



Wastewater Epidemiology COVID-19 Report

Updated: 22-Apr-2024 | **Data Complete Through:** 17-Apr-2024

✉ wastewater@bphc.org



Boston Public
Health Commission

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Level: **Very High**

Level: **High**

Level: **Moderate**

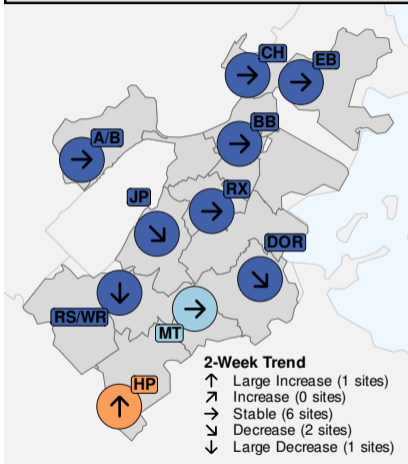
Level: **Low**

Level: **Very Low**

Neighborhood Levels and Trends



COVID-19 Wastewater Levels & Trends (17-Apr-2024)



BOSTON CITYWIDE COVID-19 LEVEL & TRENDS

COVID-19 LEVEL

Low

361 copies/mL
samples through 17-Apr-2024

2-WEEK TRENDS



Stable
-99 copies/mL (-22%)

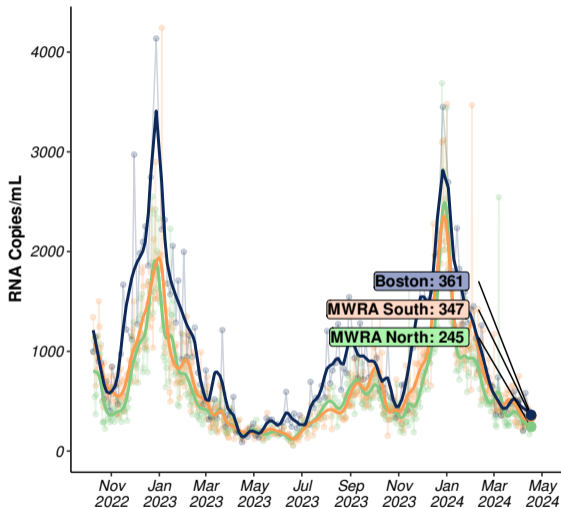
NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS

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

361

RNA copies/mL

**RANGE ACROSS 11
NEIGHBORHOOD SITES**

69-1,169

RNA copies/mL

Data through: **17-Apr-2024**

2-WEEK TRENDS

Boston
Stable

-22%
over the past 14 days

MWRA North
Stable

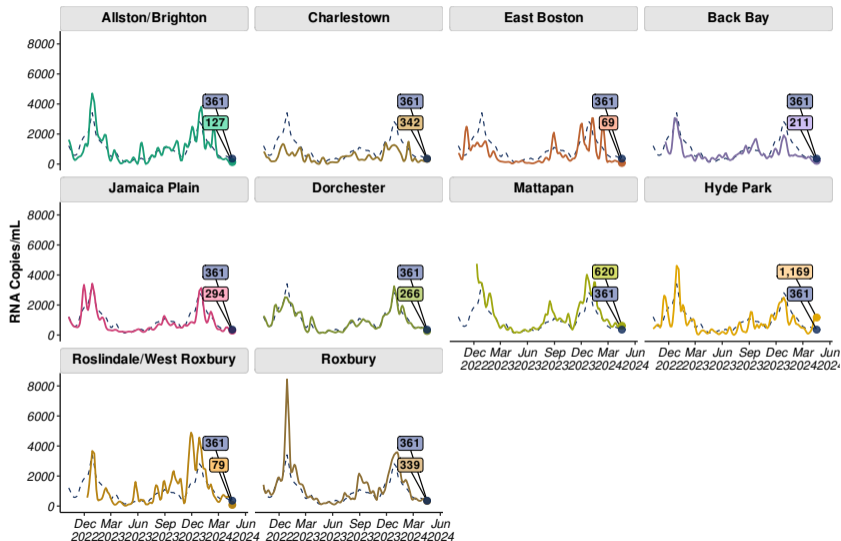
-30%
over the past 14 days

MWRA South
Stable

-10%
over the past 14 days

Updated: 22-Apr-2024 | Samples through: 17-Apr-2024 (BPHC); 17-Apr-2024 (MWRA) | MWRA Data: <https://www.mwra.com/biobot/biobotdata.htm>

