

Introduction and Benefits for Employers

The COVID-OUT Study – an introduction to employers

Background

At present, we know that the virus is transmitted through three main routes: Person-to-person, in the air, and on surfaces. However, we do not yet understand the relative importance of each of these three routes, and how environmental conditions can alter the dynamics of transmission in any given scenario.

COVID-19 outbreaks have been identified in workplaces, schools, care homes, hospitals and other settings. There is a national anticipation of further outbreaks as we plan a more significant return to normality.

In order to find effective ways to control and stop these outbreaks, we need to investigate and understand the root causes of these outbreaks and to identify any common risk factors responsible for the outbreaks across a range of settings.

How we will work with you

This is a research study. It is a voluntary decision for you to take part in the research. Personal information will be kept strictly confidential. Your organisation/site will not be identified in any publication resulting from this study.

We appreciate that taking part in the study may have an impact on production such as time needed for employees away from their work area to have testing. The research team will work with you to make suitable arrangements and will do their best to not interfere with or disrupt the running of the business.

We understand that transmission is a continuous risk and we will not consider the risk in your workplace in isolation. The research study is designed to understand holistically the factors that may contribute to the outbreak.

We also understand that the workplace could act as a vehicle to concentrate other risk factors and increase opportunity for transmission. The study has a team of scientists from HSE and PHE to conduct environmental assessment and sampling.

Benefits to employers

- The study will assess potential surface contamination. This will help to evaluate current cleaning practices and identify potential risk areas.

- The study will identify areas with insufficient ventilation that may increase the risk of aerosol transmission. These will allow you to identify or improve mitigations to prevent further transmission.
- The study will assess the work environment and working practices. These will allow you to identify areas where control measures could be improved (e.g. identify pinch points, shared surfaces and equipment, adequacy of screens etc.)
- The study will identify earlier and more completely COVID-19 cases in the workplace and ensure infected people isolate, and break chains of transmission. This will reduce the spread of the virus and provide confidence to workers and customers in the workplace, helping to protect and enable business continuity.
- The study has both virus tests and antibody tests. The study volunteers will know if they are infected now or in the past few months with the virus or if they have antibodies against the virus.

Benefits to society in general

- We will genome sequence the positive viral test samples to assess potential new variants and to identify clusters and the possible links to the community wide transmission.
- The results of the study will help greater understanding how and why outbreaks are occurring. Any policy or guidance changes resulting from the study should lead to less transmission in the workplace and less future loss of productivity due to potential outbreaks.

Short Summary of the Study

The COVID-OUT Study

COVID-19 Outbreak investigation to Understand Transmission Research Ethics Committee reference 20/NE/0282

Preventing transmission of SARS-CoV-2 is the biggest public health challenge we have faced recently. Evidence is needed to support effective mitigation. Many COVID-19 outbreaks occur in workplaces, schools, care homes, and other settings. Investigations into outbreaks are already undertaken by public health bodies and regulators to control them and manage public health concerns; but they only collect limited information, which is not consistent thereby preventing meaningful analysis across investigations at present.

The COVID-OUT study will take advantage of the unique, time-limited, opportunities given by these outbreak investigations in workplace settings to collect a consistent set of data in a systematic way so that we can understand why outbreaks occur and how we might be able to stop them happening in the future.

We will recruit workers from large workplaces where there are COVID-19 outbreaks. We will utilise data collected as part of the outbreak investigations and collect supplemental data through viral and serology testing of workers, environmental sampling of virus, and assessing building plans, ventilation systems, and COVID-secure measures. We will compare workers who have COVID-19 during the outbreak with workers who don't, to understand the transmission risk factors. We will construct transmission chains to understand how infection spreads and to investigate important transmission routes. We will conduct this study in a consistent way in a range of workplace settings, including food processing plants, warehouses and large offices. We will combine data from outbreaks for pooled analyses to increase power and enable study of common risk factors.

The COVID-OUT study is part of the National Core Study on Transmission and Environment. It is funded by the UK Government, coordinated by the Health and Safety Executive (HSE) in collaboration with Public Health England (PHE), the University of Manchester (UoM) and the London School of Hygiene and Tropical Medicine (LSHTM).