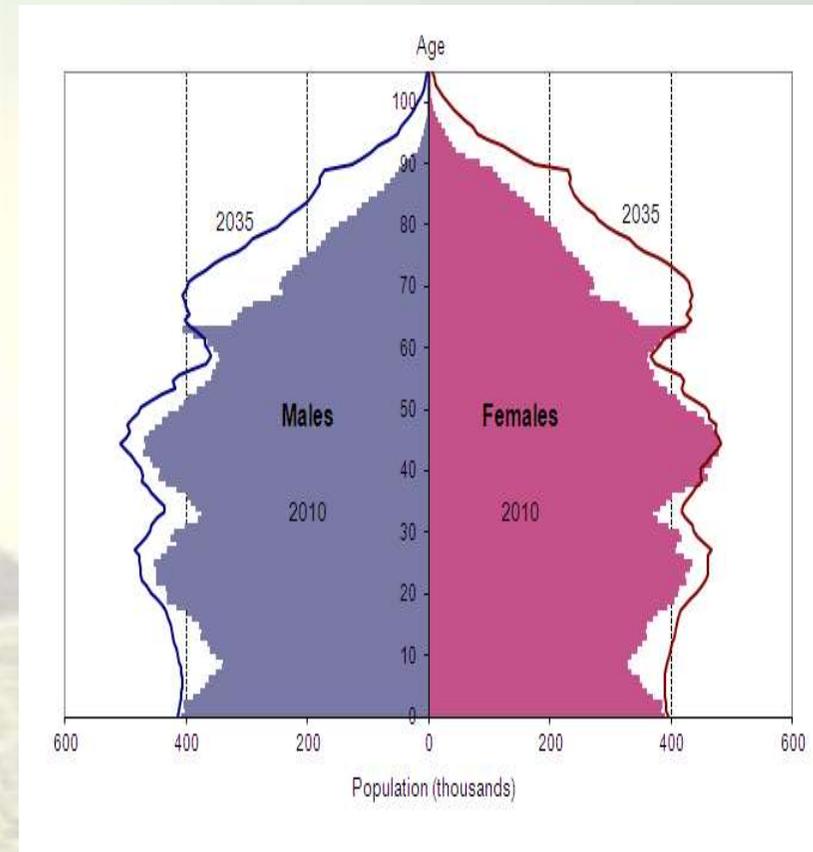


The influence of age on the incidence of work-related ill-health

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Background

- Ageing population structure
- By 2035, those aged 65+ = $\frac{1}{4}$ of total population
- Falling birth rates
- Increasing life expectancy rates
 - men 65yrs today \rightarrow 19 years
 - women 65yrs today \rightarrow 21 years
- Shortage of workers & economic imperative



Projected age structure of the UK population, mid-2010 and mid-2035, ONS 2011

- Policy response included measures – default retirement age (DRA) abolished, increasing pension age, legislating against age discrimination
- Financial problems – falling annuity rates, end of final salary pension schemes etc.

➔ Effect on early withdrawal from paid employment

➔ Extension of working lives – number of older workers in employment now is at record high (30%)

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- ‘**Good**’, ‘**safe**’ work is good for us
 - Financial, physical, social benefits of extending working lives
 - Diversity of older working population
 - ‘*Healthy survivors*’
 - ‘*Second careerists*’
 - ‘*Trapped workers*’
 - Many ‘**push**’ and ‘**pull**’ factors that impact on choice to remain in work.

- Relationship between ageing, health and work = complicated

Physical health (strength, vision, hearing, cardiovascular)

Cognitive function

Co-morbidity and ↑ number of workers needing support to remain in work



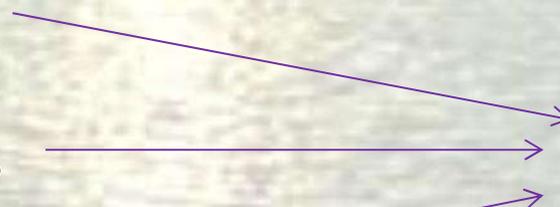
- Myths about older workers

– More ill-health

– More accidents

– More sickness absence

GAPS



Aims and Method

- To look at the incidence of work-related mental, musculoskeletal, skin and respiratory ill-health by age group.
- The Health and Occupation Research (THOR) network – UK-wide series of surveillance schemes enabling physicians (clinical systems specialists, occupational physicians (OPs) and general practitioners (GPs) to report cases of WRIH seen during their clinical practice.
- **THOR schemes –**
 - Mental – GPs and OPs
 - Musculoskeletal – GPs and OPs
 - Contact dermatitis – dermatologists
 - Asthma – chest physicians
- Relative incidence rate ratios: standardised for age and sex using UK Labour Force Survey (LFS) as denominator

