

## Boston Wastewater Epidemiology Report

Updated: 03-Oct-2024 | Data Complete Through: 29-Sep-2024



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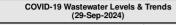
# **A Note About These Reports**

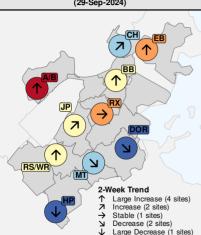


The laboratory that tests Boston's wastewater changed on August 1, 2024. Because of differences in the methods used at the old laboratory and the new one, data may not be comparable before and after the change. The change is marked with a vertical red line line on figures in this report. BPHC cautions against drawing conclusions by comparing data to the left and right of this line. BPHC closely monitors the data and the methods used to communicate these results, and presents the best understanding of the data in these reports. A report with more information about the lab change will be made available on the BPHC Wastewater Monitoring web page.

# **Neighborhood Levels and Trends**







COVID-19
Level
(# sites)













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

COVID-19 LEVEL

Low

606 copies/mL samples through 29-Sep-2024 2-WEEK TRENDS



Stable -2 copies/mL (0%)

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

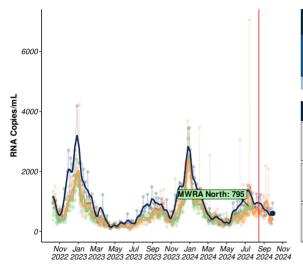
Level	Neighborhood/Site		Trend
Very High	Allston/Brighton (A/B)	1	Large Increase
High	Roxbury (RX)	$\rightarrow$	Stable
High	East Boston (EB)	1	Large Increase
	Back Bay (BB)	1	Large Increase
Moderate	Roslindale/West Roxbury (RS/WR)		Large Increase
	Jamaica Plain (JP)	7	Increase
Low	Charlestown (CH)	7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

RANGE ACROSS 11
NEIGHBORHOOD SITES

305-1,500
RNA copies/mL

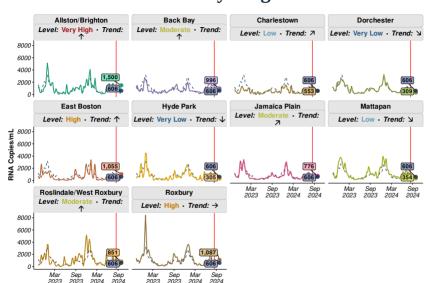
Data through: 29-Sep-2024

2-W	EEK TRENDS		
Boston <b>Stable</b>	<b>0%</b> over the past 14 days		
MWRA North <b>Stable</b>	+0% over the past 14 days		
MWRA South Decreasing	-60% over the past 14 days		

 $\textbf{Updated: } 03-0\text{ct-}2024 \mid \textbf{Samples through: } 29-\text{Sep-}2024 \left(\text{BPHC}\right); 18-\text{Jul-}2024 \left(\text{MWRA}\right) \mid \textbf{MWRA Data: } \\ \underline{\text{https://www.mwra.com/biobot/biobotdata.htm}}$ 

# **BPHC Trend Overview by Neighborhood**





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

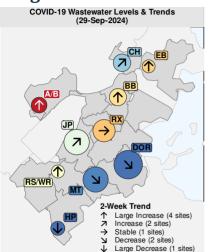
The dotted blue line and dark blue text box in each panel shows the trend and most recent value across all Boston sites weighted by population.

The vertical dashed grey line marks the date of August 1, 2024, when the laboratory that tests Boston's wastewater changed.

To see details and interpretation of these results for an individual neighborhood see Results by Neighborhood.

