



chemicals at work. He first became aware of the injury on April 14, 2004, when he stopped work. The employing establishment controverted the claim and noted that “[a]dequate safeguards against toxic or potentially toxic exposure are in place.” In a separate statement, the employing establishment indicated that appellant was working under a term appointment not to exceed August 7, 2004.

In a July 13, 2004 statement, appellant alleged that his position as a research biologist involved using chemicals that were potentially toxic to the liver and which included xylenes, toluene, aldehydes, chloroform, ethers, phenol and alcohols. He alleged that on April 14, 2004 while working in the laboratory he had an apparent seizure and was taken to an emergency room. Appellant alleged that his blood tests showed elevated liver enzymes and ammonia levels and that his previous blood tests did not show any liver function abnormalities.

In an April 14, 2004 treatment note, appellant’s supervisor, Dr. Arnulf H. Koeppen, a Board-certified neurologist and pathologist, explained that appellant experienced a major convulsion while at work in a research laboratory at the hospital. Dr. Koeppen noted that a visitor reported that appellant appeared to be “severely agitated just before the attack.” He advised that appellant’s coworkers came to his aid and summoned the emergency room staff. Dr. Koeppen indicated that several years earlier appellant had a “syncopal attack which was interpreted as ‘dehydration’ or ‘tussive syncope.’” He stated that syncope episode occurred during an outdoor party, in hot weather and that “drinking” was also involved. Dr. Koeppen also noted that appellant had one other attack afterwards which was a major seizure. He explained that this occurred while he was traveling with appellant during a science trip. Appellant had other medical conditions including adult onset diabetes mellitus which was controlled by diet, hypercholesterolemia, hypertension and liver disease. He diagnosed “epilepsy, focal onset, breakthrough.”

In a May 17, 2004 report, Dr. James C. Leyhane, a Board-certified internist and a treating physician, noted that appellant was hospitalized on April 14, 2004 after a seizure. He advised that appellant had a number of serious problems regarding his liver and opined that “the etiology of these problems are at this time not entirely clear and appellant has been advised to avoid exposures to aromatic hydrocarbons, since they are potentially liver toxic.” Dr. Leyhane indicated that, since appellant was discharged, his liver functions were returning to normal. He anticipated that appellant “could come back to work, without hydrocarbon exposures, sometime in the next few weeks to a month or two.” In a June 15, 2004 report, Dr. Leyhane advised that appellant was hospitalized in April 2004 for a “seizure at work.” Appellant was “found to have significant liver problems, including an apparent bout of liver failure, with high ammonia levels and some question about a nutritional hepatitis, versus possibly toxic hepatitis.” Dr. Leyhane indicated that appellant worked with chemicals and admitted to alcohol intake. He noted that his liver functions were presently normal and opined that appellant could not use any alcohol.

In a June 14, 2004 report, Dr. Seth Richter, a Board-certified internist and a treating physician, stated that appellant could work but that he should be placed in a work environment that did not expose him to “potentially toxic substances a[s] his current position.” He opined that this “may exacerbate his blood pressure with his liver.”

On July 9, 2004 Dr. Koeppen controverted the claim. He stated that the laboratory provided:

“[N]umerous safeguards against such exposure, among which are two fume hoods, gowns, gloves, masks and goggles. The laboratory also undergoes routine and unannounced safety inspections by the institutional safety officer, Jeffrey Jones or his designee, Pamela Colligan. The employee is also in charge of maintaining a current file with material safety data sheets and all employees are required to attend periodic safety seminars that are organized by the research service. These seminars address biosafety, radiation exposure and exposure to microorganisms and other pathogens. Radiation exposure is being monitored continuously by wearing of radiation badges and aldehyde exposure is examined in intervals by suitable similar devices.”

By letter dated August 4, 2004, the Office advised appellant that additional factual and medical evidence was needed to support his claim. He was requested to describe what work factors caused his injuries and to submit records from his physician that included dates of examination and treatment, a history of injury given, a detailed description of findings, the results of all x-rays and laboratory tests, a diagnosis, prognosis and course of treatment followed and the physician’s opinion supported by a medical explanation as to how his employment caused or aggravated the claimed injury. The Office explained that the physician’s opinion was crucial to appellant’s claim and allotted him 30 days to submit the requested information.

