



Wastewater Epidemiology COVID-19 Report

Updated: 25-Jul-2024 | Data Complete Through: 21-Jul-2024

✉ wastewater@bphc.org



Boston Public
Health Commission

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Level: **Very High**

Level: **High**

Level: **Moderate**

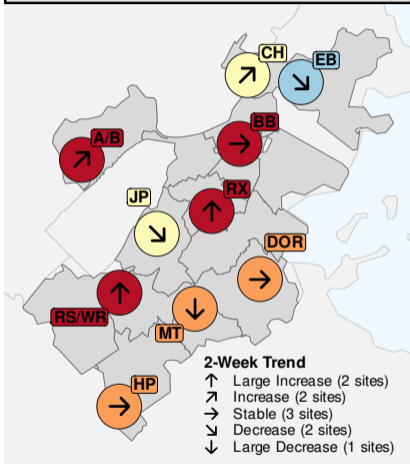
Level: **Low**

Level: **Very Low**


Neighborhood Levels and Trends



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



BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL	2-WEEK TRENDS
<h1>High</h1> <p>1,257 copies/mL samples through 21-Jul-2024</p>	 <p>Stable -102 copies/mL (-7%)</p>

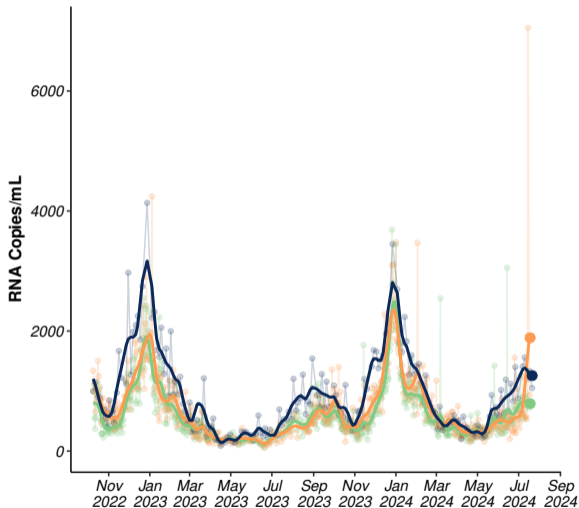
NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

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

1,257
RNA copies/mL

RANGE ACROSS 11
NEIGHBORHOOD SITES

572-2,713
RNA copies/mL

Data through: **21-Jul-2024**

2-WEEK TRENDS

Boston
Stable

-7%
over the past 14 days

MWRA North
Stable

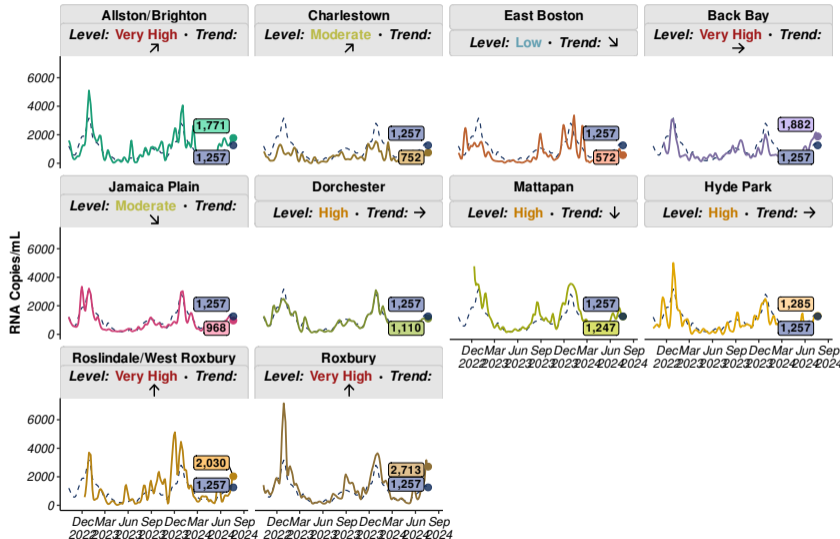
-2%
over the past 14 days

MWRA South
Increasing

+210%
over the past 14 days

Updated: 25-Jul-2024 | Samples through: 21-Jul-2024 (BPHC); 18-Jul-2024 (MWRA) | MWRA Data: <https://www.mwra.com/biobot/biobotdata.htm>

