Boston Wastewater Epidemiology Report

Updated: 24-Apr-2025 | **Data Complete Through**: 16-Apr-2025

✉ wastewater@bphc.org

Boston Public
Health Commission

Report Contents
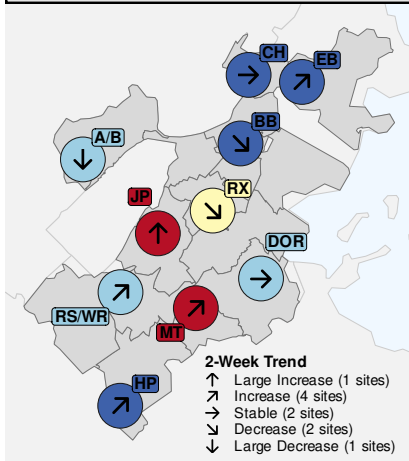
A Note About These Reports

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 Wastewater Levels & Trends (16-Apr-2025)

2-Week Trend
- ↑ Large Increase (1 sites)
- ↗ Increase (4 sites)
- → Stable (2 sites)
- ↘ Decrease (2 sites)
- ↓ Large Decrease (1 sites)

COVID-19 Level (# sites)	4 sites	3 sites	1 sites		2 sites
	Very Low	Low	Moderate	High	Very High

BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL	2-WEEK TRENDS
High	↗
1,102 copies/mL *samples through 16-Apr-2025*	*Increase* *+365 copies/mL (+50%)*

NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

Level	Neighborhood/Site		Trend
Very High	Jamaica Plain (JP)	↑	Large Increase
	Mattapan (MT)	↗	Increase
Moderate	Roxbury (RX)	↘	Decrease
Low	Allston/Brighton (A/B)	↓	Large Decrease
	Dorchester (DOR)	→	Stable
	Roslindale/West Roxbury (RS/WR)	↗	Increase
Very Low	Back Bay (BB)	↘	Decrease
	East Boston (EB)	↗	Increase
	Hyde Park (HP)	↗	Increase
	Charlestown (CH)	→	Stable

For additional details see:
- Results by Neighborhood
- Detailed Neighborhood Levels and Trends Table
- Trend and Level Category Definitions

4/29

COVID-19 Citywide Overview and Trends
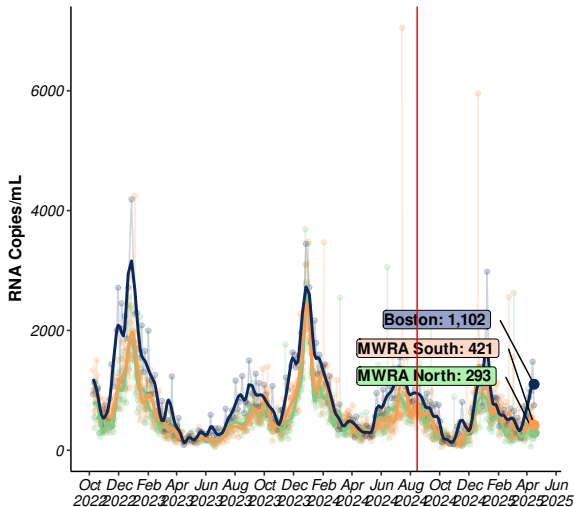
CITYWIDE AVERAGE	RANGE ACROSS 11 NEIGHBORHOOD SITES
1,102	**90-2,148**
RNA copies/mL	RNA copies/mL
Data through: **16-Apr-2025**	

2-WEEK TRENDS	
Boston **Increasing**	**+50%** over the past 14 days
MWRA North **Stable**	**-33%** over the past 14 days
MWRA South **Stable**	**+6%** over the past 14 days

