Results Almost one in two farmers had high blood pressure (46%; n=140) and/or raised cholesterol (46%; n=140). Four in five farmers were overweight/obese based on body mass index (86%; n=267) and waist circumference (80%; n=244) measurements. The majority of farmers were found to have at least four risk factors for CVD (83%; n=255) increasing risk of a cardiac event by 3.2 times.

Discussion This prevalence of multiple risk factors for CVD among farmers is a particular cause of concern, and sheds light on the excess burden of CVD mortality among farmers in Ireland. There is an urgent need for a broader focus on health within the context of 'occupational risk' and farm policy.

Poster Presentation

Ageing Workforce

0273 TEACHERS' WELL-BEING AT WORK AND QUALITY OF LIFE: ANY DIFFERENCES ACCORDING TO YEARS OF EXPERIENCE?

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Objectives In a context of ageing workforce, this study aimed to evaluate, among teachers, differences of work and general well-being according to years of experience, and to suggest recommendations.

Methods In the population-based postal survey "Teacher's Quality of Life" (MGEN Foundation/Ministry of education), 2320 primary and secondary teachers were asked about their well-being at work (professional experience satisfaction, teaching experience evolution over the past five years, three dimensions of the Maslach Burnout Inventory) and general well-being (quality of life, perceived health, four scores of the WHOQOL-BREF questionnaire). These indicators were analysed in multivariate regression models adjusted on sociodemographic and occupational factors, according to the categories of years of experience: ≤ 5 , 6–29, ≥ 30 .

Results Compared to more experienced teachers, early-career teachers had less favourable work conditions and a lower environmental health score (-3 points 95%IC= $[(-5.1)-(-1.0)]$; $p=0.005$). Senior teachers were more likely than mid-career teachers to judge their work as becoming "more and more difficult" (OR=2.6 [2.0–3.4], $p<0.001$). They also tended to show more burnout symptomatology. They were less satisfied with their quality of life (OR=0.7 [0.5–0.9]; $p=0.009$) and their health (OR=0.7 [0.5–0.9]; $p=0.002$), especially from a physical and social relationship's point of view (-5.4 points [$(-7.1)-(-3.8)$]; $p<0.001$ and -3.0 points [$(-4.8)-(-1.3)$]; $p=0.001$ respectively).

Conclusion This study adds further evidence towards the hypothesis of a decrease in teachers' well-being at the end of their career, and supports the interest of carrying out targeted support and preventive actions. Attention should also be paid to early-career teachers who may face particularly difficult work conditions.

Poster Presentation

Ageing Workforce

0274 THE PROFILE OF INFORMAL CARERS IN A COHORT OF 50–64 YEAR-OLDS: RESULTS FROM THE HEALTH AND EMPLOYMENT AFTER FIFTY (HEAF) STUDY

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Background With increases in the UK pensionable age, people are now expected to work to older ages, but they may also have caring responsibilities which constrain their capacity to work and could affect their health. To explore the extent of the problem, we assessed the profile of unpaid carers in the HEAF study.

Methods 8134 men and women aged 50–64 were recruited from 24 English general practices. Socio-demographic, lifestyle and health characteristics were elicited by postal questionnaire, along with weekly hours giving personal care to someone in the home or family.

Results 644 (17.4%) men and 1153 (26.0%) women had caring responsibilities; of these, 93 (14%) and 199 (17%) reported caring for ≥ 20 hours/week respectively. Participants with low levels of education or social class, non-homeowners, and those struggling to manage financially were more likely to be carers. Carers of both sexes were less likely to be working and, if working, more likely to be part-time or often working shifts. Carers, and particularly those caring for ≥ 20 hours/week, reported worse health (self-rated, depression and sleep problems). Prevalence of chronic musculoskeletal pain was 32% and 44% respectively among men and women who cared ≥ 20 hours/week, in comparison with 25% and 27% amongst non-carers.

Conclusions The requirement to be a carer is common in the HEAF cohort. Those affected are less likely to be in full-time employment and more likely to be in worse health. There is a need for further research on how older workers with caring responsibilities can be better supported.

