

FINAL AWARD ALLOWING COMPENSATION
(Reversing Award and Decision of Administrative Law Judge)

Injury No.: 04-144638

Employee: William Riley, deceased
Claimants: Vicki Riley, surviving spouse
Landon Riley, dependent child
Employer: City of Liberty
Insurer: Midwest Public Risk of Missouri

This workers' compensation case is submitted to the Labor and Industrial Relations Commission (Commission) for review as provided by § 287.480 RSMo. We have reviewed the evidence, read the briefs, heard the parties' arguments, and considered the whole record. Pursuant to § 286.090 RSMo, we reverse the award and decision of the administrative law judge.

Introduction

The parties asked the administrative law judge to resolve the following issues: (1) accident or occupational disease; (2) notice; (3) whether employee's work was a substantial factor in causing employee's death; (4) whether employee's death arose out of and in the course and scope of his employment; (5) liability of the employer for burial expenses in the statutory maximum amount of \$5,000.00; and (6) whether all the conditions complained of by employee were caused by the alleged accident and/or occupational disease.

The administrative law judge rendered the following findings and conclusions: (1) claimants failed to prove employee's work was a substantial factor in causing his hypertension, enlarged heart, severe left ventricular hypertrophy, and arteriosclerosis, which culminated in employee's death while at home on October 6, 2004; (2) claimants failed to prove employee was a "firefighter" with employer; and (3) claimants failed to prove employee was last exposed to any substances or conditions in his job with employer which could have caused or resulted in his severe and advanced hypertension and arteriosclerosis.

Claimants filed a timely Application for Review alleging the administrative law judge erred in denying the claim. On February 10, 2012, the employer filed an Objection to the Application for Review, requesting the Application for Review be dismissed. On February 24, 2012, we issued an order denying employer's request to dismiss claimants' Application for Review.

We reverse the award of the administrative law judge for the reasons set forth herein.

Findings of Fact

Employee served as Deputy Chief for the Liberty Fire Department. Employee handled numerous training, hiring, supervisory, and administrative duties as Deputy Chief. Employee oversaw employer's emergency medical service (EMS) component. Employee oversaw the narcotics and medical supplies on premises, which involved being on-call for restocking ambulances at any time of day or night. Employee handled a large project

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involving outsourcing billing to a private company. Employee was the liaison between the firefighters and city management which placed him on the front lines of disputes involving the firefighters' attempt to organize with a local union. Employee worked with third-party consultants on expanding an existing emergency operations plan for the City of Liberty. Employee was also in charge of monitoring severe weather and operating the public warning systems.

In addition to the foregoing administrative and managerial duties, employee's job involved responding to fires and emergencies. Employee was required to respond and assist at all fires in the City of Liberty. Employee also responded to emergencies such as traffic accidents. For example, on September 24, 2004, employee was on the scene of an accident wherein a driver crashed into a house. While checking the vital signs of the driver, employee suffered injury to his leg when he fell through the floor of the house, which had been rendered unstable. Employee's duties as Deputy Chief were to take command of the emergency scene if necessary, but he was also required to assist with the actual physical work in responding to emergencies.

Employee's considerable duties with employer kept him essentially on-call twenty-four hours per day and seven days per week. Employee kept a dispatch radio on nearly the entire time he was at home. Employee also had a pager that would regularly require his attention. Employee took all of his duties extremely seriously and his home life and his sleep at night were often interrupted by a need to respond to some emergency or other pressing issue for employer.

Employee's work duties on October 5, 2004

We acknowledge the conflicting evidence provided by the parties with respect to employee's work duties and activities on October 5, 2004. We find most persuasive the testimony from Vicki Riley, Chief Gary Birch, Captain Michael Compton, and Captain Richard Cunningham. From their credible testimony, we derive the following findings.

On October 5, 2004, employee reported to work at his normal time. Employee was jovial and cheerful and nothing appeared to be the matter with him. Later, however, employee got upset about some administrative or personnel issues, including a disagreement involving a police dispatcher, and a feeling that Chief Birch (who was also a longtime coworker and friend of employee) had questioned his judgment. Captain Michael Compton discussed these issues with employee and observed that employee was so upset that his face was red and the veins in his neck were sticking out.

Later that day, employee responded to an emergency at a private residence to assist an EMS crew. The patient had fallen down a staircase. Employee helped treat, package, and carry the patient up the stairs and into the ambulance. Due to the small area within which employee and the EMS crew had to work, and the large size and weight of the patient, the task was extremely difficult and required very strenuous exertion on employee's part. The task was made even more difficult by the fact employer was short-staffed. Ideally, as Chief Birch testified, six people would assist in carrying a patient on a stretcher, but there were only five on the scene that day. After the task had

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been accomplished, employee commented to his coworkers and to Chief Birch about how difficult and physically taxing the work had been.

Employee tried to work out on a treadmill at some point in the late afternoon, as was his custom. Afterward, employee's coworkers noticed that he didn't look well. Employee told coworkers who inquired that he didn't feel well and that he thought he'd eaten something that wasn't agreeing with him. Captain Richard Cunningham observed that employee was a pale or ashy gray color and that he was sweating profusely.

