

platform. CanPath holds data and biosamples on more than 330,000 participants from five regional cohorts representing British Columbia, Alberta, Ontario, Quebec, Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador. A sixth cohort representing Manitoba has begun recruitment and Saskatchewan is in the planning stages.

**Objectives** To examine the genetic, environmental and lifestyle factors that may influence the development of cancer and chronic disease.

**Methods** A standardized baseline questionnaire was implemented across CanPath between 2009–2015. Participants also provided biosamples including blood, saliva, urine, and toenails, and non-invasive physical measures (height, weight, hip and waist circumference, body composition, and blood pressure). Subsequently, the first follow-up questionnaire was implemented between 2016–2018. Data from supplementary questionnaires are also available from regional cohorts.

**Results** CanPath holds a harmonized dataset with 1,477 variables including demographics, history of cancer and other chronic disease, lifestyle and health behaviours, and physical measures. Variables of particular relevance to occupational health research include geographic location, sleep, job title, occupational history, work status, and work schedule. In addition, >150,000 participants provided blood and/or other biosamples.

**Conclusions** CanPath represents a powerful tool for population health research. The survey data and biosamples are available to researchers for future use to gain a more in-depth understanding of the causes and consequences related to occupational health among Canadian residents.

#### P-16 EFFECTIVENESS OF THE BRAZILIAN VERSION OF THE DANGEROUS DECIBELS PROGRAM FOR WORKERS

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**Introduction** Noise-induced hearing loss can be avoided by taking preventive measures.

**Objective** To assess the effectiveness of the Brazilian version of the Dangerous Decibels® program for noise-exposed workers, using the ecological model as an educational intervention plan.

**Method** Randomized interventional study with a quantitative, experimental trial design, conducted at a meatpacking company. The participants were divided into two groups – the first one (n=132, divided into 6 subgroups) received the Dangerous Decibels® educational intervention (DDEI) adapted to workers (REDDY et al., 2017), while the second group (n=138, divided into 5 subgroups) received a conventional educational intervention (CEI). The interventions lasted 50 minutes. The Hearing Protection Assessment Questionnaire (HPA-5) was administered before and after the interventions. The five dimensions (attitude, behavior, knowledge, supports, and barriers) were compared using the Student's t-test for paired data (<0.05).

**Results** After the DDEI training, workers improved significantly in barriers, supports, knowledge, attitudes, and behavior around noise. For knowledge, attitudes and behavior, the improvement was greater for those trained with the DDEI than the CEI.

**Conclusions** The Brazilian version of the Dangerous Decibels® program for noise-exposed workers was effective, influencing positively the factors at different levels of the ecological model.

#### P-18 SEX AND GENDER DIFFERENCES IN OCCUPATIONAL HAZARD EXPOSURES: A SCOPING REVIEW OF LITERATURE FROM THE LAST 10 YEARS

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**Introduction** Comparative research on sex and/or gender differences in occupational hazard exposures is necessary for effective work injury and illness prevention strategies that integrate individual and social context in their design, especially as women make up half of the labour force in high-income countries.

**Objective** To summarize the peer-reviewed literature on exposure differences to occupational hazards between men and women, across occupations and within the same occupation.

**Methods** A scoping review was conducted on studies from 2009 to 2019, from 8 databases. Studies were required to quantify the exposure of men and women to an occupational hazard. The analysis of hazard exposure differences within the same occupations was based on whether studies stratified or matched their results by occupation for men and women, or mentioned in the article. Studies were not limited by language or study design.

**Results** Fifty-eight studies met our inclusion criteria. Of these, 30 studies were on physical hazards, 38 studies on psychosocial hazards, 5 studies on biological hazards, and 17 studies on chemical hazards. The majority of studies reported that men were exposed to noise, vibration, radiation, physical work, biomechanical and chemical hazards; while women were exposed to wet work, bullying and discrimination, work stress, and biological agents. Within the same occupations, men were more likely to be exposed to physical hazards, with the exception of women in healthcare occupations and prolonged standing exposure. Women compared to men in the same occupations were more likely to experience harassment, while men compared to women in the same occupations reported higher stress. Men reported more exposure to hazardous chemicals in the same occupations as women.

**Conclusions** Men and women have different exposures to occupational hazards, and these differences are not solely due to the gendered distribution of the labour force by occupation. Future research is needed to explain the reasons for sex/gender inequalities and differences in exposures within the same occupations.

#### P-25 ASSESSMENT OF LIGHTING INTENSITY AT WORKSTATIONS AND INCIDENCE OF SHOULDER PAIN AMONG ELECTRONIC MANUFACTURING WORKERS

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