

2006/11/07-03

**THE WORKERS' COMPENSATION BOARD OF BRITISH COLUMBIA**  
**RESOLUTION OF THE BOARD OF DIRECTORS**

**Re: Compensation for Occupational Asthma and Contact Dermatitis**

**WHEREAS:**

Pursuant to section 82 of the *Workers Compensation Act*, RSBC 1996, Chapter 492 and amendments thereto ("*Act*"), the Board of Directors must set and revise as necessary the policies of the Board of Directors, including policies respecting compensation, assessment, rehabilitation, and occupational health and safety;

**AND WHEREAS:**

The Policy and Research Division commissioned scientific studies on occupational asthma and contact dermatitis to determine whether a worker who develops a significant hypersensitivity to a workplace substance so that he or she reacts upon exposure to that substance has a permanent impairment;

**AND WHEREAS:**

The Policy and Research Division has reviewed policy on asthma and contact dermatitis in the *Rehabilitation Services & Claims Manual* ("*RS&CM*"), Volume II, in light of these scientific studies and has presented its analysis to the Board of Directors;

**THE BOARD OF DIRECTORS RESOLVES THAT:**

1. Amendments to policy items #29.20 and #30.50 of the *RS&CM*, Volume II, attached as Appendix I, are approved and apply to claims for asthma and contact dermatitis where the worker is first disabled from earning full wages, in accordance with section 6(1) of the *Act*, on or after January 1, 2007.
2. Amendments to the *Permanent Disability Evaluation Schedule* in Appendix 4 of the *RS&CM*, Volume II, attached as Appendix II, are approved and apply to claims for asthma and contact dermatitis where the worker is first disabled from earning full wages, in accordance with section 6(1) of the *Act*, on or after January 1, 2007.
3. This resolution constitutes a policy decision of the Board of Directors.

4. This resolution is effective January 1, 2007.

DATED at Richmond, British Columbia, November 7, 2006.

**By the Workers' Compensation Board**

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**DOUGLAS J. ENNS, CHAIR  
BOARD OF DIRECTORS**

## APPENDIX I

### REHABILITATION SERVICES & CLAIMS MANUAL, VOLUME II ASTHMA POLICIES

#### #29.20 Asthma

Schedule B lists "Asthma" as an occupational disease. The process or industry listed opposite to it is "Where there is exposure to

- (1) western red cedar dust; or
- (2) isocyanate vapours or gases; or
- (3) the dust, fume of vapours of other chemicals or organic material known to cause asthma."

#### 1. Evidence of Exposure

There are many substances which are either known to cause asthma in a previously healthy individual, or ~~effo~~ **aggravate**~~aggravating~~ or **activate**~~activating~~ an asthmatic reaction in an individual with a pre-existing asthma condition. The significance of occupational exposures to these substances may be complicated by evidence that the worker is exposed to such substances in both occupational and non-occupational settings. In the investigation of the claim, the Board ~~officer~~ ~~should~~ **seeks** evidence of whether the worker is exposed to any sensitizing or **irritating** substances (obtaining where available any material safety data sheets), ~~on~~ the nature and extent of occupational and non-occupational exposure to such substances, and ~~on~~ whether there is any correlation between apparent changes in airflow obstruction/responsiveness and exposure to such substances. Additional medical evidence may be available in the form of airflow monitoring, expiratory spirometry, inhalation challenge tests, and skin testing for sensitization.

#### 2. Pre-existing Asthma Condition

A pre-existing asthma condition is not compensable unless such underlying condition has been significantly aggravated, activated, or accelerated by an occupational exposure. A worker is not entitled to compensation where his or her pre-existing asthma condition is triggered or aggravated by substances which are present in both occupational and non-occupational settings unless the workplace exposure can be shown to have been a significant cause of an aggravation of the condition. A speculative possibility that a workplace exposure to such a substance has caused an aggravation of the pre-existing asthma is insufficient for the acceptance of a claim.

