



WORKPLACE SAFETY AND INSURANCE APPEALS TRIBUNAL

DECISION NO. 2527/18

BEFORE: S. Ryan : Vice-Chair
E. Tracey : Member Representative of Employers
A. Signoroni : Member representative of Workers

HEARING: August 14, 2018 at Sudbury
Oral

DATE OF DECISION: December 4, 2018

NEUTRAL CITATION: 2018 ONWSIAT 3761

DECISION(S) UNDER APPEAL: WSIB Appeals Resolution Officer (ARO) L. Mansueti decision dated October 31, 2016

APPEARANCES:

For the worker: E. Abitbol, Paralegal

For the employer: T. L., Human Resources/Health & Safety Administrator

Interpreter: N/A

Workplace Safety and Insurance
Appeals Tribunal

505 University Avenue 7th Floor
Toronto ON M5G 2P2

Tribunal d'appel de la sécurité professionnelle
et de l'assurance contre les accidents du travail

505, avenue University, 7^e étage
Toronto ON M5G 2P2

REASONS

(i) Introduction

[1] On or about September 12, 2012, the worker developed pulmonary symptoms and was hospitalized on September 16, 2012. He was diagnosed with pulmonary blastomycosis (fungal lung infection).¹ On September 25, 2012, at age 47, he passed away.

[2] The worker's estate appeals the Appeals Resolution Officer (ARO) decision dated October 31, 2016. That decision denied entitlement for pulmonary blastomycosis.

(ii) Preliminary matter

[3] Prior to the hearing, Mr. Abitbol requested that Dr. T.D. Ewing-Bui, thoracic surgeon, be permitted to testify at the hearing to clarify his reporting in this case. We ruled that the request would be considered at the hearing scheduled for the merits of this appeal. After hearing evidence from the worker's spouse and the employer, Mr. Abitbol withdrew his request advising that he no longer required Dr. Ewing-Bui to provide testimony. Accordingly, we determined that it was not necessary to hear testimony from Dr. Ewing-Bui.

(iii) Issue

[4] The issue in this appeal is entitlement to benefits for the worker's pulmonary blastomycosis.

(iv) Background

(a) Agreed facts

[5] At the outset of the hearing and with the assistance of the Panel, the parties agreed to delineate agreed facts from disputed facts. The facts agreed to by the parties and accepted by this Panel are set out below. All disputed facts are clearly indicated as disputed facts.

[6] Blastomyces dermatitidis is endemic to parts of Northern Ontario encompassing all of the worksites where the worker worked and location of his residence in 2012. Blastomycosis is contracted by inhalation of Blastomyces dermatitidis. The period of incubation for the disease ranges between 3 and 15 weeks. In some cases, the disease can lead to death.

[7] The worker was employed for about 12 years as an executive chef (1st Cook) for the employer. The employer provided camp management services including catering for railway companies in remote areas. Most of the worker's duties were carried out in railcars (boarding cars) parked on railway tracks.

¹ Blastomycosis is a rare fungal infection that primarily affects the lungs and then spreads to other organs. It is caused by the fungus *Blastomyces dermatitidis* that can be found in moist soil enriched by organic material such as rotting wood and animal feces. It is reported to be prevalent in parts of south-central, south-eastern and mid-western United States and Canada (Ontario, Manitoba), concentrated along the Mississippi and Ohio River basin and the Great Lakes, resulting in 1-2 cases per 100,000 people in these areas. Immunocompromised individuals are at an increased risk. The infection most commonly occurs in those aged 30-69 years. However, anyone of any age can become infected. CDC. 2005 Blastomycosis. Centers for Disease Control and Prevention Department of Health and Human Services. Division of Bacterial and Mycotic Diseases

[8] The worker's shifts generally consisted of eight consecutive days "on" (at work) and six consecutive days "off" (away from work). He remained at the worksite during his days at work and returned home on his days away from work. Sometimes he took a passenger train to travel to and from a worksite; other times he drove himself to and from a worksite and was paid mileage by the employer.

[9] Although the worker worked all year round, the relevant period in this appeal is the period of incubation which, as noted above, is between 3 and 15 weeks.

[10] Between April and September 2012, the worker was dispatched to seven worksites in Northern Ontario where he and other cooks prepared food for a crew of 95 railway workers. It is not clear from the available evidence how long he spent at each worksite. All of these worksites, however, were located in areas where *Blastomyces dermatitidis* is endemic.

