

# **Wastewater Epidemiology COVID-19 Report**

**Updated**: 01-Jul-2024 | **Data Complete Through**: 26-Jun-2024

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Jamaica Plain

Mattapan

Roslindale/West Roxbury

Roxbury

South Boston

#### Additional Information

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

Level: Very High

Level: High

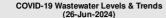
Level: Moderate

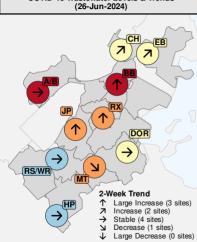
Level: Low

Level: Very Low

# **Neighborhood Levels and Trends**







COVID-19 Level		2 sites	3 sites	3 sites	2 sites
(# sites)	Verv Low	Low	Moderate	Hiah	Verv High

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

COVID-19 LEVEL 2-WEEK TRENDS High

Increase

+198 copies/mL (+22%)

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

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

#### For additional details see:

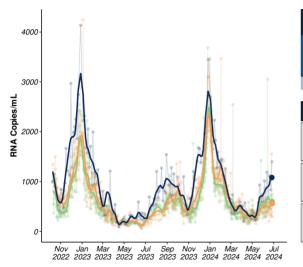
- · Results by Neighborhood
- Detailed Neighborhood Levels and Trends Table
- Trend and Level Category Definitions

1,082 copies/mL

samples through 26-Jun-2024

# **Citywide Overview and Trends**





CITYWIDE AVERAGE

1,082
RNA copies/mL

RANGE ACROSS 11
NEIGHBORHOOD SITES

456-1,669
RNA copies/mL

Data through: 26-Jun-2024

2-WEEK TRENDS				
Boston Increasing	<b>+22%</b> over the past 14 days			
MWRA North Stable	-12% over the past 14 days			
MWRA South Stable	+13% over the past 14 days			

 $\textbf{Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (BPHC); 27-Jun-2024 (MWRA) | \textbf{MWRA Data: } \underline{\textbf{https://www.mwra.com/biobot/biobotdata.htm}}$ 

# **BPHC Trend Overview by Neighborhood**

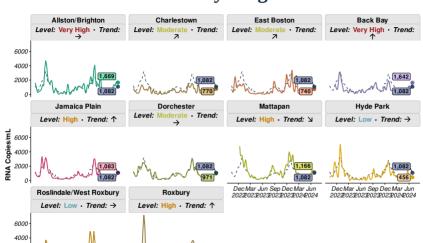
Dec Mar Jun Sep Dec Mar Jun

2022022022022022022024024

2000

Dec Mar Jun Sep Dec Mar Jun





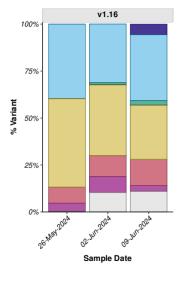
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood:

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**





%
5.6%
35.0%
2.4%
0.1%
28.8%
14.0%
3.1%
10.9%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 09-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.

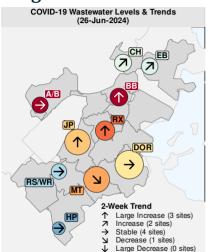
Version Changes: Added: JN.1.7, KP.3 Removed: XBB. EG.5

For Additional Info See:

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

# **Neighborhood Levels and Data Table**





	COVID-19 Wastewater Levels		2-Week Trends		
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	1,082	High	Increase	+198	+22%
A/B	1,669	Very High	Stable	-16	-1%
BB	1,642	Very High	Large Increase	+842	+105%
RX	1,297	High	Large Increase	+896	+223%
MT	1,166	High	Decrease	-314	-21%
JP	1,083	High	Large Increase	+516	+91%
DOR	971	Moderate	Stable	+122	+14%
CH	770	Moderate	Increase	+278	+57%
EB	740	Moderate	Increase	+165	+29%
RS/WR	602	Low	Stable	+148	+33%
HP	456	Low	Stable	+61	+15%

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



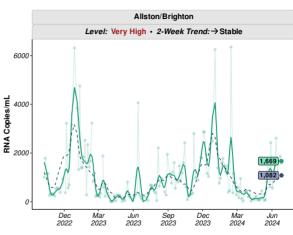
### Level: Very High

- Average value in A/B over the past week: 1,669 copies/mL.
- This value is very high compared to past values and higher than the citywide average (1,082 copies/mL).

#### Trend: $\rightarrow$ Stable

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

   -16 copies/mL (-1%).



Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (A/B);

# **Back Bay**

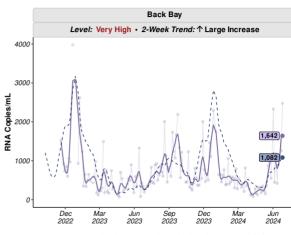


### Level: Very High

- Average value in <u>BB</u> over the past week: 1,642 copies/mL.
- This value is very high compared to past values and higher than the citywide average (1,082 copies/mL).

### Trend: 1 Large Increase

- Over the past two weeks, values in <u>BB</u> are increasing.
- Change compared to two weeks ago: +842 copies/mL (+105%).



Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (BB);

### Charlestown

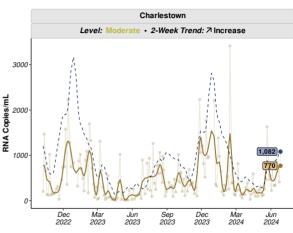


#### Level: Moderate

- Average value in <u>CH</u> over the past week: 770 copies/mL.
- This value is moderate compared to past values and <u>similar</u> than the citywide average (1,082 copies/mL).

### Trend: **↗** Increase

- Over the past two weeks, values in <u>CH</u> are <u>increasing</u>.
- Change compared to two weeks ago: +278 copies/mL (+57%).



Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (CH);

### Dorchester

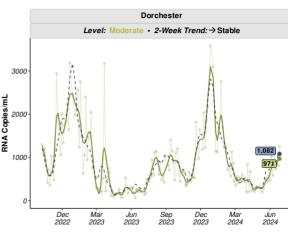


#### Level: **Moderate**

- Average value in <u>DOR</u> over the past week: <u>971</u> copies/mL.
- This value is moderate compared to past values and similar than the citywide average (1,082 copies/mL).

### Trend: → Stable

- Over the past two weeks, values in <u>DOR</u> are <u>stable</u>.
- Change compared to two weeks ago: +122 copies/mL (+14%).



Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (DOR);

### **East Boston**

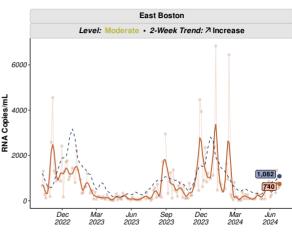


#### Level: **Moderate**

- Average value in <u>EB</u> over the past week: 740 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (1,082 copies/mL).

#### Trend: **↗ Increase**

- Over the past two weeks, values in <u>EB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +165 copies/mL (+29%).



Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (EB);

# **Hyde Park**

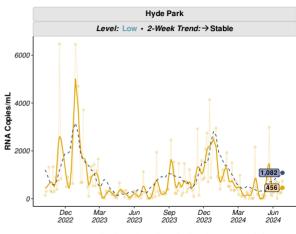


### Level: Low

- Average value in <u>HP</u> over the past week: 456 copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (1,082 copies/mL).

### Trend: $\rightarrow$ Stable

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



Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (HP);

### Jamaica Plain

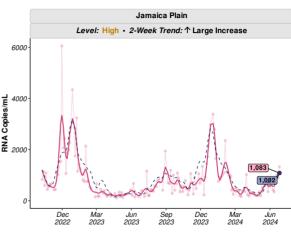


## Level: High

- Average value in <u>JP</u> over the past week: 1,083 copies/mL.
- This value is <u>high</u> compared to past values and <u>similar</u> than the citywide average (1,082 copies/mL).

### 

- Over the past two weeks, values in <u>JP</u> are <u>increasing</u>.
- Change compared to two weeks ago: +516 copies/mL (+91%).



Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (JP);

# Mattapan



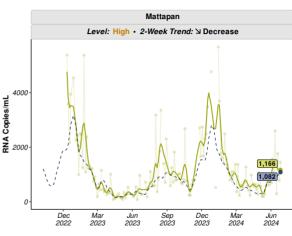
## Level: High

- Average value in <u>MT</u> over the past week: 1,166 copies/mL.
- This value is <u>high</u> compared to past values and <u>similar</u> than the citywide average (1,082 copies/mL).

#### Trend: > Decrease

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

   -314 copies/mL (-21%).



Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (MT);

# **Roslindale/West Roxbury**

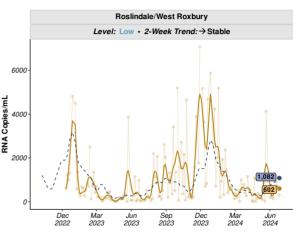


### Level: Low

- Average value in <u>RS/WR</u> over the past week: 602 copies/mL.
- This value is <u>low</u> compared to past values and <u>lower</u> than the citywide average (1,082 copies/mL).

#### Trend: → Stable

- Over the past two weeks, values in RS/WR are <u>stable</u>.
- Change compared to two weeks ago: +148 copies/mL (+33%).



Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (RS/WR);

# **Roxbury**

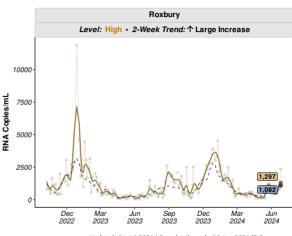


## Level: High

- Average value in <u>RX</u> over the past week: 1,297 copies/mL.
- This value is <u>high</u> compared to past values and <u>similar</u> than the citywide average (1,082 copies/mL).

### Trend: 1 Large Increase

- Over the past two weeks, values in <u>RX</u> are <u>increasing</u>.
- Change compared to two weeks ago: +896 copies/mL (+223%).

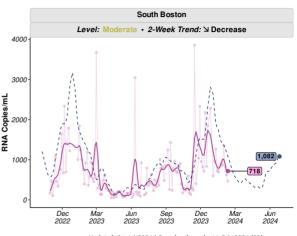


Updated: 01-Jul-2024 | Samples through: 26-Jun-2024 (RX);

### **South Boston**



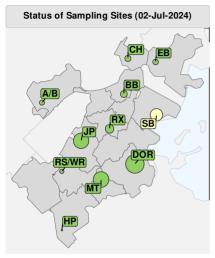
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



Updated: 01-Jul-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 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: 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 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 <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: 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