~~Compensation is not payable because a worker develops an allergy or sensitivity to a substance or substances as a result of their employment. Compensation~~

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~~may be paid where a workplace exposure to the allergen or substance results in an asthmatic reaction.~~

#### 3. Temporary Disability

In the case of a compensable asthma or a ~~reaction of the respiratory tract~~ **reaction** to a substance with irritating or inflammatory properties, temporary disability benefits are payable until ~~the temporary disability ends or until the worker's acute symptoms resolve or become stabilized or the worker reaches retirement age as determined by the Board.~~

#### 4. Permanent Disability

##### (i) Work-Caused Asthma

~~Where workplace exposures have caused the worker to develop asthma (either allergic or irritant-induced) and~~ **Where the worker's acute symptoms do not entirely resolve, and so that he or she is left with a permanent impairment of the respiratory system, a disability award may be granted** ~~the Board may grant a permanent disability award after considering the asthma tables in the *Permanent Disability Evaluation Schedule*. However, no such award can be made when the worker's symptoms have resolved and they are simply left with the underlying allergy or sensitivity. Not only is the worker not now suffering from the occupational disease set out in Schedule B, but they are not disabled from working. The Board cannot grant a permanent disability award to a person who has the same physical capabilities as they had previous to the occurrence of the occupational disease, but who is precluded from a limited number of occupations because of a remaining allergy or sensitivity. No permanent disability award can be made to a worker with a pre-existing condition when they have returned to their pre-exposure state.~~

~~Where a worker who is allergic to western red cedar dust declines to take any employment which involves exposure to that dust, such worker is taking a preventive measure. Compensation is not payable for such preventive measures. However, rehabilitation assistance may be provided to a worker in this situation (see policy item #86.30).~~

##### (ii) Permanent Aggravation of Pre-existing Asthma

**Where workplace exposures have caused a permanent aggravation of the worker's pre-existing asthma, so that the worker is unlikely to return to his or her pre-exposure state, the Board may grant a permanent disability award after considering the asthma tables in the**

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***Permanent Disability Evaluation Schedule.*** In these cases, the Board considers whether proportionate entitlement under section 5(5) of the *Act* is appropriate. (See policy items #44.00 to #44.31.)

In the situation described above, no permanent disability award is granted to a worker with a pre-existing asthma condition when the worker has returned to his or her pre-exposure state.

#### **(iii) Asthma Due to Sensitization**

Where workplace exposures to a sensitizing agent have caused the worker to develop asthma and the worker's acute symptoms resolve following removal from the workplace, the Board may consider the worker to have a permanent impairment where:

- the worker is left with a significant underlying allergy or sensitivity; and as a result
- the worker must avoid workplaces containing the sensitizing agent.

A significant underlying allergy or sensitivity is one where the worker reacts with asthmatic symptoms when exposed to a workplace sensitizing agent. This is indicated by increased bronchial reactivity and/or a significant change in peak flow when the worker returns to the workplace under conditions that do not expose the worker to excessive (i.e. irritant) levels of the sensitizing agent or other known respiratory irritants.

In determining whether there is a need to avoid certain workplaces, the Board considers the medical evidence, including the nature of the sensitization and the likelihood of an asthmatic reaction should the worker return to a work environment containing the sensitizing agent. In making this assessment, the Board considers medical advice from the attending physician and/or Board Medical Advisor.

Where it is found that the worker has a permanent impairment due to a significant underlying allergy or sensitivity, the Board considers the asthma tables found in the *Permanent Disability Evaluation Schedule* to assess the disability rating.

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### ***REHABILITATION SERVICES & CLAIMS MANUAL, VOLUME II*** **ASTHMA POLICIES**

**EFFECTIVE DATE:** January 1, 2007

**APPLICATION:** To claims where the worker is first disabled from earning full wages, in accordance with section 6(1) of the *Workers Compensation Act*, on or after January 1, 2007.

## Appendix I

### **REHABILITATION SERVICES & CLAIMS MANUAL, VOLUME II CONTACT DERMATITIS POLICIES**

#### **#30.50 Contact Dermatitis**

Schedule B lists "Contact dermatitis" as an occupational disease. The process or industry described opposite to it is "Where there is excessive exposure to irritants, allergens or sensitizers ordinarily causative of dermatitis".

