



# Wastewater Epidemiology COVID-19 Report

**Updated:** 18-Apr-2024 | **Data Complete Through:** 15-Apr-2024

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Boston Public  
Health Commission

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Level: **Very High**

Level: **High**

Level: **Moderate**

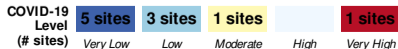
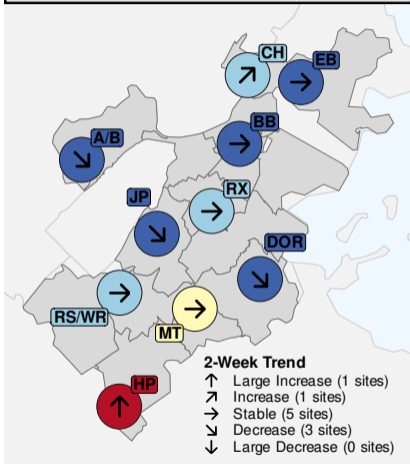
Level: **Low**

Level: **Very Low**


# Neighborhood Levels and Trends



## COVID-19 Wastewater Levels & Trends (15-Apr-2024)



## BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL	2-WEEK TRENDS
<h1>Low</h1> <p>425 copies/mL samples through 15-Apr-2024</p>	 <p>Stable -64 copies/mL (-13%)</p>

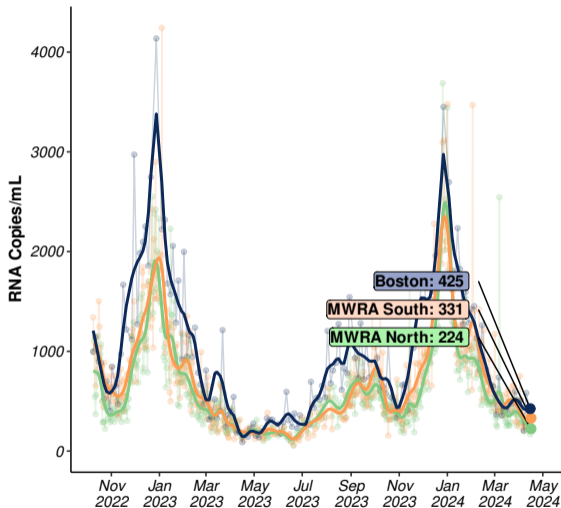
## NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

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

**425**

RNA copies/mL

RANGE ACROSS 11  
NEIGHBORHOOD SITES

**69-2,096**

RNA copies/mL

Data through: 15-Apr-2024

## 2-WEEK TRENDS

*Boston*  
**Stable**

**-13%**  
over the past 14 days

*MWRA North*  
**Stable**

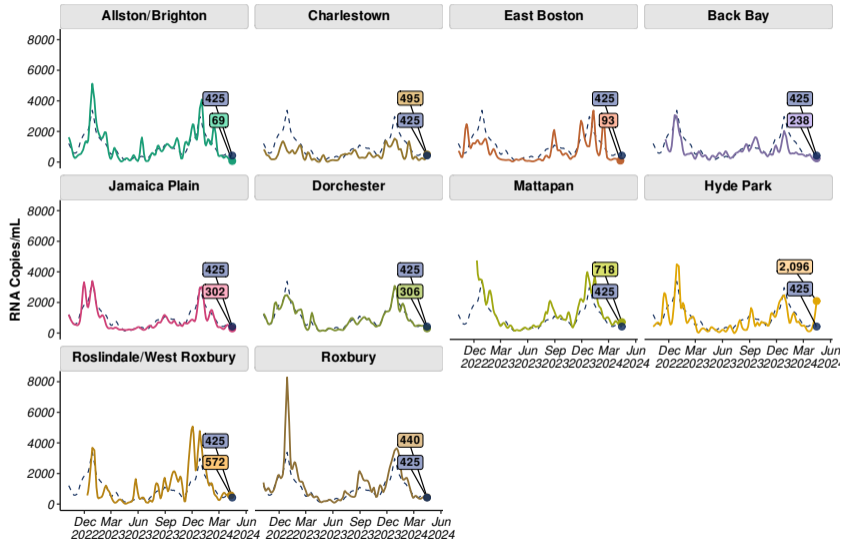
**-38%**  
over the past 14 days

*MWRA South*  
**Stable**

**-18%**  
over the past 14 days

Updated: 18-Apr-2024 | Samples through: 15-Apr-2024 (BPHC); 16-Apr-2024 (MWRA) | MWRA Data: <https://www.mwra.com/biobot/biobotdata.htm>

