May 17, 2024

Sent Via Email: policy@worksafebc.com

[Total pages: 20]

Policy, Regulation and Research Department
WorkSafeBC
P.O. Box 5350, Stn. Terminal
Vancouver, BC V6B 5L5

Re: Discussion Paper: Activity-Related Soft Tissue Disorders of the Limbs, January 2024

Thank you for the opportunity to comment on the above noted Discussion Paper. The BC Nurses' Union represents more than 48,000 members in the British Columbia healthcare industry. As the unified voice of nurses working in healthcare, significant weight should be attached to our position and recommendations on this issue.

As an occupation Nurses face a disproportionately high number of work-related musculoskeletal disorder injuries. While there is a dismally low acceptance rate for ASTD claims for all genders compared to other types of claims, as an occupation with a high percentage of female workers, nurses are disproportionately impacted by the discriminatory bias that has been identified in significantly lower acceptance rates for female ASTD claims.

Issue

The PRRD has proposed two options in policy.

1. Status quo
2. Amend policy to clarify the causative significance test and require decision makers consider the individual characteristics of the worker.

The status quo is not a reasonable option. The current policy and practices for ASTD/MSI are woefully outdated and substantially failing. We submit that the issues identified by the Policy, Regulation and Research Department (PRRD) in the Option 2 proposed changes are much too narrow and require substantial expansion that includes engaging qualified professionals to develop protocols and procedures to identify and measure risk factors.

Ergonomic Expert Evidence and Opinion

It is the BCNU's position that ASTD/MSI policy and practices is a field that benefits greatly from engaging ergonomic experts with knowledge and experience in identifying and assessing risk factors. The reliance on systematic literature reviews (SLRs) that fail to ask the relevant questions and apply criteria that excludes almost all research studies, fails to advance claims and prevention of ASTD/MSI injuries.

Please see the enclosed two reports by ergonomic expert Dr. Dan Robinson. We submit that Dr. Robinson's reports should be considered in this policy consultation.

ASTD/MSI policy and practice should be science based. Unfortunately, there is a lack of scientific basis to the current ASTD policy and practices. Two poorly designed and executed SLRs have further hindered and obfuscated a scientific basis to the current policy and the policy proposals. Subject matter experts such as Dr. Robinson should be engaged in the development of policy, particularly that which has a supposed scientific basis such as ASTD/MSI.

We will make further references to Dr. Robinson's reports and recommendations later in this submission.

Background

The Board created the term Activity-Related Soft Tissue Disorders (ASTDs) classifying these conditions as occupational diseases under Chapter 4 of the RS&CM where the condition generally developed over more than one shift. The policy lists risk factors as well as a handful of conditions such as tendinopathies and bursitis that may be subject to presumptions under schedule 1. Conditions that are not subject to Schedule 1 presumptions are adjudicated by identification and assessment of risk factors set out in policy.

Initially the Board used external service providers to perform ASTD assessments. In addition to the ASTD risk factors listed in policy there was an ASTD Reference Guide that contained prescriptive levels for risk factors such as force, repetition, and awkward postures. The Reference Guide was considered to have been outdated and retired in April 2015. Some of the prescriptive numbers were put into Practice Directive C4-2.

The numbers in the ASTD Reference Guide and Practice Directive were derived in large measures from a 1997 NIOSH study on MSIs of the upper extremities[1]. There was anticipation that NIOSH would publish an updated study. That has not happened and is now not expected to. As per the ASTD Discussion Paper the PRRD commissioned two systematic literature reviews (SLRs) to assist in updating ASTD policy. These SLRs have been unhelpful in providing useful guidance to update policy and practice.

The Board has used Board Officers (Case Managers or Adjudicators) to assess ASTD risk factors and then adjudicate the claims. The Board Officers typically receive two or five days training on assessing risk factors[2]. The assessments by Board Officers have often been inadequate. Sometimes the actual work performed at the time of injury was not looked at. There are several judicial review decisions that have found the reliance on Board Officer assessments that did not look at the actual work, over assessment of the actual work by ergonomic professionals, was patently unreasonable.[3]

Instead of ensuring that there are high quality assessments of the actual work in ASTD MSI claims, the Board has moved away from even visiting the worksite to assess ergonomic risk factors. The common practice now is for the Board Officer to conduct a phone interview with the worker and to possibly ask the worker to send in some photos or videos of the work. Workers are not equipped to identify and assess ergonomic risk factors. This practice results in MSI hazards not being identified and assessed.

A recent example is WCAT decision A2300390 in which a Board Officer did not assess the worker's actual job but instead relied on a YouTube training video of one task in dialysis nursing done at a leisurely pace for training purposes whereas an ergonomic professional assessing the actual work found the presence of multiple risk factors that presented an inordinate risk of MSI injury. It is currently the practice on ASTD claims to not conduct site visits or look at the actual work almost without exception.

According to the Discussion Paper for the current ASTD policy consultation the allow rates for all claims and ASTD claims are as follows:

All claims	92%
ASTD claims (all genders)	54.8%
ASTD claims (male)	61.7%
ASTD claims (female)	49.1% difference male female accept rate 12.6%.

[1] *Musculoskeletal Disorders and Workplace Factors - A Critical Review of Epidemiologic Evidence for Work-Related Musculoskeletal Disorders of the Neck, Upper Extremity, and Low Back,* National Institute for Occupational Safety and Health, July 1997

[2] As per WCAT internal session ASTDs – A Survey of Recent Trends, Debra Ling and Terry Yu November 1, 2014 page 20

[3] *McHugh v. Insurance Corporation of British Columbia,* 2023 BCSC 56; *Bird v. British Columbia (Workers' Compensation Appeal Tribunal),* 2023 BCSC 543; *Rear v. British Columbia (Workers' Compensation Appeal Tribunal),* 2023 BCSC 1513

Statistics the BCNU obtained from Freedom of Information requests are as follows:

ASTD Accepted Claims 2019 to Present

Year	Male allowed/ disallowed (total)	Female Allowed/disallowed (total)	Male ASTD Allow Rate	Female ASTD Allow Rate	Allow Rate difference
2019	1029/426 (1455)	841/877 (1718)	66%	49%	17%
2020	872/369 (1241)	765/718 (1483)	70.3%	51.6%	18.7%
2021	898/441 (1339)	714/775 (1489)	67.1%	48.0%	19.1%
2022	553/263 (816)	510/547 (1057)	69.4%	48.2%	21.2%

All Claims Accepted 2019 to Present

Year	Male allowed/ disallowed	Female Allowed/disallowed	Male Allow rate	Female Allow Rate	Allow Rate difference
2019	72,522/6,063	42,380/5436	96.1%	88.6%	7.5%
2020	59,836/5,368	34,250/4,944	91.8%	87.4%	4.4%
2021	64.227/4,832	38,486/4,274	93.0%	89.9%	4.1%
2022	46,916/3,803	32,836/3,475	92.5%	90.4%	2.1%

There is a huge difference in the acceptance rate of ASTD claims as opposed to all claims. There is also a very substantial gender inequity in ASTD claims that is many times the gender difference in other types of claims. There is a small gender bias among all claims but that may be largely due to ASTD claims being included in the “all claims” statistics which would then import the very large ASTD gender bias in a diluted manner into all claims.

