THOR

The Health and Occupation Research network

(Incorporating specialists' and THOR-GP reports)

http://www.population-health.manchester.ac.uk/epidemiology/COEH/research/thor/
Or
http://www.coeh.man.ac.uk/thor

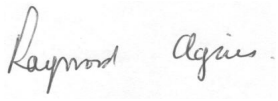
Dear colleague,

The latest quarterly data collection arising from THOR is summarised in the report which follows. My colleagues and I are grateful for your continuing input which underpins this work. One of the features of the THOR programme over the last decade is that it has also been addressing sickness absence and rehabilitation back to work. A special feature about this appears in this report. Please let us know by emailing Annemarie.money@manchester.ac.uk whether you feel that this is a useful and informative addendum, and share any suggestions you may have with us.

Please remember that your participation in THOR entitles you access to the free accredited CPD resource entitled EELAB (Electronic Experiential Learning, Audit and Benchmarking) that is available through your THOR portal. This was originally designed for GPs but has now been extended to occupational physicians. EELAB may also be of interest to other specialties, notably respiratory physicians and dermatologists, and we hope that specific adaptation for these groups will start in due course.

I close with my best wishes for the festive season and for 2017, and look forward to emailing you again in three months' time. In the meantime if you have any queries or comments please do not hesitate to contact Annemarie.money@manchester.ac.uk

Kind regards



Raymond Agius
Professor of Occupational and Environmental Medicine

QUARTERLY REPORT December 2016

This THOR (including THOR-GP) combined quarterly report summarises the cases reported in the quarter July to September 2016. It includes a special feature on the fit note and fitness for work.

If you have any comments regarding the type of information you would like to see included (or not) in future reports, or suggestions as to how we could improve the reports then please contact THOR's Manager, Dr Melanie Carder at melanie.carder@manchester.ac.uk or phone 0161 275 5636. We are pleased to hear from you.

CASE REPORTS: July to Sept 2016

Over 1100 physicians currently participate in the THOR schemes (as of Sept 2016). Physicians can report either on a core (reporting each month) or a sample (reporting for one randomly selected month each year) basis. A total of 318 actual, 1371 (estimated) cases were reported during this period, with estimated cases being those reported by sample reporters multiplied by 12 and added to the core cases.

The actual and estimated number of cases by major category and diagnostic group, for clinical specialists (chest physicians, dermatologists, occupational physicians (OPs) and general practitioners (GPs)) are shown in Table 1 (NB. only actual cases are provided for THOR-GP; since methods for calculating estimated totals based on GP reports are under further development).

Table 1 Actual and estimated cases by major category and diagnostic group, July to Sept 2016

CATEGORY	DIAGNOSTIC GROUP	CLINICAL SPECIALISTS			OCCUPATIONAL PHYSICIANS			GENERAL PRACTITIONERS	
		Actual diagnoses	Estimated diagnoses	%	Actual diagnoses	Estimated diagnoses	%	Actual diagnoses	%
RESPIRATORY DISEASE	Asthma	22	33	*11*	1	1	*8*	0	0
	ascribed to sensitisation	*22*	*33*	-	-	-	-	-	-
	ascribed to irritation/RADS	-	-	-	-	-	-	-	-
	Unspecified	-	-	-	-	-	-	-	-
	Inhalation accidents	0	0	*0*	0	0	*0*	0	0
	Allergic alveolitis	0	0	*0*	0	0	*0*	0	0
	Bronchitis/emphysema	0	0	*0*	0	0	*0*	0	0
	Infectious disease	1	12	*4*	0	0	*0*	0	0
	Non-malignant pleural disease	31	86	*30*	0	0	*0*	0	0
	predominantly plaques	*23*	*56*	-	-	-	-	-	-
	predominantly diffuse	*8*	*30*	-	-	-	-	-	-
	Unspecified/other	*1*	*1*	-	-	-	-	-	-
	Mesothelioma	11	77	*26*	0	0	*0*	0	0
	Lung cancer	3	25	*9*	0	0	*0*	0	0
	Pneumoconiosis	25	58	*20*	0	0	*0*	0	0
	Other	7	7	*2*	1	12	*92*	0	0
	Total diagnoses	**100**	**298**		**2**	**13**		**0**	
	Total cases	**93**	**291**	***100***	**2**	**13**	***100***	**0**	**0**