~~The payment of temporary disability benefits and permanent disability awards are subject to the same general principles as are set out in policy item #29.20 in respect of asthma or a reaction of the respiratory tract to a substance with irritating or inflammatory properties. Therefore, there is no disability for the purpose of the Act unless the worker has an actual loss of body function or physical impairment resulting from the dermatitis which causes the worker to be disabled from earning full wages at the work at which he or she was employed.~~

#### **1. Evidence of Exposure**

**There are many substances that may either cause contact dermatitis in a previously healthy individual or aggravate or activate a dermatological reaction in an individual with a pre-existing dermatitis condition. The significance of occupational exposures to these substances may be complicated by evidence that the worker is exposed to them in both occupational and non-occupational settings.**

**When investigating these claims, the Board seeks evidence on whether the worker is exposed to any sensitizing or irritating substances, obtaining where available any material safety data sheets. The Board gathers evidence on the nature and extent of occupational and non-occupational exposure to such substances, and whether there is any correlation between dermatological reactions and exposure. The Board also seeks medical evidence, for instance skin patch testing for sensitization.**

#### **2. Pre-existing Contact Dermatitis Condition**

**A pre-existing contact dermatitis condition is not compensable unless such underlying condition has been significantly aggravated, activated, or accelerated by an occupational exposure. A worker is not entitled to compensation where his or her pre-existing condition is triggered or aggravated by substances which are present in both occupational and non-occupational settings unless the workplace exposure can be shown to have been a significant cause of an aggravation of the condition. A speculative possibility that a workplace exposure to such a substance has caused an aggravation of the pre-existing contact dermatitis is insufficient for the acceptance of a claim.**

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#### **3. Temporary Disability**

Temporary disability benefits are payable while the disability is a temporary one, but cease when **the worker's acute symptoms resolve or stabilize or the worker reaches retirement age as determined by the Board**~~it disappears or stabilizes or becomes permanent.~~

#### **4. Permanent Disability**

##### **(i) Work-Caused Contact Dermatitis**

**Where workplace exposures have caused the worker to develop contact dermatitis (either allergic or irritant-induced) and if the worker's acute symptoms do not entirely resolve so that he or she is and they are left with a permanent impairment of the skin, the Board may grant a permanent disability award**~~may be granted after considering the contact dermatitis table in the *Permanent Disability Evaluation Schedule*. However, neither temporary disability benefits nor a permanent disability award is payable simply because the worker has developed a susceptibility to react to a certain substance as a result of his or her work which causes periods of temporary impairment if he or she is exposed to the particular substance, but otherwise causes no complaints. Rehabilitation assistance may be provided to assist the worker in obtaining alternative employment which does not expose him or her to the substance in question (see policy item #86.30).~~

##### **(ii) Permanent Aggravation of Pre-existing Dermatitis**

**Where workplace exposures have caused a permanent aggravation of the worker's pre-existing dermatitis condition, so that the worker is unlikely to return to his or her pre-exposure state, the Board may grant a permanent disability award after considering the contact dermatitis table in the *Permanent Disability Evaluation Schedule*. In these cases, the Board considers whether proportionate entitlement under section 5(5) of the Act is appropriate. (See policy items #44.00 to #44.31.)**

**In the situation described above, no permanent disability award is granted to a worker with a pre-existing condition when the worker has returned to his or her pre-exposure state.**

##### **(iii) Contact Dermatitis due to Sensitization**

**Where workplace exposures to a sensitizing agent have caused the worker to develop allergic contact dermatitis and the worker's acute**

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symptoms resolve following removal from the workplace, the Board may consider the worker to have a permanent impairment where:

- the worker is left with a significant underlying allergy or sensitivity; and as a result
- the worker must avoid workplaces containing the sensitizing agent.

A significant underlying allergy or sensitivity is one where the worker reacts with recurrent signs and symptoms of marked extent and severity when exposed to a workplace sensitizing agent. The worker experiences these signs and symptoms when he or she returns to the workplace under conditions that do not expose the worker to excessive (i.e. irritant) levels of the sensitizing agent or other known dermal irritants.

In determining whether there is a need to avoid certain workplaces, the Board considers the medical evidence, including the nature of the sensitization and the likelihood of a dermatological reaction should the worker return to a work environment containing the sensitizing agent. In making this assessment, the Board considers medical advice from the attending physician and/or Board Medical Advisor.

Where it is found that the worker has a permanent impairment due to a significant underlying allergy or sensitivity, the Board considers the contact dermatitis table found in the *Permanent Disability Evaluation Schedule* to assess the disability rating.