The statistics on their own demonstrate a significant problem with ASTD claims. No category of claims should have such a dismal allow rate compared to the overall allow rate of ~92%. To have gender inequity of ~12% - 21% on top of this is entirely unacceptable. This ASTD problem must not be allowed to continue. The current proposed policy changes would be ineffective in correcting either the overall ASTD accept rate or the ASTD gender inequity issues.

The Board has developed a technical policy with specific reference to risk factors. However, the Board then does not examine the actual work with any degree of rigour that would be expected for a technical process of assessing risk factors. The Board uses unqualified Board Officers to identify and assess risk factors rather than qualified professionals. The resulting ASTD/MSI policy and practices are a failure that results in the inordinately low claim acceptance rate and gender inequity.

The low ASTD claim acceptance rate is not due to a lack of merit in the claims, it is due to the Board simply not looking for or adequately assessing risk factors. When risk factors are identified or assessed by way of a Board Officer phone interview that may or may not include asking the worker to send in photos or video, absent clear direction on how to identify and assess risk factors, the conclusion will almost inevitably be that there is an absence of sufficient risk factors to be causative of the injury.

The problem is simple. If you don't look you won't find risk factors. The failure of the Board to look is the root cause of the egregiously low acceptance rate of ASTD claims. This has been confirmed by worker representative experience, Judicial reviews and WCAT decisions some of which are referenced in this submission.

The gender bias is a holdover from the Workmen's Compensation Board where compensable injuries were injuries that happened to men. Injuries that happened to women were not as real as traumatic injuries that workmen experienced. There are risk factors in the current policy that are misused to conclude that ASTD/MSI injuries to women may be non-compensable because of intrinsic factors. There may be intrinsic factors that may have women more susceptible to MSI injury, but it is still the work that is the most significant cause of the MSI injury.

Impact on BCNU Members

The process for ASTD/MSI claims is frustrating for workers. They will often see it take months for the claim to simply be adjudicated as in the example below the worker has gone ten months without a decision on her claim.

> *my injury was July 27/2023 to my left rotator cuff. It came from repetitive movements and heavy lifting. I was off for 3 months until my Dr said to go back to work on gradual return. I passed my gradual return to work. I have gone through 3 adjudicators since filing and had a workplace visit demonstrating my job to better understand what I do in Feb. 10 months later I still have a pending case with no decision made. Extremely frustrating!*

This is only one example of a worker's ASTD claim experience that happens over and over again.

There is frustration that members have their claims adjudicated by people with no ergonomic or medical expertise. This is a very common complaint of workers with ASTD/MSI claims. It is fair to say that worker experience on ASTD claims is overwhelmingly negative. The negative experience is even greater for female claimants whose claims are accepted at a much lower rate than male claimants. It is insulting and erodes confidence in the system when denial of a claim is impacted by the gender of the worker. Female workers may be more susceptible than male workers to MSI injury but their claims should not be considered less worthy. Unfortunately, that is what happens with BC ASTD claims.

Workers are often told by their physicians not to file ASTD/MSI claims because, "WorkSafeBC does not accept these types of claims" and then discourage the worker from making a claim. This writer has often heard this comment from workers.

Workers are at a big disadvantage in a system that denies claims because of failure to identify and assess risk factors. This effectively puts an onus on the worker to prove the work caused their injury. The vast majority of workers do not have the knowledge or resources necessary to prove the work was of causative significance of their condition. As part of the adjudication process, the Board usually obtains a Board medical advisor (BMA) opinion. The BMA will in turn opine that, based on the absence of risk factors in the Board Officer's risk factor assessment, it is unlikely that the worker's condition is due to the nature of the employment.

In order to have an ASTD claim accepted on appeal the worker will in almost all cases require an ergonomic assessment of risk factors that, in order to be reliable, requires a site visit be conducted with the ergonomic expert and the worker to assess the work. In most cases, a medical-legal opinion from a physician who reviews the claims information, including the Board Officers risk factor identification and assessment, BMA opinion and the decisions on the claim, as well as the ergonomic assessment done for the worker, is required in order to have a reasonable chance of success in an appeal of an ASTD claim denial. It is difficult to arrange site visits. There are significant expenses for an onsite ergonomic assessment and a medical-legal opinion. Those expenses may be reimbursed if WCAT so orders but it is common for WCAT to order reimbursement of only a portion of those expenses.

Injured workers, many of whom are disabled from work and losing pay, don't have the resources or abilities to arrange for ergonomic assessments and medical legal opinions. The BC Nurses' Union has applied significant resources to assist members gather relevant evidence for ASTD claim appeals. Our success rate in ASTD appeals is relatively high but for every successful appeal there is a decisional error in denying the claim. In order for an appeal to be successful the facts, law and policy must support the claim. The facts in these cases are that there are sufficient risk factors for the work to be of causative significance in causing the worker's condition. The ergonomic assessments in these cases have found the presence of ergonomic risk factors through appropriate ergonomic methodology. In most of these cases there are multitudes of risk factors exceeding ergonomic guidelines. Many workers are unable to have reasonable ergonomic assessments of their work for ASTD claims. This should be a right that is addressed in policy and procedures.

Policy and Practice Failure

The ASTD policy and practices are, in our view, a failure that demands correction. The policy sets out risk factors that must be weighed in considering work causation. Practice Directive C4-2 includes specific numerical guidelines that are too often applied as limits that must be exceeded before a condition can be considered as due to the work. The science behind those guidelines is lacking. Most of those numbers were derived from unwarranted extrapolations from studies in the 1997 NIOSH study. The ASTD Reference Manual was retired because the science to support the numbers was never present, became outdated and was never updated and the two SLRs commissioned by the PRRD failed to find sufficient evidence to support the Boards ASTD policy and procedures.

