

NO. COA97-1124

NORTH CAROLINA COURT OF APPEALS

Filed: 4 August 1998

JUDY BEAVER, Spouse of KYLE R. BEAVER, Deceased,
Plaintiff-Appellee

v.

CITY OF SALISBURY, SELF-INSURED,
Defendant-Appellant

Appeal by defendant from opinion and award entered 27 May 1997
by the North Carolina Industrial Commission. Heard in the Court of
Appeals 2 June 1998.

*Doran and Shelby, P.A., by David A. Shelby, for plaintiff-
appellee.*

*Underwood Kinsey Warren & Tucker, P.A., by Richard L. Farley
and Margo F. Evans, for defendant-appellant.*

WALKER, Judge.

On 16 March 1987, plaintiff filed a claim for workers' compensation benefits with the North Carolina Industrial Commission (Commission) seeking recovery from the defendant on the grounds that the illness from which her husband (the decedent) became disabled and died, non-Hodgkin's lymphoma, is an occupational disease.

The deputy commissioner filed an opinion and award on 27 May 1997 denying plaintiff's claim for workers' compensation benefits. The Commission, with one member dissenting, reversed the decision of the deputy commissioner and awarded plaintiff full death benefits, permanent total disability, and reasonable attorney's

fees. Further, the Commission denied defendant any credit for amounts paid to the decedent through the North Carolina Local Government Retirement System.

The findings of the Commission show that the decedent was employed as a firefighter in 1960 and attained the rank of captain in the defendant city's fire department during his twenty-four years of employment. During his employment, the decedent's duties included entering burning buildings in order to fight fires at their source and to clean up various chemical and gas spills.

As a captain, the decedent took an active role in fighting fires and was often the first firefighter into and the last firefighter out of a building. During his employment with defendant, the decedent was exposed to several kinds of smoke including that from house fires, garbage fires, grass fires, factory fires, and car fires. Although records by decedent's employer do not indicate how often the decedent wore an air pack while fighting fires, it is known that air packs were available at decedent's fire station since 1967, but were not commonly used by the firefighters in the course of their employment until 1976.

The decedent was diagnosed with a non-Hodgkin's lymphoma femoral tumor in October of 1982 and died from the illness on 6 July 1987.

Non-Hodgkin's lymphoma is a form of cancer that attacks lymph nodes throughout the body but differs slightly from Hodgkin's disease in that it lacks certain characteristic cells. Attorney's Dictionary of Medicine L-219 (Vol. 3 1997) and N-126 (Vol. 4 1997). Lymphoma is the third most rapidly increasing form of cancer in the

United States, affecting 17 out of 100,000 people, Stedman's Medical Dictionary 1009 (26th ed. 1995), and non-Hodgkin's lymphoma occurs more often than Hodgkin's disease. The Merck Manual 1248 (16th ed. 1992). Its cause is unknown, although substantial experimental evidence links causation to a virus. *Id.*

Dr. Selina Bendix (Dr. Bendix), an expert in the field of toxicology with a Ph.D in Zoology, testified on behalf of plaintiff. In determining that the decedent's non-Hodgkin's lymphoma was a compensable occupational disease, the Commission accepted Dr. Bendix's testimony that (1) the combustion found in the typical fires to which a firefighter is exposed increases the risk of contracting non-Hodgkin's lymphoma; and (2) the decedent's employment substantially contributed to the development of his lymphoma.

The primary issue on appeal is whether there is any competent evidence in the record to support the Commission's findings that the non-Hodgkin's lymphoma illness with which the decedent was diagnosed is a compensable occupational disease. The Commission's findings of fact are binding on appeal if there is any competent evidence to support them, regardless of whether there is evidence to support a contrary finding. *Lowe v. BE&K Construction Co.*, 121 N.C. App. 570, 573, 468 S.E.2d 396, 397 (1996) (citation omitted). Therefore, when considering an appeal from the Commission, our Court is limited to two questions: (1) whether competent evidence exists to support the Commission's findings of fact, and (2) whether the Commission's findings of fact justify its conclusions of law. *Id.* In other words, if a medical condition is clearly

found not to be an occupational disease based on the evidence provided, the Court can overturn the decision of the Commission.

According to the Workers' Compensation Act, three elements are necessary to prove the existence of a compensable occupational disease under N.C. Gen. Stat. § 97-53(13) (1991): (1) the disease must be characteristic of persons engaged in the particular trade or occupation in which the plaintiff is engaged; (2) the disease must not be an ordinary disease of life to which the public generally is equally exposed; and (3) there must be a causal connection between the disease and the plaintiff's employment. *Hansel v. Sherman Textiles*, 304 N.C. 44, 52, 283 S.E.2d 101, 105-106 (1981) (citation omitted).

