

APPEAL NO. 93885
FILED NOVEMBER 15, 1993

On May 20, 1993, a contested case hearing was held with the record being closed on September 9, 1993. The hearing was held under the provisions of the Texas Workers' Compensation Act, TEX. LAB. CODE ANN. § 401.001 *et seq.* (1989 Act) (formerly V.A.C.S., Article 8308-1.01 *et seq.*). The issue at the hearing was whether the respondent (claimant) contracted an occupational disease on _____, as a result of an increased exposure to ticks in his work place. The hearing officer determined that the claimant contracted Lyme disease as a direct result of exposure to an increased number of ticks in his work place and ordered the appellant (carrier) to pay income benefits and medical benefits to the claimant as and when they accrue in accordance with the provisions of the 1989 Act. The carrier contends that certain findings of fact and a conclusion of law are not supported by the evidence and are against the great weight and preponderance of the evidence. The claimant responds that the disputed findings and conclusion are supported by the evidence and requests that the hearing officer's decision be affirmed.

DECISION

The decision of the hearing officer is reversed and a decision is rendered that the claimant failed to prove that he sustained an occupational disease. Thus, the claimant is not entitled to workers' compensation benefits.

On _____, the claimant was diagnosed with Lyme disease. The claimant claims that he contracted Lyme disease as a result of being bitten by ticks at work.

The employer in this case is (employer) which owns (the hospital) where the claimant began working as an air conditioning and refrigeration maintenance worker in November 1987. Air conditioning units are located on the roof of the hospital in a structure which is open at the bottom which allows pigeons to congregate in the structure.

The claimant said that on a daily basis he had to go onto the roof to check or work on the air conditioning units. He said that over the years there was a build-up of pigeons roosting on the roof, dead pigeons, and pigeon droppings. The claimant further testified that he saw ticks crawling in the pigeon droppings and that he had to lay in and crawl through the pigeon droppings to work on the air conditioning units and that when he would get up he would find ticks on him. In response to questions from the carrier's attorney, the claimant said that the pigeons brought the ticks up to the roof. The claimant said that there was "nothing unusual to go up there and get ticks off of you" and that "on quite a few occasions we would get the ticks off of us and just wipe down with alcohol or peroxide." The claimant described having to pull ticks out of himself after laying on the roof and said that on one occasion he had to pull four or five ticks off of himself. The claimant further testified that about once a week, and sometimes more frequently, after working on the roof

he would shower at work, change clothes, and put his work clothes, which had pigeon droppings and ticks on them, in a bag to take home. The claimant said that sometime in 1990 he started having a sore neck, stiff joints, severe headaches, and began feeling run down and tired. He said he also started having unstable blood pressure so he went to (Dr. B) who prescribed medication for his blood pressure which he said did not help control his high blood pressure. The claimant said that Dr. B had two Lyme disease tests run on him both of which were positive and that he was told by Dr. B's office on _____ that he had Lyme disease. In an office note dated _____, Dr. B diagnosed the claimant as having "apparent Lyme's disease." The claimant said that his wife called the "National Lyme Center" which referred the claimant to (Dr. SG). The claimant testified that he did not have any ticks tested by experts to confirm that the ticks had Lyme disease.

In regard to places other than work where the claimant may have been exposed to ticks, the claimant acknowledged that for the last 17 years he has lived in a rural part of East Texas, but testified that he sprays his yard for ticks and could not recall ever having picked a tick off of himself at his home other than ticks on his clothes from work. He further testified that he does not have a wooded area on his property, that he does not have livestock, and that he does not cut hay on his property. He has one dog which he dips for ticks. He said he has not hunted or fished for about six years, although he obtained a hunting and fishing license in 1990 for one planned outing which never came about. He works in a garden at home and uses a tractor to mow his lawn. The hearing officer asked the claimant "[y]ou're saying you've never pulled ticks off yourself living in East Texas just from any other occurrence?" To which the claimant responded "[o]h, sure, I'm sure I have. But, I mean, you know, it never was where there was anything like as regular, you know." There was also testimony that at some point in time the claimant had taken a trip to (city), (state), however, the claimant said that he stayed in the city while there and did not walk in the woods.

