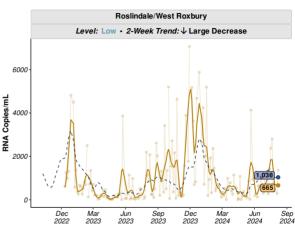


## Level: Low

- Average value in <u>RS/WR</u> over the past week: <u>665</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (1,036 copies/mL).

## Trend: **↓ Large Decrease**

- Over the past two weeks, values in <u>RS/WR</u> are <u>decreasing</u>.
- Change compared to two weeks ago: <u>-753</u> copies/mL (-53%).



Updated: 14-Aug-2024 | Samples through: 07-Aug-2024 (RS/WR);

## **Roxbury**

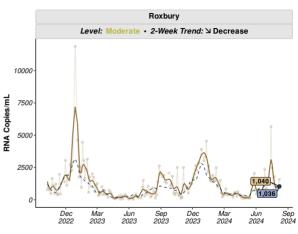


#### Level: **Moderate**

- Average value in <u>RX</u> over the past week: 1,040 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (1,036 copies/mL).

### Trend: > Decrease

- Over the past two weeks, values in <u>RX</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -198 copies/mL (-16%).

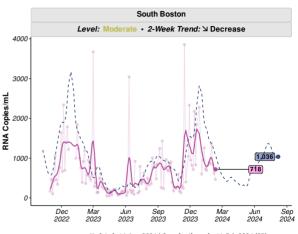


Updated: 14-Aug-2024 | Samples through: 07-Aug-2024 (RX);

## **South Boston**



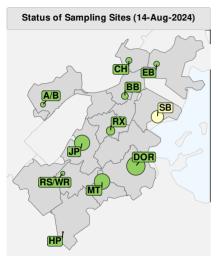
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



Updated: 14-Aug-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



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)
<u></u>	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