

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 2019.

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MAIN MESSAGES

- This is the latest annual report summarising results from The Health and Occupation Research network in the Republic of Ireland (THOR-ROI).
- THOR-ROI comprises 4 surveillance schemes collecting data on incident cases of work-related illness (WRI) in the Republic of Ireland (ROI); SWORD-ROI (chest physicians), EPIDERM-ROI (dermatologists), OPRA-ROI (occupational physicians - OPs) and THOR-GP-ROI (general practitioners - GPs).
- At present, 26 occupational physicians, 20 general practitioners, 13 dermatologists and 10 chest physicians participate in THOR-ROI.
- In total, 110 cases were reported in 2019 (OPs: 80, dermatologists: 14, chest physicians: 13, and GPs: 3). Total reported incident case between 2005 and 2019 is 2669 (OPs: 1898, dermatologists: 511, chest physicians: 225, GPs: 35, excluding one historic chest physician report as being domestic hence non-occupational exposure).
- OP case reports (2007-2019) were predominantly mental ill-health (53%) and musculoskeletal (34%) with smaller proportions of skin (9%), respiratory (2%) and 'other' WRI (3%). The majority (76%) of cases were reported in health and social care (mainly nurses) with a significant proportion also reported in transport (bus/train drivers) (12%).
- Dermatologist case reports (2005-2019) were predominantly contact dermatitis (CD) (96%), female (56% 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.
- Chest physician case reports (2005-2019) were predominantly asthma (34%), male (84%) with a mean age (all cases) of 57 years. Frequently reported industries/occupations were construction (labourers) and manufacturing, with cement/plaster/masonry dust the most frequently reported agent.
- The 20 GPs participating in THOR-GP-ROI have reported 35 cases since the scheme commenced data collection in 2015; musculoskeletal cases were reported most frequently (15 cases).
- Analysis of trends in incidence rates (based on reports to OPRA-ROI) suggest an overall decrease in incidence of total WRI of approximately 4% per year.

Summary of cases reported to THOR-ROI

Disease group	Reporting physicians	Number of cases		
		2019	2005 ^a -2019	
Skin	Dermatologists	14	511	19%
	Occupational physicians	2	166	6%
	General practitioners	0	5	<1%
Respiratory	Chest physicians	13	225 ^b	8%
	Occupational physicians	1	37	1%
	General practitioners	0	0	
Musculoskeletal	Occupational physicians	31	643	24%
	General practitioners	3	15	1%
Mental ill-health	Occupational physicians	45	1012	38%
	General practitioners	0	8	<1%
Other	Occupational physicians	2	56	2%
	General practitioners	0	7	<1%
Total cases^c	All physicians	110	2669	

^a 2007 for occupational physicians; 2015 for general practitioners

^b one historic domestic (non-occupational) exposure case has been excluded

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

EXECUTIVE SUMMARY

BACKGROUND: Chest physicians, dermatologists, occupational physicians (OPs) and general practitioners (GPs) 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 (THOR-ROI). This report describes the cases of WRI reported to THOR-ROI in the latest full calendar year (2019) and provides a summary of reporting activity since the commencement of reporting (2005 for dermatologists and chest physicians; 2007 for OPs; 2015 for GPs).

METHODS: Participating physicians were asked to provide anonymised case reports of incident cases seen during their reporting period. Ongoing recruitment of physicians to the schemes is facilitated by the scheme's champions and relevant societies with the ROI. Cases reported to THOR-ROI were analysed by age, sex, occupation/industry, suspected causal agent and symptom onset. Incidence rates and trends in incidence rates were estimated for selected reporter groups/diagnoses, using a 'multi-level' statistical model to investigate the relative incidence of reported cases over time whilst taking into account other factors that might influence the trend (such as the number of physicians reporting and the number of people employed).

RESULTS: The 69 physicians enrolled in THOR-ROI in 2019 (26 OPs, 20 GPs, 13 dermatologists and 10 chest physicians) reported a total of 110 cases (119 diagnoses) during 2019. Of these, 80 cases were reported by OPs to OPRA-ROI, 13 were reported by chest physicians to SWORD-ROI, 14 were reported by dermatologists to EPIDERM-ROI, and 3 cases of WRI were reported by GPs. This brings the total cases ever reported (2005-2019) to 2669 case reports (dermatologists: 511, chest physicians: 225, OPs: 1898, GPs: 35 case reports, with one respiratory case caused

by domestic/non-occupational exposure excluded). Analysis of trends in incidence rates (based on reports to OPRA-ROI) suggest an overall decrease in incidence of total WRI of approximately 4% per year.

CONCLUSION: THOR-ROI continues to provide the best overall source of data relating to medically attributed occupational disease incidence in the ROI, with 2669 cases reported since the inception of the schemes. Results suggest that the incidence of total WRI appears to be declining, although in most recent years this trends appears to be plateauing. With continued funding and increased enrolment and participation in the schemes, and the promotion of THOR in the ROI, case numbers will increase year on year. This would enable further more detailed analyses of data by the various determinants of risk e.g. causal agent, precipitating event (mental ill-health) and task/movement (musculoskeletal).