



Wastewater Epidemiology COVID-19 Report

Updated: 24-Jan-2024 | **Data Complete Through:** 21-Jan-2024

✉ wastewater@bphc.org



Boston Public
Health Commission

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Level: **Very High**

Level: **High**

Level: **Moderate**

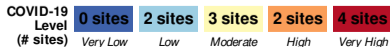
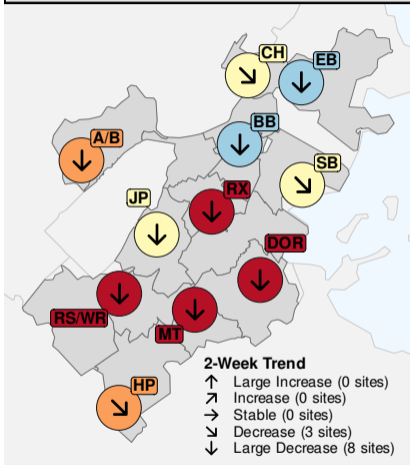
Level: **Low**

Level: **Very Low**

Neighborhood Levels and Trends



COVID-19 Wastewater Levels & Trends
(21-Jan-2024)



BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL

Very High

1,407 copies/mL
samples through 21-Jan-2024

2-WEEK TRENDS



Large Decrease
-748 copies/mL (-35%)

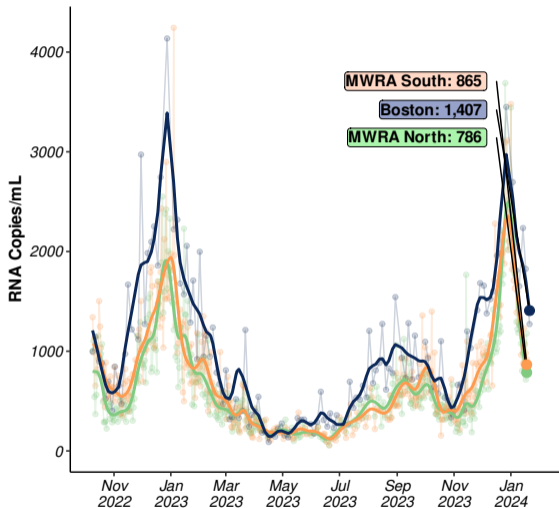
NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

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

1,407
RNA copies/mL

RANGE ACROSS 11
NEIGHBORHOOD SITES

535-2,772
RNA copies/mL

Data through: 21-Jan-2024

2-WEEK TRENDS

Boston
Decreasing

-35%
over the past 14 days

MWRA North
Decreasing

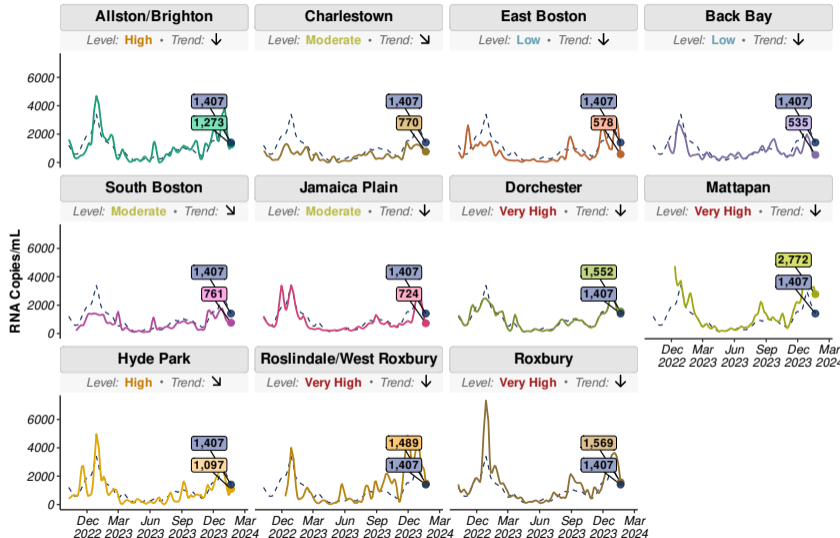
-62%
over the past 14 days

MWRA South
Decreasing

-56%
over the past 14 days

Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (BPHC); 18-Jan-2024 (MWRA) | MWRA Data: <https://www.mwra.com/biobot/biobotdata.htm>

