

### Wastewater Epidemiology COVID-19 Report

#### Updated: 13-Mar-2024 | Data Complete Through: 10-Mar-2024

☑ wastewater@bphc.org



Boston Public Health Commission

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Neighborhood Levels and Data Table Results by Neighborhood Allston/Brighton Back Bay Charlestown Dorchester East Boston Hyde Park Jamaica Plain Mattapan Roslindale/West Roxbury Roxbury South Boston

#### Additional Information

Site Status and Details

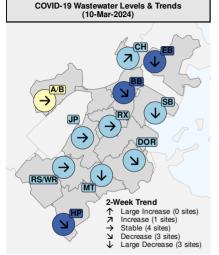
Level and Trend Category Definitions Recommendations and Resources by

#### Level

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

# **Neighborhood Levels and Trends**





7 sites

1 mm

1 sites

Moderate

0 sites

Hiah

Verv Hiah

COVID-19

(# sites) Very Low

# BOSTON CITYWIDE COVID-19 LEVEL & TRENDS COVID-19 LEVEL 2-WEEK TRENDS LOW 2 432 copies/mL Decrease samples through 10-Mar-2024 -241 copies/mL (-36%)

#### **NEIGHBORHOOD SITES COVID-19 LEVEL & TRENDS**

Level	Neighborhood/Site		Trend
Moderate	Allston/Brighton (A/B)	$\rightarrow$	Stable
	Roxbury (RX)	$\rightarrow$	Stable
	South Boston (SB)	$\downarrow$	Large Decrease
	Mattapan (MT)	$\overline{}$	Large Decrease
Low	Roslindale/West Roxbury (RS/WR)	$\rightarrow$	Stable
	Charlestown (CH)	7	Increase
	Dorchester (DOR)	И	Decrease
	Jamaica Plain (JP)	$\rightarrow$	Stable
	Back Bay (BB)	Ы	Decrease
Very Low	Hyde Park (HP)	И	Decrease
	East Boston (EB)	$\downarrow$	Large Decrease

For additional details see:

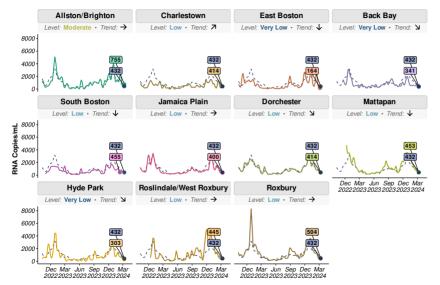
- Results by Neighborhood
- Detailed Neighborhood Levels and Trends Table
- Trend and Level Category Definitions

# **Citywide Overview and Trends**



Updated: 13-Mar-2024 | Samples through: 10-Mar-2024 (BPHC); 04-Mar-2024 (MWRA) | MWRA Data: https://www.mwra.com/biobot/biobotdata.htm

# **BPHC Trend Overview by Neighborhood**



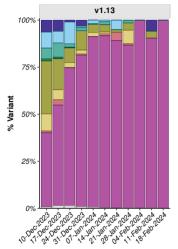
For each neighborhood, colored line and textbox shows the smoothed trend and most recent value in that neighborhood;

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%
FL.1.5.1	0.0%
EG.5	0.0%
	0.0%
BA.2.86	0.0%
JN.1	99.9%
Other	0.1%

Average variant percentage across all BPHC sites weighted by population size [ Table shows variant percentages for samples collected the week of 18-Feb-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: v1.13 (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

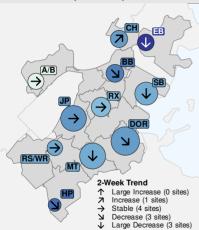
For Additional Info See:

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



# **Neighborhood Levels and Data Table**





COVID-19 Wastewater Levels & Trends (10-Mar-2024)

	COVID-19 Was	tewater Levels	evels 2-Week Trends		
NH	Conc. (copies/mL)	Level	Trend	Diff. (copies/mL)	% Change
BOSTON	432	Low	Decrease	-241	-36%
A/B	755	Moderate	Stable	+92	+14%
RX	504	Low	Stable	+32	+7%
SB	455	Low	Large Decrease	-559	-55%
MT	453	Low	Large Decrease	-605	-57%
RS/WR	445	Low	Stable	+78	+21%
СН	414	Low	Increase	+169	+69%
DOR	414	Low	Decrease	-318	-43%
JP	400	Low	Stable	-19	-5%
BB	341	Very Low	Decrease	-164	-33%
HP	303	Very Low	Decrease	-189	-38%
EB	164	Very Low	Large Decrease	-697	-81%



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**

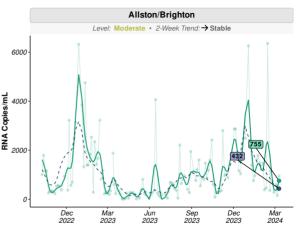


#### Level: Moderate

- Average value in A/B over the past week: <u>755</u> copies/mL.
- This value is <u>moderate</u> compared to past values and <u>similar</u> than the citywide average (<u>432</u> copies/mL).

#### Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>A/B</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>+92</u> copies/mL (+14%).



Updated: 13-Mar-2024 | Samples through: 10-Mar-2024 (A/B);

# **Back Bay**

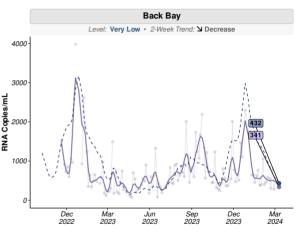


Level: Very Low

- Average value in <u>BB</u> over the past week: <u>341</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (432 copies/mL).

#### Trend: 🖌 Decrease

- Over the past two weeks, values in **BB** are **decreasing**.
- Change compared to two weeks ago: <u>-164</u> copies/mL (-33%).



Updated: 13-Mar-2024 | Samples through: 10-Mar-2024 (BB);

# Charlestown

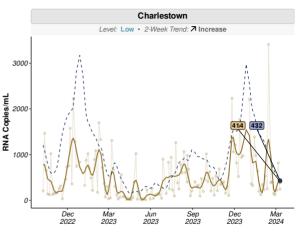


#### Level: Low

- Average value in <u>CH</u> over the past week: <u>414</u> copies/mL.
- This value is low compared to past values and similar than the citywide average (432 copies/mL).

#### Trend: 7 Increase

- Over the past two weeks, values in <u>CH</u> are increasing.
- Change compared to two weeks ago: <u>+169</u> copies/mL (+69%).



Updated: 13-Mar-2024 | Samples through: 10-Mar-2024 (CH);

### Dorchester

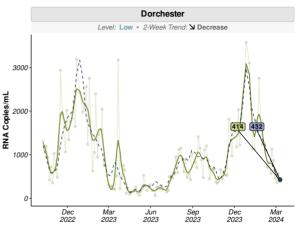


#### Level: Low

- Average value in <u>DOR</u> over the past week: <u>414</u> copies/mL.
- This value is low compared to past values and similar than the citywide average (432 copies/mL).

#### Trend: 🖌 Decrease

- Over the past two weeks, values in **DOR** are **decreasing**.
- Change compared to two weeks ago: <u>-318</u> copies/mL (-43%).



Updated: 13-Mar-2024 | Samples through: 10-Mar-2024 (DOR);

# **East Boston**

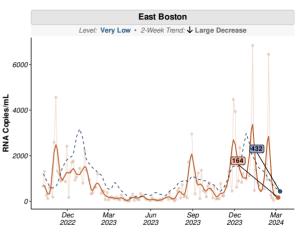


Level: Very Low

- Average value in <u>EB</u> over the past week: <u>164</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (432 copies/mL).

#### Trend: 🗸 Large Decrease

- Over the past two weeks, values in **EB** are **decreasing**.
- Change compared to two weeks ago: <u>-697</u> copies/mL (-81%).



Updated: 13-Mar-2024 | Samples through: 06-Mar-2024 (EB);

# **Hyde Park**

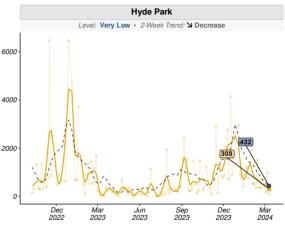


Level: Very Low

- Average value in <u>HP</u> over the past week: <u>303</u> copies/mL.
- This value is very low compared to past values and similar than the citywide average (432 copies/mL).

#### Trend: 🖌 Decrease

- Over the past two weeks, values in <u>HP</u> are **decreasing**.
- Change compared to two weeks ago: <u>-189</u> copies/mL (-38%).



Updated: 13-Mar-2024 | Samples through: 10-Mar-2024 (HP);

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

RNA Copies/mL

# Jamaica Plain

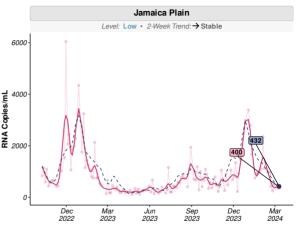


#### Level: Low

- Average value in <u>JP</u> over the past week: 400 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>432</u> copies/mL).

#### Trend: → <u>Stable</u>

- Over the past two weeks, values in <u>JP</u> are <u>stable</u>.
- Change compared to two weeks ago: <u>-19</u> copies/mL (-5%).



Updated: 13-Mar-2024 | Samples through: 10-Mar-2024 (JP);

# Mattapan

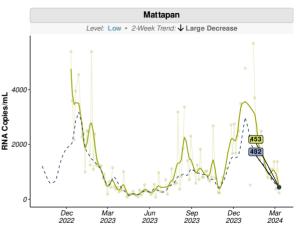


#### Level: Low

- Average value in <u>MT</u> over the past week: <u>453</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>432</u> copies/mL).

#### Trend: 🗸 Large Decrease

- Over the past two weeks, values in <u>MT</u> are **decreasing**.
- Change compared to two weeks ago: <u>-605</u> copies/mL (-57%).