As more than one diagnosis may be reported the sum of percentages and total cases in each diagnostic category may be greater than 100%

CATEGORY	DIAGNOSTIC GROUP	CLINICAL SPECIALISTS			OCCUPATIONAL PHYSICIANS			GENERAL PRACTITIONERS	
		Actual diagnoses	Estimated diagnoses	%	Actual diagnoses	Estimated diagnoses	%	Actual diagnoses	%
SKIN	Contact dermatitis	66	165	*49*	1	1	*100*	1	*100*
	Allergic	*30*	*96*	-	-	-	-	-	-
	Irritant	*23*	*45*	-	-	-	-	-	-
	Allergic and irritant	*13*	*24*	-	-	-	-	-	-
	Unspecified	0	0	-	-	-	-	-	-
	Contact urticaria	3	14	*4*	0	0	*0*	0	*0*
	Folliculitis/acne	0	0	*0*	0	0	*0*	0	*0*
	Infective	0	0	*0*	0	0	*0*	0	*0*
	Mechanical	0	0	*0*	0	0	*0*	0	*0*
	Nail	1	12	*4*	0	0	*0*	0	*0*
	Neoplasia	17	160	*47*	0	0	*0*	0	*0*
	Other	0	0	*0*	0	0	*0*	0	*0*
	Total diagnoses	**87**	**351**		**1**	**1**			
	Total cases	**85**	**338**	***100***	**1**	**1**	***100***	**1**	***100***
MUSCULOSKELETAL	Hand/wrist/arm	**No case reports from clinical specialists**			15	103	*38*	3	*18*
	Elbow				3	25	*9*	6	*35*
	Shoulder				7	18	*7*	1	*6*
	Neck/thoracic spine				3	36	*13*	0	*0*
	Lumbar spine/trunk				10	98	*36*	5	*29*
	Hip/knee				1	12	*4*	3	*18*
	Ankle/foot				2	2	*1*	2	*12*
	Other				0	0	*0*	0	*0*
	Total diagnoses				**41**	**294**		**20**	
	Total cases				**38**	**269**	***100***	**17**	***100***

As more than one diagnosis may be reported the sum of percentages and total cases in each diagnostic category may be greater than 100%

CATEGORY	DIAGNOSTIC GROUP	CLINICAL SPECIALISTS			OCCUPATIONAL PHYSICIANS			GENERAL PRACTITIONERS	
		Actual diagnoses	**Estimated diagnoses**	***%***	**Actual diagnoses**	**Estimated diagnoses**	***%***	**Actual diagnoses**	***%***
MENTAL ILL-HEALTH	Anxiety/depression	**No case reports from clinical specialists**			38	357	*82*	8	*50*
	Post-traumatic stress disorder				7	73	*17*	0	*0*
	Other work-related stress				28	160	*37*	7	*44*
	Alcohol or drug abuse				0	0	*0*	0	*0*
	Psychotic episode				0	0	*0*	0	*0*
	Other				4	4	*1*	1	*6*
	Total diagnoses				**77**	**594**		**20**	
	Total cases				**61**	**435**	***100***	**16**	***100***

As more than one diagnosis may be reported the sum of percentages and total cases in each diagnostic category may be greater than 100%

Other cases

In addition to the main diagnostic categories described in Table 1, OPs and GPs can report 'other' diagnoses of work-related ill-health (WRIH).

OPs reported three 'other' cases this quarter, one diagnosed as noise induced hearing loss in a serviceman attributed to machine gun fire; another diagnosed as regional pain syndrome in a police officer attributed to work-related trauma; and a case reported with tight chest and palpitations (co-diagnosis of social anxiety) in a local authority worker attributed to work-related tasks.

GPs reported five 'other' work-related cases this quarter, two were reports of audiological disorders diagnosed as otitis externa in a swimming instructor attributed to water and another diagnosed as aural barotrauma in a diver attributed to barotrauma / compressed air. Other cases included a gardener diagnosed with erythema migrans / Lyme disease.