[11] On September 11, 2012, the worker reported to a supervisor that he was not feeling well. On September 12, 2012, he drove himself from a worksite to his hometown to seek medical attention at a hospital. There he was diagnosed with pneumonia, discharged and advised to remain off work for a few days. On September 16, 2012, he returned to hospital by ambulance because of significant pulmonary symptoms. On September 23, 2012, following pathology, he was diagnosed with pulmonary blastomycosis. On September 25, 2012, he passed away at age 47.

[12] In a Worker's Report of Injury/Disease (Form 6) dated September 25, 2012, the estate related the worker's pulmonary blastomycosis to his employment in a "remote wooded area" of Northern Ontario.

(b) Job duties

[13] In correspondence dated October 1, 2012, the employer advised that between March and September 2012, the worker was dispatched to seven jobsites in Northern Ontario. His job entailed:

...working, living and sleeping on mobile boarding cars that moved from one location to the next throughout the season. The 5 board cars (kitchen, diner, serving car, stock room and cooks quarters) that are used by our staff are climate controlled units (with heat and air conditioning).

[14] A Job description of 1st Cook indicates that the worker was responsible for meal preparation, supervision of employees, inventory and administrative tasks. Among the job requirements were the following:

- work in remote locations
- perform unloading, loading and stocking of groceries and supplies
- follow all safe operating procedures
- report any repair/maintenance issues such as leaky faucets and broken windows

[15] The job description also indicated that the job "may require working in damp, dusty and dirty areas."

[16] There is disagreement between the parties with respect to the worker's cooking activities. It is the employer's position that, for safety reasons, all cooking took place on a "catwalk" (outdoor platform) elevated several feet from the ground in between railcars. It is the estate's

position that some cooking was done over an open pit fire or barbecue on the ground away from the railcars.

[17] On August 27, 2012, the worker suffered a back strain while hand-bombing groceries from a transport truck to a railcar. He did not lose time from work as a result of this accident and the Workplace Safety and Insurance Board (WSIB) (the Board) granted him entitlement to health care benefits.

[18] On rare occasions, according to the testimony of his spouse (discussed below), the worker was required to drive from a jobsite to a nearby town to pick up groceries.

(c) Human Resources and Skills Development Canada (HRSDC) Labour Program Hazardous Occurrence Investigation

[19] Following the worker's death, the federal government launched a "Hazardous Occurrence Investigation" to determine whether air quality played a role in the worker's illness. In a report dated January 24, 2013, HRSDC noted that the worker worked and lived in one of five railcars in a variety of locations in Northern Ontario. The railcars were climate-controlled units with heat and air-conditioning. Air sampling was conducted inside the railcars by a third party firm on October 1, 2012. At that time, the railcars were parked in a community that was not one of seven communities where the worker had worked that year. There was no evidence of elevated mould spore concentration inside the railcars relative to outdoor levels. Tape lift samples indicated mould growth in two out of three samples collected in the washroom. However, the mould detected was "Chaetomiun." Air sampling was conducted again on October 23, 2012, specifically to determine the presence of *Blastomyces dermatitidis* and fungal structures. This time, a micro-vacuum technique was used. The results indicated no detectable presence of *Blastomyces dermatitidis* or related genetic material. The HRSDC report concluded:

The environmental conditions where the deceased employee worked in and lived in were not identified as a contributing factor to the employee's death during the course of HSO Smith's investigation. It is extremely difficult to verify if [the worker] was exposed to this fungus while working in and living in the...Railway Boarding Cars while performing work as a First Cook as the roles and responsibilities of being a First Cook would not likely expose to inhalation of the fungus in the work environment, however, it should be noted that the deceased spent considerable time working and living in a variety of locations in Northern Ontario where the fungus is found in acidic, moist soil.

The environmental conditions of the work place were confirmed in the findings of the two mould assessments...

It is HSO Smith's opinion that any person who lives in and travels to the areas as identified above may have an increased risk to exposure to the fungus. *Blastomyces dermatitidis*.

(d) Medical evidence

[20] In a report dated September 17, 2012, Dr. K.J. De Blacam, general practitioner, advised that the worker was admitted to hospital by ambulance due to respiratory problems and inability to walk. Dr. De Blacam noted that the worker was diagnosed with diabetes 17 years earlier and was "non-compliant." He advised that the worker rarely attended the doctor's office. He noted that the worker's father had ischemic heart disease and died of lung carcinoma, but that his mother was alive and well. Dr. De Blacam advised that the worker was a non-smoker and non-drinker.

[21] In a report dated September 21, 2012, Dr. Ewing-Bui advised that the worker did not have any recent risk factors for exposure to *Blastomyces dermatitidis* because he worked on a train. He diagnosed extensive bilateral pneumonias.