BPHC Trend Overview by Neighborhood

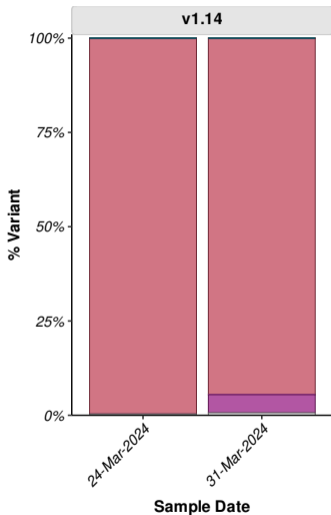


For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood;

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

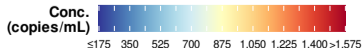
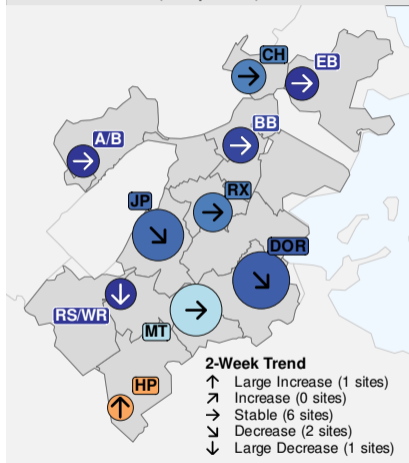
For Additional Info See:

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

Neighborhood Levels and Data Table



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



| COVID-19 Wastewater Levels | | | | 2-W |
|----------------------------|----------------------------------|----------|----------------|-----------------------|
| NH | \makecell[c]{Conc.\\(copies/mL)} | Level | Trend | \makecell[c]{Diff.\\} |
| BOSTON | 361 | Low | Stable | -99 |
| HP | 1,169 | High | Large Increase | +606 |
| MT | 620 | Low | Stable | +72 |
| SB | 455 | Low | Large Decrease | -559 |
| CH | 342 | Very Low | Stable | +122 |
| RX | 339 | Very Low | Stable | -139 |
| JP | 294 | Very Low | Decrease | -168 |
| DOR | 266 | Very Low | Decrease | -227 |
| BB | 211 | Very Low | Stable | +32 |
| A/B | 127 | Very Low | Stable | -76 |
| RS/WR | 79 | Very Low | Large Decrease | -567 |
| EB | 69 | Very Low | Stable | -88 |

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

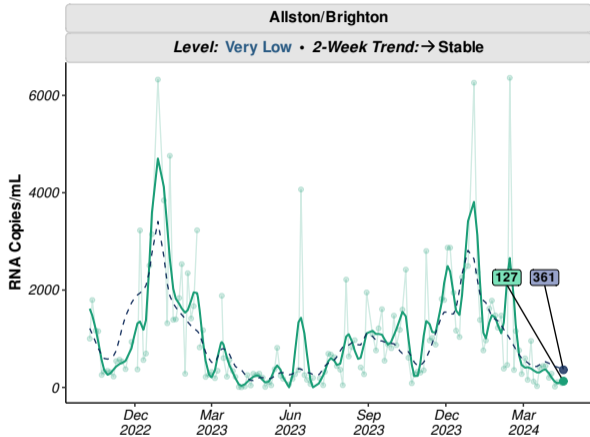


Level: **Very Low**

- Average value in **A/B** over the past week: **127** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**361** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **A/B** are **stable**.
- Change compared to two weeks ago: **-76** copies/mL (**-37%**).