# **Neighborhood Levels and Data Table**





COVID-19 Wastewater Levels			COVID-19 Wastewater Levels 2-Week Trends		
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	606	Low	Stable	-2	0%
A/B	1,500	Very High	Large Increase	+1,175	+361%
RX	1,087	High	Stable	+35	+3%
EB	1,055	High	Large Increase	+1,000	+1,808%
BB	996	Moderate	Large Increase	+508	+104%
RS/WR	851	Moderate	Large Increase	+651	+326%
JP	776	Moderate	Increase	+369	+90%
CH	553	Low	Increase	+197	+55%
MT	354	Low	Decrease	-389	-52%
DOR	309	Very Low	Decrease	-287	-48%
HP	305	Very Low	Large Decrease	-555	-65%

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

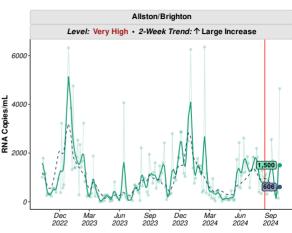


## Level: Very High

- Average value in <u>A/B</u> over the past week: 1,500 copies/mL.
- This value is very high compared to past values and higher than the citywide average (606 copies/mL).

#### Trend: ↑ Large Increase

- Over the past two weeks, values in <u>A/B</u> are <u>increasing</u>.
- Change compared to two weeks ago: +1,175 copies/mL (+361%).



Updated: 03-Oct-2024 | Samples through: 29-Sep-2024 (A/B);

## **Back Bay**

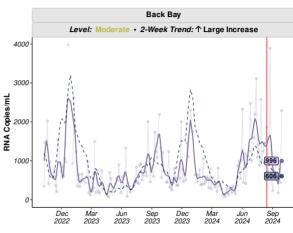


#### Level: **Moderate**

- Average value in <u>BB</u> over the past week: 996 copies/mL.
- This value is moderate compared to past values and higher than the citywide average (606 copies/mL).

## 

- Over the past two weeks, values in <u>BB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +508 copies/mL (+104%).



Updated: 03-Oct-2024 | Samples through: 29-Sep-2024 (BB);

## Charlestown

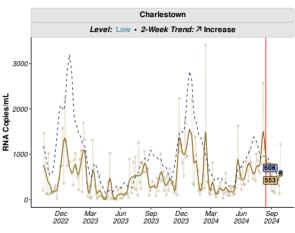


### Level: Low

- Average value in <u>CH</u> over the past week: 553 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (606 copies/mL).

#### Trend: **↗** Increase

- Over the past two weeks, values in <u>CH</u> are <u>increasing</u>.
- Change compared to two weeks ago: +197 copies/mL (+55%).



Updated: 03-Oct-2024 | Samples through: 29-Sep-2024 (CH);

## Dorchester

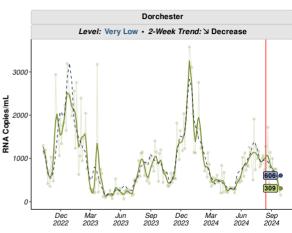


#### Level: Very Low

- Average value in <u>DOR</u> over the past week: 309 copies/mL.
- This value is very low compared to past values and <u>similar</u> than the citywide average (<u>606</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:
   <u>-287</u> copies/mL (-48%).



Updated: 03-Oct-2024 | Samples through: 29-Sep-2024 (DOR);

### **East Boston**

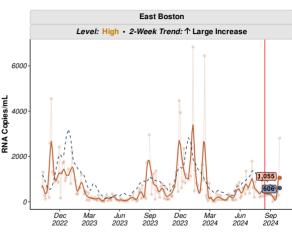


## Level: High

- Average value in <u>EB</u> over the past week: 1,055 copies/mL.
- This value is <u>high</u> compared to past values and <u>higher</u> than the citywide average (606 copies/mL).

## 

- Over the past two weeks, values in <u>EB</u> are <u>increasing</u>.
- Change compared to two weeks ago: +1,000 copies/mL (+1,808%).



Updated: 03-0ct-2024 | Samples through: 29-Sep-2024 (EB);

# **Hyde Park**

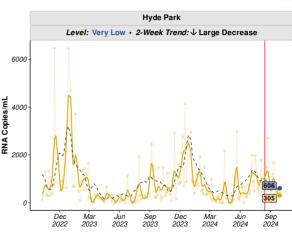


#### Level: Very Low

- Average value in <u>HP</u> over the past week: 305 copies/mL.
- This value is very low compared to past values and similar than the citywide average (606 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:
   -555 copies/mL (-65%).



