Keeping the UK Building Safely (KUBS)

Work Package 1

KUBS Phase 1 - Methodology

Pre-interview survey:

- 8 stakeholders from four participating construction companies
- Questions relating to: (i) data collection and analysis on COVID-19 transmission in the workplace, (ii) transmission risk management strategies, (iii) technology use, (iiii) impact on health and safety, (iv) COVID-related messaging

Semi-structured interviews:

- 5 interviews with 8 stakeholders from four participating construction companies
- a 'deep dive' to investigate the perceptions and views of leads in the construction sector
- discussion in three topic areas: (i) views of monitoring and mitigating COVID-19 transmission; (ii) data collection, analysis and technology and (iii) management, leadership and implementing adaptations.
- Thematic analysis: Identification of global, organising and basic themes

Timeline data collection: Dec 2020 to Feb 2021

WP1 findings – Transmission Risk

- Understanding of transmission risks:
  - Assisted by strong safety culture; able to act quickly and communicate effectively;
  - Limited clusters of cases, general perception not linked to work conditions

- Mitigation measures:
  - Behavioural change key priority
  - Focus on employee welfare over productivity
  - Tensions raised through existing contractual arrangements

- Major challenges for sector:
  - Variety of tasks and jobs limits opportunities for clear and consistent guidance
  - Worker behaviour outside workplace a concern but beyond remit of employers
  - Logistics of implementing COVID-19 measures (e.g. test and trace; client requirements)

- Employee support, including vulnerable
  - Mental health a key concern, numerous risk factors
  - Vulnerable workers generally managed on a case by case basis
  - Workplace adjustments e.g. changed work patterns, work from home, cleaning, PPE, outdoor briefings

WP4 findings – Leadership and good practice

- Current leadership good practice helped manage COVID-19 risks
  - Rapid and flexible response from management, underpinned by strong safety culture
  - Good practice to maintain visible leadership onsite and engage with workforce
  - Challenge of balancing traditional H&S risk and COVID-19 risk
  - Range of projects and contractual agreements contributes to challenges

- Adaptations to work design and work practices
  - Variety of changes implemented, high compliance and few outbreaks indicates effectiveness

- Applications of controls and technology
  - E.g. PPE, wearables, existing data management systems, COVID testing
  - Novel technology less frequently applied; concerns about overreliance on technology

- Leadership attributes:
  - 'moral drivers'; prioritise wellbeing and safety; concern about mental health (employees and managers)
  - Engagement with employees crucial to manage anxiety and provide support

- Organisational level strategies
  - Employment of routine good practice to manage COVID-19 risks
  - Communication strategies: consistent, simple and clear messaging; 'speak up' culture

KUBS2: WP1 & WP4 combined approach

Co-design content and strategy for KUBS2 with HSE & industry partners

Includes:

- Extended qualitative 'Deep-Dive' (n=22)
  - Different: construction settings; levels of management; roles
  - Focus on employee voice and organisational culture
  - Work environments: indoor / outdoor; activity type; employment status
  - Comprehensive understanding of risk across construction industry

- Quantitative survey (n=497)
  - Examination of relationships between factors (e.g., transmission perception at work/off work, safety leadership, safety climate, resilience, COVID-19 rates and exposure, traditional health and safety incidents, wellbeing, absences and turnover).
  - Range of construction employees, representative data of employees views across the sector

  Timeline data collection: Nov 2021 to Feb 2022

KUBS2: WP1 & WP4 combined approach

Aims
We set out to understand and answer the following questions:

- To understand the transmission risk perception and good / best risk management practices across different construction sites and activities

- To understand the role of hierarchy of controls and testing / vaccination regime in effective transmission risk mitigation and in ensuring H&S outcomes

- To develop insights into effects of COVID-19 and related risk management measures on employees' mental health, wellbeing, and safety compliance

- To identify leadership attributes and good/best practice related to management of COVID-19 risks, managing the workforce remotely, and supporting employees' mental health, wellbeing, and safety compliance

- To identify relationships between COVID-19 transmission risk perceptions (relative to other non-work-related activities), safety leadership and health & safety outcomes (e.g., safety incidents, wellbeing)

- To develop insights into the impact of bio secure management on traditional H&S

- To work alongside WP3 to identify and gather appropriate data to inform technology application and modelling

KUBS2: Experiences of working in Construction during COVID-19

Key Messages

A wide range of transmission mitigation measures were used to prevent outbreaks of COVID-19 at work:
- Broadly well received and compliance was high
- Perception of risk was very high at the start of the pandemic and reduced over time
- Safety leadership employed a range of tactics to support the workforce, both on site and those working remotely
- A wide range of examples of strong leadership and communication
- Particular support for mental health and general wellbeing with a focus on putting the people first.

Hierarchy of controls	Description	Control measures
Elimination	Physically remove the hazard	Not possible
Substitution	Replace the hazard	Remote working for office staff
Engineering control	Develop a solution to control hazard/ Isolate people from the hazard	Enhanced ventilation
Safe work practices	Develop strong rules and procedure	Enhanced cleaning regime Enhanced hand washing facilities Testing on site Vaccination on site
Training	Skills and knowledge reduce the likelihood of mistakes	Communication Adaptions to procedures and processes
Administrative control	Change the way people work	Social distancing Formation of work team bubbles Reduction of number of workers for specific tasks Staggered start and finish times Access restrictions to canteen, site, changing facilities Changes to shared accommodations
PPE and face covering	Personal Protective Equipment	Face coverings

KUBS2: Recommendations

In the main report we use the evidence to make broad recommendations on transmission risk and perception and safety leadership, based on the experiences of those working in construction through the pandemic.

For example we suggest:
- Emphasising the existing culture of safe working in construction and linking in COVID-19 risk controls to existing safe working guidelines, as this has been perceived as effective by many participants.
- That organisations understand the need to lead by example and show visible leadership to influence compliance with safety rules.

The experiences of those working in the construction context during the COVID-19 pandemic offer useful and interesting insights and lessons to be learned for the future.