IN THE SUPREME COURT OF TENNESSEE
SPECIAL WORKERS' COMPENSATION APPEALS PANEL
AT KNOXVILLE
August 6, 2018 Session

JOE BUTLER v. TENNESSEE MUNICIPAL LEAGUE RISK MANAGEMENT POOL

Appeal from the Circuit Court for Scott County
No. 8608 John D. McAfee, Judge

No. E2017-01981-SC-R3-WC – Mailed October 15, 2018

Joe Butler ("Employee") alleged he developed invasive pulmonary aspergillosis due to his exposure to the aspergillus fungus during the course and scope of his employment with the Oneida Water Department ("Employer"). After a trial, the court concluded Employee failed to prove by a preponderance of the evidence his work activities were the proximate cause of his injury. Employee appeals, arguing the evidence preponderates against the trial court's findings. The appeal has been referred to the Special Workers' Compensation Appeals Panel for a hearing and a report of findings of fact and conclusions of law pursuant to Tennessee Supreme Court Rule 51. After review, we reverse the trial court's judgment and remand for further proceedings.

Tenn. Code Ann. § 50-6-225(e) (2014) (applicable to injuries occurring prior to July 1, 2014) Appeal as of Right; Judgment of the Circuit Court Reversed; Remanded

DON R. ASH, SR.J., delivered the opinion of the Court, in which SHARON G. LEE, J., and WILLIAM B. ACREE, JR., SR.J., joined.

Timothy M. McLaughlin, Knoxville, Tennessee, for the appellant, Joe Butler.

John T. Batson, Jr. and Courtney F. Read, Knoxville, Tennessee, for the appellee, Tennessee Municipal League Risk Management Pool.

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OPINION

Factual and Procedural Background

Employee worked as a laborer for the Oneida Water Department ("water department" or "Employer"). On Wednesday, February 20, 2013, Employee and his coworkers installed a water line at the county landfill. He began to feel ill on Friday, February 22, 2013, and was eventually hospitalized on February 28, 2013. Following a lung biopsy, Employee was diagnosed with invasive pulmonary aspergillosis and placed on numerous restrictions. He never returned to work. Employee made a claim for workers' compensation benefits, alleging he was exposed to the aspergillus[1] fungus while digging the trench for the water line. Employee exhausted the benefit review process, and on November 18, 2013, he filed his workers' compensation complaint against Employer's insurance carrier, Tennessee Municipal League Risk Management Pool ("Insurer"). In response, Insurer denied Employee was exposed to an occupational disease during his employment. On February 27, 2015, Insurer filed a motion for summary judgment, maintaining Employee's aspergillosis could not be "fairly traced" to his employment. The trial court denied the motion, and the case proceeded to trial on August 17, 2017.

Testimony of Employee

Employee, age 38 at the time of the trial, began working for Employer shortly after he graduated from high school. As a laborer, Employee installed water and sewer lines, repaired water leaks, and worked on sewers. On Wednesday, February 20, 2013, Employee and his coworkers installed a water line at the county landfill. Employee's task was to climb into the trench to connect the pipes together. He described the surface area of the work site as dusty and the trench itself as damp. Two days later, Employee began feeling sick. On February 28, Employee was admitted to Methodist Medical Center where he was diagnosed with invasive pulmonary aspergillosis. He was placed on certain restrictions and purportedly was told he could return to work only if the restrictions were removed. However, he never returned to the water department. Employee testified, prior to his hospitalization, he was in good health but rarely visited a doctor. He had used tobacco products since his youth, but had quit "dipping and chewing" to take up smoking. He smoked for three years until he fell ill after working at the landfill.

On cross-examination, Employee acknowledged he owned a small farm; his farming activities included raising cattle, installing fencing, harvesting hay, and operating

[1] The terms aspergillus and aspergillosis are occasionally used interchangeably (and sometimes incorrectly) throughout the record. The former refers to the fungus/mold and the latter is the infection/ailment that can result from exposure to the fungus.

a small sawmill. He conceded he had not tested the landfill soil. During redirect examination, Employee stated his handling of the hay before the landfill incident was no different than in previous years.

Testimony of Coworkers

Danny Douglas, the water department maintenance supervisor, testified Employee had worked for Employer for about fifteen years and was a "real good worker." He described Employee's health as "good" before his work at the landfill, recalling Employee only missed work to have his appendix removed early in his employment. Mr. Douglas was aware Employee had smoked for a couple of years.

