

### Boston Wastewater Epidemiology Report

#### Updated: 07-Nov-2024 | Data Complete Through: 30-Oct-2024

☑ wastewater@bphc.org



Boston Public Health Commission

# **Report Contents**

#### COVID-19 Summary

Neighborhood Levels and Trends Citywide Overview and Trends BPHC Trend Overview by Neighborhood

#### **Detailed Results**

Neighborhood Levels and Data Table Results by Neighborhood Allston/Brighton Back Bay Charlestown Dorchester East Boston Hyde Park Jamaica Plain Mattapan Roslindale/West Roxbury Roxbury

#### Variant Results

Percent Variant Lineages (Citywide)

#### Influenza & RSV

Influenza Detections in Wastewater RSV Detections in Wastewater



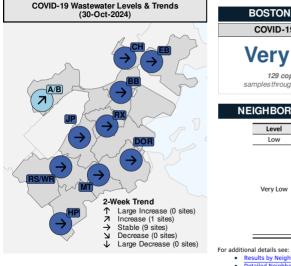
### **A Note About These Reports**



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**







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

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

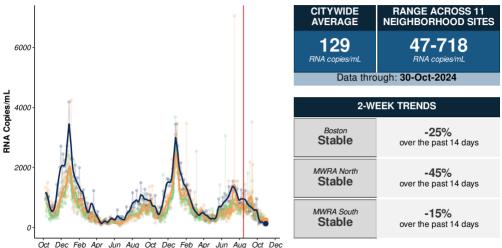
- Results by Neighborhood
- Detailed Neighborhood Levels and Trends Table
- Trend and Level Category Definitions

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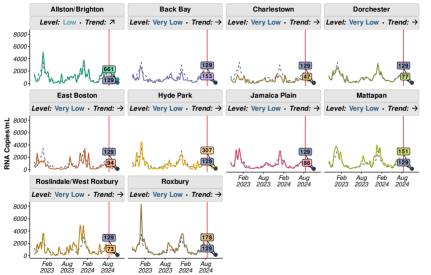
COVID-19

## **Citywide Overview and Trends**



Updated: 07-Nov-2024 | Samples through: 30-Oct-2024 (BPHC); 30-Oct-2024 (MWRA) | MWRA Data: 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;

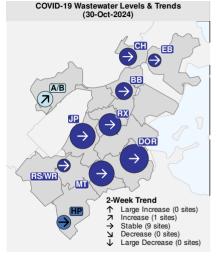
The dotted blue line and dark blue text box in each panel shows the trend and most recent value across all **Boston** sites weighted by population.

The vertical red 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		2-Week Trends		
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	129	Very Low	Stable	-44	-25%
A/B	661	Low	Increase	+475	+255%
HP	307	Very Low	Stable	+138	+82%
RX	178	Very Low	Stable	-7	-4%
BB	153	Very Low	Stable	-30	-17%
MT	151	Very Low	Stable	-113	-43%
EB	94	Very Low	Stable	+37	+63%
JP	88	Very Low	Stable	-21	-19%
DOR	77	Very Low	Stable	-101	-57%
RS/WR	73	Very Low	Stable	-62	-46%
СН	47	Very Low	Stable	-26	-36%

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: -5-500 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**

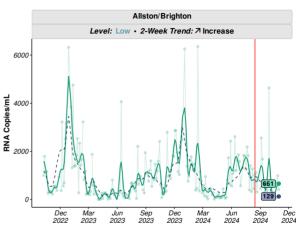


#### Level: Low

- Average value in <u>A/B</u> over the past week: <u>661</u> copies/mL.
- This value is low compared to past values and higher than the citywide average (129 copies/mL).

#### Trend: 7 Increase

- Over the past two weeks, values in <u>A/B</u> are increasing.
- Change compared to two weeks ago: <u>+475</u> copies/mL (+255%).



Updated: 07-Nov-2024 | Samples through: 30-Oct-2024 (A/B);

## **Back Bay**

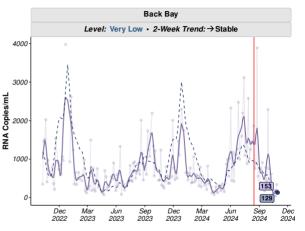


Level: Very Low

- Average value in **BB** over the past week: <u>153</u> copies/mL.
- This value is <u>very low</u> compared to past values and <u>similar</u> than the citywide average (<u>129</u> copies/mL).

#### Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>BB</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-30</u> copies/mL (-17%).



Updated: 07-Nov-2024 | Samples through: 27-Oct-2024 (BB);

# Charlestown

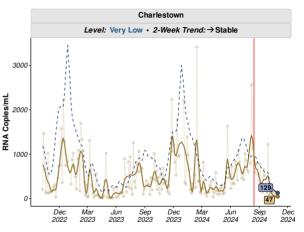


Level: Very Low

- Average value in <u>CH</u> over the past week: <u>47</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (129 copies/mL).

### Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>CH</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-26</u> copies/mL (-36%).



Updated: 07-Nov-2024 | Samples through: 30-Oct-2024 (CH);

### Dorchester

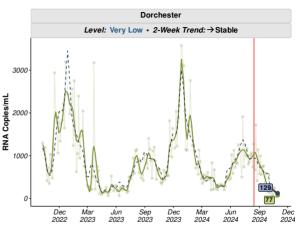


#### Level: Very Low

- Average value in <u>DOR</u> over the past week: <u>77</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (129 copies/mL).

#### Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>DOR</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-101</u> copies/mL (-57%).