In addressing this issue, our legislature has enumerated a number of diseases specifically by statute. N.C. Gen. Stat. § 97-53(1)-(12), (14)-(28) (1991). In addition, our Courts have recognized certain illnesses to be occupational diseases, including the following: serum hepatitis, see *Booker v. Medical Center*, 297 N.C. 458, 256 S.E.2d 189 (1979) (where disease was found to be characteristic of and peculiar to lab technician's occupation because of exposure to greater risk of contracting it than employees in general); byssinosis, see *Neal v. Leslie Faye, Inc.*, 78 N.C. App. 117, 336 S.E.2d 628 (1985) (where plaintiff contracted lung disease from workplace exposure to cotton dust); obstructive lung disease, see *Cain v. Guyton*, 79 N.C. App. 696, 340 S.E.2d 501, *affirmed*, 318 N.C. 410, 348 S.E.2d 595 (1986) (where plaintiff inhaled respiratory irritants such as sulfuric acid fumes while working as a battery buster); tendinitis, see *Thomas v. Hanes*

Printables, 91 N.C. App. 45, 370 S.E.2d 419 (1988) (where competent evidence supported finding that tendinitis resulted from plaintiff repeatedly using right shoulder during course of employment as operator at manufacturing plant); interstitial pulmonary fibrosis, see *Keel v. H & V, Inc.*, 107 N.C. App. 536, 421 S.E.2d 362 (1992) (where exposure to perchloroethylene fumes in dry cleaning solution used in workplace rendered plaintiff disabled); depression, see *Pulley v. City of Durham*, 121 N.C. App. 688, 468 S.E.2d 506 (1996) (where competent evidence in record supported testimony by clinical psychologist that plaintiff's depression was causally connected to her employment as public safety and police officer); allergic rhinitis, asthma, and chronic obstructive pulmonary disease, see *Grantham v. R.S. Barry Corp.*, 217 N.C. App. 529, 491 S.E.2d 678 (1997), *disc. review denied*, 347 N.C. 671, 500 S.E.2d 86 (1998) (where employment in manufacturing plant exposed plaintiff to dust, mold, and chemical substances resulting in dizziness, sneezing, itching, and headaches).

In each of the above cases, our Courts have found sufficient evidence to determine that a particular trade or occupation exposed the plaintiff to a significantly higher risk of contracting the illness than the public generally, which satisfies the first two elements of an occupational disease under N.C. Gen. Stat. § 97-53(13). *Rutledge v. Tultex Corp.*, 308 N.C. 85, 93-94, 301 S.E.2d 359, 365 (1983). It was also determined that each plaintiff's employment "significantly contributed to, or was a *significant* causal factor in, the disease's development," which satisfies the third element of an occupational disease. *Id.* at 101, 301 S.E.2d

at 369-370.

The plaintiff in a workers' compensation case has the burden of proving the causal connection by expert medical testimony which may be based either on "personal knowledge or observation or on information supplied him by others, including the patient" *Booker v. Medical Center*, 297 N.C. at 479, 256 S.E.2d at 202. Further, a medical expert is not limited to medical evidence but may also consider circumstantial factors such as: (1) the nature and extent of the plaintiff's occupational exposure; (2) the presence or absence of other non-work-related exposures and components which contributed to the disease's development; and (3) correlations between plaintiff's work history and the development of the disease. *Rutledge v. Tultex Corp.*, 308 N.C. at 105, 301 S.E.2d at 372.

The defendant offered the testimony of Dr. Melvin Reed (Dr. Reed), an oncologist from Michigan. Although Dr. Reed was not the decedent's physician, he has specialized in the treatment of cancer since 1960 and has evaluated hundreds of patients diagnosed with non-Hodgkin's lymphoma disease. Dr. Reed testified that non-Hodgkin's lymphoma is an ordinary disease of life to which all persons are equally exposed, that there is no relation between the deceased's lymphoma and his occupation as a firefighter, and that the decedent's medical records from his treating physicians likewise do not indicate his occupation as a possible source of his lymphoma.

Plaintiff contends that Dr. Reed, who usually testifies for the defense, used the Surgeon General's criteria in determining

that decedent's occupational exposure did not cause his lymphoma. Plaintiff further points out that even though Dr. Reed testified that occupational exposure to some carcinogen or substance did not contribute to or accelerate decedent's lymphoma, he did agree firefighters were exposed to carcinogens in the environment of a fire.