The Board's failure to conduct proper assessment of the work for claims adjudication processes also demands correction. Ergonomic professionals can apply peer reviewed methods to assess work to determine if that work presents risk of MSI/RSI injury. They can also propose measures to eliminate or minimize the risk of injury. The MSI regulation is consistent with these ergonomic practices. Other jurisdictions very successfully apply modern ergonomic assessments to claims and prevention. The CRE-MSD processes in Ontario are an example of a system that is effective and consistent with modern science. The system for claims should adapt and apply successful processes from other jurisdictions such as Ontario and harmonize our claims process with the MSI regulation.

Expert Opinion on MSI Policy

Appended to this submission are reports from Dan Robinson, Ph.D. Canadian Certified Professional Ergonomist, dated August 10, 2023 and April 3, 2024. The BC Nurses' Union believes that WorkSafeBC must consult and obtain opinions from experts in the field on policy and practice matters that involve technical expertise. ASTD/MSI policy and practice is a matter that requires technical expertise. Dr. Robinson is eminently qualified to provide expert opinion on this subject.

The input from experts on ergonomic risk and assessment in our view would be of substantially greater value than the SLRs commissioned by the PRRD which in our opinion have been unhelpful in the development of STD/MSI policy and practice.

In the August 10, 2023 report Dr. Robinson states, in part:

> 1. Terminology. Use of MSI and ASTD is inconsistent across regulation, prevention, policy and practice. Regulation and prevention use "musculoskeletal injury" (MSI). Policy and practice use "activity-related soft tissue disorder" (ASTD). This needs to be harmonized for clarity and to address recommendations in both Petrie and Patterson Reports to harmonize prevention and regulation with policy and practice. In my experience, many employers are not clear that MSI and ASTD refer to the same soft tissue disorders. If there is intent to harmonize policy, practice, prevention and regulation, this needs to be addressed.
>
> 2. Conclusions of the Systematic Review. The Systematic Review contains a thorough, well considered analysis; however, in my opinion, there is potential to misinterpret the conclusions when applying to policy, practice and adjudication of claims.
>
> …

Conclusions of the Systematic Review may be misinterpreted as indicating a lack of association between occupational risk factors and ASTDs because of the statement that causal relations cannot be strongly concluded. This is not what the Systematic Review found. In my experience, lack of strong causal evidence in the scientific literature has been used to diminish the significance of occupational risk factors during the adjudication of claims and in clinical opinions regarding the likelihood of work-relatedness when relevant occupational risk factors exist.

3. …
There is a proposed amendment to ensure that work causation is determined on a case-by-case basis if Schedule 1 requirements for the ASTD are not met. This partially addresses the issue of ensuring that individual cases are evaluated; however, it does not address the incorrect application of epidemiological research when performing that assessment.

4. …
In my opinion, there are problems with risk factor thresholds that are currently contained within each of policy, C4-2, regulation, and MSI prevention tools intended for the workplace, such as the MSI Risk Factor Assessment Worksheet and the prior MSI Risk Identification Checklists A and B. Guidance thresholds in these documents need to be reviewed, updated, harmonized and referenced to the source research.

5. …
The issue of denying computer work claims based on identification of only a single risk factor is addressed in proposed policy amendments by indicating that single risk factors may be sufficient for causation; however, the issues of accurate and skilled assessment of posture and rates of repetition, and misinterpretation of guidance thresholds for repetition are not addressed.

6. …
In my experience, there has also been denial of claims based on an assumption that being female and over 40 years of age presents a greater level of risk for certain ASTDs than the identifiable risk factors in the workplace. As such, the claim is denied. The proposed policy change in C27.10 that “all relevant individual characteristics must be considered” has the potential to work counter to the intent of gender equity in adjudication of claims if being female and over 40 is interpreted as more significant than repetitive or forceful awkward shoulder postures for shoulder tendinopathies, for example.

…
The current language in C4-2 indicates that thresholds within that practice directive are not intended to be absolutes but are to be used as guidelines only. In practice, the policy and C4-2 guidelines tend to be interpreted as absolutes, despite the wording. Perhaps a better approach would be to use language within policy that is similar to the first paragraph of C4-2 and indicates that single risk factors exceeding these thresholds present sufficient risk of injury, and those thresholds may be lower when two or more risk factors exist simultaneously. This would support the intent of proposed amendments to consider singular risk factors, recognizes that combined exposures are more severe, and provides thresholds above which risk is clearly considered significant. The current use of “generally” leaves uncertainty in how thresholds are to be applied in the assessment of work.

7. The proposed amendments address ASTDs of the limbs. MSI in regulation and prevention include soft tissue injuries of the neck and back. There is no parallel policy to support adjudication of these injuries. While beyond scope of the proposed amendments related to ASTDs of the limbs, this is an issue that persists.

In his April 3, 2024 Addendum Dr. Robinson recommended that:

1. Ensure that risk factors set out in policy and/or practice directives are based on the current medical/scientific evidence and periodically updated to reflect new evidence.
2. Provide additional description of causative significance clarifying the balance between occupational and non-occupational risk factors.
3. There needs to be more clarity on weighing individual characteristics.
4. Whether a worker has pre-existing injuries, disease or other conditions should not detract from an assessment that non-trivial risk factors exist in a worker's employment.
5. The addition of a singular risk factor as being of causative significance is a positive change. It is unclear what "certain conditions" means. There will need to be clarity on what "certain conditions" are required for acceptance of a singular risk factor.
6. The assessment of occupational risk factors needs to be performed by individuals with adequate education and experience to be able to identify and quantify relevant risk factors reliably and accurately. Professional expertise and education are required to reasonably interpret which risk factors are relevant, to quantify exposure and provide an opinion whether exposure is trivial or non-trivial for singular or multiple risk factors, and whether there is biological plausibility that the identified risk factors affect the tissues of interest. The use of Certified Professional Ergonomists (CCPE, CPE, or HFP) or other adequately trained professionals is more likely to ensure a fair and accurate assessment of occupational risk factors towards determining causative significance.

The development of new policy in this very technical field would have benefited greatly from the engagement of experts like Dr. Robinson early in the process. Unfortunately, the current policy consultation processes are not engaging experts early. This is a process that needs to change. Dr. Robinson's recommendations are relevant and important. They should be given considerable weight in this consideration of ASTD/MSI policy.

PRRD Discussion Paper

While the discussion paper references CPR, recommendations #36-37, recommendations #34-35 and #38 also provide specific recommendations regarding ASTD claims. The recommendations are summarized as follows:

34. Policy be amended to recognize that where there is no clear diagnosis and there is some evidence that an ASTD could be considered under either section 5 or 6 the decision include consideration of the claim under both sections.