[22] In a report dated September 23, 2012, Dr. M.C. Kerr, internal medicine specialist, advised that the worker's history was negative for any behavior that might put him at risk for immunosuppression. She advised that preliminary cytology indicated blastomycosis. Dr. Kerr noted:

On further questioning, he works for [a railway company] and they are often sleeping in bunkhouses deep in the bush. His wife says that according to collaborative history many of these bunkers have mold on the ceilings and walls and in particularly the one he stayed in. Several of his colleagues are now experiencing some similar symptoms.

[23] On September 24, 2012, Dr. A. Nistico, internal medicine specialist and nephrologist, advised that the worker's past medical history was significant for diabetes for which he was taking Metformin, Diamicron and Onglyza.

[24] In a report dated September 24, 2012, Dr. R.M. Sandre, internal medicine and infectious disease specialist, advised that he was asked to evaluate the worker for suspected pulmonary blastomycosis. He advised:

According to his wife who was present at the bedside, he has become increasingly unwell over the first few months with the development of a cough and weight loss and particularly ill over the last few weeks. He is away much of the time traveling and is exposed to the outdoors. According to his wife, he does not usually seek medical attention and getting to a family physician for evaluation has been difficult.

[25] In a report dated September 26, 2012, Dr. K.S. McKechnie, general practitioner, advised that the worker passed away on the early morning of September 25, 2012. He noted that the Coroner may perform an autopsy for possible acquisition of blastomycosis infection at work.²

[26] In an undated report addressed to the worker's former representative, Dr. Ewing-Bui advised that he reviewed documents respecting the estate's appeal. He noted that the worker was already intubated and on a ventilator when initially assessed. Thus, the worker's history was obtained from chart notes and not directly from the worker. Dr. Ewing-Bui advised that there were several errors in his initial report which required clarification. He noted that the worker did not cook mostly on the train, but rather often in open air in remote areas of Northern Ontario where *Blastomyces dermatitidis* is endemic. Dr. Ewing-Bui advised that the worker did not have "community acquired pneumonia," but rather a much more serious infection with pulmonary blastomycosis. Dr. Ewing-Bui wrote:

As for the work environment it definitely was a contributing factor to the diagnosis of his pulmonary blastomycosis infection which led to his death. The reason is that Northern Ontario where apparently he was cooking are often endemic areas...

As for diabetes playing a part of the severity of his infection this also is well known. It does not have to be blastomycosis but any infections in general do have a high risk of mortality and morbidity in patients who have diabetes. ...it is more difficult for patients to mount a strong immune response against infections. As well, diabetes does cause a dysfunction in certain portions of the immune system and hence leading to a mild immune deficiency status.

² There is no coroner's report in the Case Record.

[27] On February 19, 2013, Dr. S. Somerville, occupational medicine specialist and Consultant for the WSIB, reviewed the history of this case and noted that air quality testing did not detect any elevated mould spore concentration in the railway cars where the worker worked and lived while at camp relative to outdoor levels. Dr. Somerville noted that the worker was vulnerable to the disease due to his diabetes. He advised that the incubation period for blastomycosis has been reported to be between 21 and 105 days with an average of 45 days. Dr. Somerville wrote:

Blastomyces dermatitidis is endemic to certain areas of Northern Ontario, but cases have been reported in other regions of the province, including large urban centres. [The injured worker's] residence is indicated to be...Northern Ontario. The fungus is normally contracted in wet soil and decaying plant matter such as found at cottages, campgrounds and other outdoor areas. The disease incubation period is from 3 weeks to 15 weeks. [The injured worker's] infectious disease specialist stated [injured worker] had been ill for several months. [Injured worker] poorly controlled diabetes mellitus, which may have played a part in the severity of his respiratory infection. [Injured worker's] condition unfortunately declined, and he succumbed to his illness on September 25, 2012. Testing of [injured worker's] work environment for evidence of Blastomyces was negative. There is no evidence [injured worker] acquired pulmonary blastomycosis from his work environment.

[28] In a report dated November 25, 2015, a registered nurse (RN) with the Occupational Health Clinics for Ontario Workers (OHCOW) Inc. advised that occupational risk factors for pulmonary blastomycosis include agricultural workers, forestry workers and heavy equipment operators. Recreational risk factors include fishing, swimming, camping, hunting, digging holes, gardening, tree-planting and chopping and pulling wood. The RN noted that the increase likelihood of developing pulmonary blastomycosis was due to the disturbance of soil.