Updated: 22-Apr-2024 | Samples through: 17-Apr-2024 (A/B);

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

Back Bay

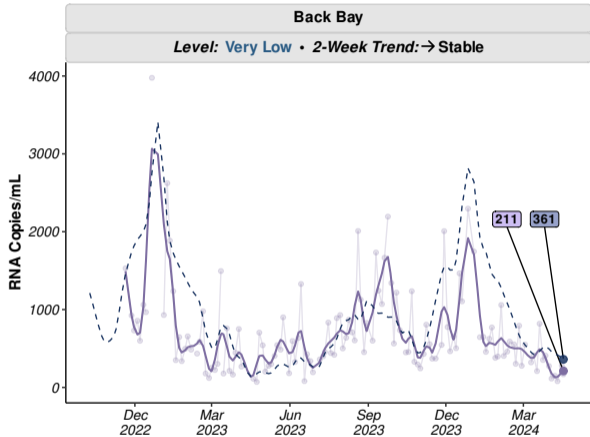


Level: **Very Low**

- Average value in **BB** over the past week: **211** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**361** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **BB** are **stable**.
- Change compared to two weeks ago: **+32** copies/mL (+18%).



Updated: 22-Apr-2024 | Samples through: 17-Apr-2024 (BB);

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

Charlestown

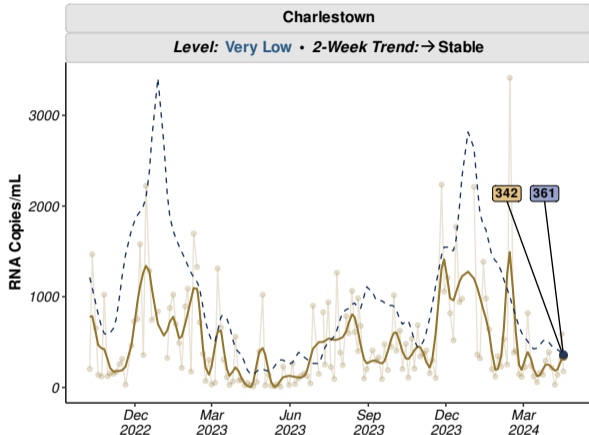


Level: **Very Low**

- Average value in **CH** over the past week: **342** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**361** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **CH** are **stable**.
- Change compared to two weeks ago: **+122** copies/mL (**+56%**).



Updated: 22-Apr-2024 | Samples through: 17-Apr-2024 (CH);

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

Dorchester

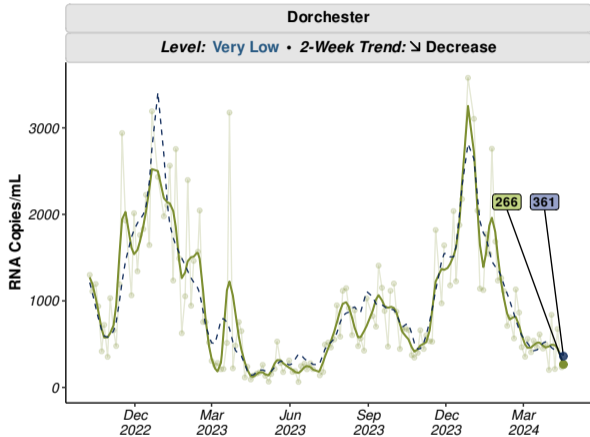


Level: **Very Low**

- Average value in **DOR** over the past week: **266** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**361** copies/mL).

Trend: **↘ Decrease**

- Over the past two weeks, values in **DOR** are **decreasing**.
- Change compared to two weeks ago: **-227** copies/mL (**-46%**).



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

East Boston

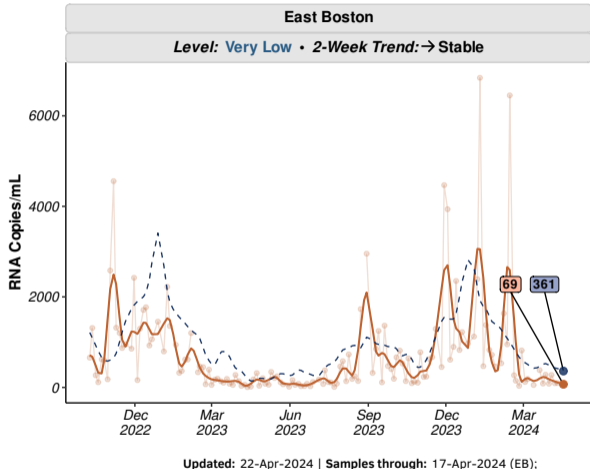


Level: **Very Low**

- Average value in **EB** over the past week: **69** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**361** copies/mL).

Trend: **→ Stable**

- Over the past two weeks, values in **EB** are **stable**.
- Change compared to two weeks ago: **-88** copies/mL (**-56%**).