The claimant's wife testified that numerous times when the claimant would come home from work she would have to pick ticks off of him and off of his clothes. She said that this was not unusual. When the claimant brought his clothes home in a bag, she would find ticks on the clothes and in the bag. She further testified that "I got to the point I wouldn't let him come in the house with clothes." She further testified that she had to wash the claimant's clothes separate from other clothes. She also testified that she was unaware of any ticks in their yard. When asked why she thought the claimant's Lyme disease is related to his work, the claimant's wife said "[w]e weren't getting these ticks anywhere else. He was bringing them home," and that "we didn't have them on our place."

(Mr. M) testified that for several years he was the claimant's helper at work and that he was on the hospital roof several times a week with the claimant. This witness said that most of the times that he went on the roof he would get ticks on himself and on his clothes. In describing the conditions on the roof this witness said "[i]t was piles of bird droppings and dead birds, rotten birds with maggots in them." This witness further testified that he has been tested for Lyme disease and that as far as he knows he does not have that disease.

In an affidavit, (Mr. L) stated that he was employed by the hospital from May 1990 to October 1991, that he had occasion to observe the roof of the hospital, that there were pigeon droppings everywhere on the roof, and that there were "ticks and stuff crawling all over the place." He further stated that "I personally had to pick ticks off of me after being up on the roof on several occasions."

(Mr. J) said in an affidavit that his company cleaned up the hospital roof in November 1991 and that he saw a number of live pigeons, a number of dead pigeons, and a large amount of "pigeon excretion" by the air conditioning units

Dr. SG is board certified in neurology, is on the professional advisory board of the National Lyme Foundation, has authored several scientific articles on Lyme disease, including an article on Lyme disease in Texas, and has given numerous public talks on Lyme disease. In a March 3, 1992, letter to the Texas Workers' Compensation Commission (Commission), Dr. SG stated that she first saw the claimant on October 7, 1991 and that the claimant had a history compatible with Lyme disease. She noted that the claimant had had Lyme disease antibodies drawn on September 17, 1991, that were positive for Lyme disease. In a March 26, 1993, letter to the claimant's attorney, Dr. SG stated:

In regard to your inquiry regarding [claimant] and how he acquired Lyme disease I can only say that obviously the risk of getting this disease is much increased by high exposure to ticks. In the state of Texas, we are considered to have a low frequency of ticks carrying Lyme bacteria. This would mean that if a patient was bitten by a tick, the risk of getting Lyme disease is actually quite low. However, if somebody has had a multitude of exposures this would increase their likelihood of disease significantly. It is safe to assume that in the location where [claimant] lived and worked, the frequency of ticks carrying Lyme disease is only somewhere about one percent. Apparently, [claimant] describes his exposure to ticks at work as extremely frequent. He has not been deer hunting for about five years nor had he been camping for three years. We do know that birds may be carriers of the ticks that contain the Lyme bacteria. Here in Texas, we have found the Lyme bacteria in wild turkeys. It is felt that birds in general are carriers of lyme infected ticks from one region to another. Given the frequency of [claimant's] exposure to ticks in the course and scope of his employment there is reasonable medical probability that he contracted Lyme disease while he was performing his duties at work. He is still being treated for Lyme disease.

Apparently, the claimant was examined by (Dr. S) at the request of the carrier. In a letter dated April 2, 1993, Dr. S said he was asked to determine if the claimant has Lyme disease and, if so, if it can be determined how he contracted the disease. Dr. S stated that he found the claimant's history and serologies to be compatible with Lyme disease. Dr. S

also stated that:

It is difficult to determine precisely how he contracted Lyme disease. His history of prolonged exposure to pigeons and finding small ticks on his body after this activity is of interest. Our review of the literature reveals that Spirochete infected ticks, including *Borrelia bergdorphi*, have been isolated from several species of birds. In an experimental setting, the isolate produced infection in hamsters and chicks. We found no studies which isolated the Spirochete from pigeons specifically.

