



# Wastewater Epidemiology COVID-19 Report

**Updated:** 21-Jul-2023 | **Data Complete Through:** 16-Jul-2023



*Boston Public  
Health Commission*

# Report Contents



## Summary

Overview and Trends

## Results by Neighborhood

BPHC Neighborhood Trends

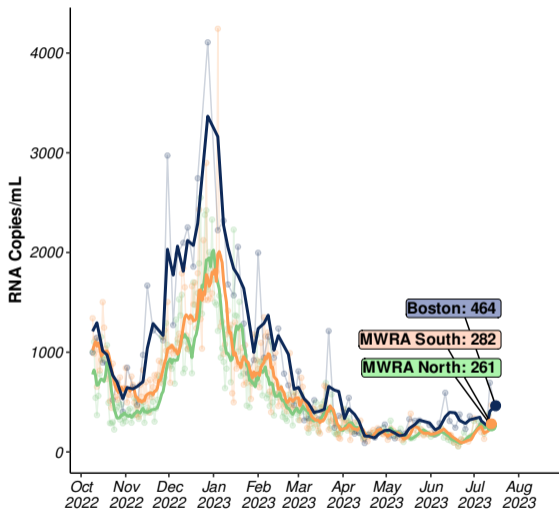
## Variant Results

Percent Variant Lineages (Citywide)

## Status & Details

Neighborhood Site Status and Details

# Overview and Trends



CITYWIDE  
AVERAGE

**464**

RNA copies/mL

RANGE ACROSS 11  
NEIGHBORHOOD SITES

**71-920**

RNA copies/mL

Data through: **16-Jul-2023**

## 2-WEEK TRENDS

*Boston*  
**Stable**

**+59%**  
over the past 14 days

*MWRA North*  
**Increasing**

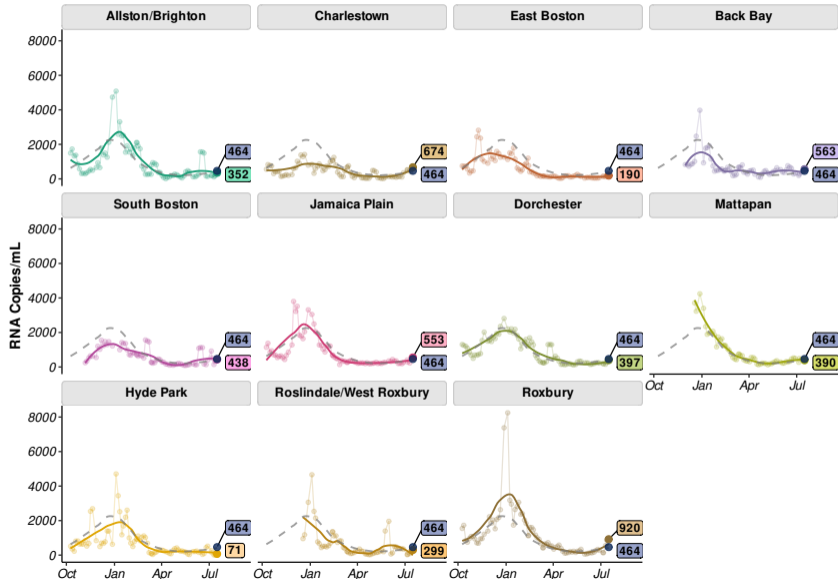
**+52%**  
over the past 14 days

*MWRA South*  
**Stable**

**+74%**  
over the past 14 days

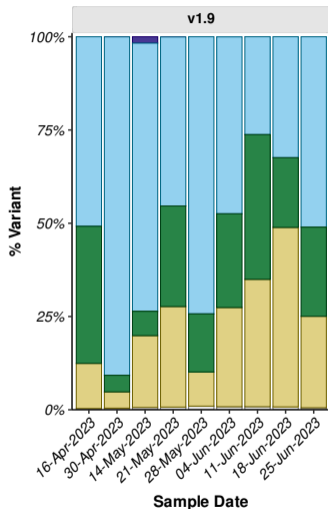
Updated: 21-Jul-2023 | Samples through: 16-Jul-2023 (BPHC); 13-Jul-2023 (MWRA) | MWRA Data: <https://www.mwra.com/biobot/biobotdata.htm>

# BPHC Neighborhood Trends



Points shown are 3-sample average values (i.e., 8-day moving average); line shows smoothed trend for 8-day moving average; dotted grey line in each panel represents average across all Boston sites weighted by population.

# Percent Variant Lineages (Citywide)



Variant	%
BA.2*	0.0%
XBB*	51.0%
XBB.1.9	23.9%
XBB.1.16	24.5%
BA.5*	0.0%
BQ.1*	0.0%
Other	0.5%

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 25-Jun-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: v1.9 (28-Apr-2023):

- BA.2\* includes BA.2, BA.2.12, BA.2.12.1, and other BA.2 sub-lineages.
- BA.5\* includes the sublineages of BA.5, except BQ.1\*.
- BQ.1\* includes BQ.1 and its sublineages, including BQ.1.1.
- XBB\* includes all XBB sublineages except XBB.1.16 and XBB.1.9, including XBB.1.5. The progenitor lineages of XBB are BA.2.75 and BA.2.10. Since neither progenitor is circulating, we combine abundances of genomic fragments of these BA.2 lineages with XBB.
- "Other variants" contains all variants not explicitly quantified.

Version Changes: Split XBB\* into XBB, XBB.1.16 and XBB.1.9. XBB includes all XBB lineages aside from 1.9 and 1.16

Removed: BF.7 and BA.4\*

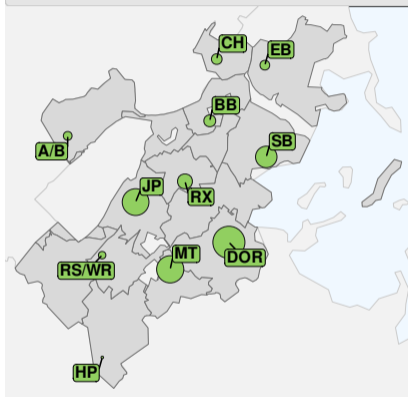
For Additional Info See:

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

# Neighborhood Site Status and Details



Status of Sampling Sites (21-Jul-2023)



Site Status (N=11) a Active (n=11)

#	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%