35. Amend policy #27.00 Risk Factors emphasizing the importance of identifying all relevant risk factors that exist in a particular case and base the decision on a careful evaluation of the evidence and taking into consideration the merits and justice of the case.

36. Amend policy 27.00 that the use of relevant risk analysis data from the workplace be considered in the adjudication of these claims.

37. The BOD consider developing an ASTD policy specific to the risk factors consistent with the requirements in the Regulation and guidelines.

38. The BOD consider steps necessary to ensure adequate expertise at the Board level to ensure fair and efficient adjudication without resorting to review/appeal levels wherever possible.

New Directions 2019 noted a very low acceptance rate for ASTD claims compared to other types of claims (~90%) with a very large gender inequity 60% for men and 35% for women. This review also noted that "British Columbia stands alone in its treatment of these MSIs as ASTD's and as Occupational Diseases (OD) under section 6 of the Act." Only between 1-2% of ASTD claims are for computer related activities. The following specific recommendations were made:

> RECOMMENDATION #84
> That the Workers Compensation Act (Act) be amended to provide that gradual onset musculoskeletal injuries (MSIs) will be treated as personal injuries under section 5 of the Act and that Board policy then be amended to provide:
>
> - for the adjudication of MSIs as personal injuries
> - a GBA+ perspective as discussed
> - an integration with the Prevention guidelines for MSI injuries
> - that Activity-Related Soft Tissue Disorder conditions now specified in Schedule B would have an equivalent rebuttable presumption of work causation for the designated occupations but as a personal injury.
>
> RECOMMENDATION #85
> That, in the meantime, Appendix 1 of Practice Directive C4-2 be retired and that the PD be updated to include the current Prevention guidelines and a process to integrate prevention and compensation approaches. In light of any new policy, I recommend that a new Practice Directive be reviewed by an expert external ergonomist who is accepted as credible by the key stakeholders.
>
> RECOMMENDATION #86
> That Board policy and practice provide a process for a worker, the union, the employer, or the OH&S committee to intervene when a worker is developing Musculoskeletal Strain Injury (MSI) or Repetitive Strain Injury symptoms and request Board assistance or resources to reduce the risk of an MSI for that worker.

The PRRD Discussion Paper only addresses a small proportion of the CPR and New Directions recommendations.

The Discussion Paper cites current statistics and research through UBC in partnership with the Board that confirms gender bias on ASTD claims. This includes vastly different accept rates for men versus women, higher accept rates for men versus women in the same occupations and a longer time to accept decisions for women's claims versus men. Despite confirming the biases against ASTD claim in general and the specific gender biases there is nothing in the proposed policy changes to specifically address these biases. This is unacceptable.

There is a section in the Discussion Paper titled Prevention Risk Factors that says the PRRD is not proposing any further changes to explicitly incorporate the MSI risk factors and requirements in the OHSR and prevention guidelines beyond changes made in 2015. The Discussion Paper goes on to say measurement criteria for risk factors for claims compared to those for prevention are by necessity different. This is patently unreasonable.

The criteria for prevention of MSI injury and the criteria for claims adjudication is not by any necessity different. There is a major inconsistency in the system in applying different criteria to claims and prevention. There is no explanation or reasoning provided why the OHSR measures adapted into claims policy in 2015 can not be expanded to a more complete and consistent approach.

The PRRD proposal is intended to clarify that WorkSafeBC must assess causation on a case-by-case basis. We wholeheartedly agree but point out that the current practice does not assess claims on a case-by-case basis. Assessing on a case-by-case basis requires observation of the worker performing the actual work. This cannot be done over the telephone by a person lacking skills and training in risk identification and assessment. This cannot be done without considering the specific anatomical characteristics of the worker and the way in which the worker performs the work.

The PRRD proposal states the amendments emphasize that when determining causative significance all relevant risk factors that include the worker's individual characteristics must be considered. In order to meet this requirement the Board will have to change the practices on ASTD claim risk assessment and adjudication dramatically.

The BC Nurses' Union supports the Option 2 Amend Policy on ASTDs but the proposed amendments are woefully inadequate.

BCNU Proposed Policy

Please accept Dr. Dan Robinson's attached reports dated August 10, 2023 and April 3, 2024 as part of our submission. It is the BCNU's position that future policy consultations on matters that involve technical expertise should engage outside experts early in the process. We ask that the Board accept and adopt Dr. Robinson's observations and recommendations .

We further submit that:

1. The compensation policy should be harmonized with the Ergonomic (MSI) requirements in the OHSR. The use of the term ASTD should be discontinued.
2. The compensation policy should require that risk factor identification and assessment must be conducted by persons professionally qualified to do so. The criteria for qualifications to identify and assess risk factors should be established in consultation with stakeholders, practicing professionals, and professional bodies.
3. The policy must require that MSI injury assessments must wherever practicable be conducted with the worker in the conditions and circumstances under which the condition arose. In circumstances where this is not possible, suitable measures must be taken to evaluate and simulate the conditions as they would have been performed and experienced by the worker.
4. The Board should be required to measure and monitor the effectiveness of new policy and practices on the acceptance rate of MSI injury claims including gender considerations.
5. The policy must provide that for intrinsic factors, the Board must consider whether the intrinsic factors made the worker more susceptible to work-related injury. Where the work is considered a significant cause, the condition should be accepted as compensable. A comparative analysis of compensable versus non-compensable causes is patently unreasonable as per *Schulmeister*[4] and must not be applied.

Conclusion

The proposed policy in the Discussion Paper Option 2: Amend Policy on ASTDs Appendix B should be adopted as a starting point. Those recommendations alone are entirely inadequate to reasonably address the ASTD compensation policy. The recommendations of Dr. Robinson in his attached reports and the BCNU recommendations above should be accepted in amending the policy in harmonization with MSI prevention measures and current developments.

All of which is respectfully submitted.

Yours truly,

BRITISH COLUMBIA NURSES' UNION

Jim Parker
Coordinator, WCB/LTD Appeals
BC Nurses' Union

c. T. Caridi
G. Grigg

[4] *Schulmeister v. British Columbia (Workers' Compensation Appeal Tribunal),* 2007 BCSC 1580

Jim Parker, Coordinator, WCB/LTD Appeals, is the Lead Author of this submission which was developed in consultation with the other BC Nurses' Union WCB Advocacy Team members; Sarah Monaco, Kerry Birch, Gregory Rabin, Zuleika Gedeon, Ming Cheng, Guinevere Loi, and Kimberly Harding.

