Wastewater Epidemiology COVID-19 Report

Updated: 21-May-2024 | **Data Complete Through**: 15-May-2024

✉ wastewater@bphc.org

Boston Public
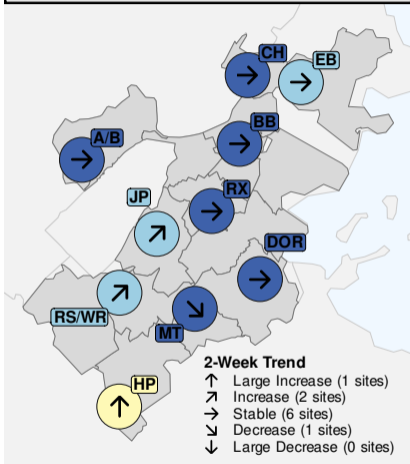Health Commission

Report Contents

Level: Very High
Level: High
Level: Moderate
Level: Low
Level: Very Low

Neighborhood Levels and Trends

COVID-19 Wastewater Levels & Trends (15-May-2024)

2-Week Trend
- ↑ Large Increase (1 sites)
- ↗ Increase (2 sites)
- → Stable (6 sites)
- ↘ Decrease (1 sites)
- ↓ Large Decrease (0 sites)

COVID-19 Level (# sites)	6 sites	3 sites	1 sites		
	Very Low	Low	Moderate	High	Very High

BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL	2-WEEK TRENDS
Very Low	→
293 copies/mL *samples through 15-May-2024*	*Stable* *-44 copies/mL (-13%)*

NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

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

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

Citywide Overview and Trends
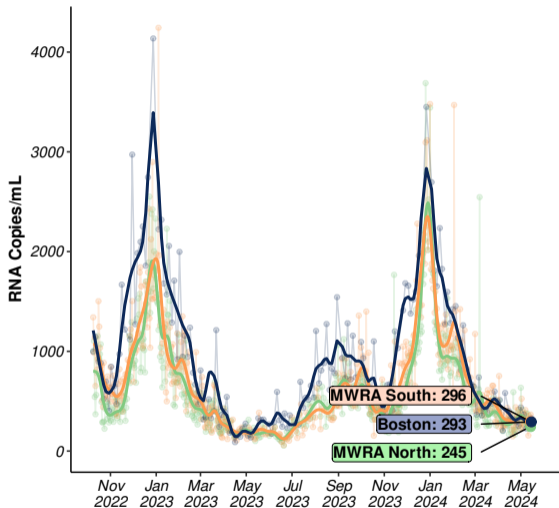
CITYWIDE AVERAGE	RANGE ACROSS 11 NEIGHBORHOOD SITES
293 *RNA copies/mL*	**62-757** *RNA copies/mL*
Data through: **15-May-2024**	

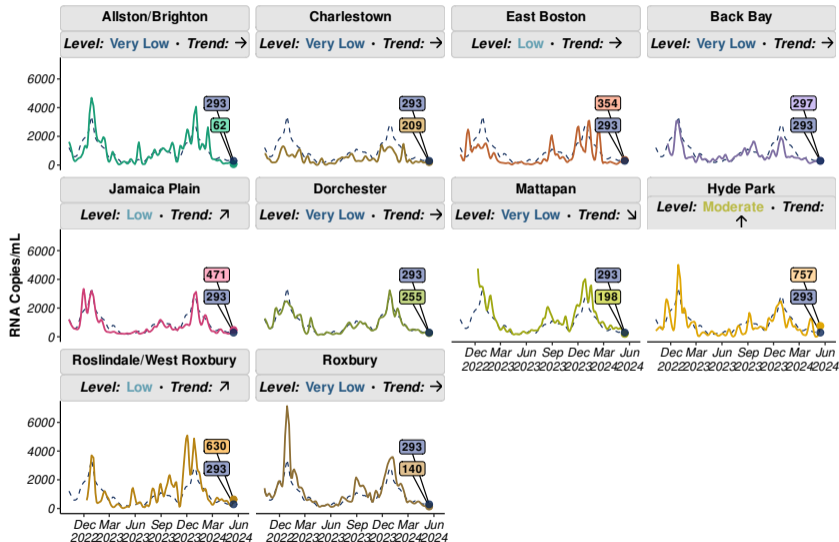| 2-WEEK TRENDS	
Boston **Stable**	**-13%** over the past 14 days
MWRA North **Stable**	**-31%** over the past 14 days
MWRA South **Stable**	**-11%** over the past 14 days