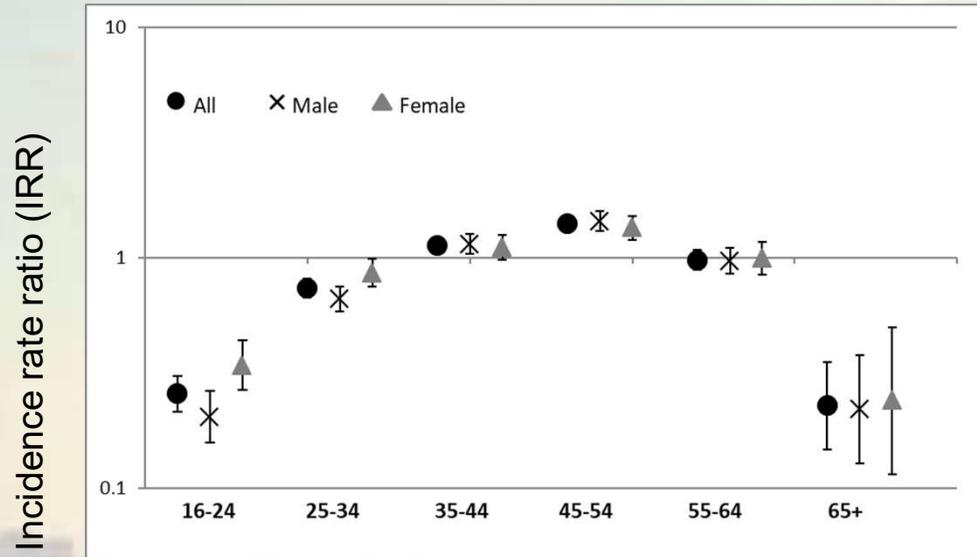
Results

- 23,677 actual cases (78,314 estimated) cases of WRIH included in analysis

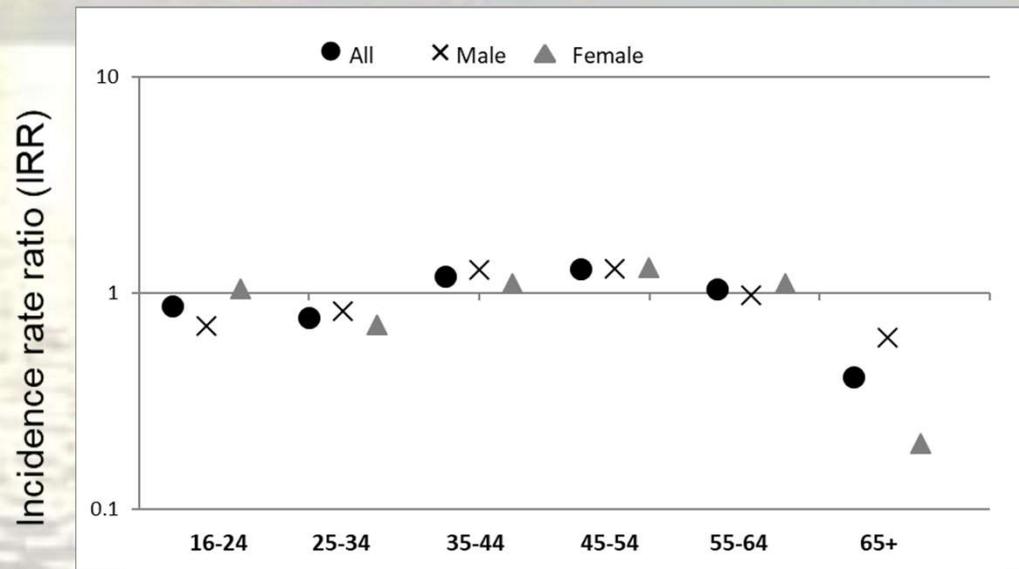
	Contact dermatitis reported by dermatologists (EPIDERM)	Asthma reported by chest physicians (SWORD)	Musculoskeletal disorders reported by occupational physicians (OPRA)	Mental ill-health reported by occupational physicians (OPRA)	Musculoskeletal disorders reported by general practitioners (THOR-GP)	Mental ill-health reported by general practitioners (THOR-GP)
Sex						
Male	2627 (39%)	917 (73%)	2180 (61%)	2633 (40%)	2046 (61%)	857 (41%)
Female	4119 (61%)	347 (27%)	1401 (39%)	3968 (60%)	1306 (39%)	1254 (59%)
Age group						
16-24	1551	62	148	187	384	149
25-34	1630	225	632	962	620	414
35-44	1396	312	1003	1874	892	607
45-54	1263	350	1154	2371	907	611
55-64	710	289	604	1142	506	310
65+	96	25	29	33	37	14
Median age (age range)	36 (16-93)	46 (17-76)	45 (16-75)	46 (17-75)	42 (16-86)	43 (17-71)
Total actual (estimated)	6761 (15759)	1264 (2661)	3583 (19973)	6606 (34458)	3352	2111