Updated: 07-Nov-2024 | Samples through: 30-Oct-2024 (DOR);

### **East Boston**

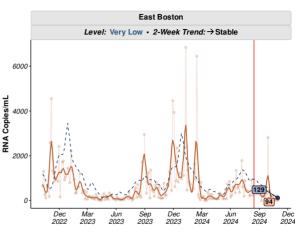


Level: Very Low

- Average value in **EB** over the past week: <u>94</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (129 copies/mL).

### Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>EB</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>+37</u> copies/mL (+63%).



Updated: 07-Nov-2024 | Samples through: 30-Oct-2024 (EB);

## **Hyde Park**

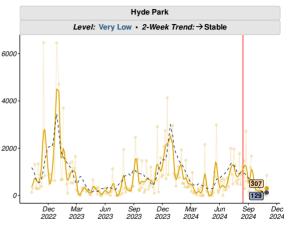


#### Level: Very Low

- Average value in <u>HP</u> over the past week: <u>307</u> copies/mL.
- This value is very low compared to past values and <u>similar</u> than the citywide average (<u>129</u> copies/mL).

### Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>HP</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>+138</u> copies/mL (+82%).



Updated: 07-Nov-2024 | Samples through: 30-Oct-2024 (HP);

See recommended actions and resources based on levels and trends in this neighborhood.

RNA Copies/mL

### Jamaica Plain

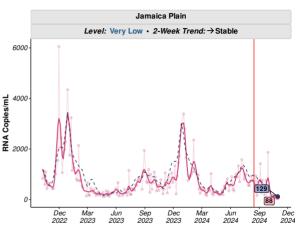


Level: Very Low

- Average value in <u>JP</u> over the past week: <u>88</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (129 copies/mL).

### Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>JP</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-21</u> copies/mL (-19%).



Updated: 07-Nov-2024 | Samples through: 30-Oct-2024 (JP);

### Mattapan

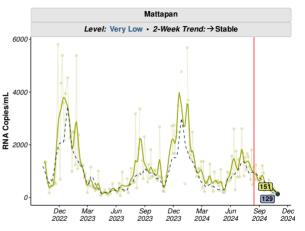


Level: Very Low

- Average value in <u>MT</u> over the past week: <u>151</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (129 copies/mL).

#### Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>MT</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-113</u> copies/mL (-43%).



Updated: 07-Nov-2024 | Samples through: 30-Oct-2024 (MT);

### **Roslindale/West Roxbury**

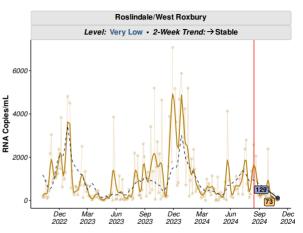


#### Level: Very Low

- Average value in <u>RS/WR</u> over the past week: <u>73</u> copies/mL.
- This value is very low compared to past values and <u>similar</u> than the citywide average (<u>129</u> copies/mL).

#### Trend: → <u>Stable</u>

- Over the past two weeks, values in RS/WR are <u>stable</u>.
- Change compared to two weeks ago: <u>-62</u> copies/mL (-46%).



Updated: 07-Nov-2024 | Samples through: 30-Oct-2024 (RS/WR);

# Roxbury

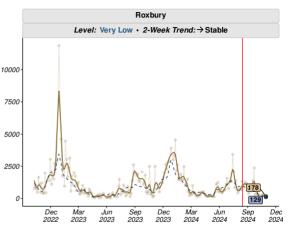


#### Level: Very Low

- Average value in **RX** over the past week: <u>178</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (129 copies/mL).

#### Trend: $\rightarrow$ <u>Stable</u>

- Over the past two weeks, values in **RX** are **stable**.
- Change compared to two weeks ago: <u>-7</u> copies/mL (-4%).

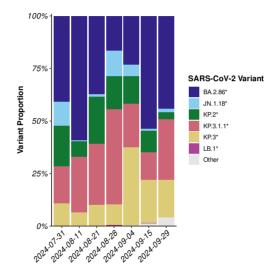


Updated: 07-Nov-2024 | Samples through: 30-Oct-2024 (RX);

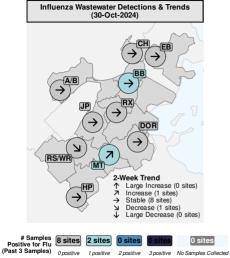
See recommended actions and resources based on levels and trends in this neighborhood.

RNA Copies/mL

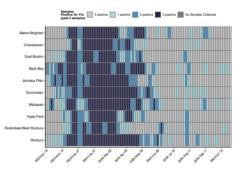
### Percent Variant Lineages (Citywide)



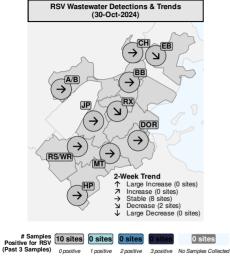
### **Influenza Detections in Wastewater**



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.



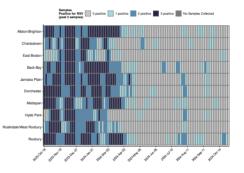
### **RSV Detections in Wastewater**





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.





### **COVID-19 Wastewater Level and Trend Category Definitions**



#### **Concentration Levels**

Concentration Level	Concentration Value (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)
$\uparrow$	Large Increase	>+500
7	Increase	+150 to +500
$\rightarrow$	Stable	-150 to +150
Ы	Decrease	-500 to -150
$\downarrow$	Large Decrease	≤-500





# 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 <u>high risk of getting very sick</u>, 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 isolation if you have COVID-19 and for what to do if you are exposed 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 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 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 isolation if you have COVID-19 and for what to do if you are exposed 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 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 <u>high risk of getting very sick</u>, consider self-testing to <u>detect infection before contact</u>, 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 isolation if you have COVID-19 and for what to do if you are exposed 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: 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 isolation if you have COVID-19 and for what to do if you are exposed 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: 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 <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 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