among management occupations, may be due to screening. Further investigation is needed on job-specific exposures with better understanding on differences in rates across occupations.

Poster Presentation

Risk Assessment

0340 INSIGHT INTO MEASLES EPIDEMICS

²Paola Altrudo*, ²Serena Carovillano, ²Caterina Bianchi, ²Daniele Palumbo, ²Francesco Giuffrida, ²Antonella Carbone, ¹Francesco Bussu, ¹Giovanni Delogu. ¹Università Cattolica del Sacro Cuore, Rome, Italy; ²Cooperativa Operatori Sanitari Associati, Rome, Italy

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In March 2017, 8 cases of measles appear (5 nurses, 2 students, 1 doctor) in the Emergency Department of a big Italian hospital in a national context of one of the worst measles epidemics in the post-vaccination era. How can we stop quickly the epidemics? Stopping measles in ED is what we verified.

Oral Presentation

Cancer

0341 WELDING FUMES AND LUNG CANCER: A META-ANALYSIS BY IARC WORKING GROUP

¹Neela Guha*, ^{1,2}Manoj Kumar Honaryar, ³Ruth M Lunn, ⁴Danièle Luce, ⁵Wolfgang Ahrens, ⁶Leslie Stayner, ⁷Andrea 't Mannetje, ⁸Johnni Hansen, ¹Dana Loomis, ¹Nadia Vilahur. ¹International Agency for Research on Cancer (IARC), Lyon, France; ²École des hautes études en santé publique (EHESP), Paris/Rennes, France; ³National Institute of Environmental Health Sciences (NIEHS), New York, USA; ⁴National Institute of Health and Medical Research (INSERM), Guadeloupe, French Southern Territories; ⁵University of Bremen, Bremen, Germany; ⁶University of Illinois, Chicago, USA; ⁷Massey University, Palmerston North, New Zealand; ⁸Danish Cancer Society, Copenhagen, Denmark

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Background An estimated ~110 million workers are exposed to welding fumes worldwide. An IARC working group (WG) re-evaluated the carcinogenicity of welding fumes in 2017, previously classified as possibly carcinogenic to humans (Group 2B) in 1990, based on limited evidence for lung cancer in humans. The WG conducted a meta-analysis of peer-reviewed epidemiologic studies reporting a relative risk for welding (fumes) and lung cancer, accounting for confounding by exposure to asbestos and tobacco smoking.

Methodology After comprehensive searches in PubMed, Web of Science and Google Scholar databases and reference lists of relevant publications, 23 case-control and 36 cohort and nested case-control studies met our inclusion criteria. We attempted to remove overlapping populations for calculating summary-RRs.

Results The summary-RRs were 1.29 (95% CI: 1.24–1.34; $I^2=47.5\%$) for “ever” compared with “never” being a welder or being exposed to welding fumes, 1.27 (95% CI: 1.22–1.32; $I^2=44.7\%$) among cohort and nested case-control studies, 1.50 (95% CI: 1.34–1.67; $I^2=39.9\%$) for case-control studies, 1.09 (95% CI: 0.98–1.20; $I^2=23\%$) adjusted for smoking and asbestos exposure, 1.15 (95% CI: 1.02–1.28), among “shipyard welders”, 1.00 (95% CI: 0.84–1.17) among “stainless-steel welders” and 1.31 (95% CI: 1.03–1.60) among “mild steel welders”. The summary-RR was higher for “gas welders” compared to “arc welders”, but not statistically significant. Increased risks were observed over time periods, occupational settings and geographic locations support an evaluation for an increased risk of lung cancer among welders, independent of exposure to asbestos and tobacco smoking.

Poster Presentation

Psychosocial

0342 PERCEPTION OF PSYCHOSOCIAL FACTORS AT WORK ACCORDING TO AGE

Régis Colin*, Stéphanie Boini, Michel Grzebyk. INRS, Vandoeuvre-les-Nancy, France

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The objective was to explore the effects of age on the perception of psychosocial factors (PSF)

SUMER, a cross-sectional survey, was designed to characterise occupational exposures in a large representative sample of French employees. In 2010, 26 762 males and 20 019 females, aged 18 to 65, filled in the Karasek (skill discretion and decision authority, job demands, social support from colleagues and supervisors) and Siegrist (esteem, job security, job promotion) questionnaires. Additionally, participants were interviewed by occupational physicians about their work situation and occupational exposures. Graphical representations were used to characterise the PSF scores according to age. Then, breakpoints were identified using multiple change-point models. Finally, seniority, and working conditions were included as dependent factors in piecewise linear models with age, separately in men and women.

The graphical representations highlighted that perceptions were different for young and old workers compared to the middle-range age in both genders. These trends were confirmed statistically for young (breakpoint at 30 years) and for older workers (breakpoint at 55 years) mostly for the Siegrist scores. When seniority was taken into account, the effect of age on PSF scores was intensified for young newly hired (less than 3 years of experience) for the Karasek scores.

Results confirmed that young, and to a lesser extent, senior workers have different perceptions of PSF compared to middle-age group. Particularly, the effect of age was strengthened in young newly hired workers. Given the well-known impact of the PSF on health, OSH prevention should pay attention to these groups of workers.