Defendant objected to the admissibility of plaintiff's expert testimony on the grounds that Dr. Bendix was not qualified to render an opinion that decedent's lymphoma was an occupational disease; that Dr. Bendix has never treated cancer patients nor has she ever observed firefighters in the course of their employment; that despite her lack of research in this area, Dr. Bendix concluded that the decedent's employment substantially contributed to the development of his lymphoma due to the chemicals and combustion found in the typical fires that a firefighter is exposed to; and, that Dr. Bendix could only provide a list of the carcinogens that decedent was probably exposed to but not to what degree the exposure actually was.

Plaintiff relies on *Keel* to illustrate that a "circumstantial or . . . chronologic[al] association" between plaintiff's symptoms and workplace exposure may prove causation. *Keel v. H & V, Inc.*, 107 N.C. App. at 538, 421 S.E.2d at 364. The plaintiff in *Keel* alleged an occupational disease by exposure over the course of several months to perchloroethylene (PCE) fumes emanating from the dry cleaning solution frequently used in the workplace. *Id.* at 537, 421 S.E.2d at 364. Whenever the plaintiff was exposed to PCE, she experienced symptoms of "eye irritation and tears, dizziness,

perspiration, coughing and later, shortness of breath," which compelled her to finally leave her employment. *Id.* The plaintiff's family physician referred her to a pulmonary specialist who testified that plaintiff's condition of pulmonary fibrosis was significantly caused by the workplace exposure to fumes. *Id.* at 538, 421 S.E.2d at 364. This finding was based upon plaintiff's symptoms evolving with her employment, thus establishing a "strong 'circumstantial or . . . chronologic[al] association'" between her illness and employment, despite the pulmonary specialist's lack of knowledge regarding the exact quantity or concentration of workplace exposure or whether plaintiff had exposure other than by employment by defendant. *Id.* at 538-540, 421 S.E.2d at 364-366. At the pulmonary specialist's request, an industrial hygienist examined the dry cleaning premises and found airborne concentrations of PCE to be "only 7% of the recommended exposure limits." *Id.* at 538, 421 S.E.2d at 364. Based on his findings, the industrial hygienist concluded that significant workplace exposure did not exist, but stated the health risks of PCE exposure to be "irritation of the eyes and upper respiratory system, central nervous system depression, and possible liver/kidney damage." *Id.* In affirming the Commission's finding of causation from workplace exposure, this Court concluded:

"[t]he evidence reveals that Dr. Driver's [pulmonary specialist] medical opinion was based upon personal examination and testing of plaintiff and an assessment of the circumstantial evidence surrounding the onset and development of the disease as well as the articles on solvent-induced lung injury. We find that Dr. Driver's medical opinion is sufficient evidence to support the Commission's finding of fact that plaintiff

suffered from an occupational disease.”

In reliance on *Keel*, plaintiff contends it is not necessary to establish precisely what carcinogens the decedent was exposed to, or the concentration of the carcinogens, as Dr. Bendix sufficiently established a link between firefighting and lymphoma in firefighters by testifying that firefighters are likely to be exposed to carcinogens in the course of their employment.

Dr. Bendix’s testimony has similarities to that of the expert witness in *Riverview Fire Protection Dist. v. Workers’ Compensation Appeals Board*, 28 Cal. Rptr. 2d 601 (Cal. Ct. App. 1994), rehearing denied and review denied (1994). The plaintiff in *Riverview* alleged decedent firefighter’s stomach cancer to be an occupational disease and provided an expert witness who testified the occupational risk factors for stomach cancer to be asbestos, general dust exposure, acrylonitrile, soot and tar. *Id.* at 606-607. The expert further testified that “asbestos [exposure in the workplace] may have played a contributory role in the genesis of [plaintiff’s] stomach cancer.” *Id.* at 607. However, the California Court held this evidence to be insufficient, as it failed to “logically [connect] industrial exposure to the applicant’s cancer,” because plaintiff’s expert failed to present any studies showing an increased risk of stomach cancer among firefighters. *Id.* at 606-608.

Likewise, Dr. Bendix has failed to show that there is an increased risk of non-Hodgkin’s lymphoma among firefighters. After reviewing twenty-five independent studies, Dr. Bendix concluded that smoke contains cancer-causing carcinogens and that due to the

nature of their job, firefighters are exposed to more of these carcinogens than the general public. However, out of the studies reviewed by her, only eleven involved firefighters, and only two of the eleven showed a slight but insignificant increase of non-Hodgkin's lymphoma among firefighters as opposed to the general population. These studies therefore do not support plaintiff's contention that non-Hodgkin's lymphoma is a disease peculiar to the occupation of firefighting or that non-Hodgkin's lymphoma develops from the carcinogens a firefighter inhales over a period of years. Additionally, the Commission noted that Dr. Reed testified non-Hodgkin's lymphoma to be a very common malignancy with approximately 20,000 new cases of this disease each year in the United States.