Chart labels: Boston: 1,102 · MWRA South: 421 · MWRA North: 293

Y-axis: RNA Copies/mL

BPHC Trend Overview by Neighborhood
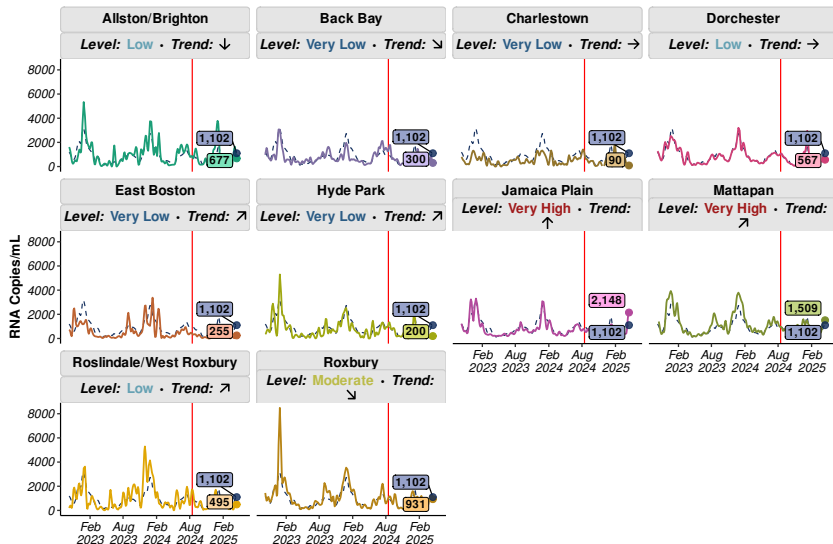
Allston/Brighton
Level: Low · *Trend:* ↓

Back Bay
Level: Very Low · *Trend:* ↘

Charlestown
Level: Very Low · *Trend:* →

Dorchester
Level: Low · *Trend:* →

East Boston
Level: Very Low · *Trend:* ↗

Hyde Park
Level: Very Low · *Trend:* ↗

Jamaica Plain
Level: Very High · *Trend:* ↑

Mattapan
Level: Very High · *Trend:* ↗

Roslindale/West Roxbury
Level: Low · *Trend:* ↗

Roxbury
Level: Moderate · *Trend:* ↘

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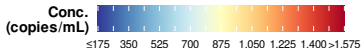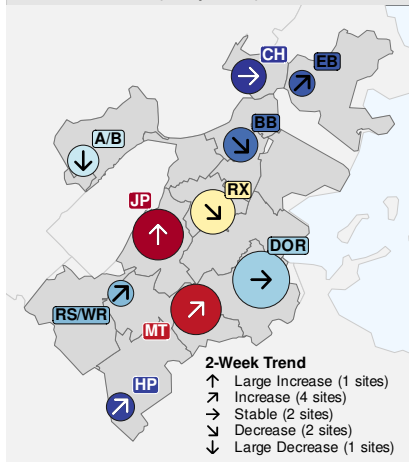
The vertical red line marks the date of August 1, 2024, when the laboratory that tests Boston's wastewater changed.

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 & Trends
(16-Apr-2025)

2-Week Trend
- ↑ Large Increase (1 sites)
- ↗ Increase (4 sites)
- → Stable (2 sites)
- ↘ Decrease (2 sites)
- ↓ Large Decrease (1 sites)

Conc. (copies/mL)
≤175 350 525 700 875 1,050 1,225 1,400 >1,575

| NH | COVID-19 Wastewater Levels | | | 2-Week Trends | | |
	Conc. (copies/mL)	Level		Trend	Diff. (copies/mL)	% Change
BOSTON	**1,102**	**High**		**Increase**	**+365**	**+50\%**
JP	2,148	Very High		Large Increase	+1,710	+390\%
MT	1,509	Very High		Increase	+381	+34\%
RX	931	Moderate		Decrease	-299	-24\%
A/B	677	Low		Large Decrease	-792	-54\%
DOR	567	Low		Stable	-49	-8\%
RS/WR	495	Low		Increase	+246	+99\%
BB	300	Very Low		Decrease	-448	-60\%
EB	255	Very Low		Increase	+230	+943\%
HP	200	Very Low		Increase	+174	+676\%
CH	90	Very Low		Stable	-103	-54\%

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)
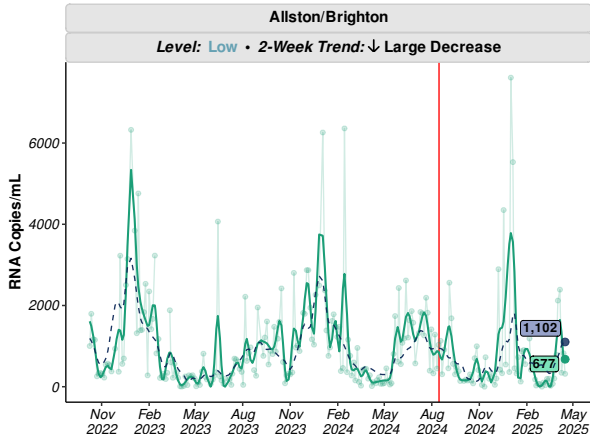- South Boston (SB)

Allston/Brighton

Level: **Low**

- Average value in **A/B** over the past week: **677** copies/mL.
- This value is **low** compared to past values and **lower** than the citywide average (**1,102** copies/mL).