BPHC Trend Overview by Neighborhood

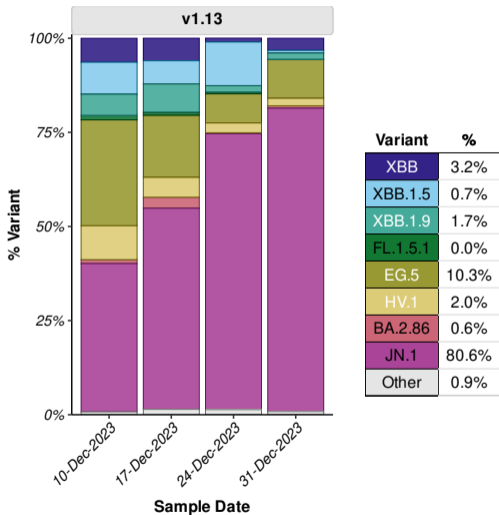


For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood;

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



Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 31-Dec-2023 (most recent available data); Variant results are reported weekly with a 3-week lag due to laboratory processing and analysis.

Sequencing Analysis Protocol Version: v1.13 (05-Jan-2024):

- XBB includes all XBB sublineages aside from those specifically reported
- "Other variants" contains all variants not explicitly quantified.

Version Changes: Added: • BA.2.86 • JN.1

- Removed XBB.1.9.1, XBB.1.9.2, XBB.1.16

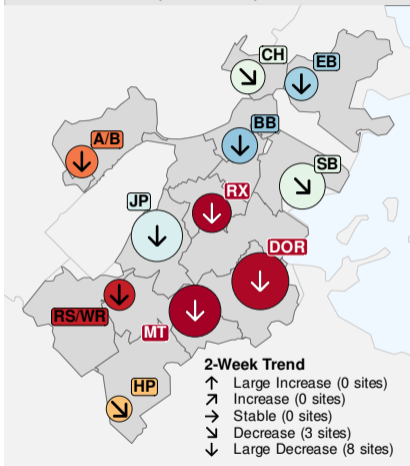
For Additional Info See:

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

Neighborhood Levels and Data Table



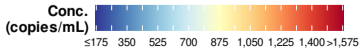
COVID-19 Wastewater Levels & Trends
(21-Jan-2024)



NH	COVID-19 Wastewater Levels		2-Week Trends		
	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	1,407	Very High	Large Decrease	-748	-35%
MT	2,772	Very High	Large Decrease	-513	-16%
RX	1,569	Very High	Large Decrease	-1,977	-56%
DOR	1,552	Very High	Large Decrease	-538	-26%
RS/WR	1,489	Very High	Large Decrease	-1,477	-50%
A/B	1,273	High	Large Decrease	-1,843	-59%
HP	1,097	High	Decrease	-377	-26%
CH	770	Moderate	Decrease	-317	-29%
SB	761	Moderate	Decrease	-180	-19%
JP	724	Moderate	Large Decrease	-1,838	-72%
EB	578	Low	Large Decrease	-2,474	-81%
BB	535	Low	Large Decrease	-690	-56%

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

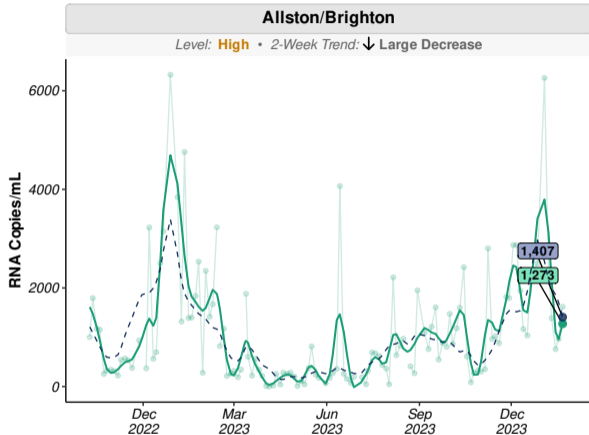


Level: **High**

- Average value in **A/B** over the past week: **1,273** copies/mL.
- This value is **high** compared to past values and **similar** than the citywide average (**1,407** copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in **A/B** are **decreasing**.
- Change compared to two weeks ago: **-1,843** copies/mL (**-59%**).



Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (A/B);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

Back Bay

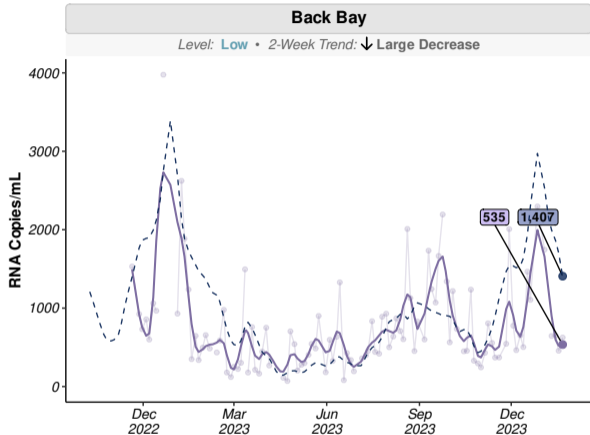


Level: **Low**

- Average value in **BB** over the past week: **535** copies/mL.
- This value is **low** compared to past values and **lower** than the citywide average (**1,407** copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in **BB** are **decreasing**.
- Change compared to two weeks ago: **-690** copies/mL (**-56%**).



Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (BB);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

Charlestown

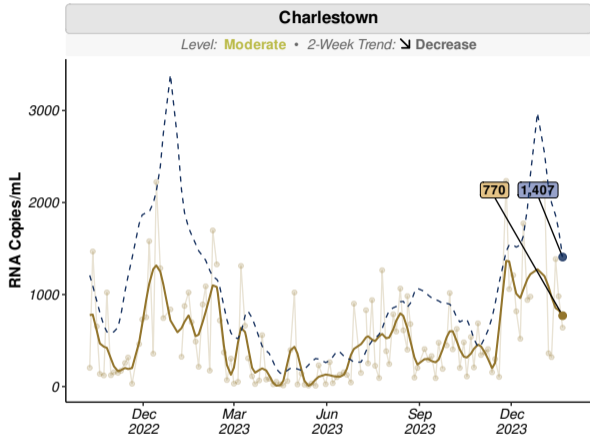


Level: **Moderate**

- Average value in **CH** over the past week: **770** copies/mL.
- This value is **moderate** compared to past values and **lower** than the citywide average (**1,407** copies/mL).

Trend: **Decrease**

- Over the past two weeks, values in **CH** are **decreasing**.
- Change compared to two weeks ago: **-317** copies/mL (-29%).



Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (CH);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

Dorchester

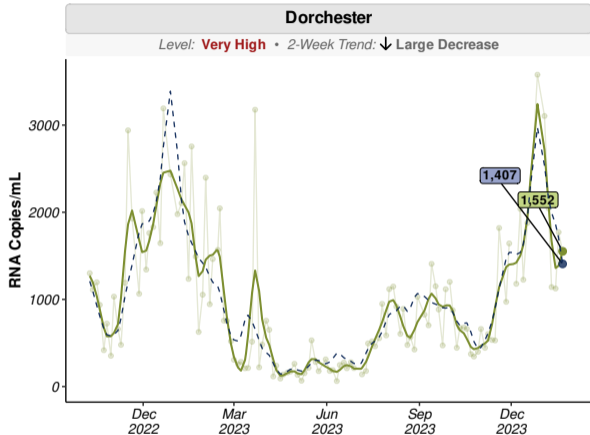


Level: **Very High**

- Average value in **DOR** over the past week: **1,552** copies/mL.
- This value is **very high** compared to past values and **similar** than the citywide average (**1,407** copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in **DOR** are **decreasing**.
- Change compared to two weeks ago: **-538** copies/mL (**-26%**).



Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (DOR);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

East Boston

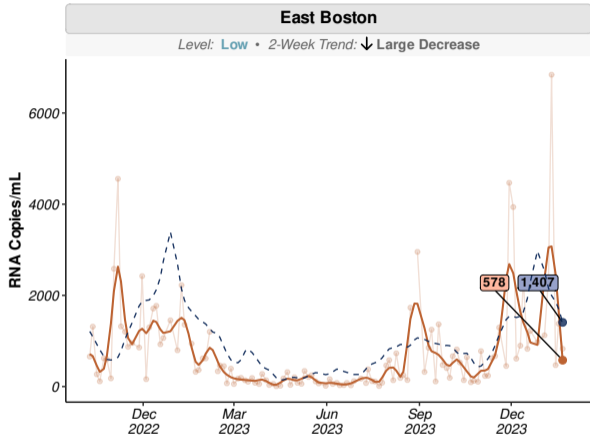


Level: **Low**

- Average value in **EB** over the past week: **578** copies/mL.
- This value is **low** compared to past values and **lower** than the citywide average (**1,407** copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in **EB** are **decreasing**.
- Change compared to two weeks ago: **-2,474** copies/mL (**-81%**).



Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (EB);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

Hyde Park

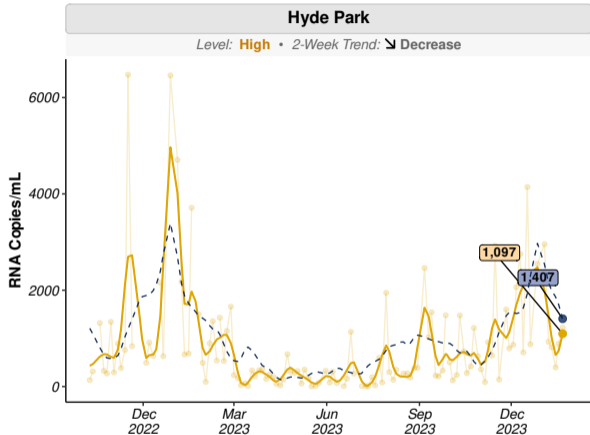


Level: **High**

- Average value in **HP** over the past week: **1,097** copies/mL.
- This value is **high** compared to past values and **similar** than the citywide average (**1,407** copies/mL).

Trend: **Decrease**

- Over the past two weeks, values in **HP** are **decreasing**.
- Change compared to two weeks ago: **-377** copies/mL (**-26%**).



Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (HP);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

Jamaica Plain

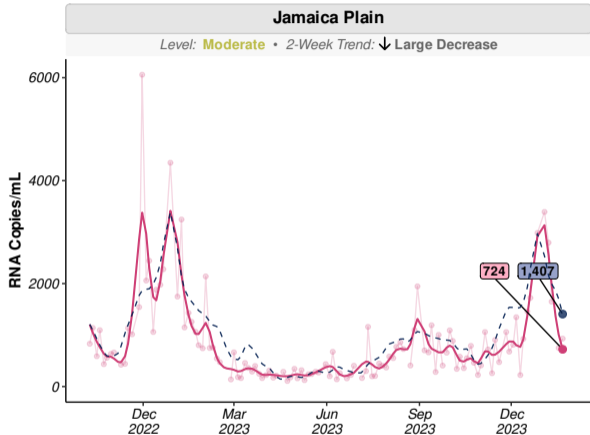


Level: **Moderate**

- Average value in **JP** over the past week: **724** copies/mL.
- This value is **moderate** compared to past values and **lower** than the citywide average (**1,407** copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in **JP** are **decreasing**.
- Change compared to two weeks ago: **-1,838** copies/mL (-72%).



Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (JP);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

Mattapan

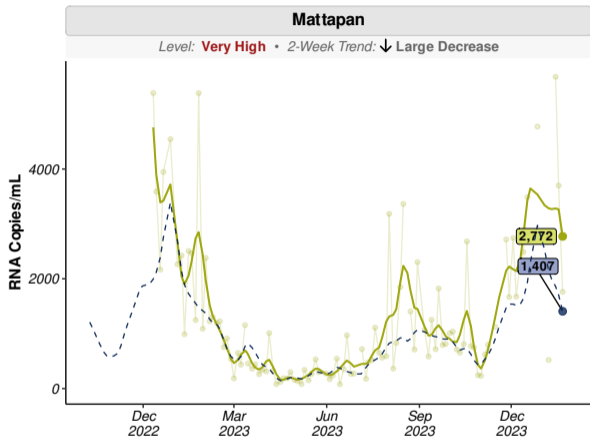


Level: **Very High**

- Average value in **MT** over the past week: **2,772** copies/mL.
- This value is **very high** compared to past values and **higher** than the citywide average (**1,407** copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in **MT** are **decreasing**.
- Change compared to two weeks ago: **-513** copies/mL (-16%).



Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (MT);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

Roslindale/West Roxbury

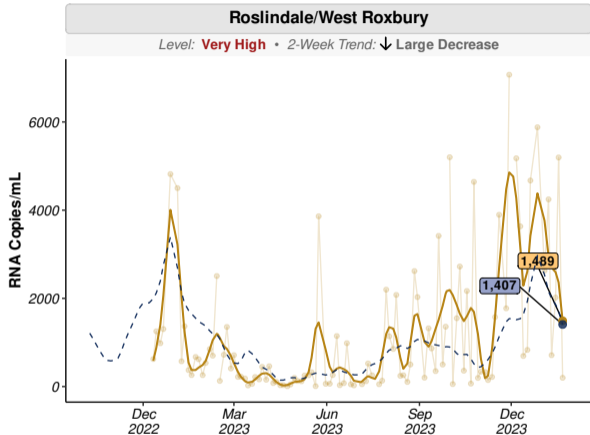


Level: **Very High**

- Average value in **RS/WR** over the past week: **1,489** copies/mL.
- This value is **very high** compared to past values and **similar** than the citywide average (**1,407** copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in **RS/WR** are **decreasing**.
- Change compared to two weeks ago: **-1,477** copies/mL (**-50%**).



Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (RS/WR);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

Roxbury

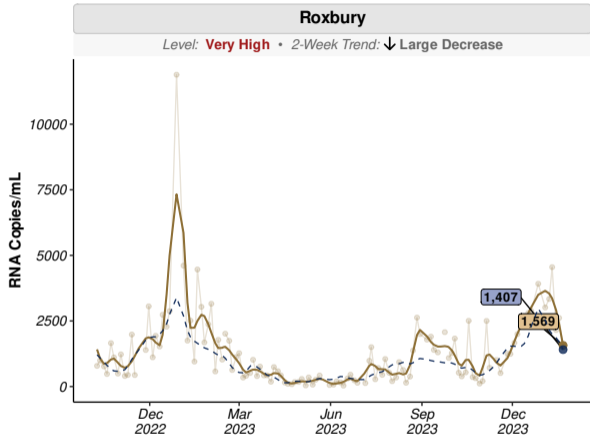


Level: **Very High**

- Average value in **RX** over the past week: **1,569** copies/mL.
- This value is **very high** compared to past values and **similar** than the citywide average (**1,407** copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in **RX** are **decreasing**.
- Change compared to two weeks ago: **-1,977** copies/mL (**-56%**).



Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (RX);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

South Boston

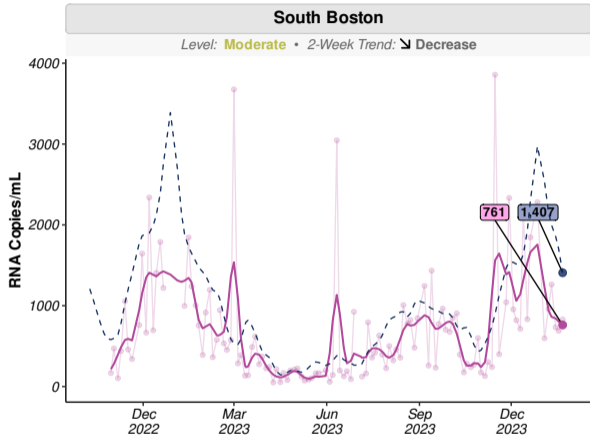


Level: **Moderate**

- Average value in **SB** over the past week: **761** copies/mL.
- This value is **moderate** compared to past values and **lower** than the citywide average (**1,407** copies/mL).

Trend: **Decrease**

- Over the past two weeks, values in **SB** are **decreasing**.
- Change compared to two weeks ago: **-180** copies/mL (-19%).



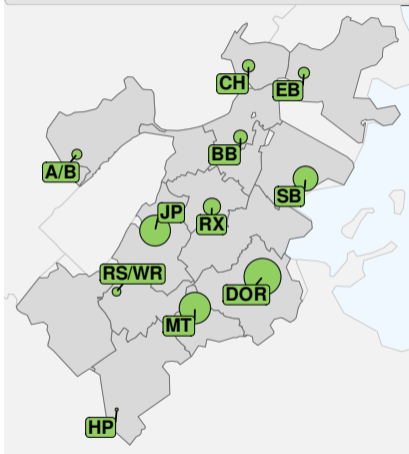
Updated: 24-Jan-2024 | Samples through: 21-Jan-2024 (SB);

See [recommended actions and resources](#) based on levels and trends in this neighborhood.

Site Status and Details



Status of Sampling Sites (24-Jan-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	Active	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=11)

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
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- Wash your hands often and cover coughs and sneezes
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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
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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

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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

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