The Office subsequently received a material safety data sheet regarding chemicals at the employing establishment, respirator test results for appellant’s face mask, air sample results from October 10, 2002 at the employing establishment, occupational exposure test results dated October 16, 2002 and a statement from appellant regarding his exposure to various chemicals at work during a 14-year period from 1990 to 2004.

In a June 25, 2004 report, Dr. Richter noted that appellant was hospitalized for abnormal liver chemistries, which were “felt to be alcohol-related liver disease, with possible toxic exposure from work playing a role in this.” While appellant was in the hospital, “other etiologies of liver disease, including hepatitis viruses and autoimmune disease and hemachromatosis had been ruled out based on blood tests.” Dr. Richter repeated appellant’s liver chemistries, which were improved from his hospitalization. He indicated that appellant had no acute complaints at the present time and was in the process of trying to get disability or retirement. He also noted that appellant related that he did not drink anymore, despite a history of drinking. Dr. Richter provided copies of his treatment notes from May 28, 2004.

In a June 26, 2004 report, Dr. Leyhane noted that appellant was hospitalized on April 14, 2004 for problems that may have been associated with hydrocarbon exposure, which happened at work. Appellant had notable difficulties with his liver during the period he was in the hospital which had slowly resolved over the past months. Dr. Leyhane advised that appellant was disabled for three to six months but he could potentially return to work without exposure to hydrocarbons.

In a July 30, 2004 report, Dr. Richter advised that appellant was recovering from his episode in the hospital for “liver toxicity, question alcohol versus chronic exposure to chemical solvents from job practice.” His chemical testing results revealed normal liver chemistries and “mildly elevated” ammonia levels. Dr. Richter determined that the etiology was unclear with regard to whether appellant’s condition stemmed from alcohol or chemical exposure. Dr. Richter recommended that appellant work away from exposure to chemical solvents as they “could possibly have been playing a role in what happened to him.” He indicated that he would continue to follow appellant every three months and spread out the intervals if his liver enzymes remained normal. The Office received additional test results which were normal.

The Office also received additional material safety data sheets on toluene, paraformaldehyde, ethyl ether and chloroform, isamyl alcohol.

In an August 18, 2004 statement, appellant noted that the frequency and duration of exposure to the specific toxic chemicals identified was dictated according to the type of experiment being performed. He alleged that the experimentation included various animal procedures, routine bench work, developmental techniques, standard solution preparation and diagnostic preparations. Appellant alleged that it was hard to narrow the exposure period to specific hours of the day or week. He alleged that his exposure was continuous over a period of 14 years. Appellant also alleged that his exposure to toxic chemicals outside of his federal employment was fairly limited. He noted that he was a senior microbiologist, which was considered midmanagement and, as a result, required his efforts to be directed toward administrative responsibilities. Appellant also alleged that his exposure to chemicals at his home were no more than the average responsibilities of any homeowner. He also denied any hobbies that exposed him to toxic chemicals.

By decision dated November 16, 2004, the Office denied appellant’s claim finding that he did not submit sufficient medical evidence which causally related his injury to any work factors of his federal employment.

By letters dated October 20, 2005 and February 6, 2006, appellant’s representative requested reconsideration and submitted additional evidence.<sup>2</sup> In an October 14, 2004 report, Dr. Kerry Brand, a psychiatrist, noted that appellant related that “he was unable to work ... because his physician told him that he could not go back to an environment where he would be exposed to liver toxins due to his liver failure.” Dr. Brand indicated that appellant alleged that, as a result, he elected disability retirement. He determined that there were “no psychiatric issues which would interfere with [appellant’s] ability to function on a daily basis. In an October 14, 2004 report, Dr. Abdul S. Khan, a Board-certified neurologist, noted that he was treating appellant for seizures which were controlled with medication. In a November 5, 2004 treatment note, Dr. Richter indicated that appellant was seen for a followup regarding his history of abnormal liver enzymes. He noted that appellant had “recovered from his initial acute insult.” However, Dr. Richter advised that it was “unclear as to what happened.” He opined that job

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<sup>2</sup> Appellant originally requested a hearing on November 24, 2004. However, on February 18, 2005 his representative changed this request to a request for reconsideration. On February 24, 2005 the Office accepted appellant’s request to withdraw his hearing.

factors could be a cause as appellant had a “history of solvent and chemical exposure from his job.”