Trend: ↓ **Large Decrease**

- Over the past two weeks, values in **A/B** are **decreasing**.
- Change compared to two weeks ago: **-792** copies/mL (**-54%**).

Allston/Brighton
Level: Low • *2-Week Trend:* ↓ Large Decrease

Updated: 24-Apr-2025 | **Samples through:** 16-Apr-2025 (A/B);

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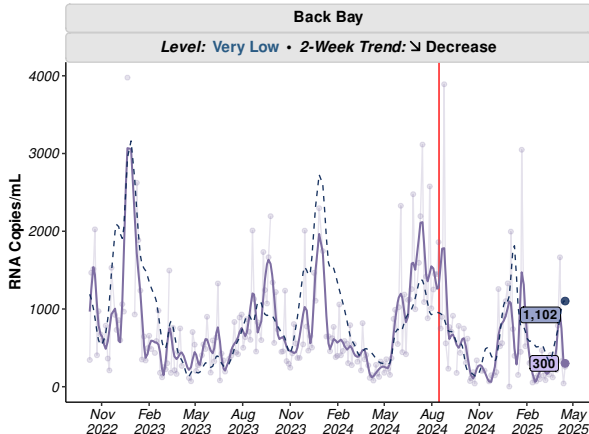
Back Bay

Level: **Very Low**

- Average value in **BB** over the past week: **300** copies/mL.
- This value is **very low** compared to past values and **lower** than the citywide average (**1,102** copies/mL).

Trend: ↘ **Decrease**

- Over the past two weeks, values in **BB** are **decreasing**.
- Change compared to two weeks ago: **-448** copies/mL (**-60%**).

Back Bay

Level: Very Low • *2-Week Trend:* ↘ Decrease

RNA Copies/mL

1,102
300

Nov 2022, Feb 2023, May 2023, Aug 2023, Nov 2023, Feb 2024, May 2024, Aug 2024, Nov 2024, Feb 2025, May 2025

Updated: 24-Apr-2025 | **Samples through:** 16-Apr-2025 (BB);

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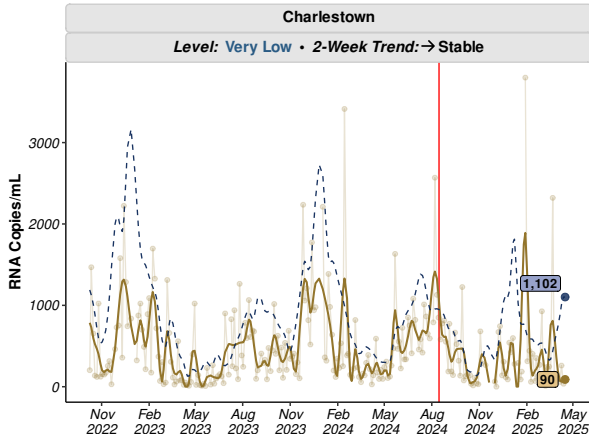
Charlestown

Level: **Very Low**

- Average value in **CH** over the past week: **90** copies/mL.
- This value is **very low** compared to past values and **lower** than the citywide average (**1,102** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **CH** are **stable**.
- Change compared to two weeks ago: **-103** copies/mL (**-54%**).

Charlestown
Level: **Very Low** • *2-Week Trend:* → **Stable**

Updated: 24-Apr-2025 | Samples through: 16-Apr-2025 (CH);

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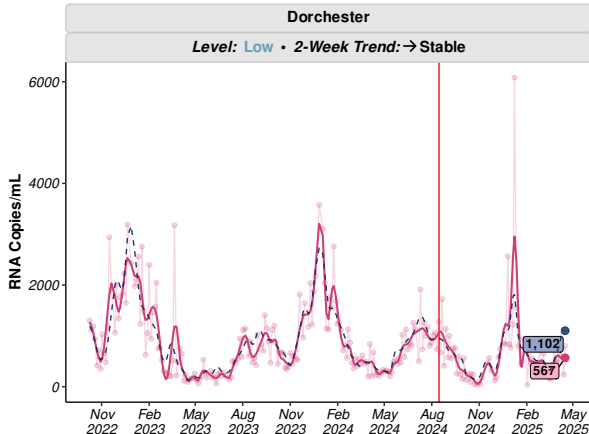
Dorchester

Level: **Low**

- Average value in **DOR** over the past week: **567** copies/mL.
- This value is **low** compared to past values and **lower** than the citywide average (**1,102** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **DOR** are **stable**.
- Change compared to two weeks ago: **-49** copies/mL (**-8%**).