[29] On February 9, 2016, Dr. J. Razavi, Board Medical Consultant (MC) and specialist in occupational medicine, reviewed the claim file including the OHCOW reports. In a memorandum, Dr. Razavi opined:

...there is no indication as to how the worker was exposed to the spores of B dermatitidis in the course of his work. There is no evidence-based exposure information that would lead to change the opinion by Dr. Somerville.

(v) Testimony

(a) Worker's spouse

[30] The worker's spouse confirmed that in 2012 she and the worker lived in a residential neighbourhood in a Northern Ontario city. She testified that her husband was a "homebody" and rarely spent time outdoors while at home.

[31] She acknowledged Google Map pictures produced by the employer that showed a forest behind the backyard of her house. The worker's spouse estimated the forest to be about 30 feet away from the back of the house. She testified that her husband never went into the forest.

[32] The worker's spouse testified that her husband did not perform outdoor work such as cutting the lawn or gardening. She stated that she performed these activities. She testified that her husband did not hunt, fish or engage in any outdoor recreational activity. She testified that while off work, the worker spent most of his time at home watching movies and playing video games with their autistic son. She stated that the worker enjoyed shopping in a local mall and visiting his brother's automotive detail shop. She stated that the worker enjoyed an annual

vacation in Niagara Falls with family members for a few days between the end of June and beginning of July. He did not take additional vacation time because he was home for consecutive days on a regular basis.

[33] The worker's spouse acknowledged that she did not attend any of the worker's remote worksites. She testified, however, that she knew about the worksites because she was in daily cellphone contact with the worker when he was at work. They updated each other on their respective daily activities. She testified that he used to tell her about his walks around the worksite to get some fresh air when he was not cooking. She recalled seeing a picture on his cellphone taken on one of his walks of a bear rummaging through garbage. She recalled that on some occasions he was required to drive from the worksite to a nearby town to purchase groceries. She knew this because she found grocery store receipts from towns near his worksites.

[34] The worker's spouse recalled that the worker's brother, a union representative, initiated the estate's claim with the Board. The worker's brother discovered that two other workers who worked with the worker in 2012 developed similar symptoms of coughing up blood. Attempts to reach these two workers failed as their whereabouts were no longer known.

(b) T.L., Human Resources (HR)/Health and Safety Representative

[35] T.L. testified she was hired by the employer in 2013. She stated that although she never met the worker, he was very well liked by management. She stated that most workers hired by the employer were "nomadic" in that they only worked a few months during the regular work season and many of them never returned. She stated that the job of cook was a seasonal job, but acknowledged that the worker may have worked all year round because he was so well-liked. During the off season months (i.e., the winter) he would have worked indoors for the employer.

[36] T.L. acknowledged that she had no direct knowledge of the work environments at the worksites where the worker worked in 2012. She stated, however, that in her capacity as HR/Health and Safety Representative, she possessed general knowledge of operations including catering operations. She stated that cooks spent about 95% of their time at the worksite inside a railcar. Food was cooked on a barbecue on a catwalk in between railcars. The catwalk was about six to eight feet above ground level.

[37] T.L. testified that workers at remote worksites were discouraged from walking around railcars for safety reasons. She explained that railcars were often parked at locations where there were multiple tracks. Workers were prohibited from walking on the "track side" of a railcar due to passing trains on the other tracks. She testified that there were often hazardous conditions on the "non-track side" of a railcar such as uneven ground and steep embankments.

[38] T.L. testified that the worker would never have cooked over an open pit campfire on the ground at any remote worksite because doing so would be a fire hazard and was prohibited.

[39] She testified that a suggestion in the Case Record that the worker, on one occasion, walked five miles carrying groceries from a nearby town to a worksite was "categorically false." She explained that it would not have been possible for the worker to personally carry the amount of groceries required to feed large crews. She stated that groceries were delivered to the worksite by a delivery truck. She estimated that there would have been about 10 grocery truck deliveries to the worksites where the worker worked between April and September 2012.

[40] T.L. was questioned about the injury to the worker's lower back on August 27, 2012, while hand-bombing groceries between a delivery truck and a railcar. She acknowledged that he would have been standing or walking on the ground in between the delivery truck and railcar used to store groceries (i.e., the stockroom car). She added, however, that this would have been an exception as most groceries could be transported directly from the delivery truck to a railcar without hand-bombing from the ground.

[41] T.L. was questioned about the job description of the "1st cook" position produced by the employer which indicated that the position "may require working in damp, dusty and dirty areas." She acknowledged that the worker would have been exposed to outdoor elements even though most of his duties were performed inside a railcar. She added that the railcars in which the worker carried out his duties had sliding windows that could be opened for ventilation.

