

2019/10/23-03

WORKERS' COMPENSATION BOARD

RESOLUTION OF THE BOARD OF DIRECTORS

RE: Activity-Related Soft Tissue Disorders ("ASTDs") of the Limbs

WHEREAS:

Pursuant to section 82 of the *Workers Compensation Act*, R.S.B.C. 1996, c. 492 ("Act"), the Board of Directors of the Workers' Compensation Board ("WorkSafeBC") 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:

In April 2018, WorkSafeBC's Board of Directors received the compensation policy review entitled *Restoring the Balance: A Worker-Centred Approach to Workers' Compensation Policy* ("CPR");

AND WHEREAS:

The CPR contains a number of recommendations regarding policies in the *Rehabilitation Services & Claims Manual*, Volume II ("RS&CM");

AND WHEREAS:

Recommendation #34 in the CPR recommends amending policy to indicate that, where there is no clear diagnosis and there is some evidence that the ASTD could be considered under either section 5 or section 6 of the *Act*, the decision include consideration of the claim under both sections;

AND WHEREAS:

Recommendation #35 in the CPR recommends amending policy to further emphasize the importance of identifying all of the relevant risk factors that exist in the particular case and base the decision on a careful evaluation of the evidence in accordance with WorkSafeBC policy and taking into consideration the merits and justice of the individual case;

AND WHEREAS:

The Policy, Regulation and Research Division ("PRRD") developed amendments to policy in the *RS&CM* to respond to Recommendation #34 and Recommendation #35 in the CPR;

AND WHEREAS:

The PRRD has undertaken stakeholder consultation on these issues and has advised the Board of Directors on the results of the consultation.

THE BOARD OF DIRECTORS RESOLVES THAT:

1. The amendments to policy item #27.00, *Activity-Related Soft Tissue Disorders ("ASTDs") of the Limbs* of the *RS&CM*, as set out in Appendix 1 attached to this resolution, are approved.
2. This resolution is effective February 1, 2020, and applies to all decisions made on or after February 1, 2020.
3. This resolution constitutes a policy decision of the Board of Directors.

I, Ralph McGinn, hereby certify for and on behalf of the Board of Directors of WorkSafeBC that the above resolutions were duly passed at a meeting of the Board of Directors held in Richmond, British Columbia, on October 23, 2019.

RALPH MCGINN, P. ENG
Chair, Board of Directors
Workers' Compensation Board

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#27.00 ACTIVITY-RELATED SOFT TISSUE DISORDERS (“ASTDS”) OF THE LIMBS

1. Definition of ASTD

The terms “cumulative trauma disorder”, “repetitive strain injury”, “repetitive motion disorder”, “occupational overuse syndrome”, “occupational cerviobrachial disorder”, “hand/arm vibration syndrome”, “work-related musculoskeletal disorder”, and others, are broad collective terms used to describe a diverse group of soft tissue disorders which may or may not be caused or aggravated by employment activities. Each of these collective terms can be misleading. They may imply the presence of “repetition” or “trauma” or “motion” or “work-relatedness” where in fact the cause of the disorder may be due in whole or in part to other factors that are not work-related.

The common elements of the disorders included in these collective terms are:

- they are related to physical activity; and
- they affect muscles, tendons, and other soft tissues.

The Board uses the term ASTDs to describe this group of disorders **of the limbs** which may or may not be caused or aggravated by employment activities.

2. Personal Injury or Occupational Disease

The following policies deal with the compensability of ASTDs affecting the limbs, and specifically ASTDs that are recognized as occupational diseases in Schedule B (see policy item #26.01, *Recognition by Inclusion in Schedule B*) or by regulation (see policy item #26.03, *Recognition by Regulation of General Application*).

Where an ASTD is attributed to a sudden trauma or an infection due to a penetrating wound, it will be treated as an injury and adjudicated in accordance with the policies in Chapter 3 (see Item C3-12.00, *Personal Injury*). A claim made by a worker diagnosed with an ASTD where no specific trauma or penetrating wound has occurred, will be treated as a disease and adjudicated in accordance with the policies in this chapter.

The Board will adjudicate a claim made by a worker under both section 5 and section 6 of the Act, and in accordance with the policies found in Chapter 3 and this chapter, where either:

- **there is an unclear ASTD diagnosis and the evidence indicates the condition may be either an injury or a disease; or**

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- **there is a clear ASTD diagnosis but the evidence indicates the condition may be either an injury or a disease.**

3. Definitions of Nerve Entrapment and Tendinopathy

The majority of the ASTDs discussed in this section can be classified as nerve entrapments or tendinopathies. A nerve entrapment occurs when nerve function is affected by mechanical anatomical factors that compress the nerve, such as, tight muscles or tendons, lesions, bony irregularities or swelling.

Tendinopathy is a generic descriptor of the clinical conditions in and around tendons, characterized by a combination of pain, swelling and impaired functioning. Tendinopathy encompasses tendinitis, which implies an inflammatory tendon condition, and tendinosis, which implies a degenerative tendon condition. The term tendinitis can be misleading because it is often used to describe all painful tendon conditions, even when there is a lack of inflammatory change.

4. Establishing Work Causation

As with other occupational diseases, the Board determines whether a worker's ASTD was caused or aggravated by the worker's employment (see policy item #26.20, *Establishing Work Causation*). **The Board makes its decision based on the merits and justice of the case, but in so doing the Board applies an applicable Board policy.**

Where the strength of association between a process or industry and a specific ASTD is strong, it may be included in Schedule B with the benefit of the rebuttable presumption provided for in section 6(3) of the *Act*. For ASTDs that are not included in Schedule B, the Board may assess work causation under section 6(1) of the *Act* based on the circumstances of the individual case, with consideration of risk factors set out in policy, and the current medical/scientific evidence.