Updated: 13-Mar-2024 | Samples through: 10-Mar-2024 (MT);

# **Roslindale/West Roxbury**

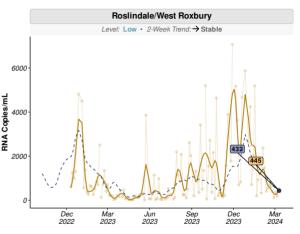


#### Level: Low

- Average value in **RS/WR** over the past week: <u>445</u> copies/mL.
- This value is low compared to past values and similar than the citywide average (432 copies/mL).

#### Trend: $\rightarrow$ <u>Stable</u>

- Over the past two weeks, values in RS/WR are <u>stable</u>.
- Change compared to two weeks ago: <u>+78</u> copies/mL (+21%).



Updated: 13-Mar-2024 | Samples through: 10-Mar-2024 (RS/WR);

# Roxbury

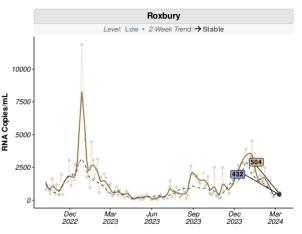


#### Level: Low

- Average value in **RX** over the past week: 504 copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>432</u> copies/mL).

#### Trend: → <u>Stable</u>

- Over the past two weeks, values in **RX** are **<u>stable</u>**.
- Change compared to two weeks ago: <u>+32</u> copies/mL (+7%).



Updated: 13-Mar-2024 | Samples through: 10-Mar-2024 (RX);

### **South Boston**

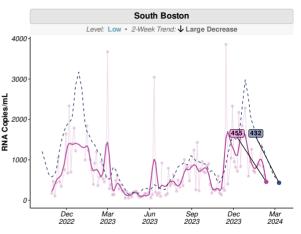


#### Level: Low

- Average value in <u>SB</u> over the past week: <u>455</u> copies/mL.
- This value is <u>low</u> compared to past values and <u>similar</u> than the citywide average (<u>432</u> copies/mL).

#### Trend: 🗸 Large Decrease

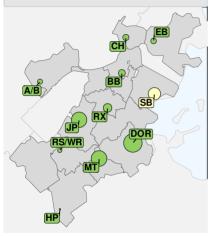
- Over the past two weeks, values in <u>SB</u> are **decreasing**.
- Change compared to two weeks ago: <u>-559</u> copies/mL (-55%).



Updated: 13-Mar-2024 | Samples through: 11-Feb-2024 (SB);

## **Site Status and Details**

Status of Sampling Sites (14-Mar-2024)



a Active (n=10)

Paused

(n=1)

Site Status

(N=11)

	#	Neighborhood	Date Site Confirmed	Site Status	Pop. Covered	% Neighborhood
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         22.8%           09         MT         11-Dec-2022         Active         24,441         80.5%			commed	Status	covereu	Covered
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         24,441         80.5%	01	A/B	02-Oct-2022	Active	2,684	4.0%
04         BB         20-Nov-2022         Active         4,551         8,1%           05         SB         30-Oct-2022         Paused         14,962         38.8%           07         JP         02-Oct-2022         Active         23,573         56.9%           08         DOR         02-Oct-2022         Active         24,441         80.5%           09         MT         11-Dec-2022         Active         24,441         80.5%	02	СН	02-Oct-2022	Active	3,736	18.3%
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%	03	EB	02-Oct-2022	Active	3,178	6.3%
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%	04	BB	20-Nov-2022	Active	4,551	8.1%
08         DOR         02-Oct-2022         Active         34,562         23.8%           09         MT         11-Dec-2022         Active         24,441         80.5%	05	SB	30-Oct-2022	Paused	14,962	35.8%
O9         MT         11-Dec-2022         Active         24,441         80.5%	07	JP	02-Oct-2022	Active	23,573	56.9%
	08	DOR	02-Oct-2022	Active	34,562	23.8%
10 HP 02-Oct-2022 Active 1,262 3.5%	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%	11	RS/WR	11-Dec-2022	Active	2,165	3.5%
12 RX 02-Oct-2022 Active 7,036 16.5%	12	RX	02-Oct-2022	Active	7,036	16.5%



# 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)
$\uparrow$	Large Increase	>+500
7	Increase	+150 to +500
$\rightarrow$	Stable	-150 to +150
И	Decrease	-500 to -150
$\downarrow$	Large Decrease	≤-500





# 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 <u>high risk of getting very sick</u>, 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

- Find a <u>vaccination clinic</u> 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





# 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

- Find a <u>vaccination clinic</u> 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 <u>high risk of getting very sick</u>, consider self-testing to <u>detect infection before contact</u>, 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

- 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

- Find a <u>vaccination clinic</u> 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 <u>isolation</u> if you have COVID-19 and for <u>what to do if you are exposed</u> to someone with COVID-19

- Find a <u>vaccination clinic</u> 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