# BPHC Trend Overview by Neighborhood

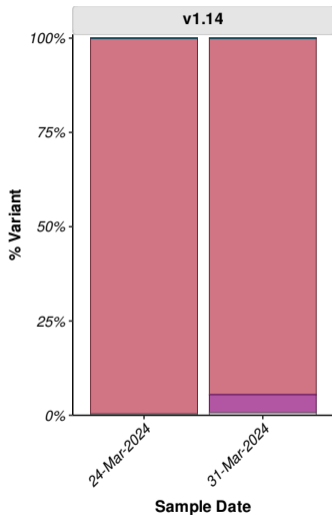


For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood;

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	%
XBB	0.0%
XBB.1.5	0.0%
XBB.1.9	0.0%
EG.5	0.0%
BA.2.86	0.0%
JN.1	94.5%
JN.1.13	4.8%
Other	0.7%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 31-Mar-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: v1.14 (11-Apr-2024):*

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

*Version Changes: Added: JN.1.13*

*Removed: HV.1, FL.1.5.1*

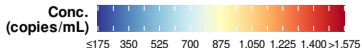
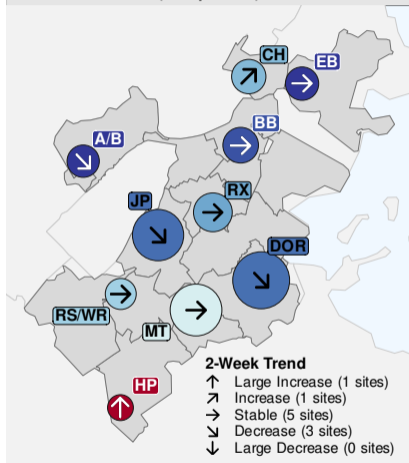
*For Additional Info See:*

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

# Neighborhood Levels and Data Table



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



COVID-19 Wastewater Levels				2-W
NH	\makecell[c]{Conc.\\(copies/mL)}	Level	Trend	\makecell[c]{Diff.}
BOSTON	425	Low	Stable	-64
HP	2,096	Very High	Large Increase	+1,70
MT	718	Moderate	Stable	+78
RS/WR	572	Low	Stable	0
CH	495	Low	Increase	+254
SB	455	Low	Large Decrease	-559
RX	440	Low	Stable	-7
DOR	306	Very Low	Decrease	-171
JP	302	Very Low	Decrease	-226
BB	238	Very Low	Stable	+14
EB	93	Very Low	Stable	-109
A/B	69	Very Low	Decrease	-190

# 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

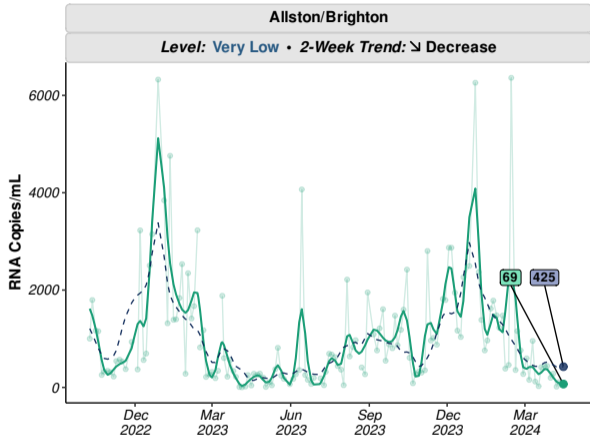


Level: **Very Low**

- Average value in A/B over the past week: **69** copies/mL.
- This value is **very low** compared to past values and **lower** than the citywide average (**425** copies/mL).

Trend: **↘ Decrease**

- Over the past two weeks, values in A/B are **decreasing**.
- Change compared to two weeks ago: **-190** copies/mL (**-73%**).