Poster Presentation

Burden of Disease

0276 PREDICTORS OF RETURN TO WORK 12 MONTHS AFTER SOLID ORGAN TRANSPLANTATION: RESULTS FROM A COHORT STUDY IN SWITZERLAND

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Background Return to work with or after a chronic disease is not a very well understood process, influenced by a variety of personal, professional, societal and medical factors. The aim of this study is to identify predictors for return to work 12 months after a solid organ transplant, applying a bio-psycho-social model.

Methods Explorative study based on patients included in the Transplant Cohort Study, a national, prospective, multicentric cohort, who underwent a first solid organ transplant (kidney, liver, heart, lung). Bio-psycho-social factors were tested and predictors of return to work identified using logistical regression models.

Results Among the 636 patients included in the study, 49.8% (317) were employed 12 months post transplant. The major predictor for returning to work 12 months post transplant was pre-transplant employment status (OR: 10.8). Accordingly, the population was stratified in employed and unemployed pre transplant groups. Age, self-perceived health (SPH, six months post-transplant) and the transplanted organ were significantly associated with post transplantation employment status in both groups. Additionally, return to work was influenced by education, depression (six month post-transplant) and waiting time in the employed pre transplant group and by invalidity pension in the unemployed pre transplant group.

Conclusion Employment rate pre transplant being highly associated with employment status post transplant, the process promoting return to work should be started well before surgery.

Poster Presentation

Respiratory

0277 SENSITIVITY AND SPECIFICITY OF OCCUPATIONAL HEALTH DOCTORS READING OF EARLY STAGE PNEUMOCONIOSIS RADIOGRAPHS

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Objective This study was aimed to find out the sensitivity and specificity in reading early stage pneumoconiosis radiographs by Occupational Health Doctors (OHDs).

Materials and method A screening test was applied. Thirty three of OHD consented to join the study. The test radiographs consisted of 67 normal and early stage pneumoconiosis films. Before testing, all participants were introduced to basic ILO reading for 65 min by 3 B-reader ILO pneumoconiosis experts. The cut-point for disease was set at profusion 0/1

and 1/0. Mean sensitivity and specificity for small opacities detection was analysed.

Results The median sensitivity of ILO profusion 0/1 or above was 88% (IQR 10.3), the median sensitivity of 1/0 cut-point film was slightly increase at 90% (IQR 10.3), while the mean specificity for ILO profusion 0/1 or above was 43.3% (SD 21.1). When stepping the cut-point to profusion 1/0, the mean specificity increased to 47.0% (SD 20.9).

Conclusion This study showed that OHDs were able to interpret chest radiographs of workers who have had early stage pneumoconiotic radiographs. Therefore, chest X-ray reading skill development for OHDs has value for the surveillance system in this country.

Poster Presentation

Disease Surveillance

0278 WORK RELATED CHARACTERISTICS OF LUNG CANCERS AMONG MALE CONSTRUCTION WORKERS: FOCUSING ON OCCUPATIONAL CANCER SURVEILLANCE DATA IN KOREA, 2011–2016

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The aim of this study is to examine occupational characteristics, hazardous work types and exposed substances in lung cancer in the construction industry by using data of occupational cancer surveillance at the national level in Korea.

From 2011 to 2016, there were 6418 patients with lung cancer were registered through the Occupational Cancer Surveillance. Among them, the F class of the Korean Standard Industrial Classification and male sex were a total of 580 patients. Work relatedness was divided into 'High' and 'Low'.

Focusing on work relatedness, 19.0% were high and 81.0% were low. There was no difference in the distribution of work relatedness and age groups ($p=0.525$) and total smoking amount ($p=0.903$) in lung cancers. There was a significant difference in the distribution of work relatedness and latency ($p=0.019$). The high prevalent 30 work types and 9 exposures high work relatedness in lung cancer. Painter of Painters (18.2%) were the most common hazardous material and job of followed by Crystalline silica in Elementary Workers (7.2%), and Crystalline silica in Stonemason (5.4%) in order.

Lung cancer occurred at younger ages in construction workers compared to non-construction workers. Smoking has no relation with the work relatedness of lung cancer. It is necessary to manage work type and risk factors that are highly related to cancer in the construction industry.