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (BPHC); 14-May-2024 (MWRA) | **MWRA Data:** https://www.mwra.com/biobot/biobotdata.htm
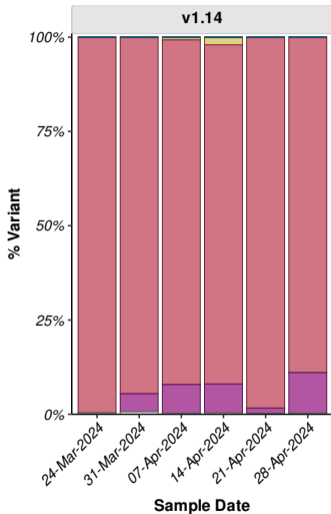
BPHC Trend Overview by Neighborhood

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.

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

Citywide Percent Variant Lineages

Neighborhood Levels and Data Table

COVID-19 Wastewater Levels & Trends
(15-May-2024)

2-Week Trend

↑ Large Increase (1 sites)
↗ Increase (2 sites)
→ Stable (6 sites)
↘ Decrease (1 sites)
↓ Large Decrease (0 sites)

Conc. (copies/mL)

≤175 350 525 700 875 1,050 1,225 1,400 >1,575
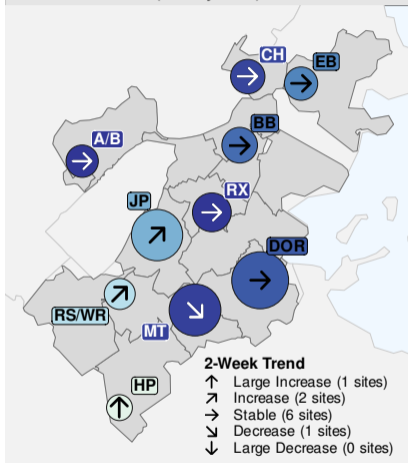
| NH | COVID-19 Wastewater Levels | | 2-Week Trends | | |
	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	**293**	Very Low	**Stable**	**-44**	**-13%**
HP	757	Moderate	Large Increase	+756	+75,609%
RS/WR	630	Low	Increase	+365	+137%
JP	471	Low	Increase	+246	+109%
SB	455	Low	Large Decrease	-559	-55%
EB	354	Low	Stable	+116	+49%
BB	297	Very Low	Stable	+35	+13%
DOR	255	Very Low	Stable	-54	-17%
CH	209	Very Low	Stable	+15	+8%
MT	198	Very Low	Decrease	-422	-68%
RX	140	Very Low	Stable	-27	-16%
A/B	62	Very Low	Stable	-116	-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 Low**

- Average value in **A/B** over the past week: **62** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**293** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **A/B** are **stable**.
- Change compared to two weeks ago: **-116** copies/mL (**-65%**).

Allston/Brighton

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

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (A/B);

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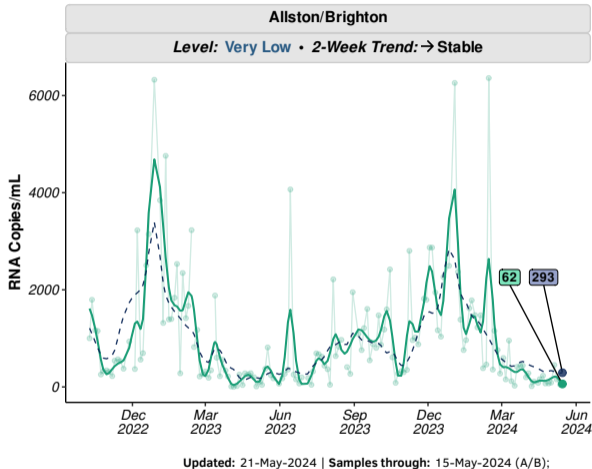
Back Bay

Level: **Very Low**

- Average value in **BB** over the past week: **297** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**293** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **BB** are **stable**.
- Change compared to two weeks ago: **+35** copies/mL (**+13%**).