Dorchester
Level: Low • *2-Week Trend:* → Stable

Updated: 24-Apr-2025 | **Samples through:** 16-Apr-2025 (DOR);

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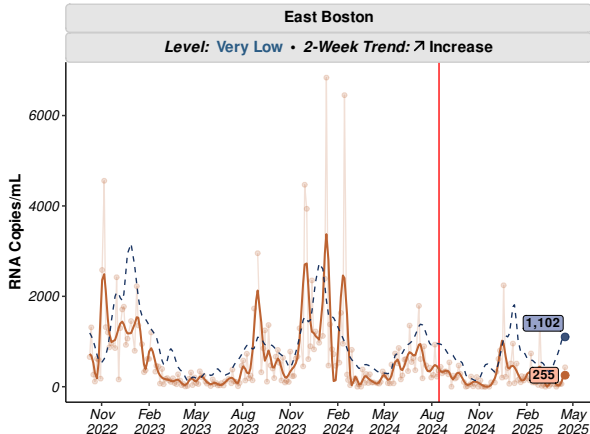
East Boston

Level: **Very Low**

- Average value in **EB** over the past week: **255** copies/mL.
- This value is **very low** compared to past values and **lower** than the citywide average (**1,102** copies/mL).

Trend: ↗ **Increase**

- Over the past two weeks, values in **EB** are **increasing**.
- Change compared to two weeks ago: **+230** copies/mL (**+943%**).

East Boston

Level: Very Low • *2-Week Trend:* ↗ Increase

Updated: 24-Apr-2025 | Samples through: 16-Apr-2025 (EB);

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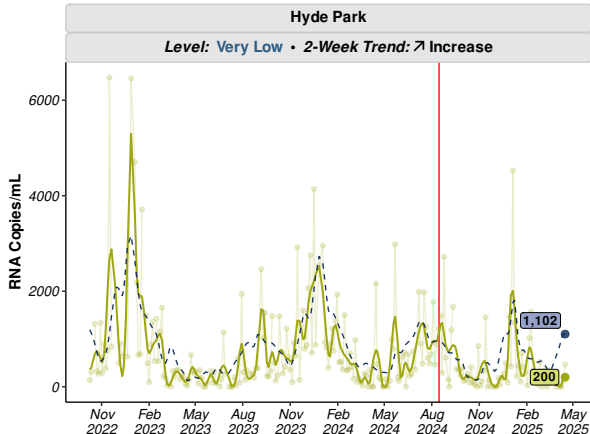
Hyde Park

Level: **Very Low**

- Average value in **HP** over the past week: **200** copies/mL.
- This value is **very low** compared to past values and **lower** than the citywide average (**1,102** copies/mL).

Trend: ↗ **Increase**

- Over the past two weeks, values in **HP** are **increasing**.
- Change compared to two weeks ago: **+174** copies/mL (**+676%**).

Hyde Park

Level: Very Low • *2-Week Trend:* ↗ Increase

Updated: 24-Apr-2025 | **Samples through:** 16-Apr-2025 (HP);

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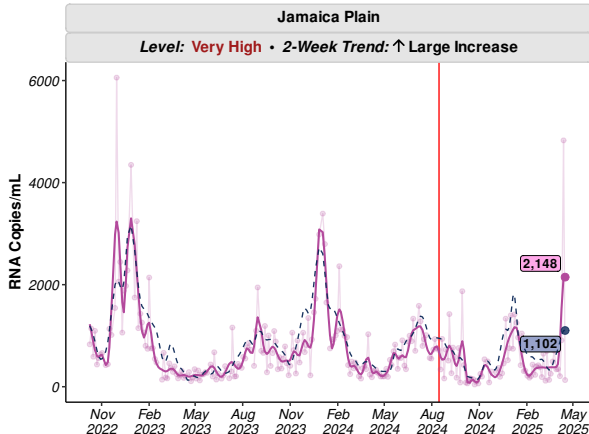
Jamaica Plain

Level: **Very High**

- Average value in **JP** over the past week: **2,148** copies/mL.
- This value is **very high** compared to past values and **higher** than the citywide average (**1,102** copies/mL).

