

<b>WCAT Decision Number :</b>	WCAT-2010-00613
<b>WCAT Decision Date:</b>	February 25, 2010
<b>Panel:</b>	Debbie Sigurdson, Vice Chair

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## Introduction

- [1] On February 12, 2009 the Workers' Compensation Board, operating as WorkSafeBC (Board), disallowed the worker's claim for hypothermia as arising out of and in the course of his employment on December 19, 2008. The worker requested a review of that decision. In *Review Reference #R0104563* dated July 30, 2009 a review officer at the Review Division of the Board varied that decision and accepted the worker's claim. The employer has appealed that decision. The employer disputes that the worker's symptoms on December 19, 2008 arose out of his employment activities.

## Issue(s)

- [2] Did the worker sustain hypothermia on December 19, 2008 that arose out of and in the course of his employment?

## Jurisdiction

- [3] Section 239(1) of the *Workers Compensation Act* (Act) provides that a decision made by a review officer under section 96.2 may be appealed to the Workers' Compensation Appeal Tribunal (WCAT). Section 250(1) and section 254 of the Act allow WCAT to consider all questions of law and fact arising in an appeal, subject to section 250(2), which requires that WCAT apply the relevant Board policy, and make its decision based on the merits and justice of the case.
- [4] This is a rehearing by WCAT. WCAT reviews the record from previous proceedings and can hear new evidence. WCAT has inquiry power and the discretion to seek further evidence, although it is not obliged to do so. WCAT exercises an independent adjudicative function and has full substitutional authority. WCAT may confirm, vary, or cancel the appealed decision or order.
- [5] The standard of proof in compensation matters is the balance of probabilities, subject to the provisions of section 250(4) of the Act. Section 250(4) of the Act provides that when the evidence on an issue is evenly weighted, the matter is resolved in favour of the worker.
- [6] The employer did not request an oral hearing. The *WCAT Manual of Rules of Practice and Procedures* (MRPP) Rule #7.5 states that WCAT will normally conduct an appeal by written submissions where the issues are largely medical, legal, or policy based and credibility is not at issue. The issue before me is largely medical in nature. I find that

I am able to complete the appeal without conducting an oral hearing. The worker was provided with notice of the appeal and is participating. Both the employer and the worker have representatives who have provided written submissions regarding the issue under appeal.

## **Background and Evidence**

- [7] The employer operates a mail service. This now 53-year-old worker has been employed as a mail carrier since April 1, 2007.
- [8] The employer's report of injury dated December 29, 2008 indicates that on December 19, 2008 the worker was delivering mail in outside temperatures between -26 degrees Celsius and -41 degrees Celsius. The worker was wearing long johns, two pairs of socks, a t-shirt, shirt, sweater, winter parka, two pairs of gloves, and winter-rated boots. Two-thirds of the way through his route, the worker felt nauseous but he completed his shift. While driving home he experienced severe shaking. Once at home, his wife called for emergency medical assistance. After spending two hours in emergency, the worker started to feel better. He took Tylenol and returned home. The worker did not miss time from work. The employer protested the claim because there was no incident and a hazard was not present.
- [9] The ambulance crew noted on a report dated December 19, 2008 that the worker had felt cold during his work shift. Part way through his shift he had experienced nausea. On his way home from work he was shaking uncontrollably. Once at home his wife had indicated he was hallucinating. The ambulance crew noted the worker had been working in extreme cold all day. The worker was dizzy at times, nauseated, hyperventilating, and shaking uncontrollably. He did not have shortness of breath or slurred speech. His temperature was recorded on the chart; however, the number is not clearly legible. His hands were tingly. His condition had improved while being transported to hospital.
- [10] The worker presented at hospital feeling cold, shivering, and unable to get warm. On admission to hospital at 5:54 p.m., the worker's temperature was 36.7 degrees Celsius. His temperature had risen to 38.9 degrees Celsius by 8:00 p.m., and was back to 37.3 degrees Celsius by 10:35 p.m. The worker reported feeling fine in the morning, but experiencing nausea in the afternoon. Dr. H, emergency room physician, reported on December 19, 2008 that the worker had been treated in emergency for significant hypothermia after cold weather exposure. Review of the hospital chart notes indicate the worker had been exposed to outdoor temperatures of -25 C for five hours. He had experienced nausea in the afternoon, and on examination he had facial reddening of cold exposed areas. Dr. H noted the worker was suffering from over-warming in follow up.