In another letter to the carrier dated April 2, 1993, Dr. S stated that the claimant probably has Lyme disease, that it is not possible to determine how he contracted Lyme disease, that it is unknown how he contracted Lyme disease, and that there were "no report of pigeons transmitting Lyme disease in the medical literature." Dr. S further stated that Lyme disease is usually contracted by being bitten by ticks usually found on rabbits or deer. In another letter, the carrier asked Dr. S whether Lyme disease is an ordinary disease of life to which the general public is exposed. Dr. S responded "yes, but in Texas this is quite rare with only 36 cases of positive antibody titers in over 100,000 tests done by the Texas State Dept. of Health."

In an April 14, 1993, letter to the claimant's attorney, Dr. SG said she had received Dr. S's evaluation of the claimant. Dr. S said that out of 753 possible Lyme borreliosis cases reported to the Texas State Department of Health between 1990 and 1992, 214 met the current "CDC case definition." Dr. SG further stated that "the organism that causes Lyme disease has been cultured by our state laboratory. It has been isolated from ticks that are present in Texas." Dr. SG added:

In regard to the associations of pigeons with Lyme disease there is to my knowledge no information. I would add however it is not necessary for pigeons to become infected with Lyme disease. The only issue really is was [claimant] exposed to ticks in the course of his job. This would better be verified by co-workers who may collaborate (sic) [claimant's] report that they were coated with ticks by the end of the day. We do know that birds may carry ticks from one region of the country to another that may transport the bacteria.

I do not think it necessary to speculate that the birds in any way vectored this disease. Namely, it is not necessary to speculate that [claimant] came in contact with blood or that he was bitten by pigeons. I will also add that the tick that causes Lyme disease here in Texas is not a deer tick. The major vector is felt to be the lone star tick.

Attached to Dr. SG's April 14th letter is an article entitled "Lyme Borreliosis in Texas" which she co-authored. This article indicates that Lyme borreliosis is a spirochetal infection caused by *Borrelia burgdorferi* and that it is the most prevalent tick-borne disease worldwide. The article further indicates that the prevention of Lyme borreliosis includes

"prudent avoidance of tick infested areas." The article also states that the Lyme spirochete is transmitted most effectively by Ixodes tick species, but that B. burgdorferi has been detected from at least 15 different tick species, several flea species, mosquitoes, and biting flies. The article goes on to state that in Texas, "this organism has been isolated from Amblyomma americanum (the lone star tick), Ixodes scapularis (the black-legged deer tick), and Ctenocephalidus felis (the cat flea)." The article also reflects that the majority of the 214 patients in Texas who were diagnosed with Lyme disease between 1990 and 1992 resided in the north central part of the state with sporadic cases occurring throughout the state and that 40% of the patients remembered a tick or flea bite within the month before onset.

In a deposition on written questions, Dr. SG said "[i]t is probable that the conditions described at the work place where there were a multitude of ticks would cause [claimant] to contract Lyme disease." Dr. SG was asked whether she felt that the claimant's exposure to ticks at the work place is the most probable cause of his Lyme disease, to which Dr. SG responded:

Yes. Because the likelihood of Lyme disease is much increased by exposure to ticks. That is, while the risk of contracting Lyme disease from any one tick in Texas is very low, with daily repetitive exposure it is more likely that eventually an infection would be transmitted by a tick that carries Lyme.

Dr. SG was also asked whether there was an increased risk of contracting Lyme disease due to the claimant's working conditions, to which Dr. SG replied "Yes. The repetitive exposure to many ticks would increase the likelihood of being exposed to an infected tick which would be able to transmit Lyme disease." When asked whether she agreed that Lyme disease is an ordinary disease of life to which the general public is exposed outside the claimant's employment, Dr. SG answered that "while it is possible for the general public to be exposed to Lyme outside [claimant's] employment, the risk is very low." She also said that it was her understanding that there was a very high concentration of ticks on the roof of the hospital, far greater than seen in most rural areas, and that "the risk of infection is related to amount of exposure."

The carrier asserts that the following findings of fact and conclusion of law are not supported by the evidence and are against the great weight and preponderance of the evidence:

FINDINGS OF FACT

4. The claimant was exposed to an increased number of ticks and tick bites while working on mechanical equipment for his employer.
6. The claimant contracted Lyme disease as a direct result of exposure to an increased number of ticks in his work place.

