

WCAT Decision Number : WCAT-2005-00631
WCAT Decision Date: February 04, 2005
Panel: Randy Lane, Vice Chair

Introduction

On May 29, 2003 the worker, then employed as a 39-year-old tree planter, applied to the Workers' Compensation Board (Board) for compensation, claiming that he suffered an infection owing to his exposure to fertilizer used in the course of his employment. He referred to exposure to fertilizer from April 25 to May 8, 2003 and indicated that May 11, 2003 was the last day that he had worked. He advised that he had a swollen face and a runny nose which became a bloody nose.

By decision of September 5, 2003, a Board claims adjudicator denied the worker's claim as she determined that the worker's symptoms, diagnosed as rhinitis and sinusitis, were not due to the nature of his employment. In his May 3, 2004 decision a review officer with the Board's Review Division confirmed the September 5, 2003 decision. (The review officer's decision, *Review Reference #11004*, may be viewed on the Internet at the Board's website at <http://www.worksafebc.com>).

The worker appealed the May 3, 2004 decision to the Workers' Compensation Appeal Tribunal (WCAT). With the assistance of a representative, the worker filed notices of appeal dated June 4, 2004 and June 10, 2004. In late June 2004 WCAT received a letter from one of the worker's co-workers. The worker's employer was notified of the appeal, but it did not indicate that it wished to participate in the appeal.

The worker was provided with an opportunity to make a submission, but no submission was received from the worker by the November 19, 2004 due date set out in an October 29, 2004 letter from a WCAT appeal liaison. On January 25, 2005 the worker hand-delivered further materials to WCAT. He provided a January 24, 2005 letter explaining why the materials were submitted after the due date for submissions. I have accepted and read the late submission. There is no respondent and no need to disclose the submission to another party.

By letter of October 29, 2004 the worker was advised that the appeal would proceed by way of written submissions. That decision does not bind me if I consider that an oral hearing is necessary. I consider a fair and thorough decision may be reached on this appeal without holding an oral hearing.

Issue(s)

At issue is whether the worker suffered an occupational disease due to the nature of his employment.

Jurisdiction

WCAT may consider all questions of fact and law arising in an appeal, but is not bound by legal precedent (section 250(1) of the *Workers Compensation Act (Act)*). WCAT must make its decision on the merits and justice of the case, but in so doing, it must apply a policy of the board of directors of the Board that is applicable in the case. WCAT has exclusive jurisdiction to inquire into, hear and determine all those matters and questions of fact, law, and discretion arising or required to be determined in an appeal before it (section 254).

This is an appeal by way of rehearing, rather than a hearing *de novo* or an appeal on the record. WCAT has jurisdiction to consider new evidence, and to substitute its own decision for the decision under appeal.

Background and Evidence

As of 2003 the worker had been employed as a seasonal tree planter for 14 years. He had suffered a compensable back injury in June 2002 while employed with A Ltd., the same employer for whom he worked in 2003. He was off work from June 2002 to August 2002. A report of injury or occupational disease filed by A Ltd. indicated that the worker commenced work with A Ltd. in February 2003.

The worker advised the claims adjudicator that he first had symptoms when he began using a new fertilizer on April 25, 2003. The fertilizer was purchased by B Ltd., the firm that retained A Ltd. to undertake tree planting. The fertilizer came in tea bags which were packed 1000 to a shipment and came in sealed packets of 100. The tree planters carried individual tea bags in their planter bags.

The worker indicated that when the tea bags arrived 25% of them were open. He indicated that he placed one on top of the soil when he planted a tree.

A representative of A Ltd. advised the Board that the tea bags, which contained coated grains of fertilizer, were laid on the top of the soil, and then covered with a thin layer of soil. The tea bags eventually break down. The representative believed that the fertilizer was suited for three growing seasons. He commented that he did "survival studies" for up to two years after planting, and he noted that the fertilizer was in solid shape. A representative of B Ltd. advised the Board that the fertilizer releases over a 180-day period. Its toxicity level was reported as "nil."

The Board was provided with a material safety data sheet (sheet) for the fertilizer and a sheet for one of the components of the fertilizer. A Board occupational hygiene officer spoke to a representative of C Ltd., the supplier of the fertilizer, who confirmed the advice of a representative of B Ltd. that the fertilizer contained polymer-coated urea rather than sulphur-coated urea. The sheets indicated that there was a potential for both eye and respiratory tract irritation.