Updated: 18-Apr-2024 | Samples through: 15-Apr-2024 (A/B);

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

# Back Bay

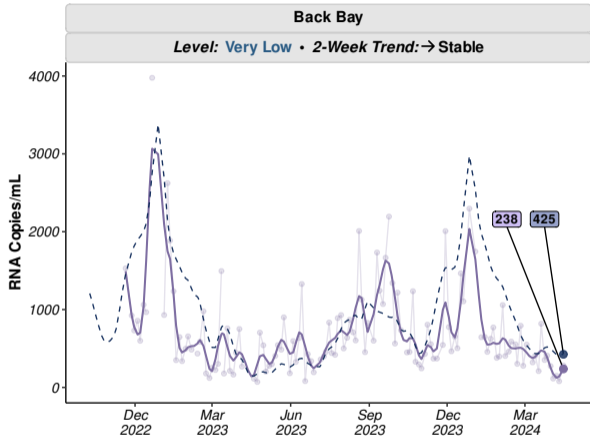


Level: **Very Low**

- Average value in **BB** over the past week: **238** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**425** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **BB** are **stable**.
- Change compared to two weeks ago: **+14** copies/mL (**+6%**).



Updated: 18-Apr-2024 | Samples through: 15-Apr-2024 (BB);

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

# Charlestown

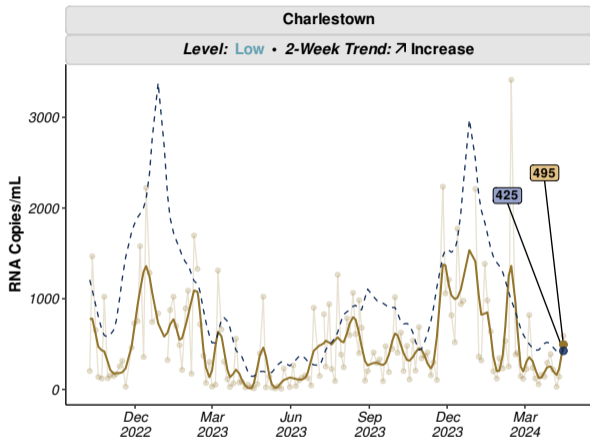


Level: **Low**

- Average value in **CH** over the past week: **495** copies/mL.
- This value is **low** compared to past values and **similar** than the citywide average (**425** copies/mL).

Trend: **↗ Increase**

- Over the past two weeks, values in **CH** are **increasing**.
- Change compared to two weeks ago: **+254** copies/mL (**+106%**).



Updated: 18-Apr-2024 | Samples through: 15-Apr-2024 (CH);

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

# Dorchester

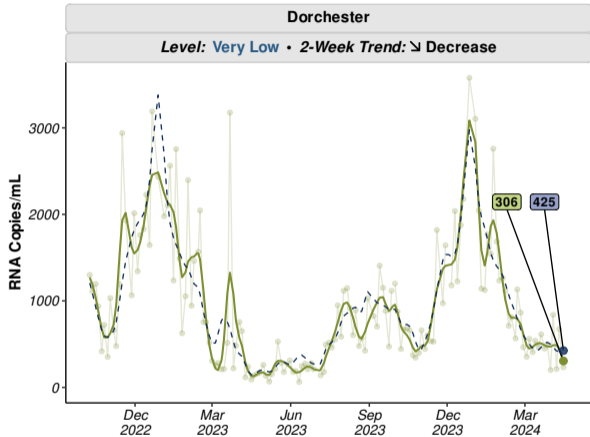


Level: **Very Low**

- Average value in **DOR** over the past week: **306** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**425** copies/mL).

Trend: **↘ Decrease**

- Over the past two weeks, values in **DOR** are **decreasing**.
- Change compared to two weeks ago: **-171** copies/mL (**-36%**).



Updated: 18-Apr-2024 | Samples through: 15-Apr-2024 (DOR);

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

# East Boston

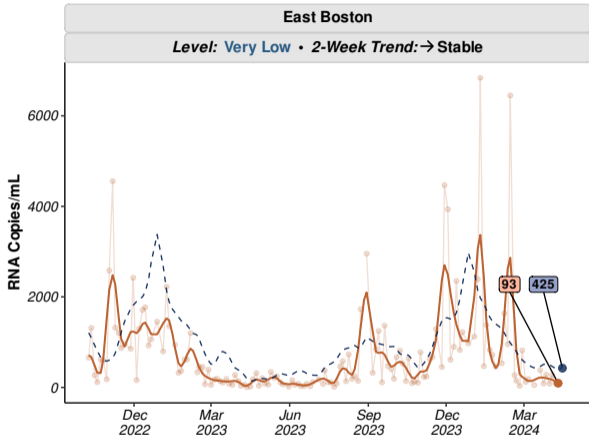


Level: **Very Low**

- Average value in **EB** over the past week: **93** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**425** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **EB** are **stable**.
- Change compared to two weeks ago: **-109** copies/mL (**-54%**).