In a November 11, 2004 report, Dr. Leyhane noted that in April 2004 appellant had a serious acute event involving liver failure and advised that “the etiology of that event is unclear. Certainly, the solvents that you work with can be potentially implicated, although again it is unclear the exact etiology.” Dr. Leyhane opined that the liver had recovered and was now “approaching normal.” He advised that appellant should “not be exposed to organic solvents or chemicals with significant associated liver toxicity ever again” and opined that these restrictions were permanent.

In an April 4, 2005 report, Dr. Leyhane noted appellant’s history, advising that he had been treated by his practice group since 1992. He indicated that the first time he saw appellant was on April 29, 2004 after he was discharged from a hospital after being brought in “because of uncontrolled epileptic seizures.” Dr. Leyhane also noted that appellant was “hospitalized in the intensive care unit for treatment of liver failure in addition to his seizures. The exact etiology of his liver failure has not become clear.” Dr. Leyhane opined that extensive workup “ruled out viral, autoimmune and genetic causes, leaving the principal cause some type of toxic organic exposure.” He added that, when patients recovered from these types of situations, they needed to be restricted from exposure to volatile organic compounds forever. Dr. Leyhane indicated that this was not an allergy situation, but was similar as exposure to one or more of these organic compounds could trigger a second episode of liver failure which could be fatal. Dr. Leyhane noted that appellant’s liver had returned almost to normal. Regarding the initial cause for the seizures in April 2004, he opined that this was “also a little bit unclear.” Dr. Leyhane advised that appellant had a history of seizure disorder that was under control and opined that there was a “reasonable likelihood that the seizures that were occurring may have been due to the liver failure as well.” Dr. Leyhane noted that appellant had abstained completely from alcohol, a “volatile hydrocarbon” and opined that “we do not think that alcohol really played a role in this episode.” In a May 19, 2005 addendum, he explained that the term “toxic exposure” referred to substances that appellant was exposed to in the course of his employment. Dr. Leyhane further noted that it also referred to a “class of compounds that most chemists would realize would be present in most similar job-type descriptions.”

By decision dated April 21, 2006, the Office denied modification of the November 16, 2004 decision. It found that the evidence was insufficient to support that his liver condition was caused or aggravated by factors of his federal employment.<sup>3</sup>

### **LEGAL PRECEDENT**

An employee seeking benefits under the Federal Employees’ Compensation Act<sup>4</sup> has the burden of establishing the essential elements of his or her claim including the fact that the

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<sup>3</sup> The Office also determined that the psychiatric report from Dr. Brand provided no diagnosis and was not considered of any probative value in establishing that any emotional condition was incurred directly as a result of appellant’s assigned job duties.

<sup>4</sup> 5 U.S.C. §§ 8101-8193.

individual is an “employee of the United States” within the meaning of the Act, that the claim was timely filed within the applicable time limitation period of the Act, that an injury was sustained in the performance of duty as alleged and that any disability and/or specific condition for which compensation is claimed are causally related to the employment injury.<sup>5</sup> These are the essential elements of each and every compensation claim regardless of whether the claim is predicated upon a traumatic injury or an occupational disease.<sup>6</sup>