Employee called his wife from work to tell her that he would be home late because he was dealing with some bad personnel issues. When employee arrived home, his wife observed that he didn't look well. Employee was pale and upset. Employee's wife had cooked his favorite dish for dinner, but employee didn't eat any of it. Instead, he told her that he'd had an argument or altercation at work, that he didn't want to talk about it, and that he just wanted to sit. Employee's quiet and subdued demeanor was a significant departure from normal. Later, employee said he was tired and went to lie down. On October 6, 2004, at around 4:00 to 4:30 a.m., employee's wife woke up to discover employee sitting in a chair in their bedroom holding his head. Employee said he had a bad headache and his throat hurt.

Employee's wife went to make him some tea. When she returned, employee complained again about throat pain, then suddenly went into a seizure and stopped breathing. He died soon after from a ventricular fibrillation, a severe form of cardiac arrhythmia. Employee's wife called Chief Birch and told him what had happened. Chief Birch left for employee's house immediately and arrived while paramedics were still on the scene.

Employee married Vicki Riley in 1982. They had two children, Diane Riley, age 34 at the time of the hearing, and Landon Riley, age 14 at the time of the hearing. Landon Riley's date of birth is March 3, 1996.

Claimants provided evidence of their funeral expenses in the amount of \$2,360.90 owing to D.W. Newcomer's Sons Floral Hills Funeral Home and \$8,086.60 owing to Speaks Memorial Chapel, Inc. We find that the total of claimants' funeral expenses is \$10,447.50.

Employee's medical history

Employee was diagnosed with sleep apnea in 1998 and used a CPAP machine thereafter. Employee was evaluated for a heart condition in 1999 after he experienced a funny feeling in his chest; his heart checked out fine. Dr. Francis, employee's primary care physician since 2001, never initiated a cardiovascular workup on employee because employee didn't have any symptoms suggestive of heart problems. Employee treated with Dr. Francis for high cholesterol and took medication for this condition. Employee had high blood pressure during some of his examinations with Dr. Francis, but employee told Dr. Francis he regularly took his own blood pressure at home and gave Dr. Francis the last five readings he'd taken; all of them were within normal range,

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and Dr. Francis attributed employee's high blood pressure during the examination as an instance of "white coat syndrome."

At the time of his death, employee was 46 years of age. Employee did not smoke cigarettes or drink alcohol. Employee was moderately overweight, but ran for exercise on a daily basis.

Expert medical testimony

Claimants allege that the physical and emotional stress employee endured in his work caused his death, and provide testimony from three medical experts in support of their claim: Dr. Lee, Dr. Gill, and Dr. Schuman. Employer provides testimony from Dr. Thompson. All of the doctors agree that, although employee was not known to have heart disease and had never been diagnosed as having a cardiovascular event in his lifetime, the autopsy revealed that employee suffered from concentric left ventricular hypertrophy, a serious underlying heart condition that made it more likely employee would die from a sudden cardiac event. The doctors disagree, however, whether employee's work on October 5, 2004, was nevertheless a substantial factor in causing employee's death.

Dr. Schuman opined that employee's work activities on October 5, 2004, were the prevailing factor in his cardiac arrest. Dr. Schuman explained that work tasks such as responding to the emergency call and assisting packaging and lifting the patient involved both physical and emotional exertion, and that such stress resulted in an increased demand on employee's heart with the heart beating harder and faster for a long period of time, which eventually caused the ischemia, which in turn culminated overnight in cardiac arrest. Dr. Schuman also believed that employee's work with employer contributed to cause his underlying left ventricular hypertrophy. Dr. Schuman reasoned that employee was experiencing intermittent sustained hypertension which his doctors missed because employee's blood pressure wasn't checked at work but instead at home or in the doctor's office.

Dr. Lee opined that physical and psychological stress on the job with employer on October 5, 2004, and probably in the weeks before that day, were the substantial causes of a cardiac rhythm disturbance evolving into sudden cardiac death. Dr. Lee explained that mental and physical stress cause an increase in adrenaline which in turn causes an increase in blood pressure, pulse rate, and an increase in cardiac work. Dr. Lee opined employee's underlying concentric left ventricular hypertrophy was the result of intermittent episodes of hypertension, which Dr. Lee opined employee must have been suffering from for a number of years, despite employee's normal blood pressure readings at home.

Dr. Gill performed the autopsy and opined that employee died from ventricular fibrillation. Dr. Gill opined that the stress employee experienced at work several hours prior was a substantial cause of this fatal cardiac arrhythmia. We note that Dr. Gill admitted he changed the wording in his report at the request of claimants' counsel. We acknowledge claimants' argument, in their brief, that an attorney must communicate with an expert to discern whether the expert is using the appropriate legal terminology to express their opinions. But the circumstances involved here were not fully developed at Dr. Gill's deposition. Dr. Gill failed to address whether he perceived any material difference

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between his earlier opinions and the ones he later substituted at the request of claimants' counsel. We feel that these circumstances taint the credibility of Dr. Gill's ultimate opinions, so we decline to derive any findings from or to further discuss Dr. Gill's testimony.

