

The incidence of work-related ill-health as reported to The Health and Occupation Research (THOR) network by physicians in the Republic of Ireland between 2005 and 2016.

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MAIN MESSAGES

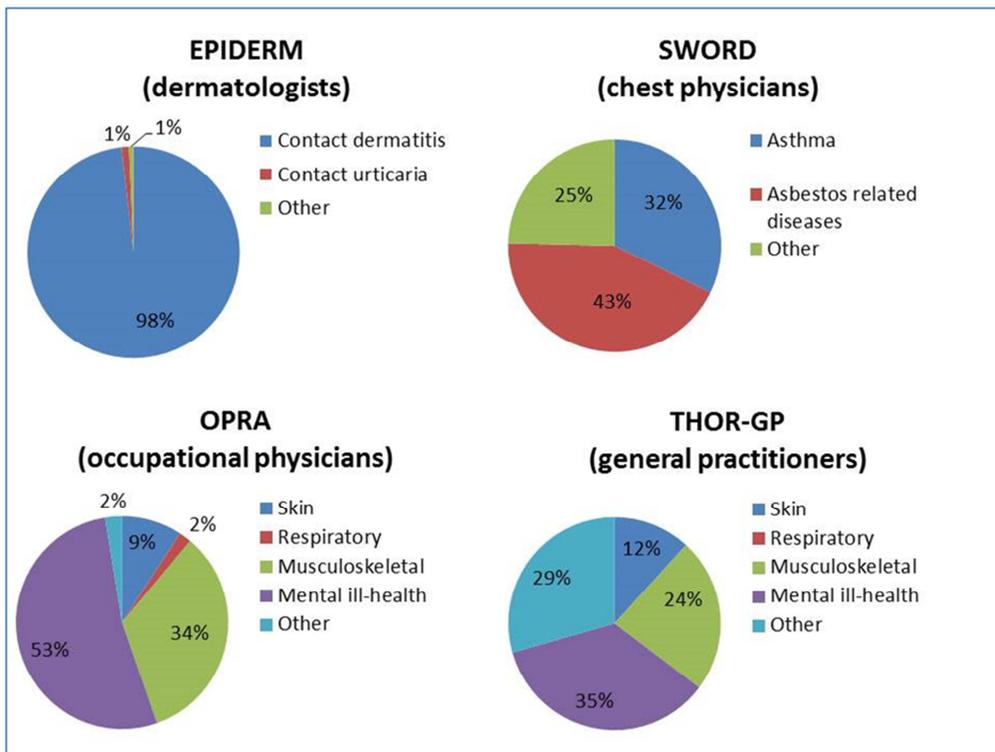
- This is the latest annual report describing reporting activity to The Health and Occupation Research network for the Republic of Ireland (ROI-THOR) including a comparison with reports to analogous THOR schemes in Northern Ireland (NI) and Great Britain (GB)
- ROI-THOR comprises 4 surveillance schemes collecting data on work-related illness (WRI) in the Republic of Ireland (ROI); ROI-SWORD (chest physicians, data collection commenced 2005), ROI-EPIDERM (dermatologists, 2005), ROI-OPRA (occupational physicians (OPs), 2007) and THOR-GP in the ROI (general practitioners (GPs), (2015)
- At present, 13 dermatologists, 12 chest physicians, 27 OPs and 22 GPs participate in ROI -THOR, reporting incident cases that they believe to have been caused or aggravated by work
- In total, 178 cases were reported in 2016 (OPs: 124, dermatologists: 24, chest physicians: 22, GPs: 8). The total ever reported (2005-2016) is 2148 (OPs:1514, dermatologists:453, chest physicians:164, GPs:17)
- OP case reports (2007-2016) were predominantly mental ill-health (53%) and musculoskeletal (34%) with smaller proportions of skin (9%), respiratory (2%) and 'other' WRI (3%). The majority (75%) of cases were reported in health and social care (mainly nurses) with a significant proportion also reported in transport (bus/train drivers) (13%)
- The breakdown of cases (by diagnostic group, industry, agents etc.) was very similar between the three geographical areas (ROI, NI and GB)
- Dermatologist case reports (2005-2016) were predominantly contact dermatitis (CD) (96%), female (54% of CD cases) with a mean age (all CD cases) of 37 years. Frequently reported industries/occupations were healthcare (nurses), manufacturing (process operatives) and hairdressing and beauty, and agents included rubber, nickel, wet work and preservatives
- The main difference between reports to EPIDERM in the ROI and the UK is that the latter contained proportionally more diagnoses of skin neoplasia
- Chest physician case reports (2005-2016) were predominantly asthma (36%), male (83%) with a mean age (all cases) of 55 years. Frequently reported industries/occupations were construction (labourers) (27%) and manufacturing (29%) with isocyanates the most frequently reported agent
- The main difference between reports to SWORD in the ROI and the UK is that the latter contained proportionately more asbestos related diagnoses
- Skin and respiratory occupational disease incidence rates were generally similar, or slightly lower in the ROI compared to NI and GB
- The 22 GPs participating in the ROI have reported 17 cases since the scheme commenced data collection in 2015; mental ill-health cases were reported most frequently (6 cases).