IRRs and 95% confidence intervals (where applicable) by age group for total and male / female musculoskeletal (OPRA / THOR-GP)

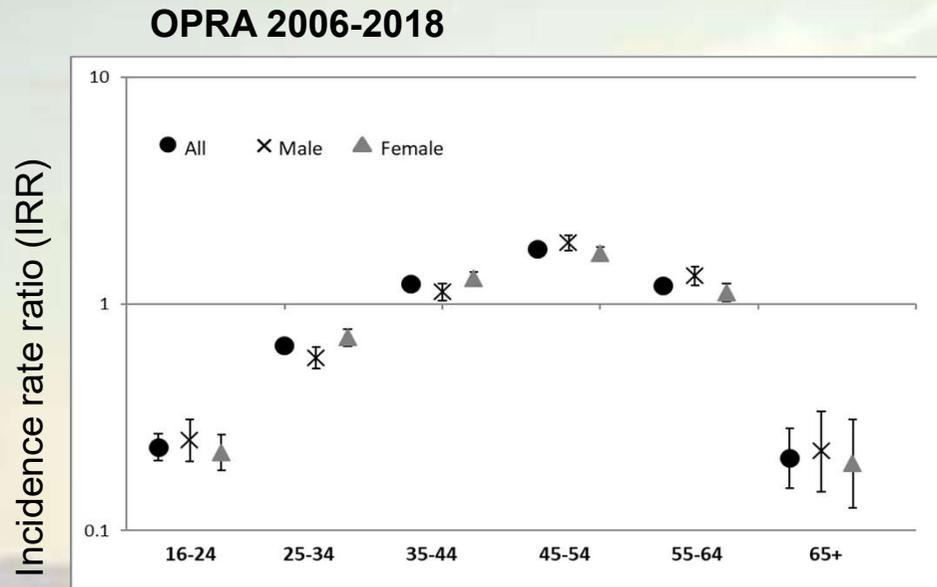
OPRA 2006-2018



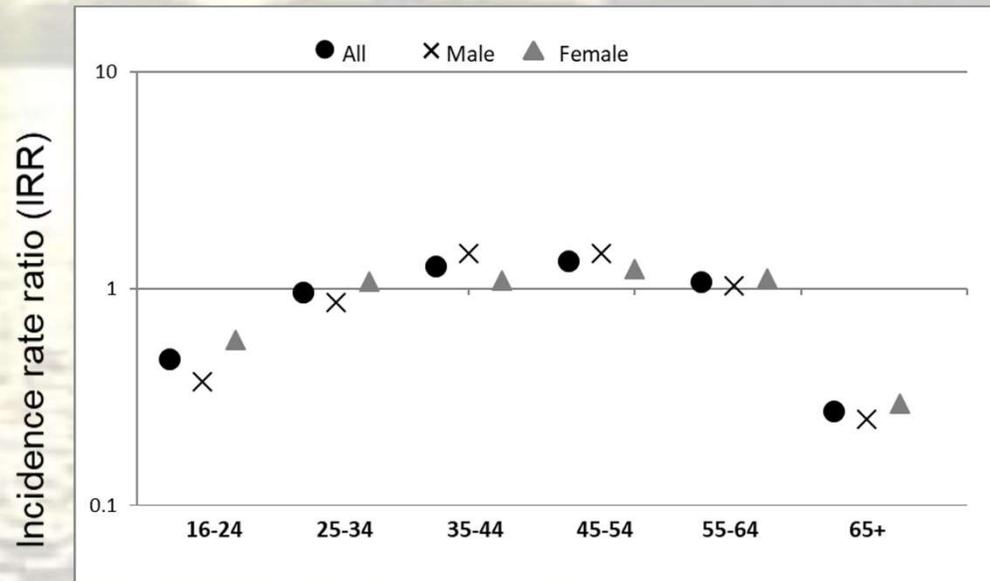