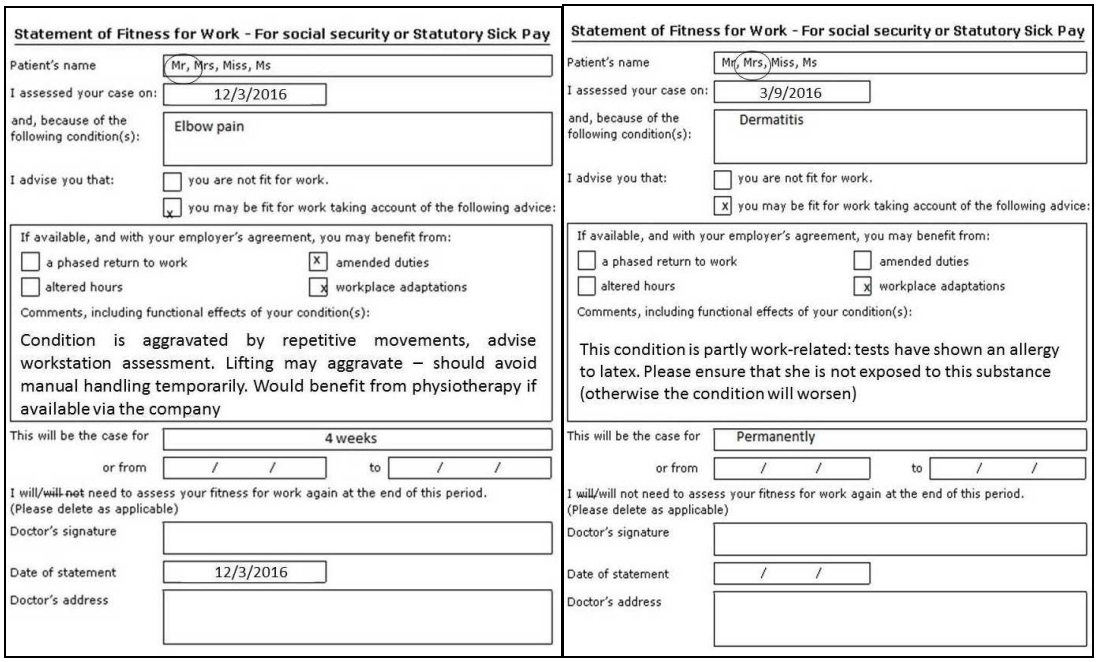
QUARTERLY FEATURE

The Fit Note and Fitness for Work

On the 31st October 2016, the Department for Work and Pensions (DWP) published its green paper on Work, Health and Disability – and encouraged consultation on 45 key questions. One of the areas the green paper covers relates to fitness for work and sickness certification. This stems from the acknowledgement that the 'fit note' - introduced in 2010 as a means of reducing the heavy burden of sickness absence on the economy and society as a whole - is not fully achieving what it set out to do[1]. The introduction of the fit note was an attempt to shift focus to what a person can do, in terms of the clinical condition and its effect on function, and consequent fitness for work, instead of what a person can't do and being signed off sick. As an alternative to declaring a person to be simply fit or unfit for work, the fit note allows GPs to indicate that a person may be fit for some types of work, and to suggest approaches to facilitate a return to work including a graded return, altered work hours, amended duties or workplace adaptations (Figure 1).

The green paper highlights that GPs are simply failing to use the 'may be fit for work subject to the following advice' option and in its' review, the DWP asks for advice on whether GPs are in fact best placed to provide work and health information and make a judgement on fitness for work / sickness certification? And if not, which other healthcare professionals should undertake this task?

[1] Agius, R & Hussey, L. (2014) Certified sickness absence: does the 'fit-note' work? Occup Environ Med 2015;72:463-464



Statement of Fitness for Work - For social security or Statutory Sick Pay

Patient's name: Mr, Mrs, Miss, Ms

I assessed your case on: 12/3/2016

and, because of the following condition(s): Elbow pain

I advise you that:
- [ ] you are not fit for work.
- [x] you may be fit for work taking account of the following advice:

If available, and with your employer's agreement, you may benefit from:
- [ ] a phased return to work
- [x] amended duties
- [ ] altered hours
- [x] workplace adaptations

Comments, including functional effects of your condition(s):

Condition is aggravated by repetitive movements, advise workstation assessment. Lifting may aggravate – should avoid manual handling temporarily. Would benefit from physiotherapy if available via the company