Trend: ↑ **Large Increase**

- Over the past two weeks, values in **JP** are **increasing**.
- Change compared to two weeks ago: **+1,710** copies/mL (**+390%**).

Jamaica Plain
Level: **Very High** • *2-Week Trend:* ↑ **Large Increase**

Updated: 24-Apr-2025 | **Samples through:** 16-Apr-2025 (JP);

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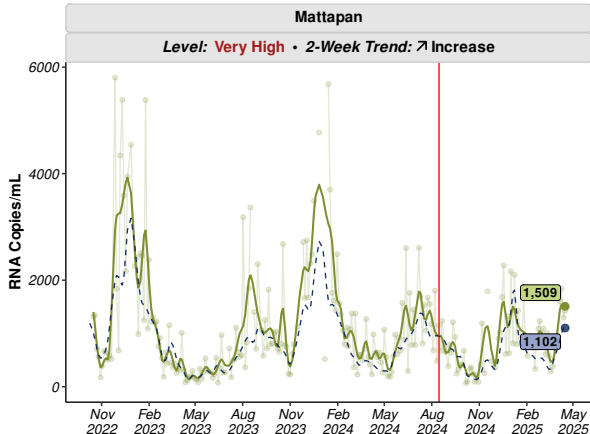
Mattapan

Level: **Very High**

- Average value in **MT** over the past week: **1,509** copies/mL.
- This value is **very high** compared to past values and **higher** than the citywide average (**1,102** copies/mL).

Trend: ↗ **Increase**

- Over the past two weeks, values in **MT** are **increasing**.
- Change compared to two weeks ago: **+381** copies/mL (**+34%**).

Mattapan

Level: Very High • *2-Week Trend:* ↗ Increase

Updated: 24-Apr-2025 | Samples through: 16-Apr-2025 (MT);

See recommended actions and resources based on levels and trends in this neighborhood.
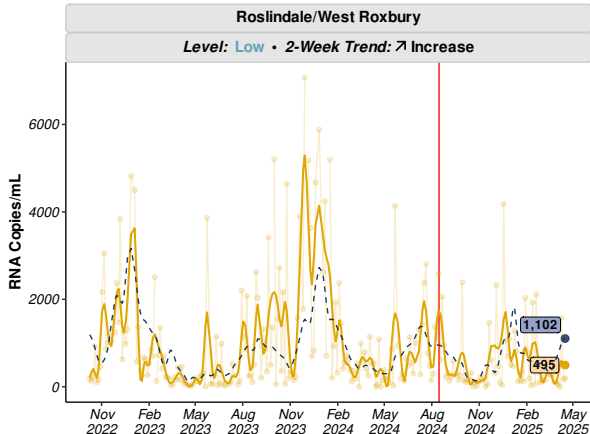
Roslindale/West Roxbury

Level: **Low**

- Average value in **RS/WR** over the past week: **495** copies/mL.
- This value is <u>low</u> compared to past values and <u>**lower**</u> than the citywide average (**1,102** copies/mL).

Trend: ↗ **Increase**

- Over the past two weeks, values in **RS/WR** are **increasing**.
- Change compared to two weeks ago: **+246** copies/mL (**+99%**).

Roslindale/West Roxbury

Level: Low • *2-Week Trend:* ↗ Increase

Updated: 24-Apr-2025 | **Samples through:** 16-Apr-2025 (RS/WR);
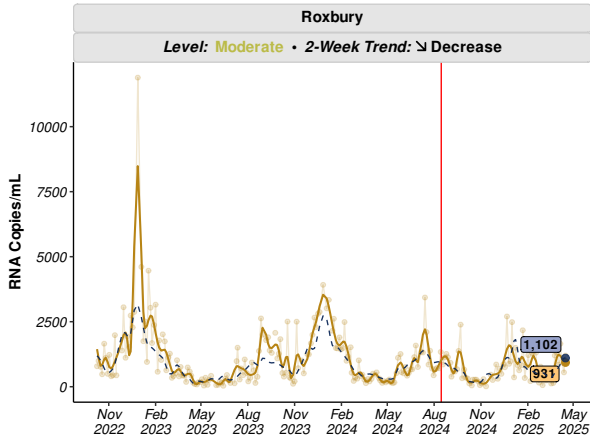
See recommended actions and resources based on levels and trends in this neighborhood.

