

# **Wastewater Epidemiology COVID-19 Report**

**Updated**: 23-Jun-2023 | **Data Complete Through**: 18-Jun-2023



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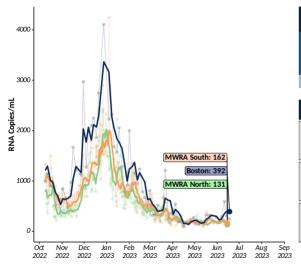
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### **Overview and Trends**





CITYWIDE AVERAGE

392
RNA copies/mL

RANGE ACROSS 11 NEIGHBORHOOD SITES

**41-1,559**RNA copies/mL

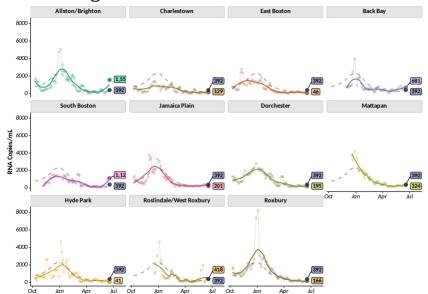
Data through: 18-Jun-2023

| 2-WEEK TRENDS        |                                      |  |  |  |
|----------------------|--------------------------------------|--|--|--|
| Boston<br>Increasing | <b>+97%</b> over the past 14 days    |  |  |  |
| MWRA North Stable    | <b>-15%</b><br>over the past 14 days |  |  |  |
| MWRA South Stable    | -2%<br>over the past 14 days         |  |  |  |

Updated: 23-Jun-2023 | Samples through: 18-Jun-2023 (BPHC); 15-Jun-2023 (MWRA) | MWRA Data: https://www.mwra.com/biobot/biobotdata.htm

# **BPHC Neighborhood Trends**

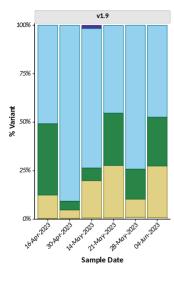




Points shown are 3-sample average values (i.e., 8-day moving average); line shows smoothed trend for 8-day moving average; dotted grey line in each panel represents average across all Boston sites weighted by population,

# **Percent Variant Lineages (Citywide)**





| Variant  | %     |  |
|----------|-------|--|
| BA.2*    | 0.0%  |  |
| XBB*     | 47.4% |  |
| XBB.1.9  | 25.1% |  |
| XBB.1.16 | 26.6% |  |
| BA.5*    | 0.0%  |  |
| BQ.1*    | 0.0%  |  |
| Other    | 0.8%  |  |

Average variant percentage across all BPHC sites weighted by population size | Table shows variant percentages for samples collected the week of 04-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):

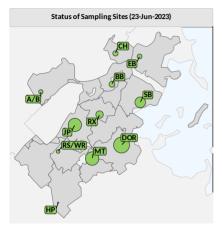
- BA.2\* includes BA.2, BA.2.12, BA.2.12.1, and other BA.2 sub-lineages.
- BA.5\* includes the sublineages of BA.5, except BQ.1\*.
- BQ.1\* includes BQ.1 and its sublineages, including BQ.1.1.
- XBB\* includes all XBB sublineages except XBB.1.16 and XBB.1.9, including XBB.1.5. The progenitor lineages 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 Permoved: BF 7 and BA  $4^*$ 

For Additional Info See: https://www.biobot.io/covid19-variants-report-notes/

# **Neighborhood Site Status and Details**





| #  | Neighborhood | Date Site<br>Confirmed | Site<br>Status | Pop.<br>Covered | %<br>Neighborhood<br>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%                        |
| 80 | 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=11)