When determining whether the worker's employment was of causative significance in causing or aggravating the worker's ASTD, the Board considers:

- the mechanics of the employment activity in question (e.g. is the condition bilateral, while the employment activity to a greater degree required movement of the limb on one side?);
- whether any changes took place in the worker's employment or non-employment activities prior to or at the time of onset of the ASTD;
- whether there is evidence of ASTD onset in those who perform the same type of employment or non-employment activities as the worker;

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- the potential combined effect of activities in more than one employment; and
- whether the worker has pre-existing injuries, diseases or other conditions that may be associated with the onset of the ASTD at issue, and the cause of such conditions.

When making the above determination, the Board recognizes that:

- ASTDs may be caused by exposure to employment-related risk factors, but they may also be caused by exposure to non employment-related risk factors that occur as part of everyday life (e.g. while playing recreational sports);
- some cases of an ASTD may be idiopathic (occurring without known cause) where a causal agent cannot be identified;
- some ASTDs may develop over hours while others develop over years;
- two or more ASTDs may exist simultaneously; a second ASTD may occur as the result of adjusting to, or compensating for, the first;
- some people are more susceptible to the development of ASTDs than others; and
- ASTDs are often caused by exposure to a combination of risk factors, rather than just one risk factor.

5. Risk Factors

Determining whether an ASTD is due to the nature of a worker's employment requires an analysis of risk factors relevant to the causation of ASTDs. **The Board considers all relevant risk factors in a particular case.** The presence or absence of some risk factors may suggest work causation, while the presence or absence of others may suggest non work-related causation.

Risk factors may act directly in causing an ASTD or they may act indirectly by creating the conditions that may lead to an ASTD. Risk factors are not equal nor can they be consistently ranked in order of importance. Their relative importance will vary with the circumstances of each claim. Individual judgment is exercised in each case to determine the weight to be given to each risk factor having regard to the available evidence.

When assessing whether a worker's employment was of causative significance in the development of an ASTD, the Board generally considers how the worker interacts with the work environment and the following employment-related risk factors:

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- cold temperature: cold may have direct damaging effects on the tissue through vascular constriction and other mechanisms;
- dose: the level of intensity of a risk factor over a specific duration;
- duration: the length of time a worker is exposed to a particular risk factor;
- force: the physical effort a worker must exert to perform a particular movement or activity;
- frequency: the number of repetitions of a complete sequence of tasks or movements of a process occurring per unit of time during a work cycle;
- grip type: the posture of the hand required for a worker to grasp an object to perform a particular movement or activity. Different types of grips require the application of different force levels;
- hand-arm vibration: the vibration that is transmitted from vibrating surfaces of objects such as hand tools, through the hands and arms;
- local contact stresses: the results from physical pressure between body tissues and objects in the work environment such as tools, machinery, and products;
- magnitude: the degree of exposure to a noted risk factor;
- posture: refers to postures that are awkward. Postures are awkward when joints are held at or near the end of range of motion or muscle tension is required to hold the posture without movement;
- repetition: the cyclical use of the same body tissues either as a repeated motion or as a repeated muscular effort without movement. Consideration is given to the:
 - work cycle;
 - work period; and
 - work-recovery (rest) cycle;
- static load: sustain a given level of muscle force/exertion for a duration of time, against gravity or against some other external force;
- task variability: the degree to which the task remains unchanged thus causing loading of the same tissues in the same way;
- unaccustomed activity: tissues not being acclimatized to the activities performed;
- work cycle: an exertion period and a recovery (or smaller exertion) period necessary to complete one sequence of a task, before the sequence is repeated; and
- work-recovery (rest) cycle: the availability and distribution of breaks in a particular activity to allow the tissue to return to a resting state for recovery.

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This is not an exhaustive list, and relevant factors not listed in policy may also be considered.

When assessing whether one of the above noted employment-related risk factors caused or contributed to the development of a worker's ASTD, the Board considers:

- the location of the anatomical structure affected (e.g. the elbow);
- the risk factors involved in the worker's employment activities;
- the muscle groups, tendons and joints involved in performing the worker's employment activities; and
- whether there is a biologically plausible connection between the employment activities and the development of the ASTD.

EFFECTIVE DATE: ~~March 1, 2015~~ **February 1, 2020**

AUTHORITY: Sections **5**, 6(1) and 6(3) of the *Act*.

CROSS REFERENCES: Item C3-12.00, *Personal Injury*;
Policy item #26.01, *Recognition by Inclusion in Schedule B*;
Policy item #26.03, *Recognition by Regulation of General Application*;
Policy item #26.20, *Establishing Work Causation*.

HISTORY: **February 1, 2020 – Amendments include providing direction when adjudicating ASTD claims where the condition may be either an injury or a disease, and further emphasizing the importance of considering all of the relevant ASTD risk factors in a particular case, and for the Board to base its decisions on the merits and justice of the case.**

March 1, 2015 – This policy provides guidance on adjudicating ASTDs generally. It incorporates language from former policy items #27.00, *Activity-Related Soft Tissue Disorders of the Limbs*, #27.11, *Bursitis*, #27.12, *Tendinitis and Tenosynovitis*, #27.20, *Tendinitis/Tenosynovitis and Bursitis Claims Where No Presumption Applies*, and #27.40, *Risk Factors*, of the *Rehabilitation Services & Claims Manual*, Volume II. This policy provides guidance on adjudicating ASTDs as either personal injuries or occupational diseases. The definitions of the terms nerve entrapment and tendinopathy are included. Guidance on factors relevant to establishing work causation of ASTDs and risk factors generally are included.

APPLICATION: This item applies to all decisions made on or after ~~March 1, 2015~~ **February 1, 2020**