Occupational Dermatitis

Work-related dermatitis is a prevalent disease affecting thousands of people every year. Occupational dermatoses are the most commonly reported occupational illnesses, excluding injuries due to acute or repeated trauma. In 1994, there were approximately 66,000 reported cases of occupational skin disease in the United States, which accounts for about 13% of all occupational diseases.

Dermatitis is an inflammation of the skin, that may start with symptoms of redness, itching, swelling, and a burning or hot sensation. Without treatment, dermatitis can progress to broken or blistering skin, scaling, infection, eczema, or psoriasis. Prognosis can be poor, and many who develop dermatitis can develop long-term skin disease.

In the state of Washington, from April 1993 through June 1997, dermatitis claims with the State Fund workers’ compensation system were reported most often for Eating and Drinking places. Other industries with high dermatitis claims reporting include Agriculture and Production Crops, Health Services and Construction Special Trade Contractors. Workers with exposure to mechanical irritants, solvents or other chemical irritants, temperature extremes, wet-work, and frequent glove application are at particular risk for developing dermatitis.

However, dermatitis is a preventable condition!

Improved workplace engineering design, substitution of materials, proper use and selection of personal protective equipment (PPE), and employer and employee education are each effective techniques for reducing occupational dermatitis.

Dermatitis Surveillance

In January of this year, SHARP sent a survey to physicians in the State of Washington to assess the extent of occupational skin disorder problems in the state, and to establish which doctors were seeing a majority of occupation-related skin problems. Participants were selected on the basis of their membership to the Seattle Dermatological Society, the Washington Society of Allergy, Asthma, and Immunology, and the Northwest Association of Occupational and Environmental Medicine. Physicians in our sentinel provider network also received a survey.

We sent 370 surveys, and received 159 responses, corresponding to a response rate of 43%. Of these respondents, 131 currently treat adult patients with dermatologic conditions. Ninety-eight percent responding stated that there
are adult patients in their practice who have work-related skin conditions. One hundred four physicians reported 696 cases of work-related allergic contact dermatitis newly diagnosed within the past year. The same number of physicians reported 1242 cases of work-related irritant contact dermatitis newly diagnosed within the past year. Respondents also reported on the number of cases of work-related urticaria, exacerbation of atopic condition, heat or cold relate condition, Raynaud’s syndrome, actinic skin damage, latex allergy, and trauma or burn related conditions. These data are summarized in table 1 below.

### Table 1. Summary of Results from State of Washington Physician Survey

<table>
<thead>
<tr>
<th>Work-related condition</th>
<th># patients newly diagnosed in past month (# respondents)</th>
<th># patients newly diagnosed in past year (# respondents)</th>
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</thead>
<tbody>
<tr>
<td>Allergic Contact Dermatitis</td>
<td>98 (53)</td>
<td>696 (104)</td>
</tr>
<tr>
<td>Irritant Contact Dermatitis</td>
<td>166 (60)</td>
<td>1242 (104)</td>
</tr>
<tr>
<td>Contact Urticaria</td>
<td>28 (13)</td>
<td>165 (36)</td>
</tr>
<tr>
<td>Exacerbation of Atopic Condition</td>
<td>146 (43)</td>
<td>989 (82)</td>
</tr>
<tr>
<td>Heat or Cold Related Condition</td>
<td>11 (8)</td>
<td>68 (28)</td>
</tr>
<tr>
<td>Raynaud’s Disease</td>
<td>5 (3)</td>
<td>27 (17)</td>
</tr>
<tr>
<td>Actinic Skin Damage</td>
<td>106 (25)</td>
<td>1021 (36)</td>
</tr>
<tr>
<td>Trauma or Burn Related Condition</td>
<td>179 (22)</td>
<td>1752 (48)</td>
</tr>
<tr>
<td>Glove allergy (including Latex)</td>
<td>47 (36)</td>
<td>352 (92)</td>
</tr>
</tbody>
</table>

Although the results from this survey cannot be used to estimate the incidence or prevalence of disease, the data do indicate that physicians in Washington are diagnosing and treating a significant number of occupational skin disorders.

These data were also useful in determining which of the physicians we contacted were seeing the majority of work-related skin disorders. We have used this information to streamline our list of sentinel providers, in an effort to expedite the reporting process and reduce resource expenditure.

### Workplace Health and Safety Problems?

SHARP is available to help you address a wide range of occupational health concerns. Our staff assists workers and employers with complex health and safety issues, delivers seminars, presents research findings, provides independent scientific review of issues, and publishes information.

To request SHARP’s services or obtain additional information about the program, please contact us at:

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Labor and Industries  
PO Box 44330  
Olympia WA 98504-4330  
Tel. (888)-66-SHARP (toll-free)

### Check out SHARP on the World Wide Web!

http://www.wa.gov/lni/sharp

SHARP’s web site provides more information about the SHARP program, describes SHARP’s research interests, lists our publications (some are available on-line), introduces the SHARP team, and provides links to other sites of occupational and environmental interest.

### Home pages of interest:

**latex**  
http://pw2.netcom.com/~nam1/index.html  
http://www.cdc.gov/niosh/latexfs.html  
http://www.cdc.gov/niosh/latexalt.html

**Contact Dermatitis**  
http://www.mc.vanderbilt.edu/vumcdept/derm  
http://www.derm.med.uni-erlangen.de/  
http://www.njc.org/msuhtml/msu_contact_der.html