Summary of cases reported to ROI-THOR

Disease group	Reporting physicians	Number of cases	
		2016	2005 ^a -2016
Skin	Dermatologists	24	453
	Occupational physicians	8	140
	General practitioners	2	2
Respiratory	Chest physicians	22	164
	Occupational physicians	6	29
	General practitioners	0	0
Musculoskeletal	Occupational physicians	40	512
	General practitioners	2	4
Mental ill-health	Occupational physicians	73	805
	General practitioners	3	6
Other	Occupational physicians	1	39
	General practitioners	1	5
Total cases^b	All physicians	178	2148

^a2007 for occupational physicians; 2015 for general practitioners

^ba case may have been assigned to more than one disease group (for example, musculoskeletal and mental ill-health)



Based on total reports to each scheme

EXECUTIVE SUMMARY

BACKGROUND: Chest physicians, dermatologists, occupational physicians (OPs) and general practitioners (GPs) currently voluntarily report cases of work-related illness (WRI) to the 4 surveillance schemes which comprise The Health and Occupation Research (THOR) network, in the Republic of Ireland (ROI-THOR). This report aims to describe cases of WRI reported to ROI-THOR in the latest full calendar year (2016) and to provide a summary of reporting activity since the commencement of reporting (2005 for dermatologists and chest physicians; 2007 for OPs; 2015 for GPs), including a comparison with cases reported to analogous THOR schemes in Great Britain (GB) and Northern Ireland (NI) over the same time period.

METHODS: Participating physicians were asked to provide anonymised case reports of incident cases seen during their reporting period. Cases reported to ROI-THOR were analysed by age, gender, occupation/industry and suspected causal agent, and compared with cases reported in GB and NI over the same time period.

RESULTS: The 74 physicians enrolled in ROI-THOR in 2016 (13 dermatologists, 12 chest physicians, 27 OPs and 22 GPs) reported a total of 178 cases (191 diagnoses) during 2016. Of these, 124 cases were reported by OPs to ROI-OPRA (59% mental ill-health, 32% musculoskeletal, 6% skin, 5% respiratory and 1% 'other' WRI), 24 were reported by dermatologists to ROI-EPIDERM (all contact dermatitis (CD)), 2 with a co-diagnosis of 'other' skin, 22 were reported by chest physicians to ROI-SWORD (41% occupational asthma, 23% non-malignant pleural disease, 14% each for bronchitis/emphysema, mesothelioma and pneumoconiosis, and 9% 'other' respiratory disease, and 8 cases of WRIH were reported by GPs to ROI-THOR-GP

(3 mental ill-health, 2 musculoskeletal, 2 skin and 1 'other' WRI). This brings the total cases ever reported (2005-2016) to 2148 case reports (dermatologists: 453, chest physicians: 164, OPs: 1514, GPs: 17 case reports).