Roxbury

Level: **Moderate**

- Average value in **RX** over the past week: **931** copies/mL.
- This value is **moderate** compared to past values and **similar** than the citywide average (**1,102** copies/mL).
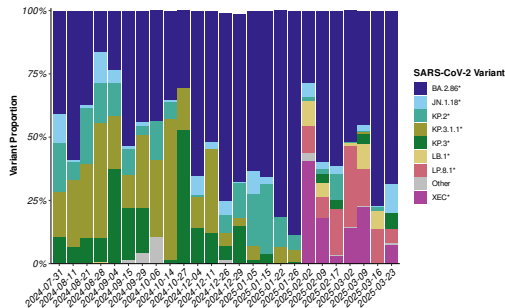
Trend: ↘ **Decrease**

- Over the past two weeks, values in **RX** are **decreasing**.
- Change compared to two weeks ago: **-299** copies/mL (**-24%**).

Roxbury

Level: Moderate • 2-Week Trend: ↘ Decrease

RNA Copies/mL

1,102
931

Nov 2022 | Feb 2023 | May 2023 | Aug 2023 | Nov 2023 | Feb 2024 | May 2024 | Aug 2024 | Nov 2024 | Feb 2025 | May 2025

Updated: 24-Apr-2025 | **Samples through:** 16-Apr-2025 (RX);

See recommended actions and resources based on levels and trends in this neighborhood.
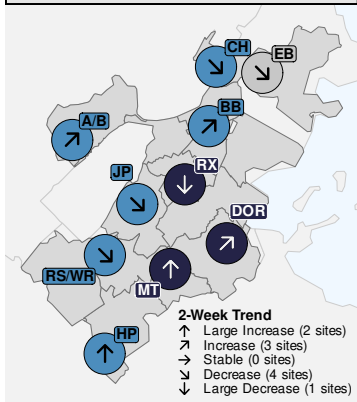
# Percent Variant Lineages (Citywide)

Influenza Detections in Wastewater

Influenza Wastewater Detections & Trends (16-Apr-2025)

2-Week Trend
- ↑ Large Increase (2 sites)
- ↗ Increase (3 sites)
- → Stable (0 sites)
- ↘ Decrease (4 sites)
- ↓ Large Decrease (1 sites)

Samples Positive for Flu (Past 3 Samples)

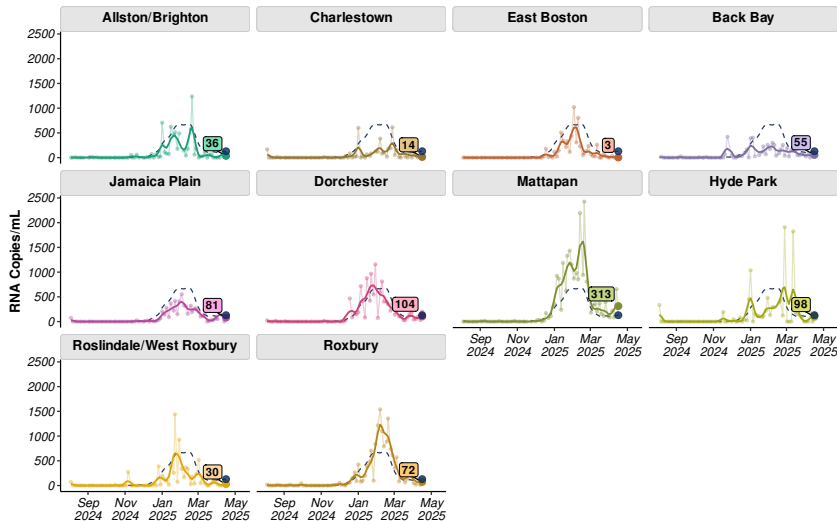| 1 sites	0 sites	6 sites	3 sites	0 sites
0 positive	1 positive	2 positive	3 positive	No Samples Collected

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.
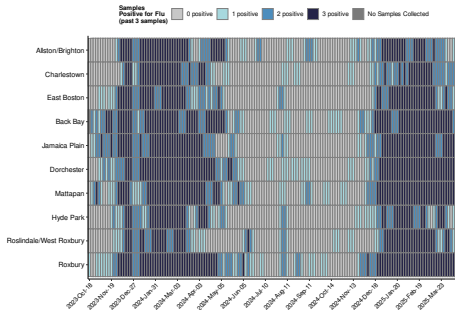
Influenza Trends in Wastewater by Neighborhood