The worker advised the claims adjudicator that after each day of work he would go to the camp, shower, and feel a little bit better. The following day he would return to work, and, within a few hours, he would have the symptoms again. He said he would be fine after he showered at night.

The worker advised the claims adjudicator that he could taste the fertilizer. He developed a runny nose and eyes, dizziness and headache; his throat and lungs were okay. He also had a fever which he had until he left camp. He left camp on either May 8 or May 11, 2003.

As part of its adjudication of the worker's claim, the Board obtained copies of Dr. Ketene's chart notes from May 13, 2003 to August 22, 2003. Dr. Ketene is the worker's family physician.

The worker first sought medical attention on May 13, 2003 when he saw Dr. Ketene who noted right-sided facial swelling and prescribed Clavulin, an antibiotic combination drug. Dr. Ketene's chart entry for the May 13, 2003 visit noted that the worker was using new fertilizer. The worker advised the claims adjudicator that his runny nose and eyes slowly resolved. The course of his symptoms was documented by the claims adjudicator as follows:

He described his head and nose as swollen like he had an allergic reaction. He said his face was puffy. The swelling started to come down after taking the antibiotics, which he took for almost three weeks. He decided to return to work after discussing it with his GP.

A May 22, 2003 x-ray of the left maxillary sinus was interpreted as revealing findings that were more likely due to sinusitis rather than simple mucosal thickening. Dr. Ketene's May 22, 2003 chart entry noted the worker developed facial swelling on May 8, 2003 after using fertilizer for two weeks. He documented that the worker had been complaining of diarrhea for three days secondary to Clavulin and that the x-ray established that the worker's left sinus was worse than his right. The worker was prescribed Septra (also called Bactrim), an antibiotic combination drug.

On May 29, 2003 the worker was seen by Dr. Ketene who diagnosed “sinusitis secondary to acute sinus congestion from work environment.” Dr. Ketene’s physician’s first report stated that the worker had an onset of acute sinus congestion after “exposure to trees for planting with new fertilizer dust.” Dr. Ketene prescribed Zithromax, an antibiotic.

On June 3, 2003 the worker returned to work as a tree planter with a different employer. He still had a headache. He did not use fertilizer that day. He worked a full shift on June 3, 2003. He worked for two and one-half hours on June 4, 2003, but he stopped work as he felt he had not fully recovered from the swelling and headache enough to be able to return to work.

On June 9, 2003 he saw Dr. Ketene who diagnosed “sinusitis, back pain.” Dr. Ketene commented in his June 9, 2003 progress report that the worker was unable to work after June 7, 2003 because of headache, sinus pain, and dizziness. He noted tender bilateral frontal maxillaries, swelling on the right side of the face, and back pain. The worker advised the claims adjudicator that his symptoms did not increase between June 3 and June 9, 2003, and that as of June 20, 2003 he had the same symptoms and had not returned to work.

Dr. Ketene’s June 13, 2003 chart entry referred to eczema on the worker’s left hand. Dr. Ketene recorded the worker’s advice that he got an allergic reaction after handling fertilizer. The worker’s letter faxed to the Board on June 13, 2003 referred to constant weakness, nausea, muscle pain and excruciating headaches. A second undated letter from the worker, apparently produced at around the same time, indicated that applying fertilizer caused blisters on his left hand.

The worker advised the claims adjudicator that on June 25, 2003 he had a sample of fertilizer at home and, when he went near it that morning, he developed watering of his eyes and nose. When asked why he had not returned to work, the worker indicated that because of his back he was unable to sit for more than 10 to 15 minutes.

Dr. W, a Board medical advisor, provided the following September 4, 2003 opinion concerning the likelihood that the worker’s work exposure was of significance with respect to his condition:

1. Based on the information provided by Occupation Hygiene Officer...(September 3, 2003) the fertilizer with which [the worker] was working in May 2003 is a mild irritant. I have been advised when dealing with a previous claim, that the use of fertilizer in tea bags produces a minimal amount of dust so the chemical is unlikely to be inhaled in significant amounts.

2. I advise that if the fertilizer was airborne in significant amounts, it would irritate the sensitive lining of the eyes as well as the lining of the nose and sinuses. The absence of eye complaints therefore supports insignificant exposure.
3. Even assuming there was some mild chemical irritation of his nose and sinuses, this would likely settle within hours to a few days following removal from further exposure. It is also likely that irritation and inflammation would be bilateral and not affect the right side worse than the left. This is more consistent with a bacterial or viral infection.
4. The prolonged recovery over several weeks is certainly more consistent with an infection, probably viral, rather than chemical irritation.