THOR-GP 2006-2018



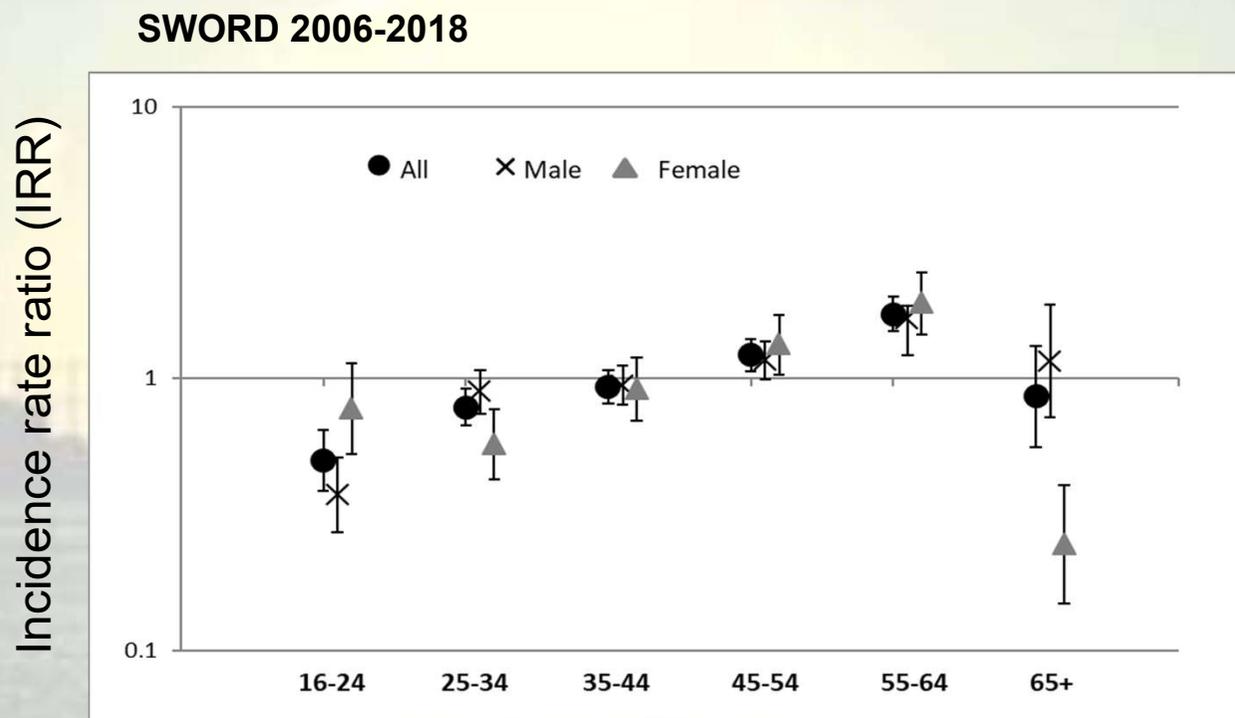
IRRs and 95% confidence intervals (where applicable) by age group for total and male / female mental ill-health (OPRA / THOR-GP)