(vi) Submissions

(a) The estate

[42] On behalf of the worker's estate, Mr. Abitbol submitted that it cannot be known with certainty where the worker inhaled the fungal spore that led to his pulmonary blastomycosis. He cited an attendance record of the worker covering the period of April 1, 2012 to September 12, 2012.³ He noted that the incubation period for the disease is between about 3 and 15 weeks. He submitted that the worker developed symptoms in mid-September 2012, which would suggest an incubation period starting anywhere from about late May to about mid-to-late August 2012. He submitted that during the incubation period, the worker was at work on more days than he was away from work. By his calculations, the worker was at work for 53 days and not at work for 32 days for the maximum incubation period between late May and mid-to-late August 2012. He submitted that the worker was also at work more often than he was away from work for incubation periods of 15 weeks. He submitted, therefore, that on a balance of probabilities, it is more likely than not that the worker contracted the disease while at work.

[43] The estate's representative emphasized evidence in the Case Record that indicates the worker spent time outside the railcar while at work. He submitted that because the fungus was airborne, the worker could have inhaled it even while working on the catwalk in between railcars or through an open window while working inside a railcar. He submitted that although there was evidence that the worker spent some time outside the railcar at various jobsites, the fact that he spent the vast majority of his time inside a railcar was not necessarily evidence weighing against the estate's claim for benefits given that the worker's blastomycosis was contracted by inhaling an airborne spore.

[44] Mr. Abitbol cited the medical opinion of Dr. Ewing-Bui which supports the estate's claim. He emphasized the testimony of the worker's spouse that the worker did not spend a lot of time outside while at home. He noted her testimony that the worker had no outdoor hobbies or recreational interests such as gardening or hunting.

[45] The estate's representative cited a number of Tribunal decisions which discuss legal tests on issues of causation and the civil standard of a balance of probabilities. He also cited *Decision No. 20064251* from the New Brunswick Workplace Health, Safety and Compensation Commission.

³ Exhibit 2, page 41

(b) The employer

[46] On behalf of the employer, T.L. stated that she was in agreement with the analysis and conclusion of the ARO in the decision dated October 31, 2016. She asked that the ARO decision be upheld in this appeal to the Tribunal.

[47] T.L. emphasized the report from HRSDC dated January 24, 2013, which concluded that the worker's duties as a First Cook for the employer "would not likely expose [him] to inhalation of the fungus in the worker environment."

[48] The employer's representative emphasized the uncontested evidence that the backyard of the worker's house is adjacent to a forest.

(vii) Analysis and conclusion

[49] We have carefully considered all of the available evidence in the Case Record, testimony of the witnesses and submissions the Mr. Abitbol and employer.

[50] Since the worker claimed to be injured in 2012, the *Workplace Safety and Insurance Act, 1997* (the WSIA) is applicable to this appeal.

[51] An "accident" is defined in section 2(1) to include:

- (a) a willful and intentional act, not being the act of the worker,
- (b) a chance event occasioned by a physical or natural cause, and
- (c) disablement arising out of and in the course of employment;

[52] General entitlement to benefits is governed by section 13:

13(1) A worker who sustains a personal injury by accident arising out of and in the course of his or her employment is entitled to benefits under the insurance plan.

(2) If the accident arises out of the worker's employment, it is presumed to have occurred in the course of the employment unless the contrary is shown. If it occurs in the course of the worker's employment, it is presumed to have arisen out of the employment unless the contrary is shown.

[53] The statutory presumption set out in section 13(2) does not apply to an injury by disablement. See, for example, *Decision Nos. 268 and 42/89*.

[54] *Operational Policy Manual (OPM) Document No. 15-02-01*, "Definition of an Accident," describes a chance event as "an identifiable unintended event which causes an injury," an injury itself is not a chance event. The policy defines a disablement as "a condition that emerges gradually over time" or "an unexpected result of working duties."

[55] The standard of proof in workers' compensation proceedings is the balance of probabilities. Pursuant to subsection 124(2) of the WSIA, the benefit of the doubt is resolved in favour of the claimant where it is impracticable to decide an issue because the evidence for and against the issue is approximately equal in weight.