Updated: 03-Oct-2024 | Samples through: 29-Sep-2024 (HP);

### Jamaica Plain

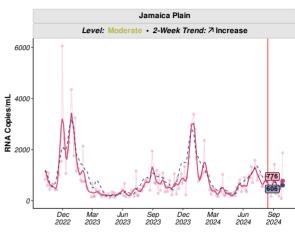


#### Level: **Moderate**

- Average value in <u>JP</u> over the past week: 776 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (606 copies/mL).

#### Trend: 7 Increase

- Over the past two weeks, values in <u>JP</u> are <u>increasing</u>.
- Change compared to two weeks ago: +369 copies/mL (+90%).



Updated: 03-Oct-2024 | Samples through: 29-Sep-2024 (JP);

# Mattapan



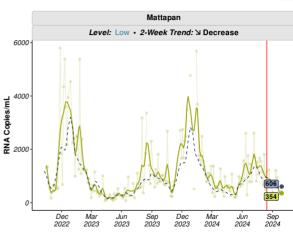
Level: Low

 Average value in <u>MT</u> over the past week: <u>354</u> copies/mL.

 This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (606 copies/mL).

#### Trend: > Decrease

- Over the past two weeks, values in <u>MT</u> are <u>decreasing</u>.
- Change compared to two weeks ago: -389 copies/mL (-52%).



Updated: 03-Oct-2024 | Samples through: 29-Sep-2024 (MT);

# **Roslindale/West Roxbury**

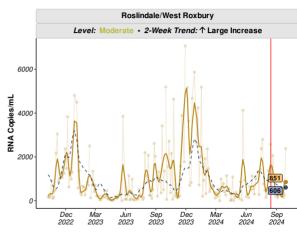


#### Level: **Moderate**

- Average value in RS/WR over the past week: 851 copies/mL.
- This value is moderate compared to past values and similar than the citywide average (606 copies/mL).

### 

- Over the past two weeks, values in RS/WR are increasing.
- Change compared to two weeks ago: +651 copies/mL (+326%).



Updated: 03-Oct-2024 | Samples through: 29-Sep-2024 (RS/WR);

## **Roxbury**

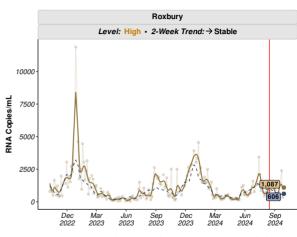


## Level: High

- Average value in <u>RX</u> over the past week: 1,087 copies/mL.
- This value is <u>high</u> compared to past values and <u>higher</u> than the citywide average (606 copies/mL).

### Trend: → Stable

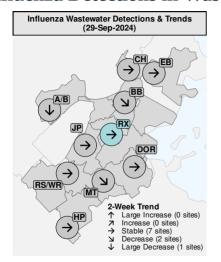
- Over the past two weeks, values in <u>RX</u> are <u>stable</u>.
- Change compared to two weeks ago: +35 copies/mL (+3%).



Updated: 03-Oct-2024 | Samples through: 29-Sep-2024 (RX);

## Influenza Detections in Wastewater





This map depicts the number of times influenza virus was detected in wastewater at the 3 most-recent samples (approximately the past week) at each of the neighborhood sampling locations.

# Samples Positive for Flu (Past 3 Samples) Not Measured 0 positive









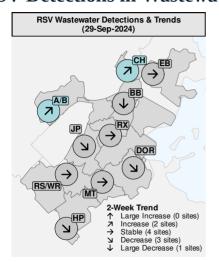






## **RSV** Detections in Wastewater





RSV = Respiratory Syncytial Virus

This map depicts the number of times RSV was detected in wastewater at the 3 most-recent samples (approximately the past week) at each of the neighborhood sampling locations.

# Samples Positive for RSV









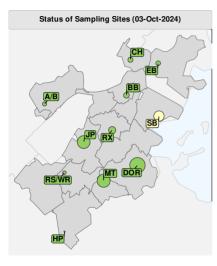






## **Site Status and Details**





Site Status (N=11) Active

a

Paused (n=1)

# **COVID-19 Wastewater 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)
$\land$	Large Increase	>+500
7	Increase	+150 to +500
$\rightarrow$	Stable	-150 to +150
7	Decrease	-500 to -150
$\overline{}$	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 <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 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





# 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