BPHC Trend Overview by Neighborhood

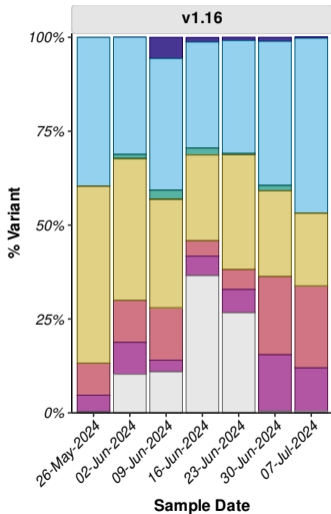


For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood;

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



Variant	%
BA.2.86	0.3%
JN.1	46.6%
JN.1.13	0.0%
JN.1.7	0.0%
KP.2	19.3%
KP.1.1	21.8%
KP.3	11.6%
Other	0.3%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 07-Jul-2024 (most recent available data); Variant results are reported weekly with a 3-week lag due to laboratory processing and analysis.

Sequencing Analysis Protocol Version: v1.16 (13-Jun-2024):

- "Other variants" contains all variants not explicitly quantified.

Version Changes: Added: JN.1.7, KP.3

Removed: XBB, EG.5

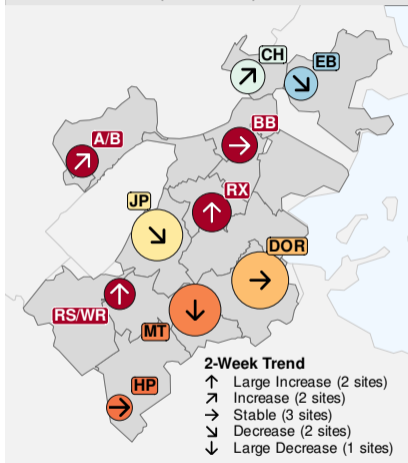
For Additional Info See:

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

Neighborhood Levels and Data Table



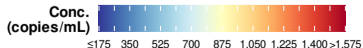
COVID-19 Wastewater Levels & Trends
(21-Jul-2024)



NH	COVID-19 Wastewater Levels		2-Week Trends		
	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	1,257	High	Stable	-102	-7%
RX	2,713	Very High	Large Increase	+978	+56%
RS/WR	2,030	Very High	Large Increase	+1,165	+134%
BB	1,882	Very High	Stable	+29	+2%
A/B	1,771	Very High	Increase	+447	+34%
HP	1,285	High	Stable	+62	+5%
MT	1,247	High	Large Decrease	-603	-33%
DOR	1,110	High	Stable	+9	+1%
JP	968	Moderate	Decrease	-300	-24%
CH	752	Moderate	Increase	+182	+32%
EB	572	Low	Decrease	-443	-44%

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

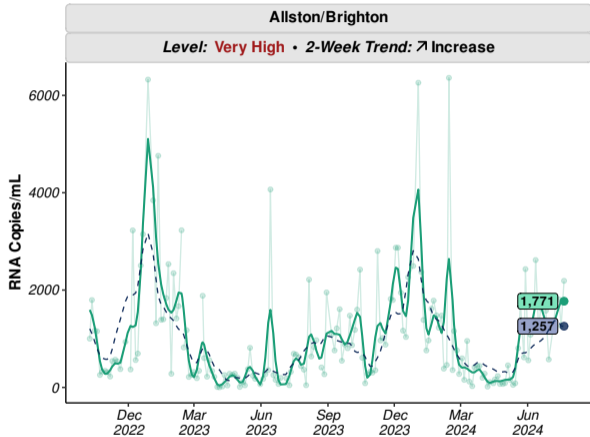


Level: **Very High**

- Average value in A/B over the past week: **1,771** copies/mL.
- This value is **very high** compared to past values and **higher** than the citywide average (**1,257** copies/mL).

Trend: ↗ **Increase**

- Over the past two weeks, values in A/B are **increasing**.
- Change compared to two weeks ago: **+447** copies/mL (**+34%**).