CONCLUSION OF LAW

2. The claimant proved, by a preponderance of the evidence, that he contracted an occupational disease on _____.

The carrier argues that claimant's testimony concerning whether his home area had ticks was "in conflict with common sense and common knowledge of the tick infestation problem during the past few years in East Texas." We observe that the carrier presented no evidence with regard to a tick infestation in East Texas. The carrier further urges that "Lyme disease is an ordinary disease of life and is generally contracted outside persons employment." We observe that the carrier presented no evidence that Lyme disease is generally contracted outside of employment and that the carrier cites no authority for the proposition that Lyme disease is an ordinary disease of life.

In urging that Finding of Fact No. 4 is not supported by the evidence and is against the great weight of the evidence the carrier states that "there is some testimony in the record that [claimant] was exposed to ticks away from the work place as well." While it may be that the claimant was exposed to ticks away from the work place, we conclude that the hearing officer's finding that the claimant was exposed to an increased number of ticks and tick bites while working for his employer to be supported by the testimony of the claimant, the claimant's wife, and the claimant's coworkers. The hearing officer judges the weight and credibility to be given to the evidence. Section 410.165(a). Finding of Fact No. 4 is not against the great weight and preponderance of the evidence. In urging that Finding of Fact No. 6 is not supported by the evidence and is against the great weight and preponderance of the evidence, the carrier again states, without citation to authority, that "Lyme disease is an ordinary disease of life and is generally contracted outside persons employment." Again, the carrier presented no evidence that Lyme disease is generally contracted "outside persons employment." The carrier further argues that Finding of Fact No. 6 as well as Conclusion of Law No. 2 are not supported by the evidence because "there is no direct evidence that claimant contracted Lyme disease as a direct result of exposure to ticks in his work place" and that "there is no direct evidence that he contract (sic) the disease at work." The carrier urges us to classify Lyme disease as an ordinary disease of life.

Section 401.011(34) provides the following definition:

"Occupational disease" means a disease arising out of and in the course of employment that causes damage or harm to the physical structure of the body, including a repetitive trauma injury. The term includes a disease or infection that naturally results from the work-related disease. The term does not include an ordinary disease of life to which the general public is exposed outside of employment, unless that disease is an incident to a compensable injury or occupational disease.

In addressing the carrier's contentions that there is no direct evidence that the claimant contracted Lyme disease at as a result of exposure to ticks at work and that Lyme disease is an ordinary disease of life, we are guided by the case of Hernandez v. Texas Employers Insurance Association, 783 S.W.2d 250 (Tex. App.-Corpus Christi 1989, no writ). In Hernandez, the employee claimed that her asthma was caused by her employment. The trial court granted an instructed verdict in favor of the carrier. On appeal, the court upheld the instructed verdict holding that there was no expert medical testimony linking the employee's inhalation of lint particles to her developing asthma. The carrier made two principal arguments to justify the rendition of the instructed verdict: (1) that there was no evidence of causation, and (2) the maladies borne by the employee were ordinary diseases of life and, as such, are expressly excluded by the statute from being occupational diseases. The court said that it viewed both contentions to be the same--that of causation. The court noted that an "ordinary disease" is one to which the general public is exposed outside the scope of employment, citing Schaefer v. Texas Employers Insurance Association, 612 S.W.2d 199 (Tex. 1981). The court observed that implicit in this definition is the proposition that all diseases outside the scope of employment are "ordinary diseases," and that in Schaefer, *supra*, the court held that an extremely rare disease, mycobacteriosis intracellular, is an "ordinary disease of life" absent a causal connection between the employee's affliction and employment. The court stated that, as used in the statute, "ordinary diseases" encompass all diseases, except occupational diseases, which in turn are determined by their relationship to employment. The court said that its analysis revealed the term "ordinary disease of life" to be a term of art having a meaning distinct from the common meaning of words, and that as such, it is not useful for a witness to opine that an affliction is an "ordinary disease of life." The court stated that the test of whether a disease is compensable under workers' compensation is if there exists a causal connection, either direct or indirect, between the disease and the employment. Thus, the court found that it was not necessary to reach a determination of whether the employee's injury was an "ordinary disease;" rather, the court stated, the test is whether there is evidence, either direct or indirect, of a causal connection between the employee's disease and her employment to withstand the motion for directed verdict issued in the case. The court then stated that absent evidence of that causal link, the employee's disease is not compensable and is an "ordinary disease of life."