This submission has been developed in accordance with BC Nurses' Union Strategic and Operational Plans. This submission has been reviewed and approved by OH&S Department Director Theresa Caridi and Manager Geri Grigg.

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August 10, 2023

Jim Parker
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Re: Pre-consultation on new ASTD Policy – Ergonomist perspective.

This document provides preliminary discussion and opinion regarding pending development of new policy for ASTD claims at WorkSafeBC, with the intent of providing constructive feedback that may assist BCNU and/or WorkSafeBC in efforts to improve ASTD policy and claims adjudication, and to address related recommendations contained within the Petrie Report and the Patterson Report.

Qualifications and Experience

Dan Robinson is a Canadian Certified Professional Ergonomist (CCPE), Fellow of the Association of Canadian Ergonomists and has been consulting in Ergonomics for more than 30 years. His education includes both M.Sc. and Ph.D. in Kinesiology from Simon Fraser University. Dan's Doctoral research focused on biomechanics and the estimation of internal tissue forces towards estimation of injury risk to spinal tissue from cumulative tissue strain. Dan is a past Chair and current Member of several Canadian Mirror Committees (CMC) to the International Organization for Standardization (ISO), including: Ergonomics (TC159), Ergonomics: Anthropometry and Biomechanics (TC159/SC3) and Ergonomics of the Physical Environment (TC159/SC5). He has guided and contributed to the development, review and revision of international Standards related to ergonomics and the assessment of occupational risk factors.

Dan's experience with WorkSafeBC includes support and feedback to WorkSafeBC Ergonomists/Human Factors Specialists regarding MSI prevention, several research projects aimed at prevention of MSI and funded by the WorkSafeBC Research Division, and the provision of independent ergonomics assessment and expert opinion to inform claims appeals at Review Division and at WCAT. Experience providing ergonomics services to industry includes assistance to comply with BC OHS Regulations (MSI Requirements), prevention of MSI, accommodations for injured workers, and independent ergonomics assessment and opinion related to WorkSafeBC claims.

Background

The opinion and recommendations contained within this letter were informed by review of relevant portions of the following documents:

- Memorandum – ASTDs of the Limbs – CPR Recommendations #36 and #37. July 13, 2023. From WorkSafeBC PRRD to BCNU. (Memo to BCNU)
- Research Snapshot. Risk factors for activity-related soft tissue disorders. Systematic Review Grant Project RS2019-SP03. WorkSafeBC.
- Koes, Bart, et al.. What are the physical and psychosocial risk factors associated with the development of activity-related soft tissue disorders of the limbs? Final Report. WorkSafeBC Project RS2019-SP03. (Systematic Review)
- Petrie, Paul, March 31, 2018. Restoring the balance. A worker-centred approach to Workers' Compensation Policy. A report to the Board of Directors, Workers' Compensation Board of BC. (Petrie Report).

- Patterson, Janet, October 30, 2019. New Directions: Report of the WCB Review 2019. Report to the British Columbia Minister of Labour, Honourable Harry Bains. (Patterson Report).
- Current WorkSafeBC Policy and Practice Directives:
  - Rehabilitation Services & Claims Manual, Volume II, Sections C4-27.10 and C4-27.20, amended to December 1, 2022.
  - Practice Directive #C4-2, August 9, 2005, amended to December 30, 2021.
- Current BC OHS Regulations on "Ergonomics (MSI) Requirements" and supporting documents:
  - BC OHS Regulation, Sections 4.46-4.53.
  - WorkSafeBC (2022) MSI Risk Assessment Worksheet, July 2022.

The Memo to BCNU provides an overview of proposed amendments to C4-27.10 and C4-27.20, which are indicated in the Memo as having an intent to address Petrie Report recommendations #36 and #37, as well as Patterson Report recommendations related to gender gaps in claims acceptance, treating ASTDs as personal injuries, and the integration of MSI prevention guidelines into compensation policy and practice. The Memo indicates that proposed amendments were informed by the Systematic Review, noting that "no strong conclusions could be made regarding possible causal relationships." Brief discussion and my opinion on statements within the Memo and on the proposed amendments to Policy are provided below.

1. Terminology. Use of MSI and ASTD is inconsistent across regulation, prevention, policy and practice. Regulation and prevention use "musculoskeletal injury" (MSI). Policy and practice use "activity-related soft tissue disorder" (ASTD). This needs to be harmonized for clarity and to address recommendations in both Petrie and Patterson Reports to harmonize prevention and regulation with policy and practice. In my experience, many employers are not clear that MSI and ASTD refer to the same soft tissue disorders. If there is intent to harmonize policy, practice, prevention and regulation, this needs to be addressed.

2. Conclusions of the Systematic Review. The Systematic Review contains a thorough, well considered analysis; however, in my opinion, there is potential to misinterpret the conclusions when applying to policy, practice and adjudication of claims.

   The Systematic Review states a conclusion on page 7: "… for all investigated combinations of exposures and outcomes, some studies showed significant associations between physical and psychosocial exposures and the occurrence of ASTDs… our findings do not allow the conclusion that physical or psychosocial exposures do not play a casual role in the development of the assessed ASTDs." A second statement on page 8 indicates "…evidence does not allow for strong conclusions regarding a possibly causal relationship between work-related physical and psychosocial exposures and a number of ASTDs." The Systematic Review discussed the difference between cross-sectional data analysis, which can inform regarding associations between risk factors and ASTDs at a specific point in time (ASTD prevalence and correlation with risk factors), versus longitudinal research which can inform regarding the development of an ASTD across a period of exposure to risk factors (ASTD incidence and causation or dose-response relationships). They note the lack of quality longitudinal research and several other issues in reviewed research, such as lack of consistent ASTD diagnoses, quantification of occupational risk factors, and risk of bias. These factors hinder the ability to define causal relationships and contribute to mixed or inconclusive findings across studies. This lack of quality

epidemiological studies lead to another recommendation within the Systematic Review (page 8): "Accordingly, in policy making cut-off values of exposure should be applied with great caution."

