

### 575 USING BURDEN OF CANCER TO PROMOTE POLICY CHANGE

<sup>1,2</sup>PA Demers\*, <sup>1,3</sup>J Kim, <sup>1</sup>M Pahwa, <sup>4</sup>CE Peters, <sup>1</sup>C Song, <sup>1,2</sup>VH Arrandale, <sup>5</sup>HW Davies, <sup>6</sup>F Labrèche, <sup>6,7</sup>J Lavoue, <sup>8</sup>AM Nicol, <sup>5</sup>CB McLeod. <sup>1</sup>Occupational Cancer Research Centre, Cancer Care Ontario, Toronto, Canada; <sup>2</sup>Dalla Lana School of Public Health, University of Toronto, Toronto, Canada; <sup>3</sup>Department of Epidemiology, Biostatistics, and Occupational Health, McGill University, Montreal, Canada; <sup>4</sup>Department of Health Sciences, Carleton University, Ottawa, Canada; <sup>5</sup>School of Population and Public Health, University of British Columbia, Vancouver, Canada; <sup>6</sup>School of Public Health, Université de Montréal, Montreal, Quebec, Canada; <sup>7</sup>Centre de recherche du Centre hospitalier de l'Université de Montréal, Montreal, Quebec, Canada; <sup>8</sup>Faculty of Health Sciences, Simon Fraser University, Burnaby, Canada

10.1136/oemed-2018-ICOHabstracts.417

**Introduction** Occupational cancer is poorly recognised due to its long latency among other factors. Burden of occupational cancer projects are an effective tool for drawing attention to the magnitude of the problem and promoting prevention. We present here some major results from the Canadian Burden of Occupational Cancer project and discuss its use for prevention.

**Methods** Our methods are based on a similar UK project, with several enhancements. The historic labour force was identified using 1961 through 2001 Census data. Occupational exposure prevalence was estimated using CAREX Canada data, allowing calculation of levels of exposure for 44 carcinogens. Relative risks were based on large epidemiologic studies and meta-analyses representative of Canadian exposure circumstances. Standard methods with Levin's equation were used to calculate attributable fractions.

**Result** Exposure to solar radiation was responsible for the largest number of cancers (4550 basal and squamous cell carcinomas annually, 6.3% of all non-melanoma skin cancer). Asbestos came second with 425 mesotheliomas (80.5% of mesothelioma, including para-occupational, but not environmental, exposure), 1900 lung cancers (8.0% of lung cancer), and smaller numbers of larynx and, ovarian, and suspected other cancers. Diesel engine exhaust was responsible for 560 lung cancers (2.4% of lung cancer) and suspected for 200 bladder cancers (2.7% of bladder cancer). Crystalline silica and welding fumes were responsible for 570 and 315 lung cancers (2.4% and 1.3% of all), respectively. Shiftwork resulting in circadian disruption was suspected for between 460 and 1180 breast cancers (2.0%–5.2% of all), annually.

**Discussion** Results from the project have begun to be used by Canadian regulatory organisations to establish priorities and by advocacy organisations to raise awareness and push for policy change. These efforts and the input from burden estimates have played a role in the governmental campaign to ban asbestos, now scheduled for 2018.

### 631 OCCUPATIONAL HEALTH PROGRAM FOR MIGRANT WORKERS IN THAILAND

<sup>1</sup>S Arphorn\*, <sup>2</sup>P Khongnil, <sup>3</sup>G Bangkadanara, <sup>1</sup>T Thanachoksawang, <sup>4</sup>B Wangkahad. <sup>1</sup>Department of Occupational Health and Safety, Mahidol University, Bangkok, Thailand; <sup>2</sup>Kanchanaburi College of Agriculture and Technology, Kanchanaburi, Thailand; <sup>3</sup>School of Health Science, Sukhothai Thammathirat Open University, Nonthaburi, Thailand; <sup>4</sup>Syngenta Crop company, Bangkok, Thailand

10.1136/oemed-2018-ICOHabstracts.418

**Introduction** Migrant workers play an important role in generating productivity of Thailand presently. The employment of

these migrant workers generates social and cultural interaction. Working in agriculture is common among migrant workers especially in border areas. Thailand has an occupational health working mechanism to promote and encourage work safety especially for workers in the system. Examples of this mechanism include the work of safety officers in work safety education, improving working environment, identifying potential hazards, and health check-up based on work risks, etc. These mechanisms are not found in the informal workers, especially among agricultural migrant workers. Apart from the lack of support for occupational health knowledge, there also be communication problems. Use of language to communicate directly to migrant workers may be a problem and an obstacle, sometimes causes misunderstandings.

**Objective** The aim of this project is to develop a knowledge mechanism driven by the occupational health leader who can understand both Thai and migrant workers' language in order to provide the right and understandable knowledge by learning materials.

**Method** The researcher has developed a safety promotion model to have the occupational health leader to create work safety characteristics and behaviours as well as transfer this knowledge to migrant workers. The action research collects samples by mixed methodology, applying both qualitative and quantitative research in order to create improvement. The research uses participation technique along with conducting field experiment to test the effectiveness of tools or equipment or patterns or mechanisms developed with the target group.

**Result** Occupational health leaders can convey the knowledge of the agricultural chemicals risks, and make the migrant workers aware of potential dangers, know how to use self-protective equipment from agricultural chemicals and have better health.

### 637 ERGONOMIC RISK FACTORS, MUSCULOSKELETAL SYMPTOMS, EXERTION AND WORKLOAD AMONG PHYSIOTHERAPISTS IN A SINGLE REHABILITATION CENTRE

<sup>1</sup>Joshua Samuel Rajkumar\*, <sup>2</sup>Deepak Sharan. <sup>1</sup>Department of Orthopaedics, RECOUP Neuromusculoskeletal Rehabilitation Centre, Bangalore, India; <sup>2</sup>Research and Development, RECOUP Neuromusculoskeletal Rehabilitation Centre, Bangalore, India

10.1136/oemed-2018-ICOHabstracts.419

**Introduction** Physiotherapists (PTs) apply manual forces such a pushing, pulling and lifting, maintain hazardous postures and static loading during treatment, which predisposes them to work related musculoskeletal disorders (WRMSD). Hence, the aim of this study was to evaluate the risk factors for WRMSDs in a group of PTs working in a rehabilitation centre.

**Methods** A prospective study was conducted among 120 PTs working in a neuromusculoskeletal rehabilitation centre in an Industrially Developing Country. Musculoskeletal and neurological conditions in adult and paediatric populations were primarily treated in the centre. The PT's were evaluated with a self-reported questionnaire which included demographic data, short-form Work Style Questionnaire, Nordic Musculoskeletal Pain Questionnaire, Borg CR 10 and NASA Task Load Index. The inclusion criteria were: PTs working for a minimum of 6 months of experience in the same centre, treating a minimum