Regarding the relevant incident, Mr. Douglas explained the crew went to the landfill to install a sewer line to connect the maintenance shop's septic tank with the city sewer. The installation occurred on the road going into the landfill, but not where garbage was dumped. The crew used a trencher to dig the trench, and Employee was in the trench connecting the pipe. Mr. Douglas described the job as "dusty" because the crew was required to dig across asphalt and rock. None of the men wore masks. Mr. Douglas became ill shortly after this job, indicating he experienced coughing and a fever. He recalled lying on the couch drenched in sweat and "freezing to death." His family doctor diagnosed him with an ear infection and bronchitis. Mr. Douglas missed two days of work, but his illness lingered "probably a week or so." He stated "everybody was sick the next week" after completing the landfill job.

Steve Boyatt testified he had worked as a laborer at the water department for approximately twenty-five years. During these years, he could not recall Employee being sick. Mr. Boyatt operated the trencher at the landfill. He described the job as "dusty," explaining the trench began in rock and ended in dirt. He did not recall seeing water in the area. The next day (Thursday), Mr. Boyatt began to experience a "real deep cough in [his] lungs"; however, he worked both Thursday and Friday. On Saturday he asked Employee to work his "on call" shift because he was not feeling well. However, when Mr. Boyatt took the pager to Employee on Saturday, he learned Employee was also feeling ill. The following Monday, February 25, Mr. Boyatt visited the doctor where he received a shot; he was not tested for aspergillosis. When he returned to work on Thursday, Mr. Boyatt learned the other crew members had also been sick and missed work.

Charles Koger testified he had worked for the water department for thirty-four years. He worked on the February 2013 landfill water line installation. He recalled the trench began with riprap rock then transitioned to regular dirt before turning into swampland – mushy dirt or mud. Both Mr. Koger and Employee were in the trench installing the water line. On March 1, 2013, Mr. Koger began feeling ill and eventually

went to the doctor. His symptoms included coughing, ear pain, tightness and burning in his chest and difficulty speaking. He was diagnosed with bronchitis, which he usually gets every year. Mr. Koger missed three days of work.

Mr. Koger characterized Employee's health as "very good" before working at the landfill, and he was unaware of Employee ever missing work due to health issues. On cross-examination, Mr. Koger acknowledged Employee owned a farm where he raised cattle, grew and stored hay, and installed fencing. He was also aware Employee occasionally smoked.

Jim Butler, Employee's first cousin, worked at the water department for twenty years. He operated the trencher during a portion of the landfill job while Employee laid the water line. Mr. Butler said the job was "very dusty" but noted none of the men wore masks. He did not recall any swampy areas. Approximately two days after the landfill job, Mr. Butler became ill with breathing issues and a fever. He testified he woke up in the middle of the night soaking wet with chest pain. He described the first couple of weeks as "pretty rough." However, Mr. Butler acknowledged his son was also sick during this time with the flu. He agreed he was not diagnosed with aspergillosis but added he had not been tested for it. After Employee was hospitalized and after Mr. Butler fell ill, Mr. Butler helped feed Employee's cattle with hay from the barn.

Randy Butler, Employee's first cousin, worked for the water department for seventeen years. He recalled the water line project at the landfill, describing the job as "dusty and dirty." Mr. Butler said the area down in the rock was a "little moist." He, too, became ill three or four days after the landfill project and experienced respiratory problems for a couple of months. Like others, Mr. Butler described Employee as a hard worker and his health as good before the landfill project. He was aware of Employee's farm work, and he also assisted in feeding the cattle during Employee's hospitalization.

Expert Proof

Employee submitted the depositions of Charles J. Mascioli, M.D., R. Scott Lovelace, M.D., R. Hal Hughes, M.D., Theron Blickenstaff, M.D., and Rodney E. Caldwell, Ph.D.[2] Insured introduced the depositions of Mark S. Rasnake, M.D. and Jeffrey Becker, Ph.D.

[2] Dr. Caldwell testified as a vocational expert. Because his deposition testimony is not substantially related to causation, a summary of his testimony is not provided herein.