On appeal, neither party has directed us to any case authority, much less a Texas workers' compensation case involving Lyme disease. We have located one Texas case, Cigna Insurance Company of Texas v. Evans, 847 S.W.2d 417 (Tex. App.-Texarkana 1993, n.w.h.), where an employee was bitten by ticks at work, was subsequently diagnosed with Lyme disease, and the jury found that the tick bites were work-related injuries. However, no appeal was made from that finding; instead, the issues on appeal were timely filing of a claim for compensation, election of remedies, and the period of incapacity. In regard to the work-related nature of the injury, the court states only that "[i]n this case, Evans has a disability caused by a disease. The disease was transmitted by tick bites. Evidence shows that Evans was bitten while working on a Shell lease." The court does not indicate the nature of the evidence showing that the disease was transmitted by tick bites, and no issue of causation was before the court. We note that a Florida court

held that Lyme disease acquired by a tick bite is an accidental injury, as opposed to a disease, and awarded workers' compensation benefits. Foxbilt Electric v. Stanton, 583 S.W.2d 720 (Florida App. 1991). Petroleum Casualty Company v. Harlan, 352 S.W.2d 342 (Tex. Civ. App.-Eastland 1961, no writ), involved the question of whether the evidence was sufficient to support a jury finding that the employee contracted Rocky Mountain spotted fever from a tick bite. The court held the evidence to be insufficient and reversed and rendered for the carrier. The only evidence connecting the tick bite to the employee's work was the testimony of the employee's wife which was found to be inadmissible as part of the res gestae. The court said that even if the wife's testimony were admissible, it constituted a mere scintilla and was insufficient to support the jury finding.

In the instant case, we believe that expert medical testimony was necessary to establish the cause of the claimant's disease. See generally, Houston General Insurance Company v. Pegues, 514 S.W.2d 492 (Tex. Civ. App.-Texarkana 1974, writ ref'd n.r.e.). The question in this case is whether the evidence establishes a causal connection between Lyme disease and the claimant's employment. In addressing the question of causation we are guided by the Schaefer case, *supra*, which was argued by the carrier at the hearing. In Schaefer, the employee's treating doctor testified that in his opinion, based on reasonable medical probability, the employee's disease resulted from his employment. The Supreme Court of Texas held that evidence that the particular strain of tuberculosis bacteria from which the employee suffered was not identified, plus testimony that the manner in which the disease was transmitted to the employee was unknown, together with the absence of evidence that the bacteria was present in the soil where the employee worked as a plumber, demonstrated that the opinion of the employee's treating doctor that the employee's illness was caused by his employment, was not based upon reasonable medical probability, and thus provided no evidence to support the jury's finding of causation. In particular, the court in Schaefer stated: "Notwithstanding Dr. A's opinion there is a crucial deficiency in the proof of causation. The evidence fails to establish that any bacteria was present in the soil where Schaefer worked." See also Texas Workers' Compensation Commission Appeal No. 93093, decided April 24, 1992; Texas Workers' Compensation Commission Appeal No. 92085, decided April 16, 1992.

In the present case, it is undisputed that the claimant suffers from Lyme disease. It is also undisputed that Lyme disease is caused by a specific type of bacteria borne by ticks and that the claimant was bitten by ticks at work. However, the medical evidence demonstrates that not all ticks carry the bacteria that causes Lyme disease and that the bacteria has been detected in fleas, mosquitoes, and biting flies. The claimant admitted that ticks from the hospital roof were not tested and there is no evidence that Dr. SG tested ticks from the hospital roof to determine if they in fact carried the bacteria that causes Lyme disease. There is also no evidence of the type of tick specie that was on the hospital roof. In essence, Dr. SG assumes that the claimant contracted Lyme disease at work based on the fact that he was bitten by ticks at work on numerous occasions. However, she admits that in Texas there is a low frequency of ticks carrying Lyme bacteria and "assumed" that in the location where the claimant lived and worked the frequency of ticks carrying Lyme disease is about one percent. The claimant acknowledged that he had pulled ticks off of