Updated: 25-Jul-2024 | Samples through: 21-Jul-2024 (A/B);

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

Back Bay

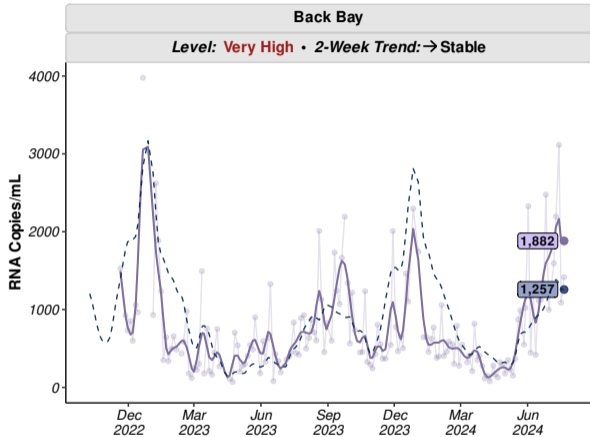


Level: **Very High**

- Average value in **BB** over the past week: **1,882** copies/mL.
- This value is **very high** compared to past values and **higher** than the citywide average (**1,257** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **BB** are **stable**.
- Change compared to two weeks ago: **+29** copies/mL (+2%).



Updated: 25-Jul-2024 | Samples through: 21-Jul-2024 (BB);

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

Charlestown

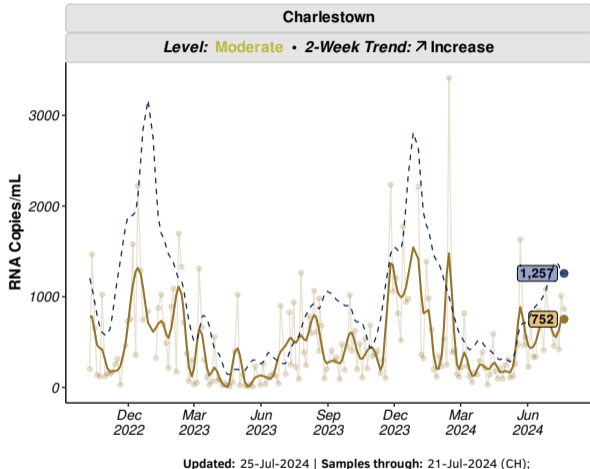


Level: **Moderate**

- Average value in **CH** over the past week: **752** copies/mL.
- This value is **moderate** compared to past values and **lower** than the citywide average (**1,257** copies/mL).

Trend: ↗ **Increase**

- Over the past two weeks, values in **CH** are **increasing**.
- Change compared to two weeks ago: **+182** copies/mL (**+32%**).



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

Dorchester

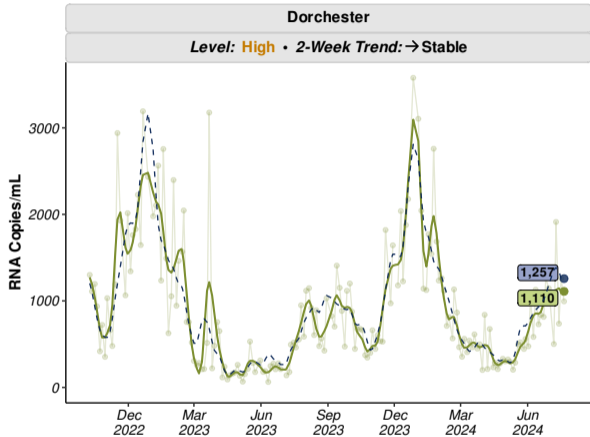


Level: **High**

- Average value in **DOR** over the past week: **1,110** copies/mL.
- This value is **high** compared to past values and **similar** than the citywide average (**1,257** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **DOR** are **stable**.
- Change compared to two weeks ago: **+9** copies/mL (**+1%**).



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

East Boston

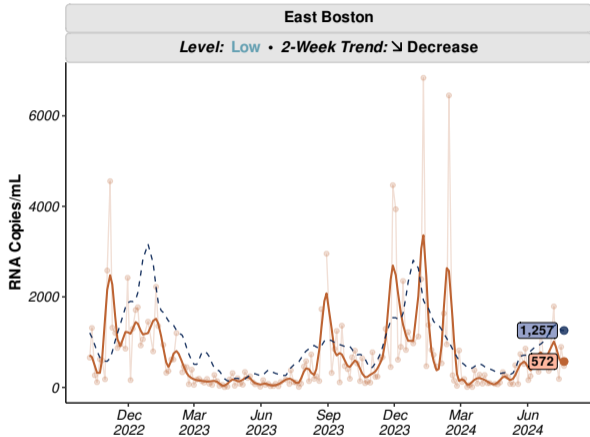


Level: **Low**

- Average value in **EB** over the past week: **572** copies/mL.
- This value is **low** compared to past values and **lower** than the citywide average (**1,257** copies/mL).

