

# The influence of age on the incidence of work-related ill-health

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## Background

The population structure in the UK is ageing. Falling birth rates and increasing life expectancy have resulted in a shortage of younger workers and a worsening dependency ratio. Improved life expectancy and economic imperatives are likely to encourage those still in the Labour Market to extend their working lives and to encourage those who have left to return to work. Policy changes such as abolishing the default retirement age, increasing state pension age, legislating against age discrimination alongside falling annuity rates, end of generous final salary pensions have had an effect on halting early withdrawal from paid employment. The result is an increase in the number of older workers in paid employment with those over 50 years accounting for 30% of the total working population

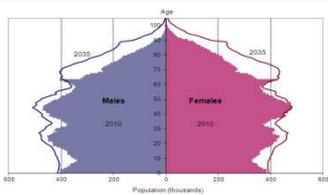


Figure 1: Estimated and projected age structure of the United Kingdom population, mid-2010 and mid-2035, ONS 2011

The relationship between ageing, work and health is complicated and many barriers need addressing. There may be perceptions that older workers are more prone to accidents, ill-health and take more sickness absence than younger workers.

## Aim

To investigate the incidence of physician reported WRIH by age categories relative to the overall age adjusted working population rates in the following main groups of disorders: mental, musculoskeletal (MSD), skin (contact dermatitis) and respiratory (asthma)

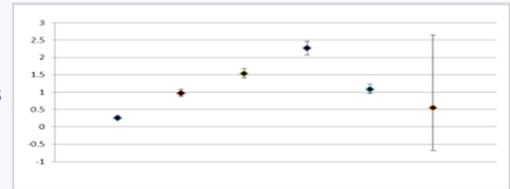
## Methods

Incident case reports of WRIH received from general practitioners (GPs) (2006-2014) and specialist physicians (dermatologists (2006-2014); chest physicians (2006-2014), rheumatologists and psychiatrists (1999-2009)) were extracted from The Health and Occupation Research network (THOR) databases. Using the Labour Force Survey data as denominator, relative incidence rate ratios (RIRRs) standardised for age and gender were calculated (with 95% CIs where applicable)

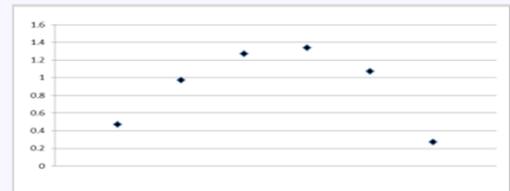
## Results

26737 actual (110183 estimated) cases of WRIH were included in the analysis. RIRRs for mental ill-health cases reported by both specialists (with 95% CIs) and GPs (Figures 2 & 3) show a similar pattern with rate ratios increasing with increasing age and peaking in the 45-54 year old age group (2.27 specialists; 1.34 GPs) then decreasing after age 55 years.

### Specialists



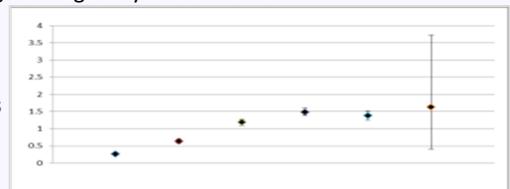
### GPs



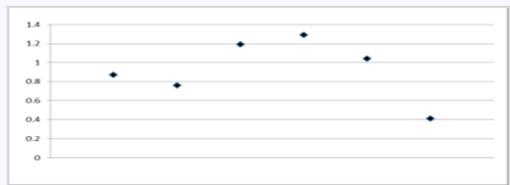
Figures 2 & 3: RIRRs by age group for WR mental ill-health reported by specialists (1999-2009) and GPs (2006-2014)

RIRRs reported by clinical specialists for MSD (Figures 4 & 5) show an increase with increasing age peaking in the oldest age category (65+), whereas RIRRs based on reports to GPs show an increase with age peaking in the 45-54 year old category but then steadily decreasing from age 55 years onwards.

### Specialists



### GPs



Figures 4 & 5: RIRRs by age group for WR MSD reported by specialists (1999-2009) and GPs (2006-2014)

GPs certified absence or presented a fit note in 52% of the cases reported to THOR-GP during 2006-2014 which accounted for 82,621 days lost (mean no. of days = 24.9). RIRRs for sickness absence increase steadily with increasing age, peaking at 45-54 year old category (1.25) and then decrease from age 55 years onwards.

## Conclusions

This study has shown that apart from MSD reports by clinical specialists, physician reported incidence of WRIH does not appear to increase with increasing age beyond 55 years. However, these data need to be interpreted with caution especially because of confounding by occupational exposure, hours worked and the healthy worker effect / survivor bias.