Conclusions of the Systematic Review may be misinterpreted as indicating a lack of association between occupational risk factors and ASTDs because of the statement that causal relations cannot be strongly concluded. This is not what the Systematic Review found. In my experience, lack of strong causal evidence in the scientific literature has been used to diminish the significance of occupational risk factors during the adjudication of claims and in clinical opinions regarding the likelihood of work-relatedness when relevant occupational risk factors exist. As an example of how language may lead to differing interpretations, there is a difference between The Memo to BCNU and the Research Snapshot in how the conclusions of the Systematic Review are stated. The Memo states in text and in footnote 3 that no strong conclusions could be made regarding possible causal relationships. This simplification of the Systematic Review conclusions focuses on what was not found, but does not reflect the complexity or the tone within the Systematic Review and drops the qualifier at the end of this statement in the Systematic Review (page 8): "… of a number of ASTDs" (not all ASTDs). In my opinion, simplification of the conclusions is likely to lead to misinterpretation that the Systematic Review indicates a lack of association between occupational risk factors and ASTDs. This was not the conclusion of the Systematic Review. The Research Snapshot more accurately represents the key findings of the Systematic Review and the primary conclusion that "WorkSafeBC cannot conclude that exposures *do not* play a causal role in the development of the assessed ASTDs". The latter statement promotes consideration of occupational risk factors within the context of biological plausibility that exposure could lead to an ASTD. Any reference to the Systematic Review within development of policy, practice, or within adjudication of claims should provide greater context to reflect the complexity of the findings, and should rely on an assessment of occupational risk factors with an assumption that those risk factors have the potential to contribute to causation of an ASTD. The evidence does not support a conclusion that occupational risk factors are trivial.

3. Interpretation of systematic reviews and epidemiological evidence. Amendment to 27.10 includes: "…risk factors set out in policy, and the current medical/scientific evidence". Systematic reviews of epidemiological research are frequently cited and used in expert or clinical opinions as indicating the lack of strong evidence for an association between risk factors and specific ASTDs, and presented to support a lack of work-relatedness when occupational risk factors that meet policy or practice thresholds are otherwise noted as present. The discussion within the Koes et al. Systematic Review regarding weaknesses in the body of existing research on ASTD causation and their conclusion that occupational risk factors cannot be excluded as relevant to ASTDs based on that body of research is important in the interpretation of findings within that and other systematic reviews. Weakness of association and lack of evidence for causation within epidemiological research should not, in my opinion, supersede biological plausibility based on biomechanics and functional anatomy within a single claim. Biological plausibility is based on identifying occupational risk factors that involve and have the potential to strain the injured tissues through forceful exertion, awkward postures, repetitive movement, sustained effort (posture or force), or vibration. The existence of biologically relevant risk factors should be accepted as evidence of sufficient risk of work-relatedness in an individual case, regardless of any epidemiological evidence to the contrary. Epidemiological evidence is

based on population response rather than individual response. ASTDs that are work-related may occur in an individual when the majority of the working population would not experience the same injury. In my opinion, reliance on epidemiological data to determine the likelihood of work-relatedness is flawed when adjudicating the work-relatedness of an individual's claim. A strong epidemiological association between risk factors and an ASTD, or between occupation and an ASTD, is indicative that occupational risk factors are likely to be relevant for an individual claim but still requires assessment of those risk factors for the individual work scenario. A weak epidemiological association between risk factors and an ASTD, or lack of evidence of an association within epidemiological research, does not indicate that risk factors are likely to be irrelevant. The same assessment of risk factors in the workplace is warranted. Proposed changes to consider individual characteristics when determining work-relatedness might be interpreted as supporting the assertion that an individual may experience work-related injury when it is rare in a working population; however, there is no indication in policy or practice that lack of epidemiological evidence does not diminish the relevance of work-related risk factors in the determination of biological plausibility for individual injury causation.

There is a proposed amendment to ensure that work causation is determined on a case-by-case basis if Schedule 1 requirements for the ASTD are not met. This partially addresses the issue of ensuring that individual cases are evaluated; however, it does not address the incorrect application of epidemiological research when performing that assessment.

4. Petrie Report recommendation #36 – amend policy to ensure the use of relevant risk analysis data from the workplace be considered in adjudication of claims. Discussion in the Petrie Report references BC OHS Regulation (Ergonomics MSI Requirements) and guidance within prevention worksheets used by employers to assess risk in the workplace. In my opinion, there are problems with risk factor thresholds that are currently contained within each of policy, C4-2, regulation, and MSI prevention tools intended for the workplace, such as the MSI Risk Factor Assessment Worksheet and the prior MSI Risk Identification Checklists A and B. Guidance thresholds in these documents need to be reviewed, updated, harmonized and referenced to the source research. This does not appear to have been addressed in the proposed policy amendments, beyond the addition of the word "generally" to the postural thresholds that already exist.

5. Petrie Report recommendation #37 - develop ASTD policy on risk factors consistent with regulation and guidance. This recommendation is also reflected in the Patterson Report regarding the integration of MSI prevention guidelines into compensation policy and practice. The related example in the Petrie Report outlines computer MSI claims that are denied based on the presence of only repetition and indicates the need to revise risk factors appropriately to recognize that single risk factors may provide sufficient risk to support work causation if the intensity or duration are high, as reflected in prevention guidance. In my opinion, recognition of single risk factors is an appropriate step, is somewhat addressed in proposed policy changes, and may assist with the scenario of computer MSI; however, there remain significant issues with how risk factors are assessed during risk factor evaluations of computer work. These include incorrect repetition thresholds in C4-2, and inaccurate risk factor evaluation from job site visits.

   C4-2 indicates a repetition threshold of 200 movements/finger (100 keystrokes/finger) for greater than 4 hours, which is equivalent to typing at 160 wpm. This would be a very rare occurrence in

computer work, and is an incorrect interpretation of the research upon which this rate is based. The rate of repetition should refer to a total of 200/min across all 8 fingers, or 25/min per finger. It does not apply to the thumb. This threshold needs revising or clarification in policy or practice directive to indicate repetition thresholds for finger movement of 200 movements/8 fingers or 25 movements/min/finger. In my opinion, this change would assist with recognition of repetitive finger movement as a single risk factor.

Inaccurate or inadequate evaluation of risk factors for computer work is a second issue that was not identified specifically but is relevant to recommendation #38 in the Petrie Report and recommendation #85 (page 204) in the Patterson report: "that the Board ensure that ergonomic assessments are conducted by qualified professionals". Awkward postures of the wrist and repetitive wrist movements are frequently not recognized or accurately quantified during assessment of keyboard or mouse use, and during other work. There is a consistent failure to identify observable ulnar deviation greater than 10 degrees associated with hand position on a keyboard or mouse. In my experience, similar inaccuracies in the evaluation of risk factors are common within ASTD Risk Evaluation Reports that are used to assess work-relatedness for ASTDs in computer work as well as other types of work. Assessment skills for posture by WorkSafeBC employees do not appear to be adequate to reliably identify lateral wrist deviation during keyboard and mouse use, leading to failure to identify awkward wrist posture as a risk factor in computer MSI. Failure to identify awkward wrist postures and wrist movements while sustaining or moving through those postures leads to underestimation of the significance of wrist repetition rates and failure to identify the second risk factor of awkward posture. This leads to the scenario described in the Petrie Report of identifying only a single risk factor when there are two or more risk factors present. There are currently two professional certifications for professional ergonomists in North America, CCPE in Canada and CPE in USA. Occupational Therapists, Physiotherapists or Kinesiologists are often also considered to have professional competence in ergonomic assessment; however, specific training in ergonomics varies and may or may not be present for individual practitioners in these professions. WorkSafeBC Case Managers who perform risk evaluations are not professionally certified in ergonomics and are not required to have a related undergraduate or graduate degree. In my opinion, this contributes to the inaccuracies in technical assessment of risk factors associated with claims.