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

Hyde Park

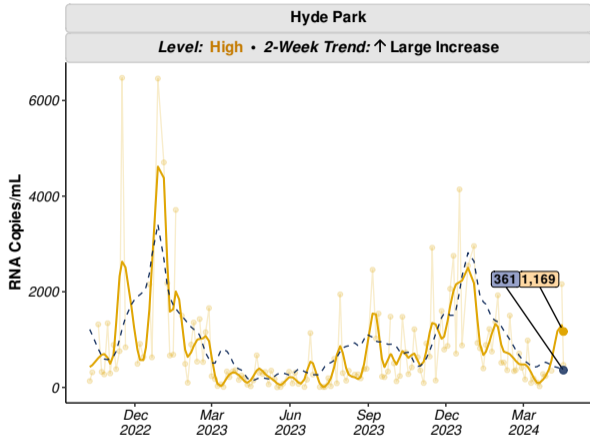


Level: **High**

- Average value in **HP** over the past week: **1,169** copies/mL.
- This value is **high** compared to past values and **higher** than the citywide average (**361** copies/mL).

Trend: **↑ Large Increase**

- Over the past two weeks, values in **HP** are **increasing**.
- Change compared to two weeks ago: **+606** copies/mL (**+107%**).



Updated: 22-Apr-2024 | Samples through: 17-Apr-2024 (HP);

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

Jamaica Plain

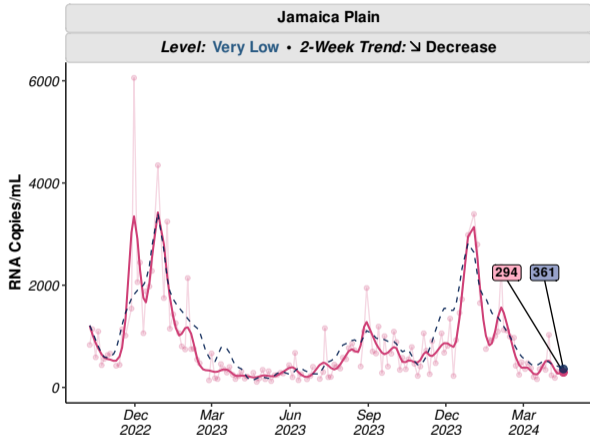


Level: **Very Low**

- Average value in **JP** over the past week: **294** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**361** copies/mL).

Trend: **Decrease**

- Over the past two weeks, values in **JP** are **decreasing**.
- Change compared to two weeks ago: **-168** copies/mL (**-36%**).



Updated: 22-Apr-2024 | Samples through: 17-Apr-2024 (JP);

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

Mattapan

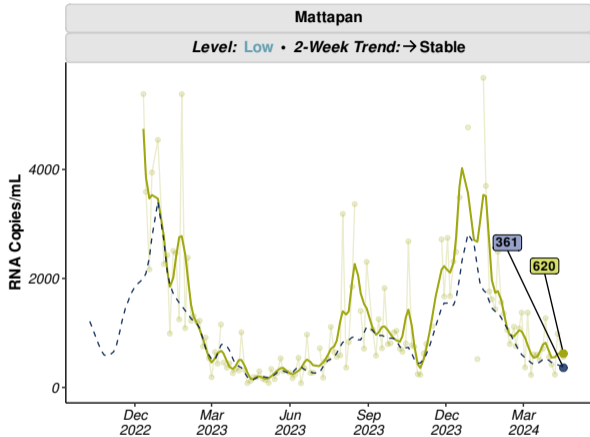


Level: **Low**

- Average value in **MT** over the past week: **620** copies/mL.
- This value is **low** compared to past values and **similar** than the citywide average (**361** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **MT** are **stable**.
- Change compared to two weeks ago: **+72** copies/mL (+13%).



