

FAQ / GLOSSARY DRAFT

*** note that we aren't splitting Dorchester in two

Why is BPHC monitoring sewage in Boston?

- BPHC's ability to gather and share data about the number of COVID-19 infections has decreased as fewer tests are reported. While not able to provide an exact number of infected people, wastewater data indicate the relative level of disease spreading in a community and fill this gap in our data. The disproportionate impact of the pandemic on vulnerable communities in Boston means we need a better view of how local communities are affected. Wastewater has proven to be useful during the pandemic for anticipating trends in COVID-19. Wastewater data are community-level, anonymous, rapid, non-invasive, and do not rely on people having access to or seeking healthcare in order to know people are infected. Because people with COVID-19 often begin shedding virus in stool before developing symptoms, wastewater serves as an early indicator of COVID-19 cases. Wastewater data need to be considered along other public health indicators, like the number of COVID cases or hospitalizations, to truly understand the public health impact and risk.

How does BPHC gather these data?

- Samples are collected twice weekly from 12 sewerholes in 11 neighborhoods throughout the city. The collected sewage is sent to Biobot's laboratories in Cambridge. Biobot uses qPCR, similar to the nasal swab tests clinics use to test people for COVID. A process called genomic sequencing is also performed to determine which variants of SARS-CoV-2 are present.

What does it mean when there is an increasing trend?

- An increasing trend means the amount of virus in the sewage is increasing, suggesting more people are becoming infected with SARS-CoV-2 and are shedding it into the sewer.

How were these sites chosen?

- Sites were selected with the goal of reaching as many of Boston's neighborhoods as possible in order to have a representative snapshot of COVID transmission in the city. A citywide wastewater signal is calculated by taking a population-weighted average across these different sites.

Why does this matter to me and my community?

- Wastewater data is similar to other public health indicators we have used throughout the pandemic to understand risk and make adjustments, such as test positivity and hospitalizations. Just as you would check your weather app to see if you need an umbrella to prevent yourself from getting rained on, checking wastewater data can be used to decide when to take more precautions to prevent infection.

How will results be shared with the public?

- Samples are collected twice weekly and this report is updated when data become available.

Variant monitoring?

- For more information, see [Biobot's description](#) of their process for identifying variants of the virus.

I don't see my neighborhood on this report.

- Our network of sites will not cover every person in Boston. These are meant to offer a snapshot across different areas of Boston to capture a citywide perspective. Everyone in Boston participates in wastewater surveillance, either through the BPHC program or through the [MADPH surveillance](#) of the Deer Island Treatment Plant, which collects wastewater from Boston and its surrounding suburbs.

Where can I go if I have questions?

- Send questions to info@bphc.org

What does BB/BH/DT/NE/WE stand for?

- This stands for Back Bay / Beacon Hill / Downtown / North End / West End (zip codes 02108-02110, 02113-02114, 02116, 02199).

What does "variant" refer to?

- Variant refers to SARS-CoV-2 strain.

How are the boundaries of the catchment areas decided?

- The Boston wastewater utility provided the boundaries based on the geography and hydrology of the sewer lines upstream of each of the sampling locations. We tried to optimize the catchment areas to include / exclude certain features (etc. we did not want samples to include hospitals) but the main priority was to have sites in as many neighborhoods as possible

Are there areas that are outside of Boston that are still in the catchment area?

- Yes, this is why our program, in Boston neighborhoods, exists - to gather information that's Boston specific, which is not possible to gather from the wastewater treatment plant alone. Our catchments are entirely within Boston.

Are catchment areas the same as neighborhoods?

- No. Some catchments areas consist of a small area within a given neighborhood, and some catchment areas span several neighborhoods.

Why don't you show the Boston-specific catchment areas, in addition to neighborhoods?

- We do not publish the specific geography of Boston-specific catchment areas as the small area size may raise privacy concerns. This is in line with CDC recommendations for safeguarding privacy.