Trend: **↘ Decrease**

- Over the past two weeks, values in **EB** are **decreasing**.
- Change compared to two weeks ago: **-443** copies/mL (-44%).



Updated: 25-Jul-2024 | Samples through: 21-Jul-2024 (EB);

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

Hyde Park

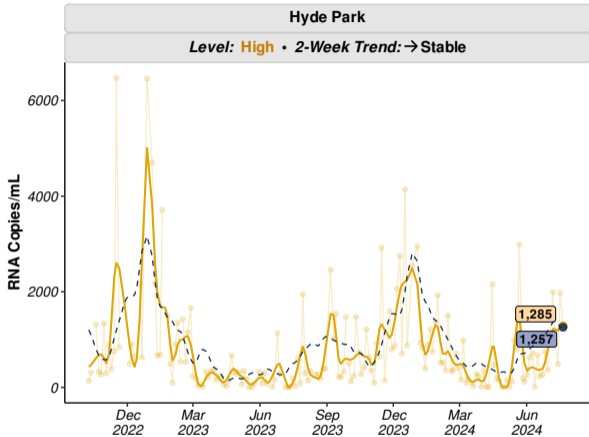


Level: **High**

- Average value in **HP** over the past week: **1,285** copies/mL.
- This value is **high** compared to past values and **similar** than the citywide average (**1,257** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **HP** are **stable**.
- Change compared to two weeks ago: **+62** copies/mL (+5%).



Updated: 25-Jul-2024 | Samples through: 21-Jul-2024 (HP);

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

Jamaica Plain

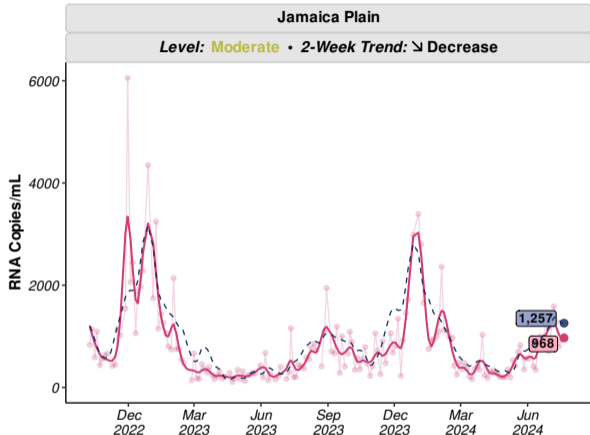


Level: **Moderate**

- Average value in **JP** over the past week: **968** copies/mL.
- This value is **moderate** compared to past values and **similar** than the citywide average (**1,257** copies/mL).

Trend: **↘ Decrease**

- Over the past two weeks, values in **JP** are **decreasing**.
- Change compared to two weeks ago: **-300** copies/mL (**-24%**).



Updated: 25-Jul-2024 | Samples through: 21-Jul-2024 (JP);

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

Mattapan

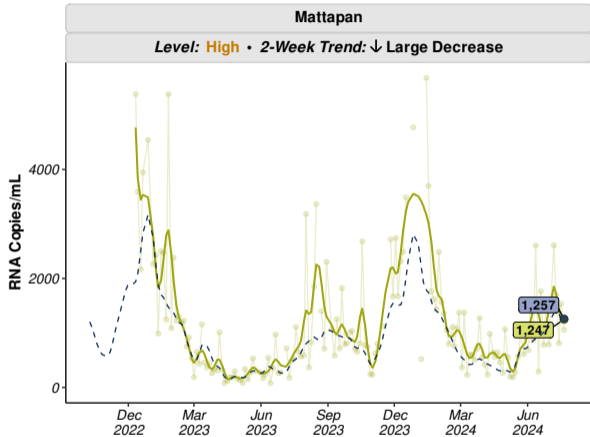


Level: **High**

- Average value in **MT** over the past week: **1,247** copies/mL.
- This value is **high** compared to past values and **similar** than the citywide average (**1,257** copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in **MT** are **decreasing**.
- Change compared to two weeks ago: **-603** copies/mL (**-33%**).