Dr. Charles J. Mascioli

Dr. Mascioli treated Employee during his hospitalization at Methodist Medical Center in February and March 2013. When Employee was admitted to the hospital, he complained of shortness of breath, coughing, general malaise, and fever. Employee reported to hospital staff he worked for the county and had a "hobby farm." Employee also reported numerous coworkers had fallen ill at the same time. Because the staff initially believed Employee had pneumonia or severe bronchitis, they began to treat him with a broad spectrum of antibiotics, bronchia dilators, and corticosteroids. The hospital performed blood work, x-rays, CAT scans, sputum cultures, a bronchoscopy, and eventually a lung biopsy. The initial sputum culture revealed the presence of aspergillus, and the bronchoscopy showed "lots and lots" of aspergillus. The lung biopsy revealed invasive aspergillosis.

Dr. Mascioli explained aspergillus is a fungus which lives "everywhere" there is moisture. He added, however, aspergillus usually does not make humans sick unless they have bad emphysema (i.e. chronic lung ailment) or are immunosuppressed. Dr. Mascioli noted Employee was basically in good health, smoking less than one pack of cigarettes per day. He acknowledged the lung biopsy showed a bit of emphysema (which he said is common in anyone who has smoked cigarettes) but he added Employee did not show advanced emphysema. Dr. Mascioli stated Employee did not fit any of the classic categories of a person with invasive pulmonary aspergillosis, describing him as a "healthy gentleman without immune compromise, without HIV, without chemotherapy, [and] without chronic steroids." Dr. Mascioli explained for such a person to get invasive pulmonary aspergillosis, the person would have to have had a "massive exposure." He located an article concerning a 52-year-old water line worker in India who contracted invasive aspergillosis while repairing a water line.

Applying a "more likely than not" standard, Dr. Mascioli opined (based on Employee's reported history) Employee's invasive aspergillosis was caused by a massive exposure to the aspergillus fungus while digging the trench at the landfill. Dr. Mascioli was aware Employee had a farm with hay and cows but noted this information did not change his opinion. He added "everybody with a farm" and "everybody around East Tennessee" has been exposed to aspergillus but invasive aspergillosis results only from a massive exposure, a weakened immune system, or anatomically abnormal lungs.

On cross-examination, Dr. Mascioli agreed aspergillus is everywhere and can be found in soil, moldy hay, and decaying vegetative matter. He was unaware Employee cultivated and harvested hay on his farm, and he had not reviewed Employee's deposition or recorded statement. He was also unaware Employee had a sawmill and installed fencing on his property. Dr. Mascioli conceded he had no evidence of the concentration of aspergillus spores in the soil at the landfill on February 20, 2013, or at Employee's

farm. He agreed it was possible Employee could have been exposed to a high concentration of aspergillus on the farm; however, he added the medical literature does not indicate such exposure on farms. Dr. Mascioli could not definitively state Employee's only exposure to aspergillus was in the trench on February 20th or Employee had no exposure prior to that date. Dr. Mascioli did not speak with any of Employee's coworkers, and he did not review their affidavits, depositions, recorded statements, or medical records.

Dr. Mascioli was aware of Employee's statement regarding his coworkers falling ill at the same time. Dr. Mascioli stated, although bronchitis can be common in February, it is uncommon for groups of people to contract bronchitis at the same time. He did not believe the other workers developed invasive pulmonary aspergillosis; however, he opined the coworkers could have been exposed to aspergillus, which was successfully suppressed by their immune systems. Dr. Mascioli was unable to rule out other possible exposures to aspergillus; however, he opined Employee must have had a massive exposure because invasive pulmonary aspergillosis is uncommon in a healthy person. He added, "[W]hat makes it seem likely is the epidemiology of everybody getting sick at the same time." Dr. Mascioli further recalled Employee had a "ton" of aspergillus in his sputum.

Dr. R. Scott Lovelace

Dr. Lovelace is board certified in internal medicine, pulmonary medicine, and critical care medicine. He treated Employee on the night shifts during Employee's hospital stay. Dr. Lovelace was aware of Employee's history of smoking, but he opined Employee did not have a preexisting or clinically significant lung disease before his admission to the hospital. When asked whether Employee's work at the landfill caused his disease, Dr. Lovelace responded "[i]t would certainly lead me to believe that that is where he contracted [aspergillosis]." Having reviewed Employee's IgG (Immunoglobulin G) and IgM (Immunoglobulin M) levels, Dr. Lovelace opined these levels "show[] . . . there was an exposure probably on the 20th when he was in [the] trench. And that his immune system is totally intact because he's having a very robust response."