In conclusion, I am unable to support his exposure to fertilizer being the probable cause of rhinitis and sinusitis.

In her September 5, 2003 decision to deny the claim the claims adjudicator cited the reasons provided by Dr. W and relied on them.

Dr. Ketene provided a December 18, 2003 opinion in support of the worker's request for a review of the September 5, 2003 decision. He indicated that examination of the worker established excessive tearing, redness, and right peri-orbital swelling. He considered that there were several "mistaken assumptions" in the claims adjudicator's September 5, 2003 decision. His opinion contained the following numbered points in which he took issue with the Board's analysis:

1. Fertilizer is a "mild irritant". As seen in my office, this patient experienced the most severe reaction I have seen to a chemical dust in my 22 years of practice. The entire right face was deformed from marked swelling and the right eye partially closed, skins was edematous, right maxillary sinus was tender. In addition, there were definite signs of allergic contact dermatitis of the skin in the form of microvesicles of the hands when seen on June 13, 2003.
2. Allergic reaction to chemical dust, which in this case was worse at the sinuses, does not rule out exposure to chemical dust at the eyes and indeed is supported by symptoms and signs described above.

3. Tea bags are extremely porous, and would allow significant amounts of chemical dust out while only keeping in the bulkier particles. Additionally, the patient specifically states that there was considerable chemical dust released upon opening the packages from the settling of contents after packaging.
4. This was not a mild irritation of sinuses, but a quite severe and made worse by ongoing exposure to the allergy, and most likely causing severe edema to the nasal mucosa, complete blockage of sinus drainage holes, and resulting in the severe sinusitis seen clinically, with the underlying allergic reaction. The eyes are open and can more easily recover by draining tears and washing away the chemical dust to the outside, where as blocked sinuses cannot. Indeed, the patients symptoms would improve after leaving the work place and taking a shower, and would worsen upon returning to work again with tears, nasal congestion and sneezing.

[Reproduced as written]

Dr. Ketene concluded his opinion by indicating that the worker became totally disabled as a result of “the allergic chemical exposure May 11, 2003.”

In his May 3, 2004 decision the review officer found that section 5 of the Act was inapplicable because the worker did not sustain an injury. He considered section 6 of the Act dealing with occupational diseases. In considering the matter, the review officer noted that Dr. Ketene documented eye symptoms. The review officer further noted that (1) the worker suffered from fever at the time of his exposure, (2) the worker’s irritation and inflammation had “greater [e]ffect on the right side of his face”, (3) the worker complained of diarrhea at a May 22, 2003 examination by Dr. Ketene, (4) the first reference to the worker having left hand eczema was on June 13, 2003, one month after he was exposed to the new fertilizer, and (5) the worker was still experiencing symptoms on July 4, 2003, some two months after his last exposure to the new fertilizer.

The review officer summarized his analysis as follows:

Based on the evidence, I prefer the medical opinion of Dr. W., the Board Medical Advisor. The evidence only establishes an imperfect temporal link between the worker’s workplace exposure to the new fertilizer, which is a mild irritant, and his rhinitis and sinusitis symptoms. This is insufficient positive evidence of a causal relationship between the worker’s employment and his rhinitis and sinusitis. It would be mere speculation to link the worker’s rhinitis and sinusitis to his workplace exposure to the new fertilizer. Therefore, I accept that the worker’s rhinitis and sinusitis

symptoms are more consistent with a bacterial or viral infection than a workplace chemical irritation.

The letter from the worker's co-worker submitted to WCAT indicated that he worked with the worker during the 2003 spring planting season. He noted that as each tree was planted, planters were required to add a tea bag sized fertilizer pouch. After one or two days, several members of the crew began to complain of low energy, nausea, and burning of the throat, nose, and eyes. After two weeks, the worker had noticeable health problems; his head was swollen from his temple to the lower jaw, his nose was running constantly, and he looked to be in a great deal of discomfort. The worker tried to continue to work, but he had to seek medical attention. The co-worker noted that several weeks later, he was working with the worker at different location, and the worker had to stop work again because of his previous ailment.