**EFFECTIVE DATE:** January 1, 2007

**APPLICATION:** To claims where the worker is first disabled from earning full wages, in accordance with section 6(1) of the *Workers Compensation Act*, on or after January 1, 2007

## Appendix II

### **REHABILITATION SERVICES & CLAIMS MANUAL, VOLUME II PERMANENT DISABILITY EVALUATION SCHEDULE ASTHMA DISABILITY RATING TABLES**

#### 81. ASTHMA

Either Tables A (1-3), Table B or Table C apply to assess asthma severity. The following considerations determine which tables or table to apply:

- Tables A1, A2 and A3 are used to make a clinical assessment based upon lung function tests and medication needs. The scores from Tables A1, A2 and A3 are added to obtain a total score for asthma severity.
- If the total score from Tables A1, A2 and A3 is “0”, Table B is used to assess the severity of subjective symptoms.
- If the score from Table B is also “0”, Table C is used to assess sensitization in an asymptomatic worker, resulting in the need to avoid work environments containing a sensitizing agent.
- Based on the asthma severity score from Tables A (1-3), Table B or Table C, Table D is then used to assign a percentage disability rating.

**Table A1: Post-bronchodilator FEV<sub>1</sub>\***

Score	FEV <sub>1</sub> % predicted
0	≥ lower limit of normal
1	70% – 80% of predicted
2	60% – 69% of predicted
3	50% – 59% of predicted
4	<50% of predicted

**Table A2: Reversibility of FEV<sub>1</sub> or Degree of Airway Hyperresponsiveness**

Score	% FEV <sub>1</sub> Change	OR	PC <sub>20</sub> ** mg/ml or Equivalent (Degree of Airway Hyperresponsiveness)
0	<10%		>8 mg/ml
1	10% – 19%		8 mg/ml to >0.6 mg/ml
2	20% – 29%		0.6 mg/ml to >0.125 mg/ml
3	≥ 30%		≤ 0.125 mg/ml
4	n/a		n/a

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**Table A3: Minimum Medication Need**

Score	Medication
0	None
1	Occasional (but not daily) Bronchodilator and/or occasional (but not daily) cromolyn
2	Daily bronchodilator and/or daily cromolyn and/or daily low dose inhaled steroid (< 800µg of beclomethasone or equivalent)
3	Bronchodilator on demand and daily high-dose inhaled steroid (>800µg of beclomethasone or equivalent) or occasional course (1-3 courses per year) of systemic steroid
4	Bronchodilator on demand and daily high-dose inhaled steroid (>800µg of beclomethasone or equivalent) and daily or every other day systemic steroid

\*FEV<sub>1</sub> indicates the “forced expiratory volume” of air exhaled during the first second of a forced breath.

\*\*PC<sub>20</sub> is the “provocative concentration” of a stimulus that causes a 20% fall in FEV<sub>1</sub>.

If FEV<sub>1</sub> is ≥ to the lower limit of normal, PC<sub>20</sub> should be determined and used for rating asthma severity; if FEV<sub>1</sub> is 70% to 80%, either reversibility or PC<sub>20</sub> can be used; if FEV<sub>1</sub> is < 70% of the predicted, reversibility only is used for rating asthma severity.

**Table B: Symptom Severity as Reported by the Treating Physician or Board Medical Advisor**

Score	Symptoms
0	None
0.3	Shortness of breath on exertion
0.6	Shortness of breath & wheezing on moderate exertion
0.9	Shortness of breath, wheezing, cough, and chest tightness on mild exertion

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**Table C: Sensitization**

Score	Sensitization
<b>0</b>	The worker is able to return to the workplace without experiencing asthmatic symptoms.
<b>0.1 – 0.2</b>	<p>The worker reacts with asthmatic symptoms upon exposure to a sensitizing agent in the workplace, indicated by increased bronchial reactivity and/or a significant change in peak flow when the worker returns to the workplace under conditions that do not expose the worker to irritant levels of the sensitizing agent or other known respiratory irritants. After considering medical advice, the Board determines that the worker must avoid workplaces containing the sensitizing agent.</p> <p>In assessing the disability rating, the Board considers the extent to which the sensitizing agent is commonly found in work environments. Generally, the more common the sensitizing agent, the higher the disability rating.</p>