To establish that an injury was sustained in the performance of duty in an occupational disease claim, a claimant must submit the following: (1) medical evidence establishing the presence or existence of the disease or condition for which compensation is claimed; (2) a factual statement identifying employment factors alleged to have caused or contributed to the presence or occurrence of the disease or condition; and (3) medical evidence establishing that the employment factors identified by the claimant were the proximate cause of the condition for which compensation is claimed or, stated differently, medical evidence establishing that the diagnosed condition is causally related to the employment factors identified by the claimant. The medical evidence required to establish causal relationship, generally, is rationalized medical opinion evidence. Rationalized medical opinion evidence is medical evidence which includes a physician’s rationalized opinion on the issue of whether there is a causal relationship between the claimant’s diagnosed condition and the implicated employment factors. The opinion of the physician must be based on a complete factual and medical background of the claimant, must be one of reasonable medical certainty, and must be supported by medical rationale explaining the nature of the relationship between the diagnosed condition and the specific employment factors identified by the claimant.<sup>7</sup>

### ANALYSIS

Appellant has established that he has a liver condition and that he was exposed to various chemicals in the performance of duty. The issue, therefore, is whether the medical evidence establishes that his employment exposures caused or contributed to his liver condition. The Board finds that appellant has submitted insufficient medical evidence to establish that his liver condition was caused or aggravated by specific factors of his federal employment.

Appellant submitted reports from several physicians; however, there is no discussion explaining how factors of his employment, such as working in the research laboratory and working with chemicals, would have caused or contributed to his liver condition or aggravated a preexisting medical condition. The record contains insufficient rationalized medical opinion explaining how the implicated employment factors caused or aggravated appellant’s liver condition.

Appellant submitted several reports from Dr. Leyhane. He submitted two reports in which Dr. Leyhane was uncertain as to the cause of appellant’s problems. In a May 17, 2004

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<sup>5</sup> *Joe D. Cameron*, 41 ECAB 153 (1989); *Elaine Pendleton*, 40 ECAB 1143, 1145 (1989).

<sup>6</sup> *Victor J. Woodhams*, 41 ECAB 345 (1989).

<sup>7</sup> *Id.*

report, he noted that appellant was hospitalized on April 14, 2004 and opined that “the etiology of these problems is at this time not entirely clear.” While he advised that appellant should avoid “exposures to aromatic hydrocarbons, since they are potentially liver toxic,” he did not provide a rationalized explanation explaining how workplace exposure to any particular chemical caused or aggravated appellant’s liver condition. Dr. Leyhane also repeated this opinion in a November 11, 2004 report and opined the “etiology of that event is unclear.” He noted that, while the solvents that appellant worked with could be “potentially implicated,” the exact etiology was unclear. The Board notes that Dr. Leyhane’s opinion lacks probative value in that it did not provide a firm diagnosis, is vague and equivocal and failed to explain the causal relationship between appellant’s condition and any work-related exposures.<sup>8</sup> In his June 15, 2004 report, Dr. Leyhane noted that appellant had “significant liver problems” and possible “nutritional hepatitis, versus possibly toxic hepatitis.” While he noted that he worked with chemicals, Dr. Leyhane did not provide any opinion regarding the cause of appellant’s condition and the Board has long held that medical evidence which does not offer any opinion regarding the cause of an employee’s condition is of limited probative value on the issue of causal relationship.<sup>9</sup>

In a June 26, 2004 report, Dr. Leyhane noted that appellant was hospitalized on April 14, 2004 for problems that may have been associated with hydrocarbon exposure at his workplace and opined that he could potentially return to work without exposure to hydrocarbons. However, Dr. Leyhane’s opinion is speculative in that he alleged that appellant’s problems may have been associated with hydrocarbon exposure at work. While the medical opinion of a physician supporting causal relationship does not have to reduce the cause or etiology of a disease or condition to an absolute certainty, neither can such opinion be speculative or equivocal.<sup>10</sup> The opinion of a physician supporting causal relationship must be one of reasonable medical certainty that the condition for which compensation is claimed is causally related to his federal employment and such relationship must be supported with affirmative evidence, explained by medical rationale and be based upon a complete and accurate medical and factual background of the claimant.<sup>11</sup> In an April 4, 2005 report, Dr. Leyhane again opined that “the exact etiology of appellant’s liver failure has not become clear.” Despite indicating that an extensive workup had been conducted which “ruled out viral, autoimmune and genetic causes, leaving the principal cause some type of toxic organic exposure,” he did not explain the medical reasons why workplace exposure to particular toxins would cause or aggravate a diagnosed liver condition. As noted, while the medical opinion of a physician supporting causal relationship does not have to reduce the cause or etiology of a disease or condition to an absolute certainty, neither can such opinion be speculative or equivocal. Dr. Leyhane added that there may be a “reasonable likelihood that the seizures that were occurring may have been due to the liver failure,” but he noted that appellant had abstained completely from alcohol and added that he did not believe that alcohol caused his episode. Thus, while he provided some speculative support for causal relationship, Dr. Leyhane’s reports are insufficient to establish appellant’s claim because he did