[56] It is not disputed that immunocompromised individuals are at an increased risk and that the worker suffered from diabetes which likely made him more vulnerable to blastomycosis. In our view, however, the worker's vulnerability to the disease is not a bar to entitlement because workers are subject to the common law rule known as the "Thin Skull Doctrine." In *Decision No. 915*, 7 W.C.A.T.R. 1 at page 136, the Panel discussed the "Thin Skull Doctrine:"

Early in the development of personal-injury law in the Courts it was argued that if the plaintiff victim had a particular susceptibility to the injury suffered, the negligent defendant ought not to be liable for the full extent of the damage. The classic illustration of this issue was the so-called “thin skull”. The question, in effect, was this: if I negligently strike a person in the head in a fashion which in a normal person would have produced only a bruise, but the person I happen to hit has an eggshell skull and it fractures, must I be liable for the fractured skull? The answer the Courts have given to that question is clearly yes; you must take your victim as you find him.

[57] The effect of the “Thin Skull Doctrine” in the context of workers’ compensation is that entitlement to benefits is not reduced due to a pre-existing condition which made the worker more vulnerable to injury, where the accident has made a significant contribution to the resulting injury.

[58] There is a dispute between the parties on the worker’s potential occupational and non-occupational exposure to moist soil where the fungus is known to exist.

[59] It is the estate’s position that some duties were carried out by the worker on the ground as evidenced by his back injury on August 27, 2012. On that date, he was hand-bombing groceries from a transport truck to a railcar. This required him to be on the ground. The estate cites a letter dated August 8, 2018, from K.B., a supervisor for a railway company that contracted with the employer for catering services. He advised that cooks for the employer including the worker frequently prepared food on barbecues “outside.” However, we note that this document is not an affidavit and K.B. was not called to testify.

[60] The estate emphasized the testimony of the worker’s spouse. She testified that her husband rarely ventured outside while at home on his days away from work. She testified that although their backyard abutted a forested area, he never entered the forest or mowed the lawn abutting the forest. She stated that he was a “homebody.” However, we note that she also testified that the worker enjoyed walks around various worksites away from the railcars. The spouse’s testimony that the worker lacked interest in venturing outside while at home yet enjoyed venturing outside while at work is, for this Panel, difficult to reconcile. The estate provided no corroborating evidence supporting the worker’s walks outside (i.e., pictures).

[61] The worker’s spouse testified that while at work the worker frequently drove to a nearby town to pick up extra groceries. She recalled finding receipts from grocery stores in towns close to where the worker worked. The estate provided no corroborating evidence of trips to grocery stores while at work (i.e., grocery store receipts or affidavit’s from co-workers).

[62] The employer emphasized the uncontested evidence that the backyard of the worker’s house abutted a forested area as indicated in Google Map pictures produced at the hearing.

[63] It is the employer’s position the worker’s duties required him to be off the ground in a railcar or on a catwalk for the vast majority of his time at work. The employer disputed that the worker would ever have cooked over an open pit fire or on a barbecue located on the ground. The employer submits that doing so would have been in violation of fire safety rules. The employer also submits that it would not have been feasible to cook for a large crew using only a barbecue or open pit fire. The employer submits that the worker was not permitted to be on the ground on the track side of the railcar due to the hazard of passing trains and would have been discouraged to be on the non-track side of the railcar due to steep embankments. However, we note that the employer did not direct us to any documented safety rules prohibiting open pit fires, barbecues or being on ground level on either side of the railcars.

[64] We acknowledge the opinion of Dr. Razavi which was that there was no indication as to how the worker was exposed to the spores of *Blastomyces dermatitidis* in the course of his work. He advised that there was “no evidence-based exposure information” that would lead to change from the opinion offered by Dr. Somerville. We note, however, that while there is no indication as to how the worker was exposed to the spores of *Blastomyces dermatitidis* in the course of his work, there is also no indication as to how the worker was exposed to the spores of *Blastomyces dermatitidis* while away from work.

[65] There is no indication in any of the medical reports that the worker was engaged in hunting, fishing, gardening or any personal activity which would have exposed him to *Blastomyces dermatitidis*.

[66] Furthermore, while the HRSDC investigated the railcars in which the worker worked in October 2012, it did not investigate any of the seven worksites where the worker worked during the likely period of incubation. In its report of January 24, 2013, the HRSDC advised that while it was extremely difficult to verify if the worker was exposed to this fungus while working in and living in the railcars as a 1st Cook because the roles and responsibilities of being a 1st Cook would not likely expose him to inhalation of the fungus in the work environment, it also expressly stated:

...it should be noted that the deceased spent considerable time working and living in a variety of locations in Northern Ontario where the fungus is found in acidic, moist soil.

...

It is HSO Smiths opinion that any person who lives in and travels to the areas as identified above may have an increased risk to exposure to the fungus. *Blastomyces dermatitidis*.