Cases reported to ROI-EPIDERM (2005-2016) were predominantly CD (96%), female (54% of CD cases), with a mean age (all CD cases) of 37 years (age range: 15-81 years). Cases reported by dermatologists in NI and GB were also predominantly CD (but proportionally more neoplasia was also reported) with a similar age/gender mix. In all three geographical areas, the most frequently reported industries were health and social care (23% of ROI cases), manufacturing (24% of ROI cases) and other service activities (which includes hairdressers and beauticians) (15% of ROI cases) with related occupations being nurses (13% of ROI cases), chemical and related process operatives (9% of ROI cases) and hairdressers (8% of ROI cases). Rubber chemicals and materials, nickel, wet work and preservatives were the most frequently reported agents for CD in the ROI. Rubber and wet work, along with soaps and detergents, were also the most frequently reported agents for CD cases reported in GB and NI.

Respiratory cases reported to ROI-SWORD (2005-2016) were predominantly asthma (36%), whilst for GB and NI the highest proportion was benign pleural plaques (NI 36%, GB 42%), attributable to asbestos exposure. Other diagnoses to ROI-SWORD included 33 diagnoses of benign pleural plaques, 31 diagnoses of pneumoconiosis, 15 diagnoses of bronchitis/emphysema and 13 diagnoses of inhalation accidents, with a further 1 or more diagnoses reported in each of the remaining SWORD reporting categories. Respiratory cases reported in the ROI were predominantly male (83%), and had a mean age of 55 years (age range 19 - 85).

Cases of asthma in ROI had a mean age of 45 years, compared to 55 years in NI and 45 years in GB. The two industrial sectors from which cases were most frequently reported by chest physicians to SWORD (ROI, GB and NI) were construction and manufacturing, with related occupations being labouring in building and woodworking trades and coal mine operatives (ROI) and carpenters and joiners (NI and GB). The 59 diagnoses of asthma in ROI were associated with 83 different agents, with isocyanates being the most frequently reported. For comparison, the most frequently reported agent for asthma in GB was also isocyanates followed by flour.

Incidence rates based on reports from dermatologists and chest physicians suggested that overall, absolute skin and respiratory occupational disease incidence was generally similar, or slightly lower in the ROI compared to NI and GB.

Reports from OPs to ROI-OPRA (2007-2016) were predominantly mental ill-health (53%) followed by musculoskeletal (34%), skin (9%), 'other' (3%) which included lead toxicity and ethanol sensitivity, and respiratory (2%). A similar diagnostic breakdown was seen for cases reported in GB and NI. Cases reported to ROI-OPRA were predominantly female (68%) with a mean age (total cases) of 43 years (age range 19-69). A similar age/gender mix was seen in NI and GB. The most frequently reported industry and occupation for ROI was the health and social care sector (75%) and nurses (23%). Cases in GB and NI were also frequently reported in the health and social care sector (although some industry sectors, such as health and social care, have better provision of occupational health services compared to others and therefore proportionally more cases might be expected). For all three geographical areas, mental ill-health case reports were most frequently attributed to

'factors intrinsic to the job' which included 'workload', 'travel', and 'organisational factors' and to 'interpersonal relationships'. Commonly reported tasks and movements associated with the musculoskeletal disorders were 'lifting/carrying/pushing/pulling', 'accidents' and 'materials handling'. Information provided by OPs in OPRA regarding the length of time between onset of symptoms and consultation with an OP shows a similar pattern for both the ROI and GB with most cases reported within 1 to 3 months after onset of symptoms.

General practitioners reported 18 cases of WRIH since the scheme commenced data collection in 2015: 6/18 (33%) mental ill-health, 5/18 (28%) 'other' WRIH, 4/18 (22%) musculoskeletal disorders and 2/18 (11%) skin disease. A similar diagnostic breakdown was seen for cases reported in GB and NI.

CONCLUSION: ROI-THOR continues to provide the best overall source of data relating to medically attributed occupational disease incidence in the ROI with nearly 2150 cases reported since the inception of the schemes. It is hoped that with increased enrolment/participation in THOR-GP (and the other ROI schemes), aided by steps such as the introduction of free Continuing Professional Development (CPD) resources, notably Electronic Experiential Learning, Audit and Benchmarking (EELAB) and the promotion of THOR in the ROI, case numbers will increase, enabling both continued comparisons with UK data and analyses by the various determinants of risk e.g. causal agent, precipitating event (mental ill-health) and task/movement (musculoskeletal), thus providing useful information for the HSA and ROI.