On cross-examination, Dr. Lovelace agreed aspergillus can be found in decaying vegetative matter, in moldy hay, and in wood. He was aware Employee had a farm where he raised cattle, operated a small sawmill, cultivated and stored hay, and fed hay to his animals. When asked whether it was more likely Employee would have been exposed to a higher concentration of aspergillus while working with hay as opposed to the landfill, Dr. Lovelace said it depends on a number of factors such as the condition of the hay on the farm or the soil at the landfill. He acknowledged no soil samples were taken from the landfill. Dr. Lovelace did not review the depositions, recorded statements, or medical

records of the coworkers, and he had no other information regarding the trench. His conclusion was based on Employee and his coworkers all becoming sick very shortly after their work at the landfill. Again, he rejected the notion the exposure could have occurred while feeding hay to the animals. He stated he was provided no history of Employee working in hay at that particular time. He also rejected the idea the coworkers all contracted bronchitis at the same time, adding "[y]ou don't get a group of people coming down with bronchitis all at the same time. That would be very coincidental."

Dr. Hal Hughes

Dr. Hughes is board certified in internal medicine, pulmonary disease, and critical care medicine. He saw Employee as a new patient on February 27, 2014, with complaints of shortness of breath and wheezing. Dr. Hughes was aware of Employee's extended hospital stay one year earlier during which Employee was diagnosed with invasive aspergillosis. He attributed the asthma symptoms to the acute invasive aspergillosis and noted improvement when comparing current x-rays with x-rays from the previous year. Dr. Hughes continued to see Employee on a monthly basis. He treated Employee with various antibiotics, steroids, and inhalers. Dr. Hughes joined with Dr. Bonnie Slovis from Vanderbilt to provide continued care for Employee, noting Dr. Slovis's overwhelming concern Employee's condition was irreversible and may require a future lung transplant. Dr. Hughes opined Employee's aspergillosis "was more likely than not due to his acute exposure on the job site that had also left multiple coworkers ill."

On cross-examination, Dr. Hughes conceded he did not speak with Employee's coworkers or review their recorded statements, affidavits, or depositions. Likewise, he had not reviewed Employee's deposition. He was unaware Employee had a personal sawmill on his property, cut his own fence posts, raised cattle, and cultivated his own hay. Dr. Hughes agreed aspergillus can be found in decaying vegetable matter, wood, dust, sawdust, and hay. He was not provided with soil samples from the landfill. Dr. Hughes opined, however, hay exposure does not cause acute invasive aspergillosis in a normal immunocompetent host.

Dr. Mark S. Rasnake

Dr. Rasnake is an infectious disease doctor at the University of Tennessee Medical Center. In preparation for his testimony, Dr. Rasnake reviewed the depositions of Employee, his wife and his coworkers; the recorded statements of the coworkers; the statements of the physicians who cared for Employee; the medical records from the hospital and primary care physician; Dr. Becker's affidavit; and Dr. Hughes' deposition. He described aspergillosis as a fungal infection caused by a mold called aspergillus that typically affects patients with weakened immune systems. Dr. Rasnake said aspergillus

is widespread in the environment, describing it as ubiquitous. He added, the highest concentrations of aspergillus spores are found in rotting vegetation or organic matter. Dr. Rasnake was aware Employee had a small farm where he raised cattle, pigs, and chickens; raised and stored hay; and operated a small sawmill. He said Employee would have encountered aspergillus spores while working on the farm. Dr. Rasnake was also informed Employee worked in a trench on February 20, 2013. In Dr. Rasnake's opinion, Employee "most likely" encountered aspergillus from his exposure to organic matter on the farm. In reviewing Employee's numerous test results, Dr. Rasnake found it significant Employee's IgG level from March 8 was elevated but his IgM level was undetectable. In Dr. Rasnake's opinion, these results suggested Employee had probably been exposed several times to aspergillus in the months, if not years, before his hospital stay. He attributed Employee's contraction of invasive pulmonary aspergillosis to the corticosteroid therapy Employee received during his hospital stay. Dr. Rasnake explained this therapy has a very potent immunosuppressive effect and "could have led" the aspergillus from his previous exposure to develop invasive characteristics. He said the steroid therapy shuts down part of the immune system which allows fungal infections to "take hold and develop severe manifestations." Dr. Rasnake identified medical literature which discussed aspergillosis in patients who are immunocompromised or who have a chronic lung disease. The article revealed patients with an underlying chronic lung disease developed severe complications of aspergillosis. Although he conceded Employee was not an immunocompromised individual before his hospital stay, Dr. Rasnake opined Employee became immunocompromised after receiving the steroid treatment during his stay. Dr. Rasnake was aware several of Employee's coworkers fell ill during the same time period but he noted all of those coworkers recovered. He saw no evidence any of the coworkers were diagnosed with aspergillosis, noting a person cannot recover from aspergillosis without treatment. Dr. Rasnake reasoned Employee's underlying structural lung disease and the corticosteroid treatment "led [Employee] down a different path." In concluding his direct testimony, Dr. Rasnake was asked to opine whether Employee and his coworkers had "a[] point source exposure of aspergillosis" at the landfill site on February 20, 2013, to which he responded, "[i]t would be unlikely."