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

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (BB);

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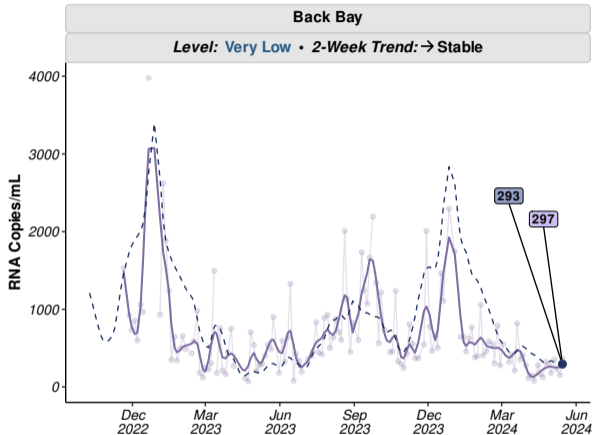
Charlestown

Level: **Very Low**

- Average value in **CH** over the past week: **209** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**293** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **CH** are **stable**.
- Change compared to two weeks ago: **+15** copies/mL (**+8%**).

Charlestown

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

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (CH);

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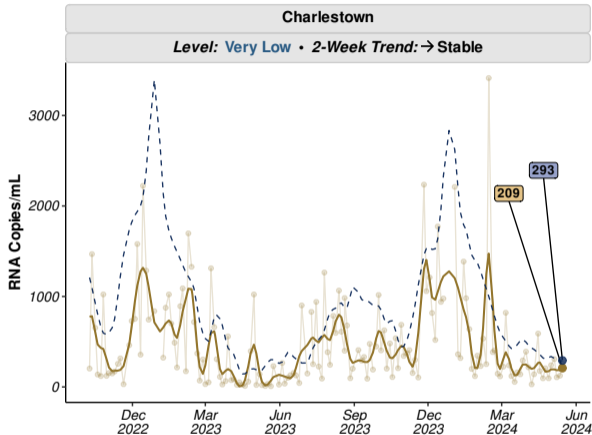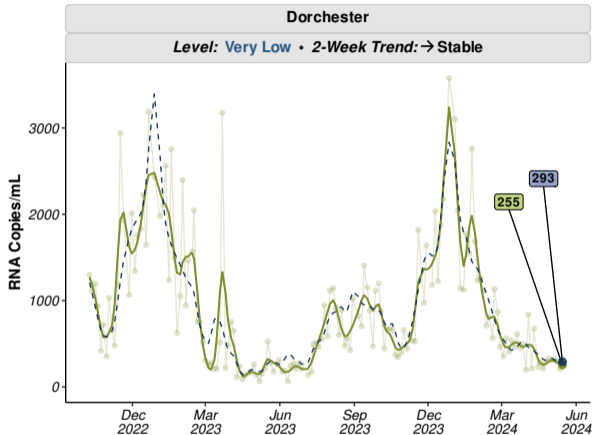
Dorchester

Level: **Very Low**

- Average value in **DOR** over the past week: **255** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**293** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **DOR** are **stable**.
- Change compared to two weeks ago: **-54** copies/mL (**-17%**).

Dorchester

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

RNA Copies/mL

293

255

Dec 2022 · Mar 2023 · Jun 2023 · Sep 2023 · Dec 2023 · Mar 2024 · Jun 2024

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (DOR);

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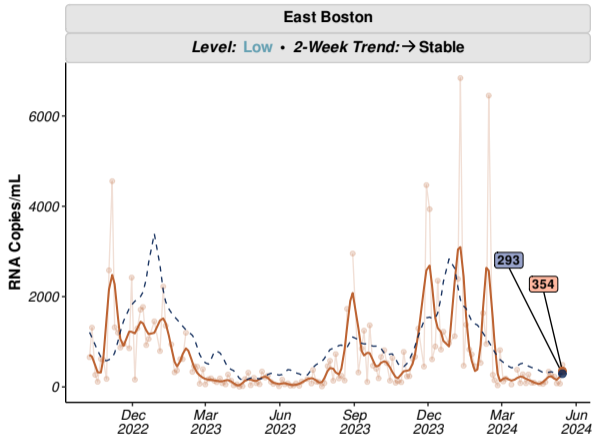
East Boston

Level: **Low**

- Average value in **EB** over the past week: **354** copies/mL.
- This value is **low** compared to past values and **similar** than the citywide average (**293** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **EB** are **stable**.
- Change compared to two weeks ago: **+116** copies/mL (**+49%**).