In contrast, the Court in *Passe v. City of St. Louis*, 741 S.W. 2d 109 (Mo. 1987), determined sufficient evidence existed to support a finding that a fireman's throat cancer was an occupational disease. *Id.* In that case, evidence was submitted of the decedent's exposure to the smoke and fumes that his treating physician "opined caused or contributed to cause his cancer." *Id.* at 111. The decedent's oncologist testified "this type of cancer develops from something that's irritating the membranes inside your throat over a period of years." *Id.* at 110. The decedent's wife and co-employees often witnessed the decedent to be "coughing up black debris after fighting a fire." *Id.* at 111. Thus, a direct causal connection was established between the decedent's cancer and his working environment as a firefighter. *Id.*

In the instant case, there is a lack of evidence to support

the onset and development of the decedent's illness and symptoms as were shown in *Keel* and *Passe*. The plaintiffs in those cases had illnesses with outward symptoms that could readily be traced chronologically to workplace exposure. However, the record in this case fails to show any outward symptoms of the decedent's illness which can be traced to his occupation.

Our research further reveals that Dr. Bendix's opinion was rejected in the California case of *Zipton v. W.C.A.B.*, 267 Cal. Rptr. 431 (Cal. Ct. App. 1990), *rehearing denied, opinion modified and review denied (1990)*, where the decedent firefighter died from widespread cancer involving his liver, hepatic, pancreatic and periaortic lymph nodes, left adrenal, and lungs. *Id.* at 433. Upon outlining the decedent's exposure history to various chemical carcinogens in the course of his employment, Dr. Bendix concluded that the decedent's cancer was probably "caused or materially contributed to" by the smoke which he inhaled as a firefighter. *Id.* at 435. As in this case, Dr. Bendix based her findings on scientific and epidemiological studies from which she documented liver and lung carcinogens found in smoke. *Id.* The California Court of Appeals affirmed the finding of the Workers' Compensation Appeals Board that the plaintiff "failed to establish a reasonable link between [decedent's] cancer and the industrial exposure to carcinogens" as required by law, for lack of scientific evidence, and stated Dr. Bendix's opinion to be "highly speculative and [conclusionary]." *Id.* at 438-439.

Also, in *Van Scoy v. Shell Oil Company*, 1995 WL 381891 (N.D. Cal. 16 June 1995), *affirmed*, 98 F.3d 1348 (9th Cir. 1996), *cert.*

denied, ___ U.S. ___, 137 L. Ed. 2d 541 (1997), Dr. Bendix testified as an expert for the plaintiff who was a California commercial fisherman and claimed he had been physically and emotionally injured by eating sturgeon contaminated with selenium from defendant's refinery wastewater after an oil spill. *Id.* at 1. The plaintiff never consulted a physician for a medical analysis of whether his physical symptoms were selenium related and a blood test revealed the selenium levels in his body to be normal. *Id.* at 3. Dr. Bendix opined that his protein intake masked a higher than normal incidence of selenium in his blood in stating, "I have a sense from the literature that there is a relationship between protein intake and the appearance of symptoms from high selenium intake. And I'm coming to think that the reason that [the plaintiff] has not shown obvious symptoms of selenium poisoning full blown is because of his high protein intake. . . ." *Id.* The court, in rejecting this testimony, stated, "Dr. Bendix's 'sense,' unsupported by any documentation or data whatsoever, is inadequate to establish" a credible theory of injury, as "plaintiff provides no evidence that any person has ever suffered physical injuries stemming from the ingestion of fish contaminated with selenium." *Id.* In granting summary judgment for the defendant, the court stated that plaintiff offered "nothing but his subjective belief" that he had been poisoned by ingesting fish contaminated with selenium. *Id.*

Likewise, in the present case, while Dr. Bendix opines there are carcinogens in smoke likely to be inhaled by firefighters, she has failed to show that firefighters are more likely to contract

non-Hodgkin's lymphoma from workplace exposure than the general population. Thus, the plaintiff's evidence does not establish a causal connection between decedent's non-Hodgkin's lymphoma and his occupation as a firefighter.

Therefore, we conclude the Commission's findings and conclusions were not supported by competent evidence and the Commission's opinion and award is

Reversed.

Chief Judge EAGLES and Judge HORTON concur.