On cross-examination, Dr. Rasnake admitted he had never seen or examined Employee and his opinions were based on his review of the records. He acknowledged he could not make a diagnosis of chronic lung disease before February 2013. Dr. Rasnake conceded steroid or corticosteroid treatment can affect IgG and IgM levels, recognizing Employee was admitted to the hospital on February 28th and the blood work was taken on March 8th. Dr. Rasnake disagreed with the opinions of Dr. Mascioli, Dr. Hughes, and others that the aspergillosis resulted from an occupational exposure. Dr. Rasnake conceded it would be unusual for up to six people to fall ill at the same place; however, he said it was not uncommon for people to fall ill in groups during the respiratory virus season. He reiterated his opinion (based on the medical literature) Employee's preexisting emphysema, combined with the corticosteroid treatment caused

the invasive pulmonary aspergillosis. Dr. Rasnake acknowledged the patient discussed in the article had a chronic lung disease and chronic alcoholic liver disease. Notwithstanding the comorbidities, Dr. Rasnake maintained Employee was exposed to aspergillus prior to the landfill incident (based on the IgG and IgM levels) and the steroid treatment contributed to the invasive aspergillosis.

During re-direct examination, Dr. Rasnake noted Dr. Mascioli did not mention the farm exposure, and another doctor, Dr. Saadia, was aware of the agriculture exposures but did not mention hay. Dr. Rasnake confirmed his beliefs that the steroid therapy did not affect Employee's IgG and IgM antibody levels; Employee already had aspergillus in his lungs at the time he received the steroid therapy; and Employee's exposure to aspergillus occurred prior to February 20, 2013.

Dr. Theron Blickenstaff

Dr. Blickenstaff is board certified in occupational medicine and in preventative medicine. In preparation for his deposition, Dr. Blickenstaff reviewed portions of Employee's hospital record, the depositions of Drs. Rasnake and Hughes, and correspondence opinions of other physicians. In his view, Employee had no clinically significant lung disease when he was hospitalized in February 2013. Dr. Blickenstaff did not believe the corticosteroid treatment brought about Employee's diagnosis of invasive pulmonary aspergillosis. According to Dr. Blickenstaff, Employee had the beginnings of aspergillosis when he arrived at the emergency room, noting aspergillus fungus showed up just a few days later in Employee's sputum. Dr. Blickenstaff was aware of Employee's potential exposure to aspergillus through farming; however, he believed "it's entirely possible that [Employee] had a massive exposure to aspergillus in the week or two before his admission to the hospital." When asked specifically whether the aspergillosis resulted from the exposure a week or two before, Dr. Blickenstaff said it was "certainly possible." Pressed further as to whether such exposure was "probable," Dr. Blickenstaff said it was difficult to say because there are so few cases of aspergillosis in healthy individuals. Although he agreed with Dr. Rasnake's interpretations of the IgG and IgM levels indicating this was not Employee's first exposure, Dr. Blickenstaff disagreed with Dr. Rasnake as to the exact timing of the onset of aspergillosis. Dr. Blickenstaff thought Employee had invasive pulmonary aspergillosis when he arrived at the emergency room on February 28, which got worse.

On cross-examination, Dr. Blickenstaff acknowledged emphysematous changes in Employee's lung tissue. However, he maintained his opinion Employee had invasive aspergillosis upon admission to the hospital as opposed to developing aspergillosis upon receiving steroid treatment. Dr. Blickenstaff agreed aspergillus can be found almost anywhere. He was aware Employee engaged in farming on the side. Dr. Blickenstaff agreed Employee was likely exposed to aspergillus in the prior months or years before his

sickness. He conceded he had no direct evidence the work at the landfill triggered Employee's invasive pulmonary aspergillosis, acknowledging he had not seen any soil samples from the job site. However, he believed such a trigger was totally compatible with the medical records and noted nothing in the medical records contradicted such possibility.

