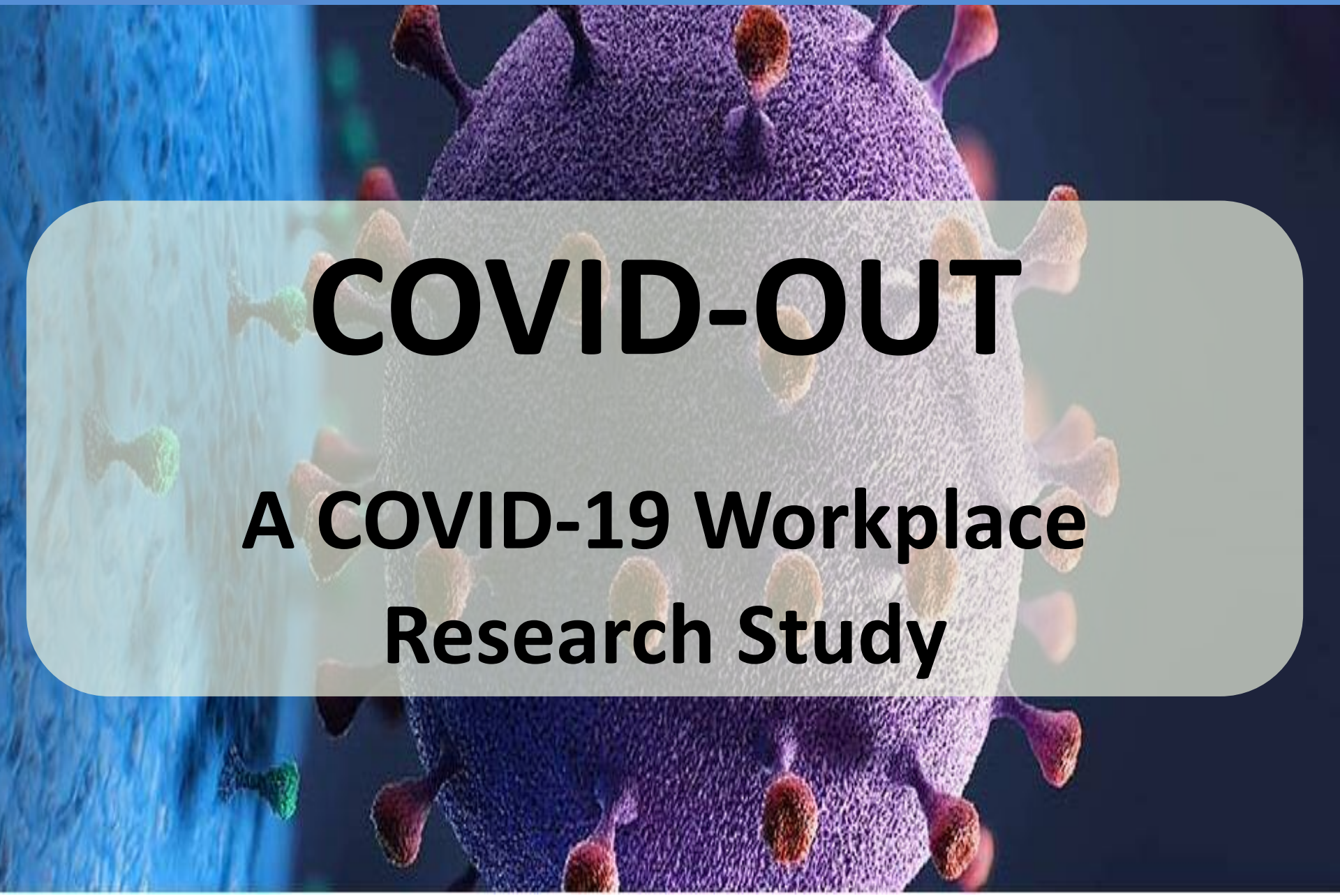

COVID-OUT

A COVID-19 Workplace Research Study

Coronavirus and COVID-19 Headlines

- Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus (SARS-CoV-2)
- Most people who are infected only experience mild symptoms however some develop serious illness
- Lack of immunity has led to many deaths and pressure on health services
- If operated safely workplaces can play a key role in preventing and slowing the spread
- Understanding the spread of coronavirus is essential in developing controls to enable ‘COVID-secure’ workplaces
- COVID-secure workplaces can:
    - Protect health and prevent spread
    - Maintain business operations
    - Benefit the UK economy