- [11] On January 14, 2009 the worker told the Board officer he had dressed in layers on December 19, 2008, including a t-shirt, long sleeve shirt, sweater, winter parka, toque, and winter hat with flaps. He wore long johns, pants, and windbreaker pants, multiple socks, and winter boots. The worker confirmed that two-thirds of the way through his shift he felt nauseous. He completed his route and returned to the depot at which time he reported feeling unwell and assumed he had the flu. When driving home he began to shake and pulled over. Once able to compose himself, he drove home. He was then transported to hospital by ambulance, and was released two hours later when he was feeling better.
- [12] In a claim log memorandum dated February 10, 2009 a Board medical advisor provided an opinion that the worker did not have hypothermia on December 19, 2009. He noted the worker was admitted to hospital with a normal temperature, which later rose to 38.9 degrees Celsius. His admission pulse and respiratory rates were normal. The Board medical advisor quoted from an article on hypothermia, which indicated that hypothermia is defined as a core temperature below 35 degrees Celsius, typically accompanied by rapid breathing, a rapid heart rate, inco-ordinate movement, slurred speech, impaired judgement, shivering, and increased urine excretion. He provided an opinion that given the worker's normal temperature on admission to emergency, together with a lack of core symptoms related to hypothermia, the recorded diagnosis was not supported by the available evidence. The Board medical advisor was not able to provide a diagnosis for the worker's nausea. He noted the worker was well-dressed for cold weather. There was no evidence to suggest the fact the worker had worked outside in cold weather was related to his subsequent nausea.
- [13] In a memorandum to the claim file dated February 10, 2009 the Board officer noted the Environment Canada website had reported the temperature on December 19, 2009 was a low of -29.4 degrees Celsius and a high of -18 degrees Celsius.
- [14] In the decision dated February 12, 2009 the Board officer concluded the worker's nausea was not caused by his work activities of December 19, 2008 and were more likely due to natural phenomena. The Board officer relied on the Board medical advisor's opinion to find the diagnosis of hypothermia could not be supported by the available evidence.
- [15] In a letter dated March 20, 2009 Dr. H reported the worker had presented with abnormal vital signs, a fever, and flushing following sustained cold exposure when examined on December 19, 2008. Dr. H acknowledged there were several possible explanations for the worker's symptoms including systemic infection, external heating to compensate for cold exposure, or an immune-mediated histamine reaction to cold exposure; however she was sufficiently convinced of the validity of the worker's illness to state he required rest, time off work, and further examination prior to repeat exposure to cold temperatures.

- [16] On April 29, 2009 the worker submitted to the Review Division that he was diagnosed with hypothermia, and not nausea, on December 19, 2008. The nausea he had experienced was one of the symptoms of hypothermia. He asked the review officer to consider the cold temperatures to which he was exposed. He submitted that on December 19, 2008 he had experienced nausea, violent and uncontrollable shaking, hyperventilating, slurred speech, stumbling, low energy, chills, the inability to warm up, confusion, hallucinations, and disorientation. The worker noted that upon arriving home, he had several blankets on him to attempt to warm himself. He continued to shake uncontrollably and was hyperventilating when the ambulance crew arrived. Based on this presentation, the ambulance crew concluded he needed to be transported to hospital for further treatment. The worker noted he was required to wait for greater than 1.5 hours in the lobby of the hospital emergency before receiving treatment. During that time, he had several blankets on him. He noted additional tests had ruled out an infection as the cause of his symptoms. The worker submitted his core body temperature was below 34 degrees and not 36.7 as indicated in the Board letter.
- [17] In submissions to the Review Division dated June 24, 2009 the employer requested the review officer prefer the Board medical advisor's opinion to that of Dr. H to find that the medical evidence did not support a diagnosis of hypothermia. The employer submitted the evidence did not substantiate the worker's statement that his body temperature was below 34 degrees. Had the worker's body temperature dropped to that level, this would have been evident on examination at the hospital. The employer asked the review officer to consider carefully the evidence from Dr. H, and noted that Dr. H did not refute the Board medical advisor's opinion regarding the symptoms that would support a diagnosis of hypothermia. The employer acknowledged the worker was working outdoors in relatively cold conditions, but also noted the worker had been appropriately dressed for those conditions. The worker's symptoms did not appear until the latter part of his shift, at which time the outside temperature would have been warmer. The employer submitted there is insufficient evidence the worker's employment activities on December 19, 2008 were of causative significance with regard to his need for medical treatment that day. The employer submitted the Board officer was correct in assessing the worker's symptoms as nausea, and suggested the worker was correct in his initial assessment that he was coming down with the flu.
- [18] On July 3, 2009 the worker again requested the review officer prefer the evidence and diagnosis from Dr. H, who had treated him on the date in question. The worker submitted he presented for treatment on December 19, 2008 with significant signs and symptoms consistent with hypothermia. He noted that he had self-treated his symptoms prior to arrival at the hospital and prior to being assessed at the hospital, such that by the time his temperature was taken and recorded as 36.7 degrees Celsius, his body temperature had risen. The worker disputed that the outdoor temperature would have warmed significantly in the latter part of the day; rather, he had been exposed to cold temperatures through the course of his shift and experienced a gradual decrease in