Updated: 18-Apr-2024 | Samples through: 10-Apr-2024 (EB);

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

# Hyde Park

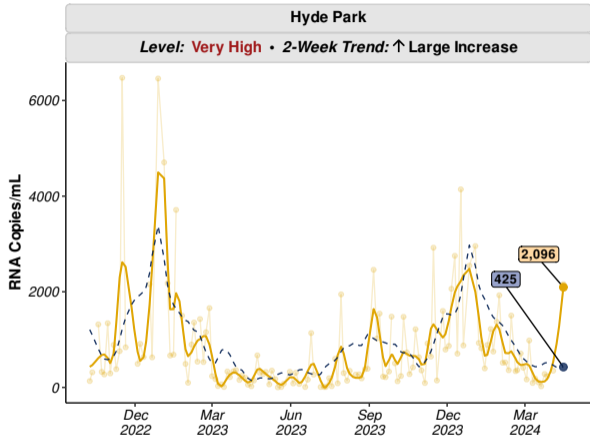


Level: **Very High**

- Average value in **HP** over the past week: **2,096** copies/mL.
- This value is **very high** compared to past values and **higher** than the citywide average (**425** copies/mL).

Trend: **↑ Large Increase**

- Over the past two weeks, values in **HP** are **increasing**.
- Change compared to two weeks ago: **+1,704** copies/mL (**+435%**).



Updated: 18-Apr-2024 | Samples through: 15-Apr-2024 (HP);

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

# Jamaica Plain

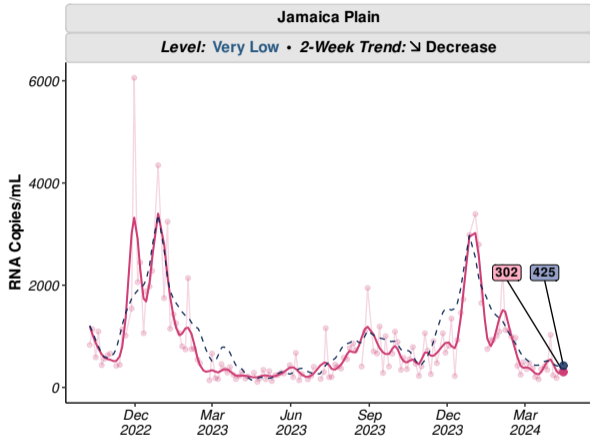


Level: **Very Low**

- Average value in **JP** over the past week: **302** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**425** copies/mL).

Trend: **↘ Decrease**

- Over the past two weeks, values in **JP** are **decreasing**.
- Change compared to two weeks ago: **-226** copies/mL (**-43%**).



Updated: 18-Apr-2024 | Samples through: 15-Apr-2024 (JP);

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

# Mattapan

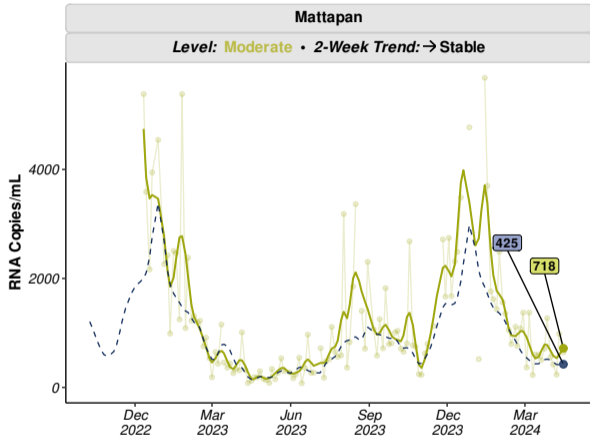


Level: **Moderate**

- Average value in **MT** over the past week: **718** copies/mL.
- This value is **moderate** compared to past values and **similar** than the citywide average (**425** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **MT** are **stable**.
- Change compared to two weeks ago: **+78** copies/mL (+12%).