In his January 7, 2005 letter Dr. Ketene contended that there was no question that the worker's illness upon presentation on May 13, 22, 23, and 29, 2003 was related to work exposure of a toxic or allergic nature. He indicated the worker was suffering mucosal edema from toxic allergic exposure to the point where hospitalization was being considered. He noted that there was an acute eczematous allergic reaction of the skin. He reiterated that any sinusitis component of the worker's facial swelling was secondary to his allergic reaction to the fertilizer dust. Sinusitis does not cause eczema on the hand, but allergic exposure caused secondary sinusitis and primary dermatitis. Dr. Ketene's letter also noted the worker's 2002 back injury and indicated that there was a February 2003 re-injury. He outlined the worker's back symptoms and treatment.

Dr. Ketene's letter was accompanied by a page entitled "REASONS FOR DISAGREEMENT WITH REVIEW DECISION #11004." The following points are made in this one page attachment:

- While fertilizer in tea bags may produce a minimal amount of dust, handling of the tea bags through normal usage causes many bags to rip or tear, thereby significantly increasing the amount of chemical inhaled, and this is attested to by the worker.
- Although the fertilizer may be a mild irritant, it is indisputably capable of causing irritation and inflammation, which it indeed caused every time the worker inhaled chemical dust from ripped or torn tea bags.
- While Dr. W's assessment of the worker's symptoms points to a viral or bacterial infection, chronic inflammation of the sinuses can cause acute sinusitis.
- Inflammation (whether from a cold, virus or chemical irritant) causes retention of the mucus secretion which can cause normally healthy bacteria to multiply and invade sinuses, thereby causing a chronic sinus infection.

- The inflammation from the irritant can therefore cause a bacterial infection and that explains why the worker's symptoms were more consistent with a bacterial or viral infection and why the irritation symptoms did not settle down after a short period of time. It is also consistent with the worker's development of an enduring fever.
- The evidence is not merely speculative. There is little doubt that some bags ripped in the course of handling and the released dust irritated the worker's nasal and respiratory symptoms. It is more than simply a temporal coincidence that this reaction led to acute rhinosinusitis with symptoms of a bacterial infection.

Reasons and Findings

The issue before me concerns the worker's 2003 claim for sinusitis. (Dr. Ketene did not diagnose rhinitis.) Whether the 2002 back claim should be reopened or whether the worker sustained a further back injury in 2003 is not before me for determination. WCAT *Decision #WCAT-2005-00561*, issued on January 31, 2005, addressed those issues.

I agree with the decision of the review officer that section 5 of the Act is inapplicable to the worker's 2003 claim for sinusitis; the worker did not suffer an injury.

The issue is whether the worker suffered an occupational disease. As established by subsection 6(3) of the Act, if at or immediately before the date of the disablement, a worker was employed in a process or industry mentioned in the second column of Schedule B of the Act, and the disease contracted is the disease in the first column of the schedule set opposite to the description of the process, the disease is deemed to have been due to the nature of that employment, unless the contrary is proved. Sinusitis is not listed in Schedule B, and therefore subsection 6(3) is not applicable.

What still must be considered is whether the worker had an occupational disease under subsection 6(1) of the Act which provides that compensation is payable where a worker suffers from an occupational disease, is disabled from earning full wages at the work at which the worker was employed, and the disease is due to the nature of any employment in which the worker was employed. As noted by the review officer, item #26.22 of the *Rehabilitation Services and Claims Manual, Volume I* (RSCM I) provides assistance in adjudicating claims for occupational diseases not listed in Schedule B of the Act. Key passages in that policy are as follows:

- (2) The Board must make its decision based upon the merits and justice of the case, but in so doing the Board must apply a policy of the board of directors that is applicable in that case.
- (3) If the Board is making a decision respecting the compensation or rehabilitation of a worker and the evidence supporting different findings

on an issue is evenly weighted in that case, the Board must resolve that issue in a manner that favours the worker.

Therefore if the weight of the evidence suggesting the disease was caused by the employment is roughly equally balanced with evidence suggesting non-employment causes, the issue of causation will be resolved in favour of the worker. This provision does not come into play where the evidence is not evenly weighted on an issue.

If the Board has no or insufficient positive evidence before it that tends to establish that the disease is due to the nature of the worker's employment, the Board's only possible decision is to deny the claim.

The worker did not have symptoms when he was using other types of fertilizer before 2003. I can understand in such circumstances how he might link the new fertilizer to his symptoms. However, that temporal association, by itself, does not establish causation. It is necessary to consider whether the symptoms are consistent with the fertilizer exposure.

