

## Patch Test Surveillance in Ontario

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### Background:

Occupational skin diseases are one of the most common occupational diseases. Contact dermatitis is the most common occupational skin disease. The main types of contact dermatitis are irritant and allergic.

In the diagnostic process, patch testing is often used to identify the causative allergen. Clinics may pool their patch test results and there are a number of these groups that routinely review their patch test experience. Examples of these groups include the European Surveillance System for Contact Allergies, the American Contact Dermatitis Group and the Information Network of Department of Dermatology based in Germany.

In addition to patch test results they report demographic and clinical information using a standardized risk factor scheme.

This information has been used to demonstrate changes over time and to identify early new emerging allergens.

Examples include increasing sensitization to epoxy and decreasing sensitization to chromium with the introduction of legislation to limit chrome in cement in construction workers.

Additional information can also be systematically collected such as workplace characteristics and prevention activities and health care utilization.

### CREOD Study Results and Conclusions

**Objective:** To examine seven years of data related to workplace allergens in the St Michael's Hospital patch test database.

**Results:** There were 1130 cases of occupational contact dermatitis identified out of a total of 3269 consented participants. For the 1130 cases, the MOAHLFA characteristics include: 53% male, 26% atopic dermatitis history, 87% hand involvement, 24% leg involvement, 26% face involvement and 60% over the age of 40 (mean age 43.7). 47% had lost time from work because of their dermatitis and 50% had filed a workers' compensation claim.

There were significant differences between sectors for both diagnosis and common occupational allergens. Most common occupational allergens identified included thiuram, p-phenylenediamine (PPD), epoxy, chromium, methylisothiazolinone and hydroxyethyl methacrylate.

**Conclusions:** This information can be used to target the key risk exposures by sector. With ongoing data collection, trends over time can be analysed as well as additional information about workplace characteristics and practices to provide insight into prevention in the workplace. Early identification of new allergens for rapid prevention response is also a goal.

We are currently analyzing the North American Contact Dermatitis Group occupational results.

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