East Boston

Level: Low • *2-Week Trend:* → Stable

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (EB);

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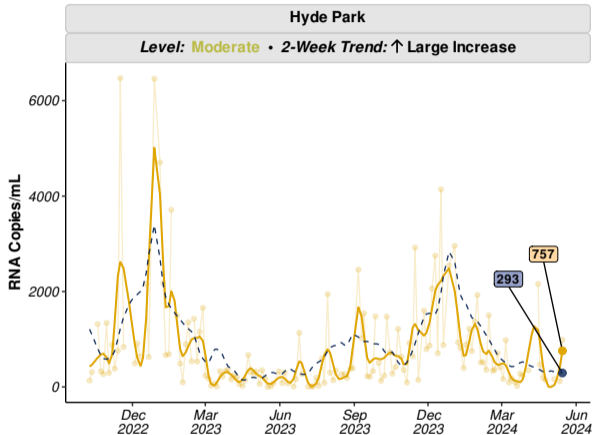
Hyde Park

Level: **Moderate**

- Average value in **HP** over the past week: **757** copies/mL.
- This value is **moderate** compared to past values and **higher** than the citywide average (**293** copies/mL).

Trend: ↑ **Large Increase**

- Over the past two weeks, values in **HP** are **increasing**.
- Change compared to two weeks ago: **+756** copies/mL (**+75,609%**).

Hyde Park
Level: Moderate • *2-Week Trend:* ↑ Large Increase

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (HP);

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

Jamaica Plain

Level: Low

- Average value in **JP** over the past week: **471** copies/mL.
- This value is **low** compared to past values and **similar** than the citywide average (**293** copies/mL).

Trend: ↗ Increase

- Over the past two weeks, values in **JP** are **increasing**.
- Change compared to two weeks ago: **+246** copies/mL (**+109%**).

| Jamaica Plain |
| Level: Low • 2-Week Trend: ↗ Increase |

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (JP);

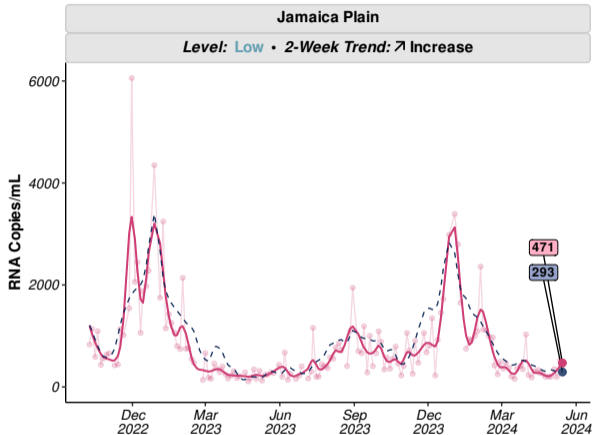See recommended actions and resources based on levels and trends in this neighborhood.

Mattapan

Level: **Very Low**

- Average value in **MT** over the past week: **198** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**293** copies/mL).

Trend: ↘ **Decrease**

- Over the past two weeks, values in **MT** are **decreasing**.
- Change compared to two weeks ago: **-422** copies/mL (**-68%**).

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

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (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: **630** copies/mL.
- This value is **low** compared to past values and **similar** than the citywide average (**293** copies/mL).

Trend: ↗ **Increase**

- Over the past two weeks, values in **RS/WR** are **increasing**.
- Change compared to two weeks ago: **+365** copies/mL (**+137%**).

Roslindale/West Roxbury

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

Y-axis: RNA Copies/mL

Callouts: 630, 293

X-axis: Dec 2022, Mar 2023, Jun 2023, Sep 2023, Dec 2023, Mar 2024, Jun 2024

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (RS/WR);