Accurate quantification of rates of wrist and finger movement, appropriate thresholds for finger movement, and recognition of awkward lateral wrist postures are required to address the intended outcome of accepting MSI that are legitimately associated with computer work. This is also relevant to the Patterson Report recommendations regarding gender differences in rates of claims acceptance, which was indicated as possibly related to a larger population of women than men performing computer-based work.

The issue of denying computer work claims based on identification of only a single risk factor is addressed in proposed policy amendments by indicating that single risk factors may be sufficient for causation; however, the issues of accurate and skilled assessment of posture and rates of repetition, and misinterpretation of guidance thresholds for repetition are not addressed.

6. Precision and language within 27.10 and 27.20. There are terms used that may increase uncertainty or variability in interpretation and application of policy. These include:

a. 27.10 amendment to reinforce work causation test uses the terms "more than a trivial or insignificant aspect". There is no definition for what trivial or insignificant mean in the determination of risk factor exposure. If this specifically refers to exposure durations within practice directives or policy or prevention documents, there should be reference to these documents to provide clarity of interpretation.

b. The Patterson Report noted a gender inequity in acceptance of claims. The denial of most claims related to computer work was indicated as a possible contributor. In my experience, there has also been denial of claims based on an assumption that being female and over 40 years of age presents a greater level of risk for certain ASTDs than the identifiable risk factors in the workplace. As such, the claim is denied. The proposed policy change in C27.10 that "all relevant individual characteristics must be considered" has the potential to work counter to the intent of gender equity in adjudication of claims if being female and over 40 is interpreted as more significant than repetitive or forceful awkward shoulder postures for shoulder tendinopathies, for example. While individual characteristics and circumstances should be considered, there is no guidance regarding the relative weight assigned to those characteristics versus the occupational risk factors that may exist.

c. 27.10 proposed amendment to indicate that a single risk factor may be sufficient to cause an ASTD under certain conditions is needed. It is not clear what "certain conditions" means. Recommend indicating that single risk factors that exceed thresholds in policy or practice are sufficient. Where two or more risk factors exist, those thresholds may be lower. Guidance on the assessment of single risk factors is required to put this policy into practice.

d. The proposed amendment to add the word "generally" into C27.20 related to hand-wrist and shoulder posture thresholds may increase variability and uncertainty in how specific cases are adjudicated. It is not clear how "generally" is to be interpreted, leaving it entirely to the adjudicator to decide whether a threshold should be more or less for a specific claim. Although the Systematic Review indicated that thresholds need to be cautiously determined, in my opinion, there needs to be a guidance threshold around which risk may be assessed to provide clarity and consistency in the interpretation of policy. The current language in C4-2 indicates that thresholds within that practice directive are not intended to be absolutes but are to be used as guidelines only. In practice, the policy and C4-2 guidelines tend to be interpreted as absolutes, despite the wording. Perhaps a better approach would be to use language within policy that is similar to the first paragraph of C4-2 and indicates that single risk factors exceeding these thresholds present sufficient risk of injury, and those thresholds may be lower when two or more risk factors exist simultaneously. This would support the intent of proposed amendments to consider singular risk factors, recognizes that combined exposures are more severe, and provides thresholds above which risk is clearly considered significant. The current use of "generally" leaves uncertainty in how thresholds are to be applied in the assessment of work.

e. Proposed amendment to 27.20 indicates the definition of frequently repeated as "at least once every 30 seconds". This is inconsistent with guidance for wrist repetition in C4-2,

which indicates 2/minute through full range of movement or 10/min through less than full range. Policy and practice should be consistent.

f. 27.20 definition of frequently repeated uses "…time for the affected muscle/tendon groups to return to a relaxed or resting state". In my experience, the definition of a relaxed or resting state is often misinterpreted as meaning postures less than the awkward posture threshold rather than fully neutral (typically 0 degrees). Resting states are either fully supported or fully neutral with no muscle/tendon activity. This could be better defined.

7. The proposed amendments address ASTDs of the limbs. MSI in regulation and prevention include soft tissue injuries of the neck and back. There is no parallel policy to support adjudication of these injuries. While beyond scope of the proposed amendments related to ASTDs of the limbs, this is an issue that persists.

I remain available for further assistance or to provide clarification.

Sincerely,

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April 3, 2024

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Re: Addendum - consultation on proposed ASTD Policy – Ergonomist perspective.

Background

An opinion letter regarding pending development of new policy for ASTD claims at WorkSafeBC was provided August 10, 2023 to BCNU, with the intent of providing constructive feedback that may assist BCNU and/or WorkSafeBC in efforts to improve ASTD policy and claims adjudication, and to address related recommendations contained within the Petrie Report and the Patterson Report. The proposed amendments to Policy in RSCM II have since been formalized and released for consultation, with a submission deadline of April 26, 2024. This letter provides an addendum to my August 10, 2023 letter, considering the current proposed amendments and explanation of intent that have been released for consultation.

The August 2023 letter is based on review of a Memo to BCNU that outlines proposed amendments to C4-27.10 and C4-27.20, which are indicated in the Memo as having an intent to address Petrie Report recommendations #36 and #37, as well as Patterson Report recommendations related to gender gaps in claims acceptance, treating ASTDs as personal injuries, and the integration of MSI prevention guidelines into compensation policy and practice. Key comments in the August 2023 letter address harmonizing terminology, interpretation of the Koes, Bart et al. systematic review conclusions, the application of epidemiological evidence to individual claim adjudication on a case-by-case basis, issues in the quality of assessment and interpretation of ASTD risk factor guidelines, issues with assessment of risk associated with computer work, challenges in interpreting imprecise or undefined terms within Policy ("generally", "more than a trivial or insignificant aspect"), issues with interpretation of individual characteristics versus occupational risk factors (e.g., female over 40 years of age as a risk factor), and lack of guidance for adjudication of soft tissue injuries of the neck or back that have similar risk factors as ASTDs of the limbs.