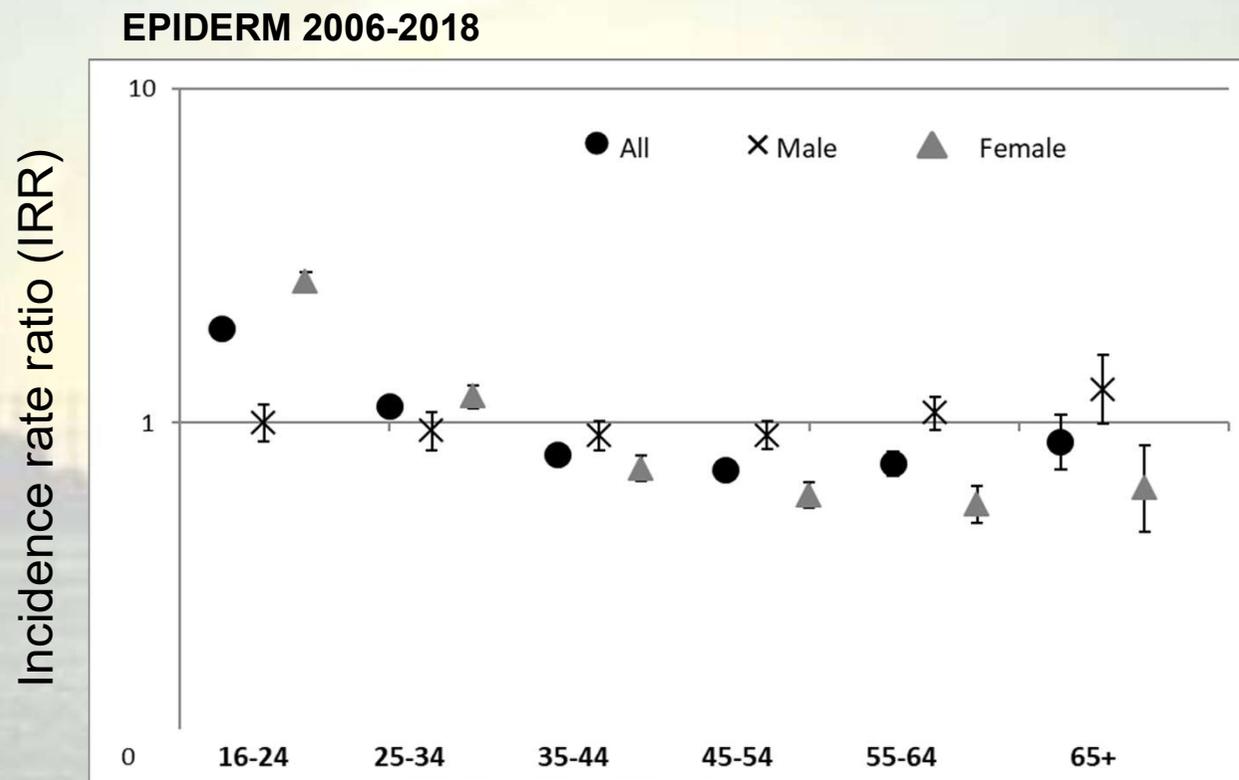
THOR-GP 2006-2018



IRR and 95% confidence intervals by age group for total and male / female occupational asthma (SWORD)



IRR and 95% confidence intervals by age group for total and male / female contact dermatitis (EPIDERM)



Other sources of data....

- HSE Self reported work-related illness:
 - Musculoskeletal highest incidence in 45-54 and 55+ categories, and both are statistically significantly higher than average across all persons
 - Mental ill-health – highest incidence in 25-34 group lowest incidence in oldest age group – statistically significantly lower than average across all persons.

Summary

- IRRs increase with age up to a certain point (mainly 45-54 age group) then decrease with increasing age, with the exception of contact dermatitis.
- Working populations = survival populations - 'Healthy worker effect'
- Exemplified by musculoskeletal results? vulnerability increases with age – declining general fitness, gradual onset of osteoarthritis etc., combined with the healthy worker effect.

Summary.....

- Patterns emerging in initial investigations, but not sure why exactly; for example asthma IRRs highest in older age group? Contact dermatitis in younger females – hairdressers / beauticians??
- Myth of higher incidence of occupational disease in older workers - often due to long latency diseases, especially respiratory?

Next steps...Changes over time... sickness absence / injury data

- Trends analysis looking at changes over time within age groups: regroup to 55+ category
- Analysis of sickness absence data: 3390 (53%) of the cases reported have data on absence from work. This accounts for 82,621 total days lost (mean number of days lost = 24.9).
- Injury data – 879 (14%) of THOR-GP cases reported as a work injury.

A photograph of a sunset over a body of water. The sun is low on the horizon, creating a bright, hazy glow and a reflection on the water. In the background, there is a silhouette of an industrial skyline with several tall chimneys or towers. The overall scene is peaceful and serene.

Questions?

Thank you