[67] Although there are shortcomings in the evidence of the parties on the extent to which the worker may or may not have spent time outside on the ground at work and at home, we note that it is not contested that the worker likely contracted the disease by inhalation. In the OHCOW report dated November 25, 2015, it was noted that pulmonary blastomycosis is a fungal infection that primarily “affects the lungs.” In a report dated September 23, 2012, Dr. Kerr advised that the worker “now has presumptive blastomycosis with bilateral lower lobe, right middle lobe, lingular pneumonia, hypoxemic respiratory failure.” Although the worker was not employed in an occupation that is associated with a higher risk for contracting the disease (i.e., agricultural worker, forestry worker and heavy equipment operator), given that the disease is likely contracted by inhalation, we cannot rule out the possibility that he inhaled the fungal spore while on the catwalk or even in the railcars which were ventilated by open windows and air conditioners.

[68] It is also clear that he was involved in some ground-level occupational activities, as he had entitlement for a condition due to “hand-bombing” groceries. We note, as well, that he travelled to his worksite by car and by train, and the car travel would also likely have involved some time at ground level. HSO Smith's opinion about exposure specifically referred to travelling as a factor which increased the risk of exposure to the fungus.

[69] In this case the evidence does not indicate that the worker engaged in any extensive activity involving exposure to moist soil enriched by organic material such as rotting wood and animal feces while at work or away from work. Yet, he nevertheless contracted blastomycosis.

[70] The evidence on causation is mixed. Dr. Ewing-Bui corrected his initial report after receiving more information about the worker's outdoor cooking and stated that the work environment was definitely a contributing factor. Dr. Somerville's opinion addressed the testing results for the railcars and does not appear to have considered the worker's outdoor work. Dr. Razavi reviewed the claim file including the OHCOW reports but supported Dr. Somerville's opinion as there was no indication as to how the worker was exposed during the course of his employment.

[71] In determining causation, we note that the Supreme Court of Canada held in *Snell v. Farrell*, [1990] 2 S.C.R. 311, [1990] S.C.J. No. 73, that causation need not be determined with scientific precision. Medical experts ordinarily determine causation in terms of certainties, but the law requires a lesser standard. It is the function of the trier of fact, not the medical witnesses to make a legal determination of the question of causation. The Supreme Court approved the drawing of inferences from the undisputed primary facts of the case, using a "robust and pragmatic approach," where there was medical or uncertainty with respect to causation. Sopinka J. wrote for the court:

The conclusion I draw from these passages [referring to the reasoning of Lord Bridge for the House of Lords in *Wilsher v. Essex Area Health Authority*, [1988] 2 W.L.R. 557] is that *McGhee v. National Coal Board* [1973] 1 W.L.R. 1 had laid down no new principle of law whatever. On the contrary, it affirmed the principle that the onus of proving causation lies on the pursuer or plaintiff. Adopting a robust and pragmatic approach to the undisputed primary facts of the case, the majority concluded that it was a legitimate inference of fact that the defenders' negligence had materially contributed to the pursuer's injury. ...

I am of the opinion that the dissatisfaction with the traditional approach to causation stems to a large extent from its too rigid application by the courts in many cases. Causation need not be determined by scientific precision. It is, as stated by Lord Salmon in *Alphacell Ltd. v. Woodward*, [1972] 2 All E.R. 475, at p. 490:

...essentially a practical question of fact which can best be answered by ordinary common sense rather than abstract metaphysical theory. ...

It is not therefore essential that the medical experts provide a firm opinion supporting the plaintiff's theory of causation. Medical experts ordinarily determine causation in terms of certainties whereas a lesser standard is demanded by the law....

[72] *Snell v. Farrell* was recently considered in the workers' compensation context in *British Columbia (Workers' Compensation Appeals Tribunal) v. Frazer Health Authority* [2016] 1 S.C.R. 587, 2016 SCC 25 (CanLII).

[73] We note *Decision No. 1386/03* (November 30, 2004), in which a Panel of the Tribunal considered the case of a worker who contracted Hepatitis C. In that case, there were several possible occupational and non-occupational exposures to Hepatitis C. It was possible that the worker contracted Hepatitis C from some forgotten exposure in his personal life. It was also possible that he contracted it from his father. The worker had some involvement in the personal care of his father before the father's death. The other possible source of the worker contracting Hepatitis C was at a group home where he worked. A Tribunal medical assessor indicated that there was a higher likelihood that this group of residents had been exposed to Hepatitis C than would be found in the general population. Adopting a robust and pragmatic approach to the evidence, the Panel concluded that there was sufficient evidence to support entitlement for Hepatitis C.