The opinion and recommendations contained within this addendum were informed by review of the documents listed in the August 2023 letter, in addition to the recent document "Activity-Related Soft Tissue Disorders of the Limbs: For Consultation" (undated, but with a submission deadline of April 26, 2024), including appendices. This is referred to as the Consultation Document below.

Opinion - Addendum

The Consultation Document provides an explanation of the intent of specific revisions to policy, and provides the proposed wording within Appendix B. The opinions and concerns outlined within my letter of August 2023 remain relevant. In addition to those considerations, the following are offered.

1. The addition to C4-27.10 A (page 5, Appendix B) of "…with consideration of risk factors set out in policy, and the current medical/scientific evidence" holds the potential to allow for divergent interpretation of medical/scientific evidence by different adjudicators. The Systematic Reviews (2019 and 2020, and supplementals) have indicated that the state of the scientific evidence is poor for many ASTDs, with limited clarity on which risk factors and at what level of exposure are associated with increased risk of specific ASTDs. This may be misinterpreted as indicative of a

lack of association when the real issue is a lack of consistency and quality in the available research. Discussion within the Consultation Document (page 10) regarding perceived differences between risk factor criteria for prevention (population/epidemiology based) and risk factor criteria for compensation for an individual case (individual employee characteristics) is relevant in the interpretation of medical/scientific evidence but is not clearly outlined in policy. This leaves interpretation of the available scientific evidence up to the adjudicator and has potential to result in less consistency in claims adjudication, and a requirement for an updated literature review in each claim to ensure that "current medical/scientific evidence" has been applied. In my opinion, risk factors set out in policy should be based on a combination of biological plausibility and available scientific evidence; however, that scientific evidence should not be reinterpreted for each claim. Recommend removing "and the current medical/scientific evidence" from policy and instead ensuring that risk factors set out in policy and/or practice directives are based on the current medical/scientific evidence and periodically updated to reflect new evidence.

2. The additional description of "causative significance" in C4-27.10 A (page 5, Appendix B) as meaning "more than a trivial or insignificant aspect" of employment, and the statement that "…employment (the employment-related exposure to risk factors) need not be the sole or even predominant cause…" are of potential value in clarifying the balance between occupational and non-occupational risk factors. In my opinion, this clause indicates that the presence of non-trivial occupational risk factors represents causative significance, even if there are other non-occupational risk factors that may have played a role in causation. This eliminates the need to interpret the relative balance between occupational and non-occupational risk factors. When occupational risk factors are present in a non-trivial manner, this presents causative significance even if there are other non-occupational risk factors. In my opinion, this could result in greater gender equity in claims acceptance. There remains poorly defined interpretation of what constitutes "more than a trivial or insignificant aspect".

3. It is unclear what "weighing the evidence… including the worker's individual characteristics" applies to in the adjudication of a claim. If the intent of the policy changes to the description of causative significance (see #2 above) are interpreted as indicating that non-trivial occupational risk factors represent causative significance, then the application of "including worker's individual characteristics" is intended to assist with the assessment of occupational risk factors rather than the identification of competing non-occupational risk factors. In my opinion, this could be further clarified by changing "in weighing the evidence" to "in assessing occupational risk factors". As currently stated, the interpretation could be that an assessment of an individual's non-occupational risk factors (personal characteristics) is required to determine a balance of causation between occupational and non-occupational risk factors. This is not consistent with the "causative significance" description that clearly indicates employment does not need to be the predominant cause but must be more than trivial or insignificant.

4. As per #2-3 above, the consideration of "whether the worker has pre-existing injuries, diseases or other conditions that may be associated with the onset of the ASTD at issue" should not detract from an assessment that non-trivial occupational risk factors exist in a worker's employment. Similarly, consideration of whether non-occupational risk factors within everyday life are present should not detract from an assessment that non-trivial occupational risk factors exist. It is rarely possible to clearly determine the balance between occupational and non-occupational risk factors. As written, policy accepts that the presence of non-trivial occupational risk factors is sufficient for

causative significance. In my opinion, reference to non-occupational risk factors is secondary to this and no longer necessary within policy.

5. The addition of a singular risk factor as being of causative significance is a positive change. It is unclear what "certain conditions" means. The current guidance thresholds within PD C4-2 are indicated as singular risk factor thresholds that may be lower when multiple risk factors are present. In my opinion, and in practice, these thresholds should apply in the assessment of exposure to singular risk factors. There will need to be clarity on what "certain conditions" are required for acceptance of a singular risk factor.

6. Accurate quantification and assessment of occupational risk factors is critical to the fair adjudication of claims, and a clear requirement in both current and proposed policy. In my opinion, the assessment of occupational risk factors needs to be performed by individuals with adequate education and experience to be able to identify and quantify relevant risk factors reliably and accurately. Professional expertise and education are required to reasonably interpret which risk factors are relevant, to quantify exposure and provide an opinion whether exposure is trivial or non-trivial for singular or multiple risk factors, and whether there is biological plausibility that the identified risk factors affect the tissues of interest. The addition of "generally" to policy statements regarding ASTD adjudication makes this professional expertise more important. In my opinion, Case Managers often do not have the education or expertise to perform this duty adequately or accurately. There is no requirement for Case Managers to be trained in biomechanics, anatomy, physiology, injury mechanisms, or methods of field measurement for posture, force, repetition rates or vibration. This training is required for selecting and adequately assessing relevant risk factors. Risk factors are often described by Case Managers in general or vague terms that cannot be compared directly with policy criteria or practice directive guidance. The resulting ASTD Risk Evaluation Reports do not represent the observable occupational risk factors accurately or adequately and fail to adequately inform the Board Medical Advisor who uses the ASTD Risk Evaluation Report to inform the presence of risk factors in determining causative significance or biological plausibility. In my experience, Board Medical Advisors tend to accept the risk assessment of the Case Manager as accurate rather than identifying gaps or inaccuracies in the risk factor descriptions or in the adequacy of video evidence. In my opinion, the use of Certified Professional Ergonomists (CCPE, CPE, or HFP) or other adequately trained professionals is more likely to ensure a fair and accurate assessment of occupational risk factors towards determining causative significance. This becomes more critical as policy aims to be more responsive to individual characteristics, and identifies thresholds for risk factors as "generally" applying but also requiring interpretation for singular exposures, combined exposures or specific individuals.

I remain available for further assistance or to provide clarification.

Sincerely,

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