Dr. Blickenstaff opined exposure to aspergillus at the job site was a "more likely possibility" than aspergillosis being triggered by Employee's treatment at the hospital due to an underlying lung disease. Dr. Blickenstaff said he reviewed statements of Employee's coworkers and recalled they described the soil as "different" at the landfill location. Although he was aware coworkers became ill, he had not seen their medical records. Dr. Blickenstaff understood one of the physicians who treated Employee had also treated a coworker and believed the symptoms were compatible with aspergillus exposure. He added, however, if the coworker did not miss any work, he likely did not have invasive aspergillosis. When asked how he knew Employee was not exposed to aspergillus when feeding hay to his animals, Dr. Blickenstaff said Employee had been feeding his animals for years and something would have had to be different about the hay. He conceded there was no evidence of an unusually heavy load of aspergillus at any source of exposure.

Jeffrey Becker, Ph.D.

Dr. Becker is a Professor Emeritus of Microbiology at the University of Tennessee at Knoxville. In preparation for his testimony, he reviewed the depositions of Employee and his wife. He gave a detailed description of the nature and characteristics of aspergillus. Dr. Becker also described this fungus as "ubiquitous," noting it is particularly common in East Tennessee (known as the "mold belt"). He explained aspergillus likes a lot of air and moisture. The spores are inhaled into the lungs where they can germinate. In a healthy individual, the spores are usually destroyed before they can germinate; however, in an immunocompromised individual, the fungi can invade deeply, causing the disease known as aspergillosis. Dr. Becker was aware of Employee's farming activities and the work Employee was doing at the landfill in February 2013. In Dr. Becker's opinion (noting "there's no proof of this in any way"), it is more likely aspergillus spores would be present in hay and Employee would more likely be exposed to aspergillus via the hay rather than the soil. He said a very detailed microbiological molecular study would be required to ascertain the source.

Trial Court Order

In its brief order, the trial court dismissed Employee's cause of action, giving "greater weight" to the testimony of Insurer's experts, Dr. Rasnake and Dr. Becker. As a result, the trial court concluded Employee failed to prove by a preponderance of the

evidence his work activities were the proximate cause of his invasive pulmonary aspergillosis. The trial court further found Employee was equally exposed to aspergillus doing his farm work.

Analysis

Standard of Review

Appellate review of decisions in workers' compensation cases is governed by Tennessee Code Annotated section 50-6-225(e)(2) (2008), which provides appellate courts must "[r]eview . . . the trial court's findings of fact . . . de novo upon the record of the trial court, accompanied by a presumption of the correctness of the finding, unless the preponderance of the evidence is otherwise." As the Tennessee Supreme Court has observed many times, reviewing courts must conduct an in-depth examination of the trial court's factual findings and conclusions. *Wilhelm v. Krogers*, 235 S.W.3d 122, 126 (Tenn. 2007). When the trial court has seen and heard the witnesses, considerable deference must be afforded the trial court's factual findings. *Tryon v. Saturn Corp.*, 254 S.W.3d 321, 327 (Tenn. 2008). No similar deference need be afforded the trial court's findings based upon documentary evidence such as depositions. *Glisson v. Mohon Int'l, Inc./Campbell Ray*, 185 S.W.3d 348, 353 (Tenn. 2006). Similarly, reviewing courts afford no presumption of correctness to a trial court's conclusions of law. *Seiber v. Reeves Logging*, 284 S.W.3d 294, 298 (Tenn. 2009).

A. Causation

Employee's sole issue is whether the trial court erred in holding Employee failed to prove by a preponderance of the evidence he contracted invasive pulmonary aspergillosis in the course and scope of his employment. Employee's alleged exposure occurred prior to July 1, 2014. The statute in effect at the time provides as follows:

> As used in this chapter, "occupational diseases" means all diseases arising out of and in the course of employment. A disease shall be deemed to arise out of the employment only if:
> (1) It can be determined to have followed as a natural incident of the work as a result of the exposure occasioned by the nature of the employment;
>
> (2) It can be fairly traced to the employment as a proximate cause;
>
> (3) It has not originated from a hazard to which workers would have been equally exposed outside of the employment;

> (4) It is incidental to the character of the employment and not independent of the relation of employer and employee;
>
> (5) It originated from a risk connected with the employment and flowed from that source as a natural consequence, though it need not have been foreseen or expected prior to its contraction; and
>
> (6) There is a direct causal connection between the conditions under which the work is performed and the occupational disease. Diseases of the heart, lung, and hypertension arising out of and in the course of any type of employment shall be deemed to be occupational diseases.

