

## Research that makes a Difference

| Title  | Hand and upper extremity function in workers with occupational contact dermatitis  |
|--|--|
| Year   | 2006 – 2008  |
| CREOD<br>Investigators                                   | Sharon Switzer-McIntyre, Linn Holness, Dorcas Beaton, Rosemary Nixon   |
| CREOD Research Program                                   | Occupational Skin Disease  |
| Research Theme   | Health Services – Assessment, Outcomes   |
| Funder   | WSIB   |
| Product Type   | Research Study   |
| Background   | Work-related contact dermatitis involving the hand may result in significant dysfunction.  Dermatologists typically use clinical assessment of severity as the measure of impairment. Little attention has been devoted to functional assessment of the hand.  |
| Study Focus<br>(Research<br>Question/Goals/<br>Methods)  | The study was designed to gain a better understanding of the function of the hand and upper extremity of patients with contact dermatitis. A detailed physical examination of the upper extremity was conducted and the SF36, DLQI, DASH, Work Instability Score and Work Limitations Questionnaire were administered to patients with hand dermatitis.  |
| Key Findings   | <ul> <li>50% had limitation of tuck.</li> <li>82% had impairment of grip strength.</li> <li>49% had numbness.</li> <li>72% had moderate to high impact on the DLQI.</li> <li>48% had moderate to high work instability.</li> <li>31% decrease in work productivity.</li> </ul>   |
| Implications for<br>Health/Labour<br>Policy and Practice | Assessment of hand and upper extremity are important additions to the standard dermatological assessment of patients with hand dermatitis. Hand dermatitis has significant impact on function and work. The clinical evaluation and method of evaluating impairment for workers with hand dermatitis should be re-assessed.  |
| Publication<br>Information                               | Publications Holness DL, Harniman E. DeKoven J, Skotnicki-Grant S, Beaton D, Nixon R, Switzer-McIntyre S. Hand function in workers with contact dermatitis. Dermatitis 2010;21:230-231.  Presentations Holness DL, Harniman E. DeKoven J, Skotnicki-Grant S, Beaton D, Nixon R, Switzer-McIntyre S. Hand function in workers with contact dermatitis. American Contact Dermatitis Society Annual Meeting, Miami, March 2010.  Switzer-McIntyre S, Holness DL, Beaton D, Harniman E Hand and upper extremity unction in workers with hand dermatitis. 16 <sup>th</sup> International World Confederation for Physical Therapy Congress (World Physical Therapy 2011), Amsterdam, June 2011. |