[74] Given the circumstances of this case, we adopt a robust and pragmatic approach to the evidence. We find it necessary to analyze the worker's time at work and time away from work (i.e., at home) as well as his outdoor activities.

[75] While the evidence on the extent of his activities is conflicting, it appears likely that he was involved in more outdoor activity at work since there was no evidence that he engaged in any activities such as hunting, fishing or gardening at home, while his job as a cook required him to cook outdoors on a catwalk as well as hand-bomb groceries on occasion.

[76] The preponderance of evidence indicates that the worker spent more time at work than he did away from work during the likely period of incubation. It is through this analysis that we find, on a balance of probabilities, that the worker contracted pulmonary blastomycosis as a result of his employment. Accordingly, the estate's appeal is granted.

[77] We note that it is not contested that pulmonary blastomycosis can only be contracted by exposure to the fungus, *Blastomyces dermatitidis*, which, as noted above, is found in moist soil enriched by organic material such as rotting wood and animal feces. The fungus is endemic to parts North America including Ontario. It is not disputed that the fungus has been reported to be present in the areas where the worker worked and lived in 2012. It is also not disputed that the fungus would have been airborne and would have been inhaled.

[78] According to Dr. Somerville's report of February 19, 2013, the period of incubation for the disease is between 21 and 105 days (3 and 15 weeks) with an average of 45 days. Incubation is defined as the "interval between exposure to infection and the appearance of the first symptom."⁴ According to Dr. Sandre's report of September 24, 2012, the worker "become increasingly unwell over the first few months with the development of a cough and weight loss and particularly ill over the last few weeks" resulting in admission to hospital on September 17, 2012. Although the phrase "first few months" lacks precision, we find that it reasonably falls within the period of employment for which we have information about the worker's work schedule: April 1, 2012 to September 12, 2012.

[79] The worker's work schedule provides information about the worker's days at work and days away from work between April 1, 2012 and September 12, 2012 (a period of 165 days). According to this document, the worker was at work 101 days and away from work 61 days. He spent three days driving (presumably to and from work) in August 2012. This would result in a total of 104 days spent at work or in work-related activities and 58 days in non-work-related activities.

[80] Considering the maximum period of incubation, 15 weeks, there is no block of 105 consecutive days where the worker spent more time away from work than at work. The maximum number of days that the worker spent away from work during all consecutive blocks of 105 days was from April 18 to July 21, 2012. During this block of 105 days, he spent 41 days away from work and 64 days at work. Roughly, this means that for the block of 105 days where the worker spent the most number of days away from work, he still worked three days for every two days he did not work.

[81] Considering the minimum period of incubation, three weeks, there are three blocks of 21 consecutive days where the worker spent more time away from work than at work. The maximum number of days that the worker spent away from work during any block of 21 days

⁴ *Taber's Cyclopedic Medical Dictionary* 19th ed.

was from May 14 to June 3, 2012, May 15 to June 4, 2012 and May 16 to June 5, 2012. During these periods, he spent 11 days away from work and 10 days at work. In all other blocks of 21 consecutive days, the worker spent more time at work than away from work. The minimum and maximum ratio of days at work and away from work ranged from 11 to 10 and 16 to 5 respectively.

[82] Similarly, considering the average period of incubation, 45 days, there is no block of 45 consecutive days where the worker spent more time away from work than at work. The most time he spent away from work during any block of 45 consecutive days was from May 16 to June 23, 2012. During this period, he spent 19 days away from work and 26 days at work.

[83] Given the foregoing, we are satisfied that the worker was at work far more often than he was away from work during the period of incubation of *Blastomyces dermatitidis*.

[84] In summary, there is: a) a lack of evidence that his non-occupational activities placed him at any greater risk than his occupational activities for contracting the disease; b) evidence that he spent more time at work than away from work during the period of incubation of the disease; c) evidence that his work involved regularly cooking outdoors on a catwalk; d) evidence that he was required to do some hand-bombing of groceries while standing on the ground; and e) evidence of exposure to ventilation while inside a railcar through open windows and air conditioning. Given the totality of evidence, we find, on a balance of probabilities, that he contracted blastomycosis while at work. Accordingly, the estate has entitlement.

[85] We note that had we not found entitlement on a balance of probabilities, we would next have considered entitlement on the benefit of doubt, as was done in *Decision No. 772/09*, where the worker had exposure to pigeon droppings both at work and at home.

DISPOSITION

[86] The appeal is allowed.

DATED: December 4, 2018

SIGNED: S. Ryan, E. Tracey, A. Signoroni