

Customer-area COVID-19 sampling at TfL – Phase 2

June 2021

Background

- TfL commissioned Imperial college to collect samples across surface and LU to test for COVID-19 on the network, starting September 2020
- Phase I focused on a simulated passenger journey, repeated monthly
- Phase 2 is split into two workstreams:
 - Workstream 1 continues the simulated passenger journey
 - Workstream 2 adds air and surface sampling of staff areas (reported separately)

Methods – phase I

- Researcher travels from Waterloo to Euston on Northern Line, then Euston to Paddington on 205 bus
- Takes swab samples at hard surfaces e.g. grab handles
- Takes air samples, sampling 300L/minute of air (on average someone exercising hard breathes less than 100L/minute so this is a large sample volume)
- Extremely sensitive lab tests are used to give the best chance of detecting any virus



Phase I testing procedure

Sample number	Air sampling	Swab sampling
1	Waterloo, on concourse between Bakerloo and Northern Line, for 1 hour	Escalators, oyster readers
2	In carriage along journey from Waterloo to Euston	Grab handles on carriage
3	Euston station at 'half' concourse, near ticket machines, for 1 hour	Escalators, oyster readers
4	205 bus top deck from Euston to Paddington	205 bus push buttons, handrails

Phase I results – all samples negative in 2020

Experiment date	Air sampling	Swab sampling
September 2020	Negative (no COVID found)	Negative (no COVID found)
October 2020	Negative (no COVID found)	Negative (no COVID found)
November 2020	Negative (no COVID found)	Negative (no COVID found)
December 2020	Negative (no COVID found)	Negative (no COVID found)



More information on sampling methodology

The BBC filmed the October 2020 sampling run which can be viewed at <https://www.bbc.co.uk/news/uk-england-london-54649463>

Imperial College full report – phase I

Available from the TfL website
<https://content.tfl.gov.uk/covid-sampling-paper-phase-1.pdf>



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Phase 2 workstream 1 – simulated journey

- The same journey from workstream 1 is sampled monthly
- The hour-long sample on the concourse has been removed
 - Other sampling experience indicates the concourse is an extremely unlikely place to detect coronavirus
 - A customer is not likely to stand motionless on the concourse for an hour

Experiment date	Air sampling	Swab sampling
January 2021	Negative (no COVID found)	Negative (no COVID found)
February 2021	Negative (no COVID found)	Negative (no COVID found)
March 2021	Negative (no COVID found)	Negative (no COVID found)
April 2021	Negative (no COVID found)	Negative (no COVID found)
May 2021	Negative (no COVID found)	Negative (no COVID found)
June 2021	Negative (no COVID found)	Negative (no COVID found)

• How should we use these results?

- The risk of catching COVID-19 comes from being close to people who are infected
- The transport network is safe but it's imperative everyone follows the guidance – staying away from other people, travelling off peak where possible, observing hand hygiene and wearing masks
- The risk of infection is greater now (July 2021) due to there being more cases, COVID-19 Delta variant's increased transmissibility and the greater number of people on the network.
- Mask wear remains critically important – everyone wearing a mask reduces the chance of the virus moving between people, and helps reduce COVID spreading in and around London

Contacts

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