risk due to an interaction between disability and age (reference = age 24 and under) was greatest amongst employees age 40–44 years in the harassment model (interaction contrast (IC)=8.19%, 95% CI: 7.22%–9.13%) and 45–59 years in the discrimination model (IC=13.32%, 95% CI: 7.25%–18.34%). In the discrimination model, excess risk due to an interaction between disability and ethnicity (reference = not a visible minority) was observed for employees who identified as visible minorities (IC=4.49%, 95% CI: 1.53=7.51%) and as Aboriginal (IC=6.00%, 95% CI: 2.85%–9.21%).

Conclusion In the current Canadian labour market disabled employees experience high levels of workplace harassment and discrimination despite policy and legislation to prevent this. Additional efforts to address workplace harassment and discrimination are needed, especially for vulnerable groups.

Poster Presentation

Psychosocial

0188 TRAJECTORIES OF WELL-BEING: TIME-VARYING EFFECTS OF PSYCHOSOCIAL DETERMINANTS OF HEALTH AT WORK

^{1,2}Neto Mariana, ³Chambel Maria José, ⁴Manuel Sérgio, ²Miguel José Pereira, ²Reis Maria de Fátima. ¹Instituto Nacional de Saúde Doutor Ricardo Jorge, Lisboa, Portugal; ²ISAMB – Instituto de Saúde Ambiental. Faculdade de Medicina da Universidade de Lisboa, Lisboa, Portugal; ³Faculdade de Psicologia da Universidade de Lisboa, Lisboa, Portugal; ⁴EDP – Eletricidade de Portugal, Lisboa, Portugal

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Objective To analyse a simplified model of psychosocial work environment in order to estimate how changes over time in factors related to psychological working conditions, work-life interface and personal characteristics influence workers well-being trajectory.

Methods The simplified model, which includes working conditions (Job Demands, Job Control, Supervisor Support and Co-workers Support), Work-Family Conflict (Conflict based on Strain and Conflict based on Time) and Sense of Coherence, was examined in a three time points longitudinal survey including 1691 workers using latent growth curves models (LGCM) with time-varying effects through a structural equations modelling approach.

Results Group level individual trajectories of Time-Varying Covariates (TVC) showed that Job Demands and Time-based Conflict decreased, Co-Workers Support increased and Supervisor Support remained stable. Only Time-based Conflict and Supervisor Support showed individual workers variation across change. Job Control and Sense of Coherence individual trajectories had no acceptable fit to the data. Well-being trajectory showed a significantly increase over time and this growth was conditioned significantly by Job Demands, Time-based Conflict and Sense of Coherence in the three moments, by Job Control and Supervisor Support in two moments, but not by Co-Workers Support time-specific effects.

Conclusions Working environment factors have differentiated intervention regardless of their isolated trajectories in a dynamic compatible with a systemic mechanism of homeostatic and adaptive type, with the ability to activate resources necessary to maintain the highest possible Well-Being level.

Knowledge of this adaptive dynamics is a critical issue to the adoption of company's policies favourable to employees Well-Being and individual resources improvement.

Poster Presentation

Injuries

0189 WORK-RELATED SNAKE BITES INJURIES AMONG FARMERS IN BRAZIL

Yukari Figueroa Mise, Tatiane Costa Meira, Maria Claudia Peres Moura Luna, Vilma Sousa Santana*. Universidade Federal da Bahia, Salvador, Bahia, Brazil

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Objective To estimate annual incidence of work-related snake bites injuries, WSBI, among farmers in Brazil from 2007 to 2015.

Methods This study was carried out with data from the Information System for Notifiable Diseases and injuries, SINAN, which includes records of work-related injuries caused by poisonous animals. Population estimates are from the Brazilian Institute of Geography and Statistics, IBGE.

Results In 2007 the WSBI incidence was 5.3/100,000 and 5.2/100,000 in 2015, a reduction of –2.4% among farmers in Brazil. The highest WSBI incidence was estimated for Roraima and Espírito Santo, in 2007 (29.5/100,000 and 24.7/100,000, respectively) and 2015 (40.7/100,000 and 16.1/100,000). Over the study time, the WSBI annual incidence increased in the North (52.3%) and Northeast (14.6%). In the remaining regions there was a decrease of –66.8% (Middle West), –40.8% (Southeast) and –32.0% (South).

Conclusions There are deep regional disparities in the risk of WSBI among farmers in the country, approximately 15 million. Epidemiological data for them are scarce leaving invisible these severe, potentially disabling or fatal preventable work-related injury with simple safe shoes like rubber boots.

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Oral Presentation

Methodology

0190 OCCUPATIONAL EXPOSURE TO CRYSTALLINE SILICA AND DEATH FROM LUNG CANCER: G-ESTIMATION OF STRUCTURAL ACCELERATED FAILURE TIME MODELS

¹Sally Picciotto*, ¹Daniel M Brown, ¹Andreas M Neophytou, ³Lisa E Gallagher, ¹Ellen E Eisen, ²Harvey Checkoway, ¹Sadie Costello. ¹UC Berkeley, Berkeley, California, USA; ²UC San Diego, La Jolla, California, USA; ³Boston University, Boston, Massachusetts, USA

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Background Occupational exposure to crystalline silica has been linked to mortality risk for lung cancer. The healthy worker survivor effect may bias effect estimates downward unless special methods are used to adjust for employment status, time off work, and co-exposures. Unlike traditional regression, g-estimation adjusts correctly for such time-varying confounders.