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<sup>8</sup> *Samuel Senkow*, 50 ECAB 370 (1999); *Thomas A. Faber*, 50 ECAB 566 (1999).

<sup>9</sup> *See Michael E. Smith*, 50 ECAB 313 (1999).

<sup>10</sup> *See Samuel Senkow*, 50 ECAB 370 (1999).

<sup>11</sup> *Id.*

not provide medical reasoning explaining how and why specific workplace toxins would have caused or aggravated his condition.

Appellant also submitted several reports from Dr. Richter. In a June 14, 2004 report, he opined that appellant was able to work but, that he should not be exposed to “potentially toxic substances” at his current position. However, Dr. Richter did not provide an opinion on causal relationship. In a June 25, 2004 report, Dr. Richter opined that appellant was hospitalized for abnormal liver chemistries and opined that they were related to “alcohol-related liver disease, with possible toxic exposure from work playing a role in this.” While the medical opinion of a physician supporting causal relationship does not have to reduce the cause or etiology of a disease or condition to an absolute certainty, neither can such opinion be speculative or equivocal. Dr. Richter repeated this opinion in his July 30 and November 5, 2004 reports. He opined that the etiology was unclear with regard to whether appellant’s condition stemmed from alcohol or chemical exposure. While he advised that appellant work away from exposure to chemical solvents as they “could possibly have been playing a role in what happened to him, Dr. Richter’s report remained equivocal.<sup>12</sup> As with Dr. Leyhane, Dr. Richter’s reports are insufficient to establish appellant’s claim because he did not provide medical reasoning explaining unequivocally how and why specific workplace toxins would have caused or aggravated appellant’s condition.

Other medical reports submitted by appellant are insufficient to establish his claim because they do not address and explain how specific employment exposures caused or aggravated the claimed liver condition.

The Board has held that the mere fact that a condition manifests itself during a period of employment does not raise an inference that there is a causal relationship between the two.<sup>13</sup> Neither the fact that the condition became apparent during a period of employment, nor the belief that the condition was caused or aggravated by employment factors or incidents is sufficient to establish causal relationship.<sup>14</sup> The question of causal relationship is a medical one and must be resolved by probative medical evidence.<sup>15</sup>

As there is insufficient probative, rationalized medical evidence addressing and explaining why appellant’s liver condition was caused or aggravated by specific factors of his employment, he has not met his burden of proof in establishing that he sustained a medical condition in the performance of duty causally related to factors of employment.

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<sup>12</sup> See *supra* note 10.

<sup>13</sup> See *Joe T. Williams*, 44 ECAB 518, 521 (1993).

<sup>14</sup> *Id.*

<sup>15</sup> *Margaret Cravello*, 54 ECAB 498 (2003).

**CONCLUSION**

The Board finds that appellant has not met his burden of proof in establishing that he sustained an injury in the performance of duty.

**ORDER**

**IT IS HEREBY ORDERED THAT** the decision of the Office of Workers' Compensation Programs dated April 21, 2006 is affirmed.

Issued: November 14, 2006  
Washington, DC

David S. Gerson, Judge  
Employees' Compensation Appeals Board

Michael E. Groom, Alternate Judge  
Employees' Compensation Appeals Board

James A. Haynes, Alternate Judge  
Employees' Compensation Appeals Board