

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 2020.

**Annual Report
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**Dr Ireny Y.K. Iskandar, Dr Sarah Daniels, Ms. Laura Byrne, Ms. Kimberly Fowler,
Dr Melanie Carder, Dr Martin Seed & Prof Martie van Tongeren**

MAIN MESSAGES

- This is the latest annual report, including data collected during 2020, 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).
- In 2020, 27 occupational physicians, 20 general practitioners, 12 dermatologists and 9 chest physicians participate in THOR-ROI.
- A total of 93 cases were reported in 2020 (OPs: 40, dermatologists: 23, chest physicians: 27, and GPs: 3). In total, the number of reported incident cases between 2005 and 2020 is 2761 (OPs: 1938, dermatologists: 534, chest physicians: 251, GPs: 38).
- Dermatologist reported (2005-2020) 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 healthcare (nurses), personal service occupations (hairdressers and beauty therapist) and manufacturing (process operatives). Most frequently reported agents were rubber, wet work, nickel and preservatives.
- Asthma was the largest category of cases reported by chest physician (2005-2020) (38%). The majority of all reported cases reports was male (85%) and the mean age (all cases) was 57 years. Frequently reported industries/occupations were construction (labourers) and manufacturing, with isocyanates and cement/plaster/masonry dust being the most frequently reported agents.
- OP case reports (2007-2020) were predominantly mental ill-health (54%) and musculoskeletal (33%) with smaller proportions of skin (8%), respiratory (2%) and 'other' WRI (3%). The majority (77%) of cases were reported in health and social care (mainly nurses) with a significant proportion also reported in transport (bus/train drivers) (12%).
- 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).
- 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 2020. 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		
		2020	2005 ^a -2020	
Skin	Dermatologists	23	534	19%
	Occupational physicians	4	170	6%
	General practitioners	0	5	<1%
Respiratory	Chest physicians	27	251	9%
	Occupational physicians	1	38	1%
	General practitioners	1	1	<1%
Musculoskeletal	Occupational physicians	20	663	24%
	General practitioners	2	17	<1%
Mental ill-health	Occupational physicians	13	1025	37%
	General practitioners	0	8	<1%
Other	Occupational physicians	4	60	2%
	General practitioners	0	7	<1%
Total cases^b	All physicians	93	2761	

^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)

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 (2020) 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 physicians reporting and the number of people employed).

RESULTS: The 68 physicians enrolled in THOR-ROI in 2020 (27 OPs, 20 GPs, 12 dermatologists and 9 chest physicians) reported 93 cases (103 diagnoses). Of these, 40 cases were reported by OPs, 27 were reported by chest physicians, 23 were reported by dermatologists, and three cases of WRI were reported by GPs. This brings the total number of cases reported between 2005 and 2020 to 2761 (dermatologists: 534, chest physicians: 251, OPs: 1938, 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 2020.

CONCLUSION: THOR-ROI continues to provide the best overall source of data relating to medically attributed occupational disease incidence in the ROI, with 2761 cases reported since the inception of the schemes. 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).