That the worker's co-workers may have reported symptoms does not establish that they or the worker had occupationally-induced sinusitis. The letter from the co-worker does not indicate that the co-workers were diagnosed with sinusitis that physicians linked to their employment.

There is some disagreement on the file as to the level of dust that the worker would have encountered. Dr. W considered that exposure to dust would have been minimal, and Dr. Ketene indicated that the worker stated that there was considerable dust. I accept that there was some dust exposure.

I agree with the review officer that Dr. Ketene's materials indicate that the worker suffered eye symptoms; as well, the worker advised the claims adjudicator that he had eye symptoms. I consider that Dr. W erred in his comment that there was an absence of eye symptoms. While that error by Dr. W does affect the weight that can be attached to his opinion, the error does not mean that no weight can be attached to the opinion. Notably, using the analysis employed by Dr. W, the presence of eye symptoms could support a conclusion that the fertilizer was airborne in significant amounts.

I consider that when Dr. W referred to the fertilizer as a mild irritant, he was referring to the fertilizer's properties. He did not assert that the worker's condition was mild. That a fertilizer may be labeled as mild does not preclude a worker from having a more than mild response to the fertilizer.

The review officer was not explicit, but I infer from his reference to the worker's fever and diarrhea that he may have considered that the worker was experiencing symptoms secondary to a systemic illness. Yet, clearly the diarrhea was explained in Dr. Ketene's

contemporaneous chart entry as being a consequence of the worker having taken antibiotics. Diarrhea is listed as one of the more common side effects of Clavulin (see www.medbroadcast.com).

At first, one might consider that the persistence of the worker's symptoms well after the conclusion of any possible workplace exposure supports a conclusion that the worker's symptoms were not due to the nature of his employment. In that regard, responses to workplace contaminants often abate when a worker is away from the workplace. However, such abatement may not occur in cases where a contaminant produces an infection above and beyond any direct response to the contaminant such as irritation.

Dr. W's opinion that the worker's symptoms were more consistent with viral or bacterial infection is not in conflict with Dr. Ketene's point that the worker's sinusitis was secondary to his allergic exposure. The infection, and any attendant fever, was a further consequence of the worker's reaction to the fertilizer exposure.

In her September 5, 2003 decision the claims adjudicator noted Dr. W's comment that it was likely that chemically-induced irritation and inflammation would be bilateral and that the appearance of more severe symptoms on the right side was more consistent with a bacterial or viral infection. Yet, Dr. Ketene did not explain why non-bilateral symptoms would be occupationally-induced. This is of interest given that Dr. Ketene's December 18, 2003 letter takes specific exception to several aspects of the claims adjudicator's September 5, 2003 decision. Yet, I do not attach great significance to the fact that the worker's right sinus was worse than his left. Quite simply, it may be that the infection was more severe on one side than the other. The body is not perfectly symmetrical in its response to irritants. I note that in his May 29, 2003 and June 13, 2003 reports to the Board, Dr. Ketene, when asked to identify the affected side, indicated that the worker's condition was bilateral.

After having considered the matter, I vary the decision of the review officer that the worker did not suffer from an occupational disease due to the nature of his employment. I have considered Dr. W's opinion, but I am persuaded by Dr. Ketene's opinions which contain persuasive analyses linking the worker's symptoms to his workplace exposure. I find that the worker's condition diagnosed by Dr. Ketene as sinusitis was an occupational disease due to the nature of his employment.

The claims adjudicator's decision did not address whether the worker's eczema was due to the nature of his employment. The review officer noted the eczema, but he did not address whether it was an occupational disease. I do not consider that the appeal before me raises the issue of whether it was an occupational disease, and I make no decision on that issue. I observe that whether the worker's eczema first appeared in June 2003 or earlier is not relevant to whether he suffered sinusitis due to the nature of his employment. My finding concerning the worker's sinusitis is not contingent on whether the fertilizer caused the worker's eczema.

It is not clear from the worker's January 24, 2005 letter whether he is asking WCAT to reimburse him for Dr. Ketene's January 7, 2005 report, or whether he is asking WCAT to pay Dr. Ketene directly. That same letter was considered by the panel that issued *WCAT Decision #2005-00561*. The panel noted that WCAT had approved payment for the letter, and it ordered payment. In these circumstances, I make no order for reimbursement.

Conclusion

I allow the worker's appeal. I vary the review officer's May 3, 2004 decision, and I find that the worker suffered an occupational disease due to the nature of his employment.

Randy Lane
Vice Chair

RL/ml/jy