Updated: 18-Apr-2024 | Samples through: 15-Apr-2024 (MT);

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



# Roslindale/West Roxbury

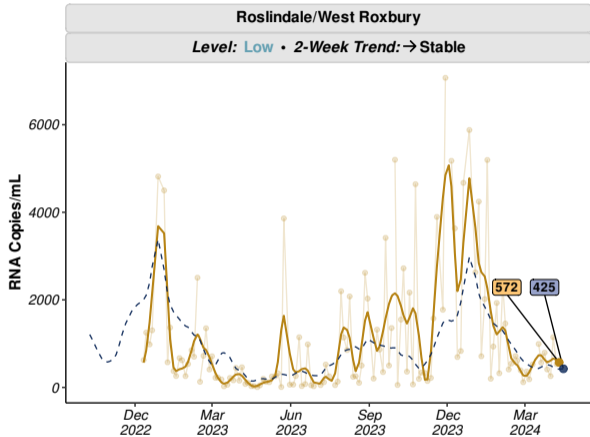


Level: **Low**

- Average value in **RS/WR** over the past week: **572** copies/mL.
- This value is **low** compared to past values and **similar** than the citywide average (**425** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **RS/WR** are **stable**.
- Change compared to two weeks ago: **0** copies/mL (**0%**).



Updated: 18-Apr-2024 | Samples through: 10-Apr-2024 (RS/WR);

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

# Roxbury

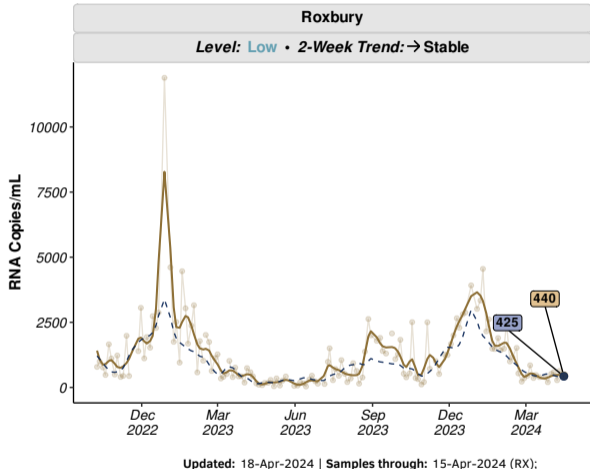


Level: **Low**

- Average value in **RX** over the past week: **440** copies/mL.
- This value is **low** compared to past values and **similar** than the citywide average (**425** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **RX** are **stable**.
- Change compared to two weeks ago: **-7** copies/mL (**-2%**).

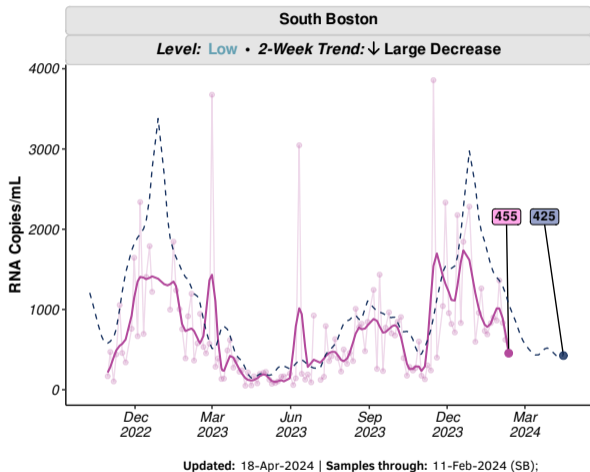


See [recommended actions and resources](#) based on levels and trends in this neighborhood.

# South Boston



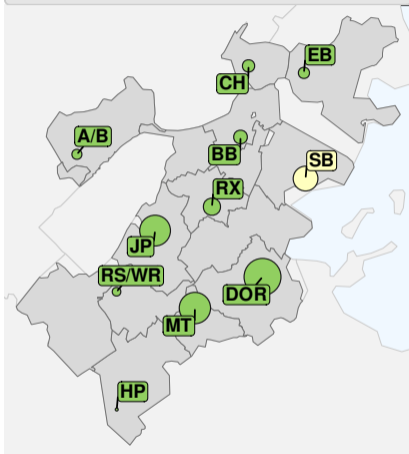
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



# Site Status and Details



## Status of Sampling Sites (18-Apr-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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