

**Title:** What effect does the physical working environment (*including welfare facilities*) have on health (*including MSDs and mental wellbeing*) over an extended working life in the logistics and transport sector?

**Principal Investigator:** Sheena Johnson, AMBS, University of Manchester. Discipline Organisational Psychology. **Co-Investigators:** Helen Beers, Health and Safety Executive, Discipline Social Science / Health Psychology; Elinor O'Connor, AMBS, University of Manchester. Discipline Organisational Psychology. Nina Day, Health and Safety Executive, Discipline Mechanical Engineering.

**Ageing Workforce Background** As the population ages the prevalence of ill-health and disability will increase, and the nature of ill-health will change, with a shift from acute illness towards chronic conditions, multi-morbidities, cognitive impairments and long-term frailty. Evidence on working into older age is relatively scarce, as policymakers and researchers have only recently become interested in this topic. In addition, there are gaps in our knowledge about the interaction between age and gender in the workforce and any potential influence on health and performance (and whether the issues affecting older workers may impact disproportionately on women).

**The logistics and transport sector** is experiencing a period of complex demographic change. There are concerns about the health of the workforce, and how safety culture and behaviours may be shifting. The sector has seen a shift away from many small / owner drivers to big companies. The use of many agency workers and Eastern European lorry drivers makes it hard to pin down the exact demographic profile of the industry (although the workforce is generally ageing and there is a lack of young people coming into the industry). Whilst it is currently a male dominated industry, the Road Haulage Association is trying to get more women into the industry.

There is a lot of job insecurity among drivers. Pay is generally poor, demands are high (work is time pressured), and drivers have little control over their work (e.g. their schedules; how the trailers are loaded). Many are on zero-hours contracts, and may therefore be reluctant to raise issues if there are problems. Drivers work alone, may have little support, and seek to address problems at work, including with equipment (i.e. they may not do a risk assessment or call for advice / help) which can lead to adverse health and safety outcomes. Stress levels in the industry are high (possibly due to the high demand / low control nature of the work, time spent away from home / disruption of personal relationships and family life).

The job is sedentary, so lack of physical activity is an issue (with issues such as diabetes). The work involves shifts, which may have a negative effect on wellbeing and issues such as sleep apnoea (drivers momentarily falling asleep whilst driving) pose a risk to safety. Osteoporosis is also an issue in drivers (who fall and slip a lot and have knee problems). If more women come into the sector, a fall could result in more serious injuries than for a man. Musculoskeletal disorders (MSDs) continue to pose significant health problems across the sector, with the logistics sector having a worse than average record for health and safety performance. According to the recent Labour Force Surveys, the non-fatal injury rate is almost double the 'all industries' rate; similarly for ill health, the rate of MSDs is 50% higher. Anecdotal evidence suggests an increase in accidents with age, and there are potential ergonomic issues that may be of concern, e.g. vehicles are now being fitted with more mirrors, sensors, cameras, portholes in doors, warning buzzers which may impact age groups differentially.

The Health and Safety Executive has a health strategy and a number of priority research areas, one of which is demographics. As part of the demographics priority research area HSE is interested in exploring how extended working lives affect people's physical and mental health in work, and wish to understand about the impact of age on work performance and attitudes to risk. This interest aligns with HSE's wider strategic theme of tackling ill health (including obtaining greater awareness

of how to prevent work-related ill health and supporting behaviour change). As part of the health strategy, HSE are also taking into consideration not only the effect of work on health, but the effect of health on work. HSE's science and evidence strategy highlights HSE's role in understanding risks to health and safety and how to control them, in developing and using practical, evidence-based science, and working with those in academia and elsewhere to develop and synthesise evidence.

**Research Aims** To explore extended working lives and the health effects of the physical working environment in road haulage drivers.

To look at work attitudes and work behaviour towards risk from an age perspective including: Risk to health (physical, mental); Risk to safety.