Workers’ compensation claims for Occupational Contact Dermatitis: 20 years of data from Victoria, Australia

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Background

• Occupational contact dermatitis - Priority occupational disease: Safe Work Australia

• Irritant contact dermatitis
  Nurses handwashing - soap and water

• Allergic contact dermatitis
  Hairdressers hair perming solutions
  Floor finishers - epoxy resins
Background

- Certain occupational groups known to be of high risk for occupational contact dermatitis\(^1\)
- Differences between diagnosed disease patterns and workers’ compensation claims\(^2,3\)

Study objective

• To characterise patterns of occupational contact dermatitis workers’ compensation claims data
Where is Victoria?
Where is Victoria?

- Australian population 23 mil
- Victorian population 6 mil
Denominators

- Victorian working pop- 4 mil\(^4\)
- Specific ‘high risk’ occupations
- How do we appropriately define the ‘population at risk’?

Employers paying less than $7,500 annually in salaries (with no apprentices or trainees) – impossible to identify (assume negligible)

**Employees working for self-insurers**

**Employees working for SRCC Licensees**

**Insured Victorian Labour Force**

**Sole Traders**

**Federal government employees**

Can be identified/excluded using information in the LFS

Will need to be excluded by hand

Acknowledgement: Peter Smith
Methods: Workers’ compensation data

Victorian workers’ compensation data from Jan 1996- Dec 2015
Filtered by:

• Contact Dermatitis (codes 410 & 742)

• Other and unspecified dermatitis (codes 420 & 742)
Results: Workers’ compensation claims

• Between January 1996-December 2015 there were 3,348 accepted Workers’ Compensation claims for OCD
Results: Workers’ compensation claims

Overall rate for initial workers’ compensation claims:

- 6.7 (95% CI: 6.49-6.95) per 100,000 person-years (labour force data)

Yearly rates for workers’ compensation claims:

- Fivefold plus reduction in claims from 11.84 (95% CI: 10.39-12.87) in 1996 to 1.78 (95% CI: 1.34-2.33) in 2015
Results: Workers’ compensation claims

Incidence Rate of Contact Dermatitis: 1996-2015

Unadjusted Rate

Age Adjusted Rate (2015)

Upper CI

Lower CI
Results: Workers’ compensation claims

- Males had a higher overall claims rate 7.97 (95%CI: 7.64-8.32) compared to females 5.18 (95%CI: 4.89-5.49)

- This difference has decreased from 14.46 (95%CI:12.38-16.80) in 1996 to 1.74 (95%CI:1.3-2.7) in 2015 for males compared to 8.41 (95%CI:6.63-10.53) in 1996 to 1.83 (95%CI:1.18-2.70) in 2015 for females.
Results: Workers’ compensation claims

Incidence of Contact Dermatitis by Sex: 1996-2015
Results: Workers’ compensation claims

- Although there was some variation between occupational groups, there was an overall decline across all high-risk occupational groups.

- This was most consistent amongst labourers and technicians and trades workers (proxy for manufacturing?)
Results: Workers’ compensation claims

Incidence Rate of Contact Dermatitis by Major High Risk Occupational Group (ANZSCO): 1996-2015

- Professionals
- Technicians and Trades Workers
- Community and Personal Service Workers
- Machinery Operators And Drivers
- Labourers
Results: Workers’ compensation claims

Range of different substances nominated as agents of disease, some claims more than one agent.

These included:

• Chemical products, detergents, plastic materials and synthetic resins; oils and fats; vegetation; paints and varnishes; clothing and footwear; food and beverages; plant treatment chemicals; chlorine; cement, lime and concrete (wet and dry); chromium and chromium compounds; and abrasive powders.
Results: Workers’ compensation claims

Site of dermatitis:

- Upper limbs (72.4%)
- Head/face (9.5%)
- Multiple locations (9.3%)
- Lower limbs (4.8%)
- Trunk (2.7%)
- Neck (1.1%)

Little difference by season, highest in the winter months, followed by spring, autumn and summer
Strengths and limitations

• Comprehensive data 20 years for claims

• Use of administrative data

• Under reporting
Discussion

• Other jurisdictions have also reported a decline in reported rates for occupational contact dermatitis over this time frame

• Mix of jurisdictions, data sources (claims data, physician reporting schemes: EPIDERM UK).  

This document is available from www.hse.gov.uk/statistics/
Discussion: Future research

- Issues with administrative data, dip in claims in 1992 caused by a legislative change
Discussion/ future research

- Issues with administrative data, dip in claims in 1992 caused by a legislative change
- Other (unknown) factors influencing the data?
- Has there been a corresponding decline in other jurisdictions?
- Need for vigilance, changing exposures

Discussion/ Future research

• Sole reliance on administrative dataset for the purpose of OCD disease surveillance is inadequate

• To provide a sufficient evidence base for policy and practice intervention, diagnosed disease data or other sources of information (eg clinic data) are an essential complement to workers’ compensation claims statistics
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