

## Signs and symptoms of COVID-19

COVID-19 is a new illness that can affect lungs and airways; it is caused by a coronavirus. The illness can be mild, moderate, severe, or (in rare cases) fatal; initial symptoms may include:

- a high temperature or fever;
- a new continuous cough.

Generally, the infection can cause more severe symptoms in people with weakened immune systems, older people, and those with long-term conditions like diabetes, cancer and chronic lung disease.

## Transmission of COVID-19

The virus is thought to spread primarily “person-to-person” (i.e. between people who are in close contact with one another) through respiratory droplets produced when an infected person coughs, sneezes, or talks. It may also be contracted if an individual touches surfaces or objects that have the virus on them and then touches their own mouth, nose, or (possibly) their eyes.

## UK Biobank Response to COVID-19

UK Biobank take the COVID-19 pandemic seriously and is committed to protecting the health and wellbeing of all our staff.

Following the closure of our imaging centres to participants on the 13<sup>th</sup> March and the closure of all of our sites (with a move to home working, where possible) on the 20<sup>th</sup> March, work on our sites has been limited to key staff performing essential functions at Cheadle and periodic checks of key equipment at our Imaging Centres. This work has been carried out under controlled conditions in line with specific risk assessments.

We are now, at the request of UK Government, designing and preparing to run a seroprevalence survey amongst our participants and their adult children and/or grandchildren. This will require a limited return to work for a small number of operational staff.

Detailed risk assessments have been carried out to inform the controls, adjustments and working practices we will employ to ensure that this work can be carried out with the minimum of risk.

The detailed risk assessments are published via our Quality Management System (QMS) and posted at key points within the Cheadle site; the key messages from these risk assessments are also distilled into “induction” presentations that will be delivered to relevant staff (and will be available for review via our QMS and in hard copy form on site).

This document summarises the key measures in place to minimise possible transmission and to protect staff; further detail is published in the abovementioned documents.

## Seroprevalence Survey

This project will involve the remote collection (via mail out and return) of small volumes of blood from consented UK Biobank volunteers and their (consenting) adult children.

## Risk Mitigation

### Risk of contracting the virus from the samples

The project is a general population survey focused on antibody measurement in blood samples rather than tests for “live virus” (as, for example, in antigen or qPCR-based tests on throat or nose swabs).

The infection rates in the general population are very low and blood is not considered a mechanism for virus transmission.

All samples will therefore be managed under our normal laboratory sample handling processes with staff (as per our normal processes) required to wear appropriate PPE; as an additional precaution, double gloving will be mandatory.

As a further precaution, processes which have the potential to produce aerosols will be carried out in double HEPA-filtered microbiological safety cabinets.

The risk from samples is therefore considered extremely low.

### Transmission of COVID-19 between staff on site

Site staffing is limited to the minimum required and social distancing is enforced both within the working environment and in welfare facilities.

Handwashing / sanitising is mandated on entry and exit to the site and encouraged regularly (signage is in place and sinks / soaps / sanitiser provided). No-touch hand driers and paper towels are available in all toilet areas.

Teams, where possible, are kept separate with minimum contact (the site is divided into red/green/blue zones with specific personnel only allowed in each zone).

Dedicated entry / exit points and welfare facilities are available/identified for specific teams.

Enhanced cleaning protocols are in place with commercial cleaners; in addition, staff are required to clean touchpoints after use (antibacterial wipes are provided).

Breaks are staggered and the use of “communal equipment” (microwaves, kettles, fridges etc.) discouraged. Staff are encouraged to bring their own food / drink and sharing is prohibited. Disposable cutlery and plates will be provided.

Decontamination / washing of equipment / goods is performed prior to handover of equipment / goods between zones. Samples only enter/exit the laboratory via defined paths.

Workstations are arranged to adhere to the 2m social distancing rule and, where this is not possible, additional protection is provided (Perspex screens).

Staff members reporting symptoms are prohibited from attending site and/or immediately sent home. Staff with symptoms are requested to arrange a live virus test (UK Biobank is also registered for employee testing as a fall back if there are any issues with staff requesting testing directly).

### **Risk of contracting the virus from the equipment / good deliveries**

All deliveries are managed by the facilities team - the only team allowed to work across both green to blue areas.

Disposable gloves are worn when transferring goods from green to blue areas and are to be disposed after each transfer to avoid cross contamination.

The transfer of goods from blue to red zones is the responsibility of the lab team under guidelines set out in the lab risk assessments.

### **Risk of virus transmission amongst laboratory staff**

In addition to the general mitigation activities above, a number of laboratory adjustments have been made:

- Lab coats, safety glasses etc. are assigned to individuals and (in the event of a confirmed case in the lab, the lab coat for that individual is to be placed in a red cleaning bag and a deep clean of the area initiated)
- Antechambers are cleaned morning, lunchtime and evening
- Weekly deep cleaning activities are performed

Staff are given the opportunity to feedback on social distancing measures and encouraged to share any concerns and ideas to improve social distancing; regular informal audits take place to check adherence to social distancing guidelines.

A weekly reminder is sent to remind staff to stay at home if they, or a member of their household, has coronavirus symptoms (a fever or continuous cough).

### **COVID-19 infection of vulnerable staff**

Staff that are shielding (received a letter from government asking them not to leave their homes) are not permitted on site.

Individual risk assessments are completed for individuals in high risk groups (those classed as clinically vulnerable).