This will be the case for: 4 weeks

or from: / / to / /

I will/~~will not~~ need to assess your fitness for work again at the end of this period.
(Please delete as applicable)

Doctor's signature:

Date of statement: 12/3/2016

Doctor's address:

Statement of Fitness for Work - For social security or Statutory Sick Pay

Patient's name: Mr, Mrs, Miss, Ms

I assessed your case on: 3/9/2016

and, because of the following condition(s): Dermatitis

I advise you that:
- [ ] you are not fit for work.
- [x] you may be fit for work taking account of the following advice:

If available, and with your employer's agreement, you may benefit from:
- [ ] a phased return to work
- [ ] amended duties
- [ ] altered hours
- [x] workplace adaptations

Comments, including functional effects of your condition(s):

This condition is partly work-related: tests have shown an allergy to latex. Please ensure that she is not exposed to this substance (otherwise the condition will worsen)

This will be the case for: Permanently

or from: / / to / /

I ~~will~~/will not need to assess your fitness for work again at the end of this period.
(Please delete as applicable)

Doctor's signature:

Date of statement: / /

Doctor's address:

Figure 1. Examples of 'may be fit' advice provided on fit notes issued for elbow pain and dermatitis

In collaboration with THOR reporters, colleagues at COEH have been publishing widely for a number of years on such key issues[2],[3],[4]. Just prior to the introduction of the fit note in 2010, we (Money *et al)* published a paper based on a qualitative study with GPs trained to diploma level in occupational medicine which asked (among many other things) precisely this question – who is best placed to administer sickness certification? Three typical responses were observed: GPs who prefer not to administer certificates at all, those wanting more involvement from other occupational health agencies, and those happy with the current system but wanting all GPs to have more training in occupational medicine. After the introduction of the fit note, the Fit for Work service[5] was rolled out nationally. This service allows GPs to refer patients who have had, or are at risk of having, four or more week's absence from work. Patients work with an occupational health professional in order to draw up achievable return to work plans which often replace the need for a fit note, and help patients return to work in a way that's right for them.

However, these interventions appear to be having little effect on the burden of sickness absence in the UK with recent figures revealing an estimated 30.4 million working days lost due to work-related illness or injury, costing around £14.1 billion to the UK economy[6] In a paper published in 2015, we (Hussey *et al*) undertook an analysis of the sickness absence data reported to The Health and Occupation

[2] Money A, Hussey L, Thorley K, Turner S, Agius R. (2010) Work-related sickness absence negotiations: general practitioners' qualitative perspective. *Br J Gen Pract, 60(579):721-8*.

[3] Money A, Hann M, Turner S, Hussey L and, Agius R. (2015) The influence of prior training on GPs' attitudes to sickness absence certification post-fit note.

[4] Hussey L, Money A, Gittins M, Agius R. (2015) Has the fit note reduced general practice sickness certification rates? Occup Med (Lond), 65 (3): 182-189

[5] **http://fitforwork.org/**

[6] **http://www.hse.gov.uk/Statistics/overall/hssh1516.pdf?pdf=hssh1516**

Research network in General Practice (THOR-GP) and compared the proportions of WRIH issued with sickness certification pre (four years before) and post (three years after) the introduction of the fit note in order to begin answering the question of whether the fit note has reduced general practice sickness certification rates. As we are now six years post fit note introduction we thought it might be interesting to revisit this data and update the original results.

For all cases of WRIH reported, the analysis found that pre-fit note, 50% of cases were certified sick, the figure 6 years post-fit note had reduced to 47% which is statistically significant (P<0.022). There was no change in the proportion of cases certified sick in the first year post-fit note, despite 13% of cases classified as 'maybe fit' (see Figure 2 for individual years post fit note).