Updated: 25-Jul-2024 | Samples through: 21-Jul-2024 (MT);

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

Roslindale/West Roxbury

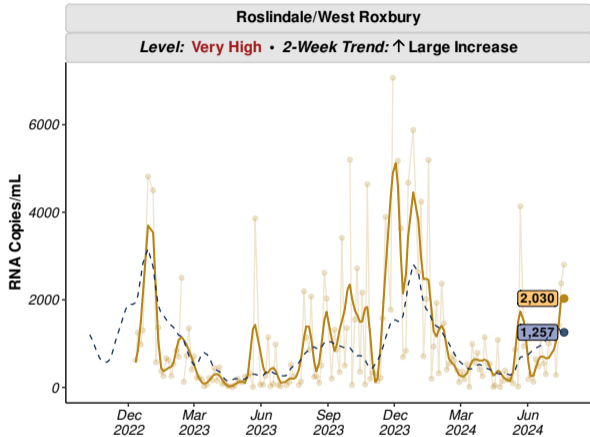


Level: **Very High**

- Average value in **RS/WR** over the past week: **2,030** copies/mL.
- This value is **very high** compared to past values and **higher** than the citywide average (**1,257** copies/mL).

Trend: **↑ Large Increase**

- Over the past two weeks, values in **RS/WR** are **increasing**.
- Change compared to two weeks ago: **+1,165** copies/mL (+134%).



Updated: 25-Jul-2024 | Samples through: 21-Jul-2024 (RS/WR);

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

Roxbury

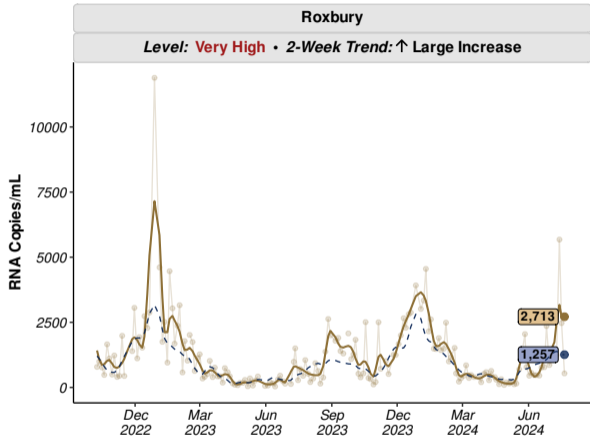


Level: **Very High**

- Average value in **RX** over the past week: **2,713** copies/mL.
- This value is **very high** compared to past values and **higher** than the citywide average (**1,257** copies/mL).

Trend: **↑ Large Increase**

- Over the past two weeks, values in **RX** are **increasing**.
- Change compared to two weeks ago: **+978** copies/mL (**+56%**).



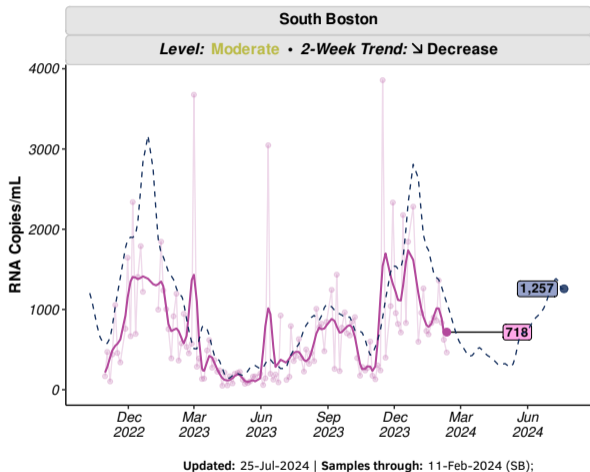
Updated: 25-Jul-2024 | Samples through: 21-Jul-2024 (RX);

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

South Boston



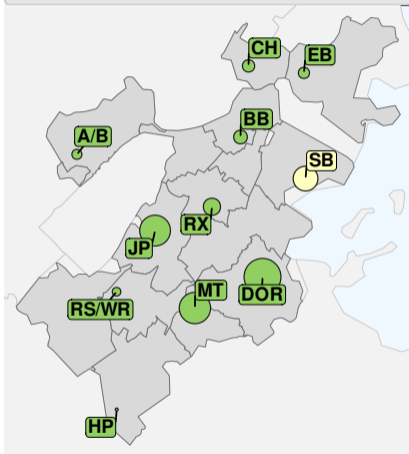
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



Site Status and Details



Status of Sampling Sites (25-Jul-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)



Active
(n=10)



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
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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
- 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: **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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