

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 2021.

Annual Report

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Dr Ireny Y.K. Iskandar, Dr Sarah Daniels, Ms. Laura Byrne, Dr Melanie Carder & Prof Martie van Tongeren

Centre for Occupational and Environmental Health

The University of Manchester

MAIN MESSAGES

- This is the latest annual report, including data collected during 2021, summarising results from The Health and Occupation Research network in the Republic of Ireland (THOR-ROI).
- THOR-ROI comprises of four surveillance schemes collecting data on incident cases of work-related illness (WRI) in the Republic of Ireland; SWORD-ROI (chest physicians), EPIDERM-ROI (dermatologists), OPRA-ROI (occupational physicians - OPs) and THOR-GP-ROI (general practitioners - GPs).
- The COVID-19 pandemic crisis and the interruptions it caused made 2020 and 2021 challenging years. Following the relaxation of the lockdown in 2020 there was an increase in THOR-ROI reporter activity, though case numbers remained slightly below normal.
- In 2021, 27 occupational physicians, 20 general practitioners, 12 dermatologists and 9 chest physicians participated in THOR-ROI.
- A total of 100 cases were reported in 2021 (OPs: 60, dermatologists: 23, chest physicians: 17, and GPs: 0). In total, the number of reported incident cases between 2005 and 2021 is 2867 (OPs: 1998, dermatologists: 557, chest physicians: 274, GPs: 38).
- Dermatologist reported (2005-2021) predominantly contact dermatitis (CD) cases (98%), with majority of all reported cases reports being female (56% of CD cases) and a mean age (all CD cases) of 37 years. Frequently reported industries/occupations were manufacturing (process operatives), healthcare (nurses), and personal service occupations (hairdressers and beauty therapist). Most frequently reported agents were rubber, wet work, preservatives, and nickel.
- Asthma was the largest category of cases reported by chest physician (2005-2021) (33%). The majority of all reported cases reports was male (84%), and the mean age (all cases) was 57 years. Frequently reported industries/occupations were construction (labourers) and manufacturing, with isocyanates, ill-defined fumes/gases and cement/plaster/masonry dust being the most frequently reported agents.
- OP case reports (2007-2021) were predominantly mental ill-health (53%) and musculoskeletal (33%) with smaller proportions of skin (8%), respiratory (2%) and 'other' WRI (4%). The majority (77%) of cases were reported in health and social care (mainly nurses and nurse auxiliaries) with a significant proportion also reported in transport (bus drivers) (11%).
- The 20 GPs participating in THOR-GP-ROI have reported 38 cases since the scheme commenced data collection in 2015; musculoskeletal cases were reported most frequently (17 cases).
- A total of 33 case reports attributed to SARS-CoV-2 virus have been reported by OPs and GPs to THOR-ROI between 2020 and 2021, with majority of the cases having a diagnosis of long-covid (53%), followed by post-covid (29%) or active covid-19 infection (18%). All cases worked in the health and social care industrial sector, with nurses (45%) and nurse auxiliaries (21%) being the most frequently reported occupations. However, these results should be interpreted with caution as some industry sectors such as health and social care may have better provision of occupational health services than other industry sectors.
- Trend analysis in the number of OPRA-ROI case reports suggests an overall decrease in the number of case reports of total WRI of approximately 5% per year between 2007 and 2021. No trends analyses were conducted based on the other reporting schemes.

SUMMARY OF CASES REPORTED TO THOR-ROI

Disease group	Reporting physicians	Number of cases		
		2021 (n)	2005 ^a -2021 (n)	(%)
Skin	Dermatologists	23	557	19%
	Occupational physicians	4	174	6%
	General practitioners	0	5	<1%
Respiratory	Chest physicians	17	274	10%
	Occupational physicians	10	48	2%
	General practitioners	0	1	<1%
Musculoskeletal	Occupational physicians	16	679	24%
	General practitioners	0	17	<1%
Mental ill-health	Occupational physicians	14	1039	36%
	General practitioners	0	8	<1%
Other	Occupational physicians	23	83	3%
	General practitioners	0	7	<1%
Total cases ^{b, c}	All physicians	100	2867	

ⁿ Number of cases; % Proportion of cases from the total number of cases reported between 2005 and 2021.

^a 2007 for occupational physicians; 2015 for general practitioners

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

^c Totals may have increased from previous reporting due to the submission of late cases.

EXECUTIVE SUMMARY

BACKGROUND: Chest physicians, dermatologists, occupational physicians (OPs) and general practitioners (GPs) voluntarily report cases of work-related illness (WRI) to the four 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 (2021) and provides a summary of results based on all case reports since the commencement of the different schemes (2005 for dermatologists and chest physicians; 2007 for OPs; 2015 for GPs).

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

RESULTS: The 68 physicians enrolled in THOR-ROI in 2021 (27 OPs, 20 GPs, 12 dermatologists and 9 chest physicians) reported 100 cases (116 diagnoses). In comparison, 109 (121 diagnoses) and 93 (103 diagnoses) cases were reported in 2019 and 2020, respectively. The slight decrease in reporting in 2020 and 2021 is probably largely due to the COVID-19 pandemic crisis and the interruptions that it caused. Of the 100 cases reported to THOR-ROI in 2021, 60 cases were reported by OPs, 17 were reported by chest physicians, and 23 were reported by dermatologists. GPs reported no cases to THOR-GP ROI in 2021. This brings the total number of cases reported between 2005 and 2021 to 2867 (dermatologists: 557, chest physicians: 274, OPs: 1998, GPs: 38

case reports). Trend analysis in the number of case reports (based on reports to OPRA-ROI) suggest an overall decrease in the number of case reports of total WRI of approximately 5% per year between 2007 and 2021.

CONCLUSION: THOR-ROI continues to provide the best overall source of data relating to medically attributed occupational disease incidence in the ROI, with 2867 cases reported since the inception of the schemes. The COVID-19 pandemic crisis and the interruptions it caused made 2020 and 2021 challenging years. Nevertheless, following the relaxation of the lockdown in 2020 there was an increase in THOR-ROI reporter activity, though case numbers remained slightly below normal. 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 detailed analyses of data by the various determinants of risk e.g., causal agent, precipitating event (mental ill-health) and task/movement (musculoskeletal).