**Table D: Asthma Disability Rating**

Score (Table A(1-3), B or C whichever is higher)	Disability Rating
<b>0</b>	<b>0%</b>
<b>0.1 – 0.2</b>	<b>1% - 2%</b>
<b>0.3</b>	<b>3%</b>
<b>0.6</b>	<b>6%</b>
<b>0.9</b>	<b>9%</b>
<b>1</b>	<b>10 %</b>
<b>2</b>	<b>14%</b>
<b>3</b>	<b>18%</b>
<b>4</b>	<b>22%</b>
<b>5</b>	<b>26%</b>
<b>6</b>	<b>30%</b>
<b>7</b>	<b>34%</b>
<b>8</b>	<b>42%</b>
<b>9</b>	<b>50%</b>
<b>10 - 11</b>	<b>51% - 100%</b>

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**REHABILITATION SERVICES & CLAIMS MANUAL, VOLUME II  
PERMANENT DISABILITY EVALUATION SCHEDULE  
DERMATITIS DISABILITY RATING TABLE**

**82. CONTACT DERMATITIS**

<b>Disability Rating</b>	<b>Signs &amp; Symptoms</b>	<b>Treatment (see I and II for details)</b>
<b>1 – 2%</b>	<p><b>Skin disorder signs and symptoms not present when the worker is removed from a workplace sensitizing agent, but the worker reacts with recurrent signs and symptoms of marked extent and severity when exposed to the sensitizing agent. The worker experiences these signs and symptoms when he or she returns to the workplace under conditions that do not expose the worker to irritant levels of the sensitizing agent or other known dermal irritants. After considering medical advice, the Board determines that the worker must avoid workplaces containing the sensitizing agent.</b></p> <p><b>In assessing the disability rating, the Board considers the extent to which the sensitizing agent is commonly found in work environments. Generally, the more common the sensitizing agent, the higher the disability rating.</b></p>	<b>Requires no treatment.</b>
<b>3 – 5%</b>	<b>Skin disorder signs and symptoms present or intermittently present.</b>	<b>Requires no or intermittent treatment with agents listed in I below.</b>
<b>6 – 24%</b>	<b>Skin disorder signs and</b>	<b>Requires intermittent treatment</b>

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	symptoms intermittently or constantly present.	with agents listed in I and II below.
25 – 50%	Skin disorder signs and symptoms constantly present.	Constant treatment with agents listed in I and II below. Cases such as these are rare and require tertiary level medical input.

In evaluating the severity of the worker's condition and its effect on earning capacity, the Board officer may consider the limitations experienced by the worker in his or her activities of daily living.

#### I. TREATMENTS

##### a. Topical Treatment

Topical treatment may be indicated for mild cases of contact dermatitis with limited site of involvement, acute contact dermatitis when the offending agent has been removed, or chronic contact dermatitis with limited symptoms.

Topical therapy frequently includes:

- i. Emollients, lubricants, moisturizers
- ii. Non-alkaline cleansers instead of soap
- iii. Cool compresses
- iv. Lotions, such as calamine
- v. Topical corticosteroid creams, ointments, lotions, gels or spray
- vi. Antibiotics

##### b. Systemic Treatment

- i. Antihistamines
- ii. Antibiotics

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#### **II. SYSTEMIC TREATMENT (OTHER)**

Systemic treatment may be indicated for control of itching and/or edema even in cases of limited extent. Systemic treatment may also be indicated for moderate to severe acute and/or chronic contact dermatitis. Such treatments include:

- i. Antihistamines
- ii. Corticosteroids (oral or parenteral)
- iii. Antibiotics (oral or parenteral)
- iv. Psoralen (topical or oral) and ultraviolet A radiation (PUVA)
- v. Azathioprine
- vi. Cyclosporin

**EFFECTIVE DATE:** ~~August 1, 2003~~ **January 1, 2007 (with respect to items 81 and 82)**

**APPLICATION:** To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

**With respect to items 81 and 82, to claims where the worker is first disabled from earning full wages, in accordance with section 6(1) of the *Workers Compensation Act*, on or after January 1, 2007.**