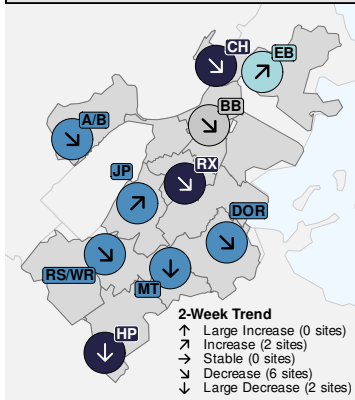Influenza Trends in Wastewater

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

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

RSV Detections in Wastewater

RSV Wastewater Detections & Trends
(16-Apr-2025)

2-Week Trend
↑ Large Increase (0 sites)
↗ Increase (2 sites)
→ Stable (0 sites)
↘ Decrease (6 sites)
↓ Large Decrease (2 sites)

 # Samples Positive for RSV (Past 3 Samples)

1 sites	1 sites	5 sites	3 sites	0 sites
0 positive	1 positive	2 positive	3 positive	No Samples Collected

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.
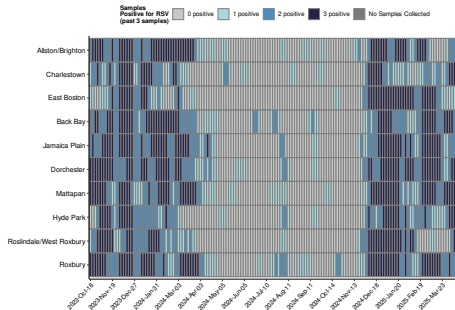
RSV Trends in Wastewater by Neighborhood
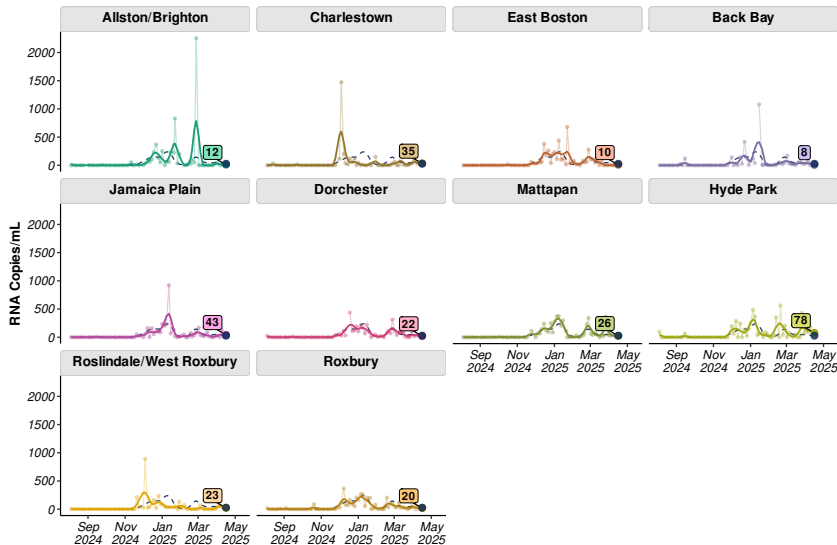
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood;

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

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)
↑	Large Increase	>+500
↗	Increase	+150 to +500
→	Stable	-150 to +150
↘	Decrease	-500 to -150
↓	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.
- Recognize the symptoms of COVID-19 and 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 preventing spread if you have COVID-19

RESOURCES

- Find a vaccination clinic in your neighborhood
- Pick up 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 in Boston

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.
- Recognize the symptoms of COVID-19 and 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 preventing spread if you have COVID-19

RESOURCES

- Find a vaccination clinic in your neighborhood
- Pick up 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 in Boston

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.
- Recognize the symptoms of COVID-19 and 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 preventing spread if you have COVID-19

RESOURCES

- Find a vaccination clinic in your neighborhood
- Pick up 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 in Boston

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.
- Recognize the symptoms of COVID-19 and 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 preventing spread if you have COVID-19

RESOURCES

- Find a vaccination clinic in your neighborhood
- Pick up 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 in Boston

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.
- Recognize the symptoms of COVID-19 and 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 preventing spread if you have COVID-19

RESOURCES

- Find a vaccination clinic in your neighborhood
- Pick up 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 in Boston