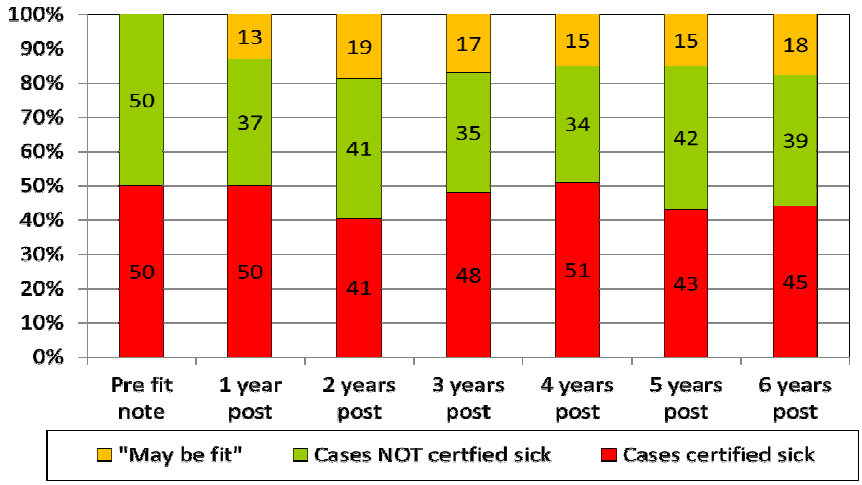


Figure 2 Proportion of cases certified sick before and after introduction of the fit note (all cases)

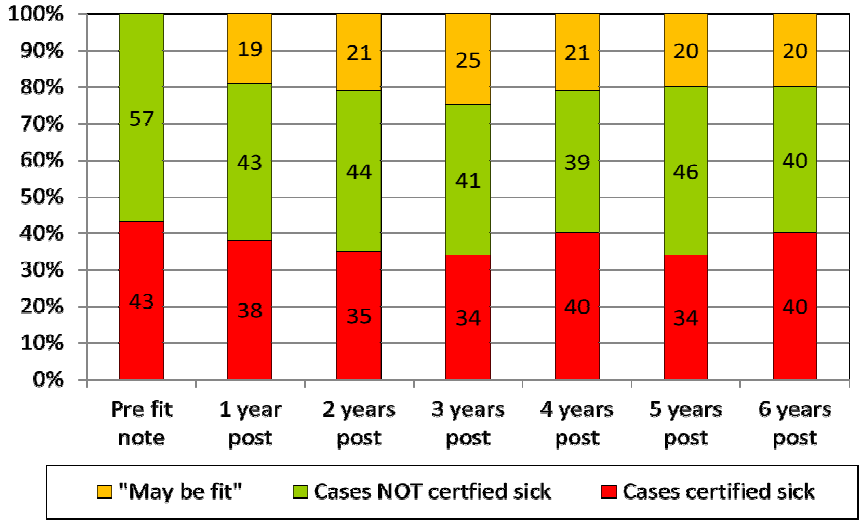


Figure 3 Proportion of musculoskeletal cases certified sick before and after introduction of the fit note.

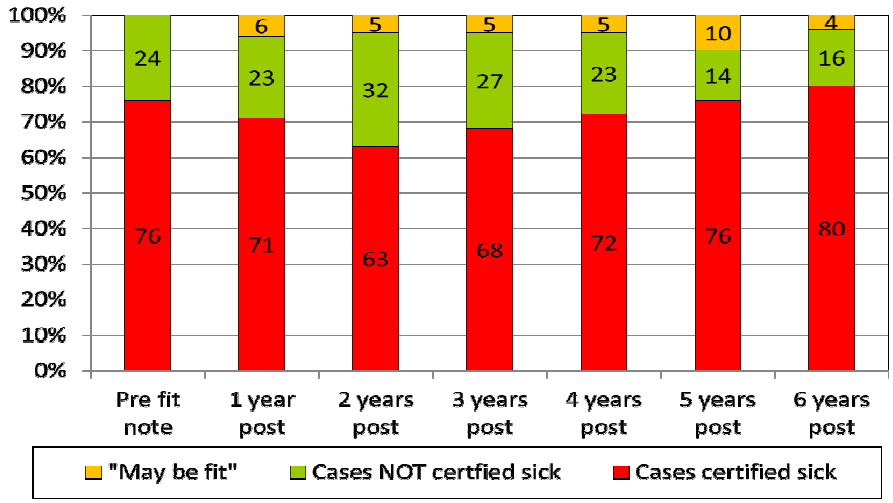


Figure 4 Proportion of mental ill-health cases certified sick before and after introduction of the fit note.