function. He submitted his nausea was a symptom of the hypothermia rather than a diagnosis of his condition. He also noted the ambulance report and emergency room report indicate he had low blood pressure, hyperventilation, dizziness, shivering/shaking, nausea, shortness of breath, and elevated pulse.

- [19] On July 30, 2009 the review officer concluded the ambulance crew had recorded the worker's body temperature as 32.3 degrees Celsius, but that fact had not been considered by the Board medical advisor in reaching his opinion. The review officer considered the available medical evidence and concluded the worker had developed hypothermia on December 19, 2008. He also noted that the worker's elevated body temperature could also be a symptom of hypothermia, as noted by Dr. H. The review officer concluded the worker's employment placed him at greater risk of hazard from cold than the public at large. The worker's symptoms, his exposure to cold temperatures in the course of his employment, and the subsequent diagnosis of hypothermia lead to a conclusion the worker's condition was likely caused by his work on December 19, 2008.
- [20] In submissions dated October 15, 2009 the employer requested the panel consider its previous submissions to the Review Division. The employer requested the panel carefully review and consider the available medical evidence, and in particular to prefer the medical evidence of the Board medical advisor on the diagnosis of the worker's condition. The employer submitted the ambulance crew report does not state the worker's temperature was 32.3 degrees Celsius; rather, the document is difficult to read but states the worker's temperature was 38.3 degrees Celsius. The employer contends this document was reviewed and evaluated by the Board medical advisor who provided a clear opinion that the diagnosis of hypothermia was not substantiated. The employer submitted the worker's symptoms came on after he had completed his workday, and that a multitude of other causes could explain those symptoms, such that it is less than 50% likely that the worker's symptoms were caused by his employment activities. The fact that there is not a confirmed diagnosis is insufficient to conclude the worker's symptoms were work-related. On November 16, 2009 the employer submitted it is speculative to link the worker's symptoms on December 19, 2008 to his employment activities.
- [21] On November 2, 2009 the worker submitted the Board medical advisor had failed to review and consider the evidence from the ambulance crew report, as noted in the Board medical advisor's comment that the emergency report was the "solitary medical report". The worker agreed with the review officer's conclusion that the ambulance crew had recorded the worker's temperature as 32.3 degrees Celsius and not 38.3 degrees Celsius. A low temperature reading in the ambulance is more consistent with the worker's presentation and history. The worker also submitted that on arriving home after work, he had drank hot tea and sat with blankets and a heating pad prior to the arrival of the ambulance. The worker noted Dr. H has explained his higher body temperature later in the day as being due to over-warming. The worker did not suffer

from an infection or disease, and did not suffer ill effects from the hypothermia episode. The worker submitted the employer's submissions do not make sense, as the worker's body temperature would have risen to 38.3 degrees Celsius at 5:20 p.m., then dropped to 36.7 degrees Celsius by 6:00 p.m. and then risen to 38.9 degrees Celsius by 8:00 p.m. During this period, the worker would have been under blankets in an attempt to warm himself. The worker asked the panel to consider that the relevance of the temperatures taken must be considered in light of the lapse of time and the attempts the worker had taken to warm himself. Further, the fact the worker's symptoms developed after he had stopped work does not mean the condition did not arise out of and in the course of his employment, as hypothermia is a progressive condition based on protracted exposure to cold temperatures.