Updated: 22-Apr-2024 | Samples through: 17-Apr-2024 (MT);

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

Roslindale/West Roxbury

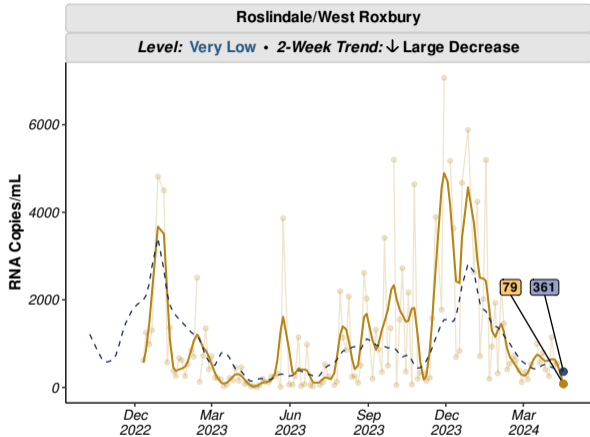


Level: **Very Low**

- Average value in **RS/WR** over the past week: **79** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**361** copies/mL).

Trend: **↓ Large Decrease**

- Over the past two weeks, values in **RS/WR** are **decreasing**.
- Change compared to two weeks ago: **-567** copies/mL (**-88%**).



Updated: 22-Apr-2024 | Samples through: 17-Apr-2024 (RS/WR);

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

Roxbury

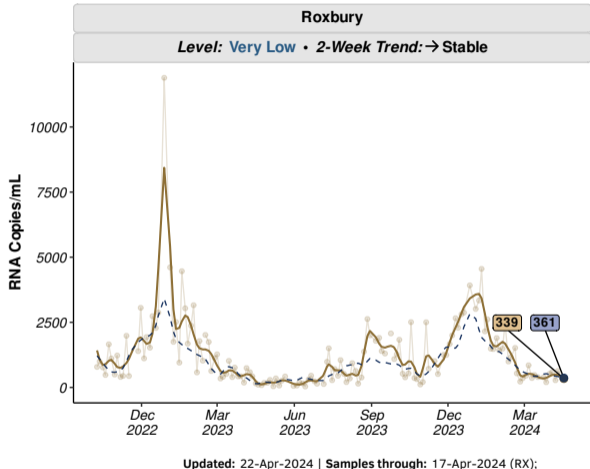


Level: **Very Low**

- Average value in **RX** over the past week: **339** copies/mL.
- This value is **very low** compared to past values and **similar** than the citywide average (**361** copies/mL).

Trend: → **Stable**

- Over the past two weeks, values in **RX** are **stable**.
- Change compared to two weeks ago: **-139** copies/mL (**-29%**).

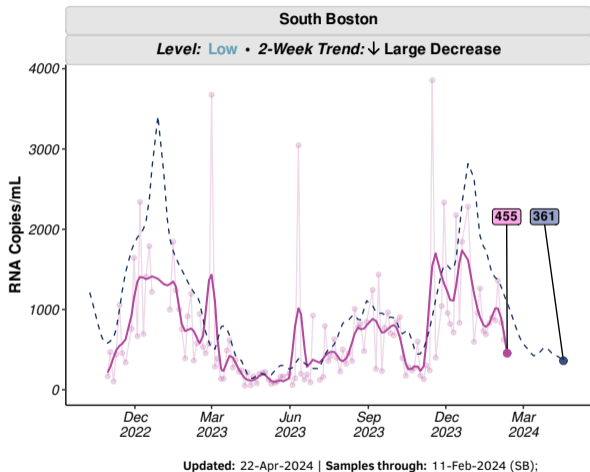


See [recommended actions and resources](#) based on levels and trends in this neighborhood.

South Boston



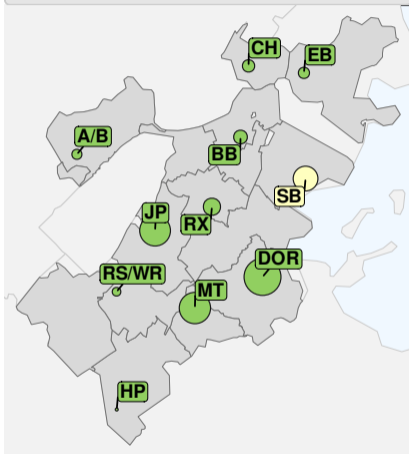
- As of 11-Feb-2024, sampling at the South Boston site has been paused indefinitely due to sewer construction
- Data for South Boston are shown through 11-Feb-2024



Site Status and Details



Status of Sampling Sites (22-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
- 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: 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

RESOURCES

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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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- Learn more about COVID-19 and find additional resources: [COVID-19: Know the Facts Find the Truth](#)