Tenn. Code Ann. § 50-6-301 (2014); s*ee also Excel Polymers, LLC v. Broyles*, 302 S.W.3d 268, 274 (Tenn. 2009). In *Excel*, the Court explained:

> Generally speaking, a workers' compensation claimant must establish by expert medical evidence the causal relationship between the alleged injury and the claimant's employment activity, [e]xcept in the most obvious, simple and routine cases. The claimant must establish causation by the preponderance of the expert medical testimony, as supplemented by the evidence of lay witnesses. . . . the claimant is granted the benefit of all reasonable doubts regarding causation of his or her injury:
>
> Although causation in a workers' compensation case cannot be based upon speculative or conjectural proof, absolute certainty is not required because medical proof can rarely be certain. . . . All reasonable doubts as to the causation of an injury and whether the injury arose out of the employment should be resolved in favor of the employee.
>
> The trial court may properly award benefits based upon medical testimony that the employment "could or might have been the cause" of the employee's injury when there is also lay testimony supporting a reasonable inference of causation.

Excel, 302 S.W.3d at 274-75 (citations & internal quotations omitted).

In the instant case, the medical experts agree Employee was exposed to aspergillus fungus and developed invasive pulmonary aspergillosis. At issue here is the source of the exposure.

The proof established aspergillus spores are everywhere; however, the fungus thrives in moist areas with decaying vegetation. Employee maintains he was exposed to

aspergillus in the landfill trench while working for Employer. On the other hand, Insurer avers Employee was most likely exposed to aspergillus on his farm. Because neither source was tested, the record contains no direct evidence of the concentration of aspergillus, if any, at either potential source. Absent direct evidence, Employee must establish causation through circumstantial evidence and any reasonable inferences that may be drawn from the evidence.

We can glean from the proof the medical experts agree breathing aspergillus spores does not typically cause illness in a healthy individual. According to the medical proof, invasive aspergillosis typically develops in individuals in three primary categories: (1) individuals with a weakened immune system; (2) individuals suffering from a chronic lung ailment; or (3) individuals who have had a "massive exposure" to aspergillus.

At the outset, we can eliminate the second category. Although testing revealed Employee had emphysematous changes, the experts conceded (as supported by the record) Employee did not have a chronic lung condition that resulted in his contraction of aspergillosis. In fact, Employee established through lay and expert testimony he was in generally good health at the time. The dispute here is between the two remaining categories.

Employee presented lay and expert testimony to support his claim his aspergillosis resulted from a "massive exposure" to aspergillus in the landfill trench. Through the testimony of his coworkers, Employee established he and his coworkers developed respiratory ailments after installing the water line at the landfill. At least two of his coworkers were diagnosed with bronchitis. None of the coworkers were tested for aspergillus exposure, and none developed aspergillosis.

Employee's medical proof also supported his claim. As summarized above, Dr. Mascioli opined Employee's invasive aspergillosis was caused by a massive exposure to the aspergillus fungus while digging the trench at the landfill. Dr. Hughes opined Employee's aspergillosis "was more likely than not due to his acute exposure on the job site that had also left multiple coworkers ill." Dr. Blickenstaff believed "it's entirely possible that [Employee] had a massive exposure to aspergillus in the week or two before his admission to the hospital." Dr. Lovelace believed Employee was exposed to aspergillus at the landfill based on the fact Employee and his coworkers were sick very shortly after their work at the landfill. For the most part, Employee's experts rejected the notion Employee's aspergillosis resulted from exposure to aspergillus on the farm. One of the experts commented it would be a "strange coincidence" for the group of men to contract bronchitis at the same time.

Conversely, Insurer's experts opined Employee was more likely exposed to aspergillus fungus on his farm. Specifically, Dr. Rasnake opined Employee "most likely"

encountered aspergillus from his exposure to organic matter on the farm. Dr. Becker said Employee would more likely be exposed to aspergillus via the hay rather than the soil, admitting however "there's no proof of this in any way."