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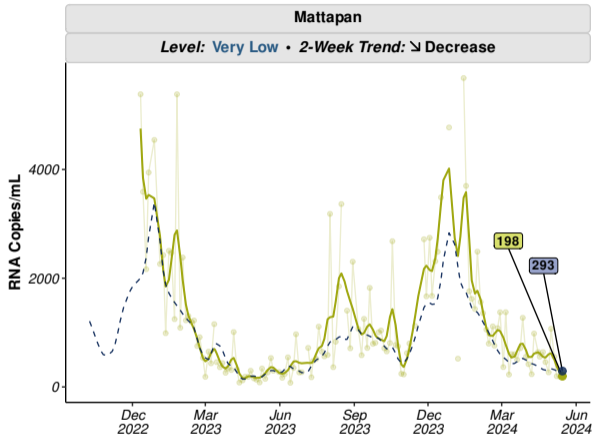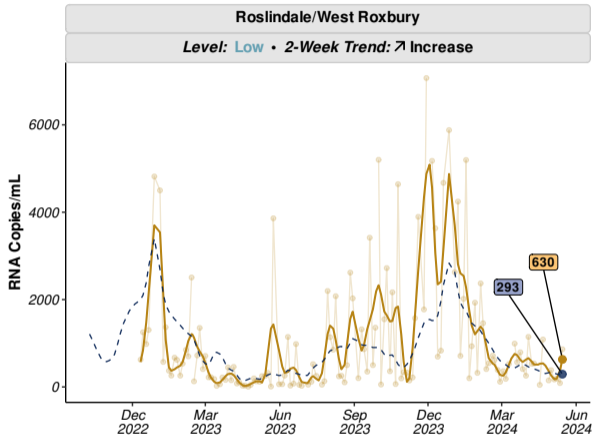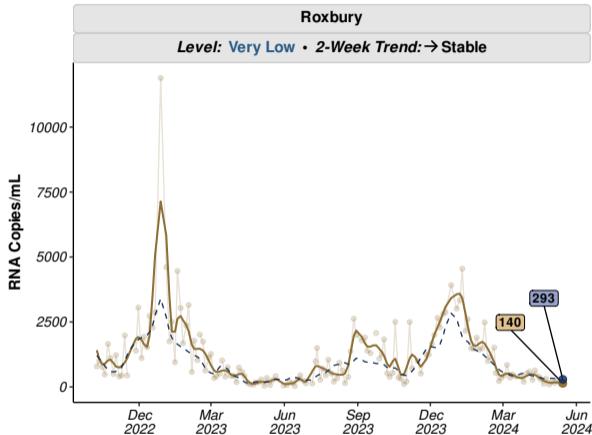
Roxbury

Level: **Very Low**

- Average value in **RX** over the past week: **140** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**293** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **RX** are **stable**.
- Change compared to two weeks ago: **-27** copies/mL (**-16%**).

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

Updated: 21-May-2024 | **Samples through:** 15-May-2024 (RX);

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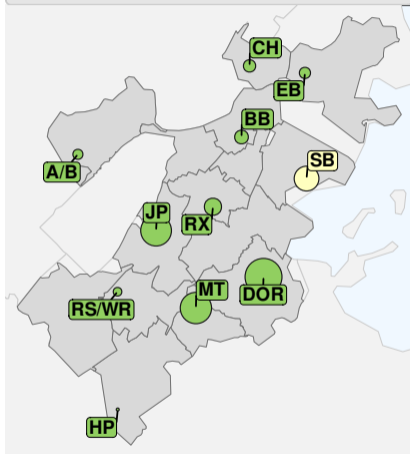
South Boston

- 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: 21-May-2024 | Samples through: 11-Feb-2024 (SB);
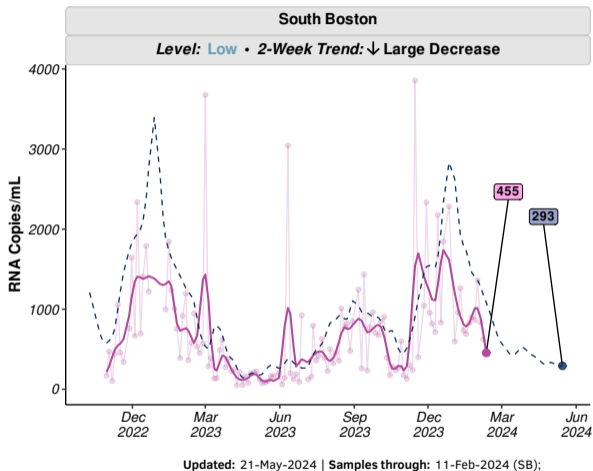
Site Status and Details

Status of Sampling Sites (21-May-2024)

#	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)
a Active (n=10) a Paused (n=1)

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.
- 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

RESOURCES

- 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 isolation if you have COVID-19 and for what to do if you are exposed to someone with COVID-19

RESOURCES

- 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 isolation if you have COVID-19 and for what to do if you are exposed to someone with COVID-19

RESOURCES

- 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 isolation if you have COVID-19 and for what to do if you are exposed to someone with COVID-19

RESOURCES

- 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 isolation if you have COVID-19 and for what to do if you are exposed to someone with COVID-19

RESOURCES

- 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