COVID-19 National Core Studies

- 6 National Core Studies announced in October 2020 https://www.hdruk.ac.uk/covid-19/covid-19-national-core-studies/
- Letter from Chief Scientist Sir Patrick Vallance 28 Oct 2020 to SAGE and Parliament: https://committees.parliament.uk/publications/3400/documents/32493/default/
  - **Epidemiology and Surveillance** led by Professor Ian Diamond (ONS).
  - **Clinical Trials Infrastructure** led by Professor Patrick Chinnery (MRC) and Divya Chadha Manek (VTF/NIHR).
  - **Immunity** led by Professor Paul Moss (University of Birmingham)
  - **Longitudinal Health** led by Nish Chaturvedi (UCL)
  - **Data and Connectivity** led by Professor Andrew Morris (HDR UK)
  - **Transmission and Environment** led by Professor Andrew Curran (HSE) Taking samples to aid u*nderstanding of transmission of the disease in workplace, transport and public places.*

Transmission and Environment

Key questions

- How is the virus transmitted?
- Do certain work environments cause a greater risk of infection? (as seen in meat packing or warehouses)
- What work activities generate different levels of aerosolised particles?
- How can the spread of coronavirus be mitigated?

Transmission and Environment

"PROTECT"

Partnership for Research on Occupational, Transport, Environmental and Covid Transmission

Six themes

- **Theme 1. Outbreak investigations**
- Theme 2. Environmental transmission mechanisms
- Theme 3. Sector specific studies
- Theme 4. Development of tools to study respiratory virus transmission
- Theme 5. Experimental infections to characterise SARS Cov2 transmission
- Theme 6. Data integration of findings and practical guidance

https://sites.manchester.ac.uk/covid19-national-project/

Theme 1 - Outbreak Investigations

Aim

To understand SARS-CoV-2 transmission routes and risk factors through investigation of outbreaks in a range of occupational settings

The COVID-OUT Study

COVID-19 Outbreak investigations to Understand Transmission

Objectives

- To establish a multiagency, rapid response team for workplace outbreak investigations identified by PHE/health Protection teams
- In active outbreak investigations, To collect additional data on exposures, practices, infections
- To identify and characterise the SARS-CoV-2 transmission risk factors and their roles in the outbreaks. Transmission may have been at work or outside, with infections brought to work.

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Data collected

1. Infections – Coronavirus from nasal swabs & antibody tests of infection
2. Genetic typing of virus to identify different infection groups
3. Questionnaire on workers' activities at work, commuting routes, home
4. Hygiene practices in the workplace
5. Measurements of virus in air & on surfaces

Feedback

Advice from hygienists

Report back after data analysed on suggestions for improvements

Report from whole study integrating lessons across workplaces

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Environmental survey – example of some measurements made

- Surface wipe samples to identify presence of SARs-CoV-2 in the workplace
- Air samples to investigate potential for airborne transmission
- Detailed assessment of workplace ventilation
- Detailed assessment of COVID risk management measures

Headline Findings from PHE Sampling in Three Food Producers Outbreaks:

- ***Communal Areas such as canteens had the highest percentage of surface samples positive for SARS-CoV-2 RNA (7/9, 78%)***
- ***Surface contamination also found in changing areas and PPE dispensers***
- ***No SARS-CoV-2 was found on samples from production lines in two facilities (0/13)***
- ***In one facility cleaning of canteen surfaces was found to be ineffective with 4/5 surface samples positive before and after cleaning***

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Benefits of participation

Detailed tracking of current and historic infection status of your workforce

Potential to provide detailed mapping of transmission with your workforce

Detailed assessment of risk controls with feedback

Lessons learned applicable to other workplaces/future pandemics

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