The results show that diagnostic category had a significant influence on the proportion of cases that were certified sick prior to the introduction of the fit note, with cases of mental ill-health being certified more frequently than other work-related conditions. The proportion of certified 'sickness absence' cases of musculoskeletal disorders (4 years pre - 43%, 6 years post - 38%) and mental ill-health (4 years pre - 76%, 6 years post - 70%) fell slightly and these changes were statistically significant (musculoskeletal $P<0.022$; mental ill-health $P<0.004$). So in light of the additional data for recent years, the reported cases would suggest that at least for mental ill-health, the proportion of WRIH cases certified sick is now statistically no different from what it was before the fit note.

Colleagues from COEH and the wider University will respond to the consultation set out in the green paper, and we would encourage you to respond if you feel you can contribute particularly to the review of the sickness certification system and role of occupational health professionals in the UK: https://consultations.dh.gov.uk/workandhealth/consult/

BECK REPORT

We are most grateful to Dr Mark Wilkinson for this quarter's 'Beck Report', which provides a commentary for cases of work-related skin disease reported to THOR and THOR-GP UK this quarter

BECK REPORT

The cases reported to EPIDERM this month again highlight that fewer cases of skin cancer appear to be reported from the armed forces and a greater number from other outdoor occupations. Of 17 cases, 9 were reported from farmers and agricultural workers, 2 postmen, 1 police man, a bricklayer and an oil rig worker, and only 3 from the armed forces. I was interested to discover that actinic keratoses and squamous cell carcinoma are now recognised and compensated as

occupational diseases in Germany[7]. Actinic keratoses must cover an area of at least 4cm^2 or there must be at least 5 individual keratoses develop per annum. The tumour must develop in sun exposed areas, and to qualify the worker must have been exposed in their job to an additional 40% UV above the calculated exposure of an indoor worker. This 40% increase in sun exposure is assumed to double the risk of developing cutaneous squamous cell carcinoma. They calculate that at age 50 a worker would have had to have spent 15 years in an outdoor occupation (at 60 - 18 years; 70 - 21 years and at age 80 - 24 years) to meet their criteria.

Also, interesting to see were the number of more exotic perfume allergens causing contact allergy amongst the workforce. For the non-dermatologist; when testing for fragrance allergy we use a screen of 2 fragrance mixes, an extract of a tree used in perfumery (*Myroxylon pereirae*) and a synthetic fragrance hydroxyisohexyl 3-cyclohexene carboxaldehyde – better known as HICC! Of 9 fragrance allergic patients, only 4 reacted to a screening substance. Other fragrance chemicals reported included 2 to limonene & linalool and one each to majantol, geraniol, citral and lemon grass oil. That 5 of these patients would have been missed by our screening materials emphasises the need to test more widely for fragrance allergy and that the current fashion for 'natural' products isn't without its risks.

Two cases this quarter also highlighted why I think it's useful to list not just the allergen but also the exposure resulting in the dermatitis. Both were builders allergic to potassium dichromate with 2 exposures causing dermatitis; cement and leather gloves and potentially leather footwear.

The quirk this quarter was a bank cashier allergic to thiurams assumed to be present within the rubber bands she used in her job. Too much of the folding stuff!

Dr Mark Wilkinson, Consultant Dermatologist, Leeds General Infirmary

PUBLICATIONS

The following are recently published, or forthcoming, papers based on THOR work:

L Hussey, K Thorley, R Agius. 'Reporting and prediction of work-related sickness absence by general practitioners' *Occup Med* 2016.

Carder, M, Hussey, L, Money, A, Gittins, M, McNamee, R, Stocks, J, Sen, D & Agius, R 'The Health and Occupation Research Network (THOR) - an evolving surveillance system' *Safety and Health at Work* (in press)

In addition, papers on the following topics have been submitted to, and are under consideration with a number of journals – long-latency respiratory disease; health inequalities and work-related ill-health and work-related mental ill-health reported in doctors.

[7] Diepgen TL, Brandenburg S, Aberer W, et al. Skin cancer induced by natural UV-radiation as an occupational disease—requirements for its notification and recognition. J Dtsch Dermatol Ges. 2014; 12: 1102-6

THOR CONTACTS

Many thanks for your continued support of THOR, please contact us (Table 2) if you have any queries or data requests.

Table 2 THOR Contact details

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