

### 1603 TO PROVIDE AN OVERVIEW OF THE WORKING GROUP ON OCCUPATIONAL INFECTIOUS AGENTS' RESEARCH AND AN OPPORTUNITY TO INITIATE GUIDANCE PRODUCTS

<sup>1</sup>Mary H Ross\*, <sup>2</sup>Claudina M Nogueira. <sup>1</sup>University of the Witwatersrand, Johannesburg, South Africa; <sup>2</sup>University of Pretoria, Pretoria, South Africa

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<sup>1</sup>Prof. Albert Nienhaus, <sup>2</sup>Prof. Robert R. Orford, <sup>3</sup>Prof. Stefano Porru, <sup>4</sup>Prof. Kari Reijula, <sup>5</sup>Prof. Thomas P. Fuller

<sup>1</sup>University Clinics Hamburg-Eppendorf (UKE), Health Services Research in Nursing (CVcare), Hamburg, Germany

<sup>2</sup>Division of Preventive, Occupational, and Aerospace Medicine, Mayo Clinic, Scottsdale, Arizona, USA

<sup>3</sup>Department of Diagnostics and Public Health, University of Verona, Verona, Italy

<sup>4</sup>Professor of Occupational Health, Helsinki University, Helsinki, Finland

<sup>5</sup>Illinois State University, Normal, Illinois, USA

### 1603a COSTING OCCUPATIONAL INFECTIONS: LESSONS FROM HEPATITIS C IN HEALTH WORKERS IN GERMANY

<sup>1</sup>A Nienhaus, <sup>2</sup>C Westermann, <sup>2</sup>M Dulon. <sup>1</sup>University Clinics Hamburg-Eppendorf (UKE), Hamburg, Germany; <sup>2</sup>Statutory Accident Insurance and Prevention in the Health and Welfare Services (BGW), Hamburg, Germany

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**Introduction** Healthcare personnel (HCP) have a risk of hepatitis C infection (HCI). Chronic HCI is associated with significant morbidity and mortality. The aim of this study is to describe the cost for occupationally-caused HCI based on data from an accident insurance carrier.

**Methods** The secondary data analysis used the database of the German Institution for Statutory Accident Insurance and Prevention in the Health and Welfare Services. The analysis is based on a sample of HCP whose HCI were registered as occupational diseases (OD) between 1996 and 2013. Incurred cost was calculated for the period between 1 January 2000 and 31 December 2014.

**Result** The number of registered ODs declined by 86% within the study period. A total of 1.121 ODs were registered. The majority was female, older than 40 years and medical nursing professionals. In the study period, the cost came to a total of € 87.9 million, of which 60% was attributable to pension payments (€ 51,570,830) and around 15% was attributable to medical treatment (€ 12,978,318). Expenses for drugs increased in 2012 (from around € 500,000–8 00 000 to € 1.7 million) and 2014 (to € 2.5 million). Pension payments came to € 1.6 million in 2000 and rose continuously to over € 4 million in 2014. Expenses for occupational rehabilitation accounted for less than 1%.

**Discussion** For HCI as an OD, an increase in cost has been observed in recent years, while the number of registered cases has declined. This rise in cost is explained by the increase in pension payments and, since 2012, by a rise in the cost for drugs. In future the high cost of anti-viral therapies is potentially compensated by treatment benefits and savings for pension payments.

### 1603b TRAVEL AND THE SPREAD OF INFECTIOUS DISEASES

RR Orford. Division of Preventive, Occupational, and Aerospace Medicine, Mayo Clinic, Scottsdale, Arizona, USA

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**Introduction** Over three billion passengers fly internationally each year, including executives, professionals and workers employed in many industries. Government and non-government organisations such as the US Centres for Disease Control (CDC), the International Civil Aviation Organisation (ICAO) and its Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA), and the World Health Organisation (WHO), working individually and together, have recommended interventions to prevent the occurrence of infectious disease outbreaks resulting from travel, particularly air travel.

**Methods** Measures recommended to prevent the spread of infectious diseases associated with travel were reviewed, and preventive interventions recommended for individual infectious diseases were assessed with respect to their effectiveness.

**Result** Public travel information and monitoring of exposed travellers are the most cost effective measures for preventing the spread of travel-related infectious diseases. Handwashing and the use of face masks may reduce transmission to others, but have limited value as protective measures for individual travellers. Entry and exit screening are commonly used and have some effectiveness, particularly with respect to alerting the public of specific infectious disease risks, but are expensive, and will miss cases in the incubation period when there are no symptoms or fever. Contact tracing may be of benefit particularly with respect to monitoring of exposed passengers, but can also be expensive, passenger manifests may be incomplete, and exposed passengers may be difficult to locate several days after arrival at their destination. Control of animals and fomites (baggage, cargo, etc.) has limited value. Travel restriction is of limited effectiveness and politically controversial. Quarantine is costly, and compliance difficult to enforce.

**Discussion** Preventive measures are used to prevent or delay the spread of infectious diseases resulting from travel, but are of variable effectiveness. Public travel information and monitoring of exposed travellers are the most effective control measures.

### 1603c IMMUNISATION POLICIES AND PRACTICES IN OCCUPATIONAL HEALTH: EVIDENCE AND OPTIONS FROM THE LITERATURE AND THE FIELD

S Porru, M Chiappin, N Sfriso. University of Verona, Verona, Italy

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**Introduction** Exposure to biological agents occurs in many workplaces. Immunisation is a safe, cost-effective intervention for Vaccine Preventable Diseases (VPD). Although updated, evidence-based vaccination policies are available for the general population, overall there are few consensus recommendations for working populations apart from health care workers (HCWs).

**Methods** To evaluate current trends and evidence-based options, we performed a literature review of main online databases from 1997 to 2017, websites of various public