Aside from opining the farm was the source of aspergillus, Dr. Rasnake believed Employee fell into the category of individuals susceptible to aspergillosis due to a weakened immune system. Based on Employee's IgG and IgM levels, Dr. Rasnake opined Employee was probably exposed to aspergillus several times in the months and years preceding his admission to the hospital. He explained, during Employee's hospital stay he received corticosteroid therapy for his breathing issues, which has "a very potent immunosuppressive effect." Thus, although Employee would not typically fall into the "weakened immune system" category (because he was noted to be in generally good health prior to the incident), Dr. Rasnake believed the corticosteroid therapy may have weakened Employee's immune system and "could have led" the aspergillus from his previous exposure(s) to develop into aspergillosis.

Notably, as in any case, both sides attempted to discredit the opposing experts. Many of Employee's experts conceded during cross-examination they had not reviewed statements or medical records of the coworkers. Many relied on the history provided by Employee. Some were unaware of the extent of Employee's farming activities. Likewise, Dr. Rasnake acknowledged it would be unusual for six people to fall ill at the same place, and Dr. Becker conceded a very detailed microbiological molecular study would be necessary to ascertain the true source of the aspergillus. As to the IgG and IgM levels, Dr. Rasnake conceded these levels can be affected by corticosteroid treatment, although he did not believe the levels were affected in this instance. All of the experts recognized none of the potential sources had been tested.

Causation is a close question in this case. However, we must determine where the preponderance of the evidence lies. While we recognize causation cannot be based on speculation or conjecture, absolute certainty is not required. *Excel*, 302 S.W.3d at 274-75. We have reviewed the lay testimony of five coworkers who also suffered respiratory illness following the work at the landfill. Indeed, it seems "strangely coincidental" all of the men fell ill with similar symptoms after working at the landfill. We have also reviewed the deposition testimony of the competing medical experts, recognizing the trial court is not entitled to the same deference regarding documentary evidence. Notably, the experts were equivocal in their respective opinions and often used the terms "could have" or "most likely" when indicating whether or not the exposure to aspergillus occurred at the landfill site. We must resolve any reasonable doubt regarding causation in favor of Employee. *Id.* at 275 (adding a trial court may properly award benefits upon medical testimony indicating the employment "could or might have been the cause" of the employee's injury); *Alford v. HCA Health Servs. of Tenn., Inc.*, No. M2014-02455-SC-R3-WC, 2015 WL 9025242, at *6 (Tenn. Workers' Comp. Panel Dec.

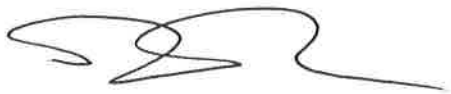
15, 2015). Accordingly, we conclude the evidence preponderates against the trial court's judgment. We therefore reverse the decision of the trial court and remand for a determination of benefits.

B. Medical Expenses

The Insurer claims Employee failed to prove his medical expenses. Some testimony, albeit brief, was elicited regarding the medical expenses incurred in this case. However, the issue was pretermitted by the trial court's finding Employee was not exposed to the hazard at work. Because we are reversing the trial court's judgment as to causation and remanding for a determination of benefits, the trial court may also resolve any outstanding issues related to the medical expenses on remand.

Conclusion

For the foregoing reasons, the judgment of the trial court is reversed. The case is remanded for a determination of benefits and for the resolution of the issues surrounding Employee's medical bills. Costs are taxed to Insurer/Employer, for which execution may issue if necessary.



DON R. ASH, SENIOR JUDGE

IN THE SUPREME COURT OF TENNESSEE
AT KNOXVILLE

JOE BUTLER v. TENNESSEE MUNICIPAL LEAGUE RISK MANAGEMENT POOL

Circuit Court for Scott County
No. 8608

No. E2017-01981-SC-WCM-WC

ORDER

This case is before the Court upon the motion for review filed by Tennessee Municipal League Risk Management Pool pursuant to Tennessee Code Annotated section 50-6-225(a)(5)(A)(ii), the entire record, including the order of referral to the Special Workers' Compensation Appeals Panel, and the Panel's Opinion setting forth its findings of fact and conclusions of law.

It appears to the Court that the motion for review is not well taken and is, therefore, denied. The Panel's findings of fact and conclusions of law, which are incorporated by reference, are adopted and affirmed. The decision of the Panel is made the judgment of the Court.

Costs are assessed to Tennessee Municipal League Risk Management Pool, for which execution may issue if necessary.

It is so ORDERED.

PER CURIAM

SHARON G. LEE, J., not participating.