## Reasons and Findings

- [22] The issue to decide in this appeal is whether the worker's nausea, shaking and cold sensation, diagnosed as hypothermia, arose out of and in the course of his employment on December 19, 2008. Section 5(1) of the Act requires the Board accept a claim for compensation when the evidence shows a worker has sustained a personal injury that arises out of and in the course of the employment. Not all symptoms experienced at work are compensable. *Rehabilitation Services and Claims Manual, Volume II* (RSCM II) item #14.20 provides there must be something in the employment that is of causative significance in producing the injury; a speculative possibility is not sufficient.
- [23] RSCM II item #15.00 recognizes the necessity to distinguish between injuries resulting from employment and those resulting from natural causes. This policy item notes that an injury is not compensable simply because it happened at work. The injury must arise out of the employment, such that there was something in the employment situation that was of causative significance in producing the injury.
- [24] There is dispute about the diagnosis of the worker's condition on December 19, 2008. The worker initially thought he was coming down with the flu; however laboratory testing confirmed the worker was not suffering from an infection on December 19, 2008. The worker presented with some, but not all, of the symptoms of hypothermia as identified by the Board medical advisor in his memorandum. Specifically, I note the worker had experienced episodes of dizziness, was hyperventilating, and had uncontrolled shaking when assessed by the ambulance crew. I note that by the time the worker was being transported to hospital, his condition was improving, but that he was still cold, shivering and unable to get warm upon arrival at the hospital.
- [25] The parties have made submissions regarding the worker's body temperature while being transported to the hospital and at the hospital. I note that the recorded temperatures would have been taken approximately two hours or more after the worker had removed himself from the cold environment, and after which he had attempted to warm himself both in his car and with blankets, tea, and a heating pad at home. I find

the recorded temperatures are not determinative of whether the worker had hypothermia. Further, I note the worker's temperatures had risen to the point he had a fever, which Dr. H had explained both on the emergency records and in her letter of March 20, 2009 as over-warming in follow up.

[26] I prefer the medical evidence and diagnosis provided by Dr. H over that provided by the Board medical advisor. Dr. H, who is not the worker's attending physician, assessed the worker on the date of the onset of his symptoms and provided the diagnosis of hypothermia. She had the benefit of directly examining the worker and reviewing all of the history in reaching her diagnosis. While she has acknowledged there are other possible explanations for the worker's symptoms in her letter of March 20, 2009, she also noted he presented with symptoms consistent with hypothermia including abnormal vital signs, fever, and flushing, and with a history of sustained cold exposure. I note that the Board medical advisor did not refer to the ambulance crew report, and that he specifically noted in the memorandum that he reviewed the "solitary medical report" on file, namely the hospital emergency report. The Board medical advisor also did not consider the fact the temperatures as recorded on the emergency records would have been taken two to five hours after the worker had removed himself from the cold environment, and after he had made significant effort to warm himself with blankets, heating pads and consumption of warm fluids. I note that the worker's symptoms improved after he had warmed himself. This is also consistent with the diagnosis of hypothermia, and less consistent with a flu, which would not necessarily improve after attempts at warming. I find the worker had developed hypothermia on December 19, 2008.

[27] The next question is whether the worker's hypothermia arose out of and in the course of his employment. There is no dispute that the outdoor temperatures on December 19, 2008 in the region the worker was employed were extreme, with a low of -29 degrees Celsius and a high of -18 degrees Celsius. There is also no dispute that the worker was exposed to those temperatures for a five-hour period during which time he was delivering mail. I acknowledge the worker was dressed in layered clothing that were designed to provide protection in cold temperatures. The fact the worker was well-dressed, however, does not of itself establish that work was not of causative significance in producing his symptoms. As noted by the review officer, RSCM II item #17.00, *Hazards Arising from Nature*, provides that where an injury results from natural elements, compensation is payable in situations where the worker's job is one to place him in a greater position of hazard to those elements as compared to the public at large. I find that the worker's job duties placed him in a greater position of hazard to cold temperatures compared to the public at large. The worker was exposed to cold temperatures for five hours while delivering mail on foot. While the general public in the region the worker resides would have been exposed to cold weather temperatures on December 19, 2008 when going outdoors, the exposure would not have been for the lengthy duration the worker experienced while performing his job duties.

- [28] The worker's symptoms developed in the latter part of his shift and after he finished work. I agree with the worker that the development of hypothermia occurs over a period of time and is a progressive condition that occurs with continued exposure to cold temperatures. The fact the worker's extreme shivering and cold sensation did not arise until he had finished work does not mean that the work activities were not of causative significance in producing the condition. There is insufficient evidence the worker was exposed to cold temperatures when he was not at work and performing his job duties. I find the worker's hypothermia arose out of and the course of his employment activities.

## **Conclusion**

- [29] I deny the employer's appeal and confirm *Review Reference #R0104563*. The worker's diagnosed hypothermia arose out of and in the course of his employment on December 19, 2008.
- [30] No expenses have been requested in relation to this appeal. I make no order for reimbursement of expenses.

Debbie Sigurdson  
Vice Chair

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