himself from occurrences other than work. The absence of evidence in this case that the ticks at the claimant's work carried the bacteria which causes Lyme disease is directly analogous to the Schaefer case where there was an absence of evidence that the bacteria was present in the soil where Schaefer worked. Thus, we conclude, as did the court in Schaefer under similar circumstances, that Dr. SG's opinion, although couched in terms of probability, did no more than suggest a possibility as to how or when the claimant was exposed to or contracted Lyme disease. We hold that Dr. SG's opinion is not based on reasonable medical probability but relies on possibility, speculation, and surmise. Consequently, Dr. SG's opinion is not evidence that the disease suffered by the claimant is an occupational disease. Since no medical evidence based on reasonable medical probability establishes that the claimant contracted Lyme disease in his employment, we reverse the decision of the hearing officer and render a decision that the claimant did not sustain an occupational disease.

Robert W. Potts
Appeals Judge

CONCUR:

Thomas A. Knapp
Appeals Judge

DISSENTING OPINION:

I respectfully dissent from the majority opinion, although I recognize the reasons why the majority believes the Schaefer case is analogous. In my opinion, the evidence here, unlike that case, does rise to a reasonable medical probability such that an issue of fact was properly raised (as a matter of law) for the finder of fact to determine. I would affirm his determination, as the great weight and preponderance of evidence is not to the contrary.

In the case at hand, unlike Schaefer, the causative agent of Lyme disease, as well as the etiology of its transmission, is known. An expert in Lyme disease in Texas, whose Lyme credentials alone fill three pages of resume, has stated that one percent of all potential ticks to which claimant was exposed on or off the employer's premises can be safely assumed to carry the Lyme spirochete. (Unlike Schaefer, where the expert was

subjected to blistering cross-examination on all of his assumptions, there appears to be no challenge of this one percent assumption by the carrier.) There is powerful and unrefuted evidence of the presence of ticks, which bit the claimant, on the place where he worked nearly on a daily basis. Unlike the fact situation in Schaefer, the claimant works in the same location. The expert states that the chances of encountering the one percent of infectious ticks increases with the frequency of exposure to the tick population as a whole. From this, and noting that he had not in some years engaged in recreational hunting or camping, she opines that it is more unlikely that he encountered the infectious ticks through the type of exposure to which the general population would be exposed, and most probable that he encountered the infectious ticks at work.

True, the doctor does not say it is *impossible* that he could have encountered the infectious tick away from the employer's location, but I do not read Schaefer to impose such a burden. It states that the proponent in such a case must produce medical evidence rising to a reasonable medical probability (not certainty) of a causal link. In summary, I think that all the "speculations" with which the Supreme Court found fault in Schaefer are not present in this case, where the disease-causing agent, etiology, method of transmission, presence of the probable disease-causing agent (tick) at an identified work location need not be guessed about, but are known.

It seems to me that the majority opinion, carried to its logical conclusion, imposes nearly an impossible burden of proof, essentially requiring a prospective claimant to shuttle back and forth between laboratory and work site when he thinks there might be something at work which might, in the unknown future, cause an occupational disease. Let's assume that the claimant here did what the majority opinion implies he should have done--went back and found ticks carrying Lyme disease at the employer's location, possibly years, of course, after the fact. If the carrier then went out to claimant's house and located similar ticks, it seems to me that the finder of fact would still be left with weighing the expert's very compelling evidence that the frequency of exposure to the tick population increases the risk of encountering the infectious tick. And the preponderance of the evidence would still show that this occurred at work and that the claimant's work exposure to ticks put him at a greater risk of Lyme disease than the general population.

The Schaefer court indicated that a soil sample would have been desirable to fill in some of the gaps that were filled only by the expert's "guesstimates" in that case as to presence of the causative agent at Schaefer's varying work sites or the etiology of transmission. Those same gaps don't exist in the evidence here. The only "unknown" in this case is whether it is probable (and not certain), within reasonable medical probability, that the infectious tick was encountered at the work place. This evidence was supplied by the Lyme expert, and it was up to the hearing officer to weigh that evidence against contrary evidence. There is certainly sufficient evidence to support his conclusion that claimant's Lyme disease is compensable in this case.

Susan M. Kelley
Appeals Judge