

07D.5 SUBJECTIVE COGNITIVE DECLINE AMONG US WORKERS AGED ≥ 45 YEARS BY OCCUPATION, BRFSS, 2015–2016

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Background Subjective cognitive decline (SCD) is one of the earliest noticeable symptom of dementia, including Alzheimer's disease. Some studies have shown that half of older adults with subjective memory complaints go on to develop more severe cognitive decline within 7–18 years. The objective of this study was to examine the prevalence of SCD among US workers and to identify occupations with a high prevalence of SCD, even after adjustment for common risk factors.

Methods Data from the 2015–2016 Behavioral Risk Factor Surveillance System were used to examine the prevalence of SCD among US workers aged ≥ 45 years who were currently employed or were employed at some point in the past 12 months. SCD is defined as frequent confusion or memory loss within the previous 12 months. Only states ($n=28$) that collected data on both industry/occupation and cognitive decline were included in this study.

Results The overall prevalence of SCD among US workers aged ≥ 45 years was 6.2%, and was higher for workers 65 years and older. The prevalence was significantly higher among Veterans (8.3%) compared to non-veterans (5.9%). 29.2% of those with SCD reported that they need assistance with day-to-day activities and 35.1% had discussed confusion/memory loss with a healthcare professional. The prevalence of SCD was significantly lower among workers in management, business and financial operations, Healthcare practitioners and technical, and office and administrative support occupations. While workers in building and ground cleaning and maintenance, and personal care and service occupations had elevated prevalence of SCD.

Conclusion Cognitive decline is an important public health issue affecting older workers and their ability to work. SCD prevalence is much higher among occupations that are less mentally challenging which indicates that interventions to improve or maintain cognitive functioning may help older workers to remain productive and in the workforce.

07D.6 ABSTRACT WITHDRAWN

Mini-Symposium 5: Climate Change

07E.1 SOLUTIONS TO PREVENT OCCUPATIONAL HEALTH AND PRODUCTIVITY EFFECTS OF HEAT

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In the context of global warming and rising workplace temperatures, the European Commission funded HEAT- SHIELD

project is creating a sustainable inter-sectoral framework to prevent heat- induced health effects in working people and improve quality and productivity of important industries (i.e. manufacturing, construction, transportation, tourism and agriculture). Strengthened occupational epidemiology services is an essential component of this framework.

The project is producing a series of outcomes including: (i) implementation of appropriate technical and biophysical solutions to counter the heat- induced risk to workers' health for key industries; (ii) development of an online open access service to anticipate and warn about extreme heat events; (iii) dissemination of scenario-specific guidelines aimed at maintaining workers' health, well-being and productivity in spite of global warming; (iv) assessment of the health, social, and economic benefits of implementation of such guidelines and their impact on reducing inequalities. This paper at EPICOH will present up-to-date results of the analysis of preventive solutions and their testing.

For example, in order to ensure agricultural workers, remain healthy and productive the following steps should be followed:

1. Have a plan for how to deal with heat stress
2. Give workers training on signs and symptoms of heat strain
3. Pay attention to weather forecasts.
4. In hot weather give workers time to physiologically acclimatize
5. Reschedule physically demanding work to cool times
6. Provide short breaks every 30 min in cool areas
7. Hydration: make sure workers drink 500 ml (2 glasses) of water before the work shift starts and when the work shift end, further encouraging them to drink plenty in the evenings. Also, make sure workers have access to water throughout the day.
8. Workers should wear light, breathable, light-coloured, loose fitting clothing unless special protective clothing is needed.

07E.2 RISK FACTORS FOR HEAT STRAIN – COMPARING INDOOR AND OUTDOOR WORKERS IN THE CHANGING CLIMATE SCENARIO

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Background Predicted rise in global mean temperatures of 2°C–3°C and much larger increases in some regions due to Climate Change is expected to impact workers' health because of physiological limits due to the Wet Bulb Globe Temperature (WBGT). Such temperatures rise implies increasingly large increases in regions where outdoor and indoor work is restricted due to physiological decrements and reduced work capacity.

Aim We compare the potential health and productivity risks for indoor and outdoor workers in select Indian workplaces.

Methods The study population was a random sample of ~1300 outdoor and indoor workers from various occupations in Indian workplaces. We conducted seasonal WBGT exposures, quantitative physiological heat-strain measurements and captured self-reported health symptoms through questionnaires. The risk definition included symptoms of heat-strain, self-reported heat-illness, and reduced work capacity/productivity loss.