Contrary to employee's experts, Dr. Thompson opined that work played no role in employee's death. Instead, Dr. Thompson opined that employee's underlying risk factors, including the left ventricular hypertrophy, borderline obesity, sleep apnea, and high levels of LDL cholesterol, combined to cause the sudden cardiac event that resulted in employee's death.

Dr. Thompson's opinion that work was not a causative factor in employee's death relies largely on studies about firefighter heart attacks that suggest if the heart attack doesn't happen within about one hour after the trauma at work, it is not caused by the work. Citing these studies, Dr. Thompson found it significant that employee died at home approximately 14 hours after participating in the call on October 5, 2004, and not on the scene of the emergency or within one hour afterward. But as claimants point out in their brief, employee didn't die of a heart attack, or myocardial infarction, but rather from a cardiac arrest resulting from cardiac arrhythmia. Dr. Thompson appeared to understand this, as he listed employee's cause of death in his report as "cardiac arrhythmia related to an acute coronary syndrome," yet he advanced studies about myocardial infarction to show employee's work didn't play a role in his death. Employer failed to acknowledge this distinction in its brief but instead highlighted Dr. Thompson's research and publishing credentials.

Dr. Thompson also downplayed the stress involved in being a firefighter as follows: "job related emotional challenges are extremely common and are difficult to quantify." *Transcript*, page 2389. We fail to see how challenges such as packaging a patient onto a stretcher and carrying them up a flight of stairs, or falling through an unstable floor after responding to an emergency where a driver crashed into a house, can reasonably be characterized as "extremely common." We also fail to see how employee's numerous other administrative and managerial duties with employer can be so easily discounted. We have found that employee was essentially always on-call to respond to any emergency or issue that arose, and that employee's responsibilities to employer were so extensive that his home life and his sleep at night were affected. In our view, Dr. Thompson's comments reveal that he wholly failed to grasp the magnitude of employee's work duties.

Ultimately, after careful consideration of the testimony from all of these well-qualified experts, we find Dr. Schuman most credible. We find that employee's work tasks on October 5, 2004, including responding to the emergency call and assisting packaging and lifting the patient up the stairs, as well as the tense interactions with a dispatcher and his supervisor which stemmed from his considerable administrative duties for employer, involved significant levels of both physical and emotional stress, and that such stress resulted in an increased demand on employee's heart, which culminated in ischemia, which deteriorated to heart failure in the hours leading up to his death early the following morning.

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Conclusions of Law

Applicable law

There appears to have been some confusion as to the statutes applicable to this claim. For example, we note the administrative law judge incorrectly analyzed this claim under § 287.120.8 RSMo which states, in relevant part:

Mental injury resulting from work related stress does not arise out of and in the course of the employment, unless it is demonstrated that the stress is work related and was extraordinary and unusual. The amount of work stress shall be measured by objective standards and actual events.

The plain language of the foregoing provision reveals that it is only applicable to claims for “mental injury,” i.e. where an employee alleges some kind of psychiatric injury like depression or post-traumatic stress disorder. Claimants are alleging that employee died from a *physical* injury, not a mental one, so the statute’s requirement that claimants prove employee’s work stress was “extraordinary and unusual” have no place in the analysis of this case.

We note that the administrative law judge also incorrectly applied certain of the substantive provisions of the 2005 amendments to the Missouri Workers’ Compensation Law to this claim, as evidenced by his statement on page 27 of his award that “[t]he statutes governing workers’ compensation do not give the benefit of the doubt to either party.” This is true after the 2005 amendments, but in cases (such as this one) arising under the previous version of the statute, Missouri case law requires us to apply the following principles in our analysis:

The fundamental purpose of the Workers' Compensation Law is to place upon industry the losses sustained by employees resulting from injuries arising out of and in the course of employment. . . . The law is to be broadly and liberally interpreted with a view to the public interest, and is intended to extend its benefits to the largest possible class. . . . Any doubt as to the right of an employee to compensation should be resolved in favor of the injured employee.

West v. Posten Constr. Co., 804 S.W.2d 743, 745-746 (Mo. 1991), quoting *Wolfgeher v. Wagner Cartage Service, Inc.*, 646 S.W.2d 781 (Mo. 1983).

We are required to apply the substantive provisions of the Missouri Workers’ Compensation Law as they existed on the date of employee’s injury. See *Tillman v. Cam's Trucking, Inc.*, 20 S.W.3d 579, 585-86 (Mo. App. 2000). For purposes of this claim, that includes applying the principles identified by the *West* court. See *Heiskell v. Golden City Foundry, Inc.*, 260 S.W.3d 443, 450 (Mo. App. 2008); *Molder v. Mo. State Treasurer*, 342 S.W.3d 406, 409 n.2 (Mo. App. 2011).

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Accident or occupational disease

Claimants pursue alternative theories of injury by accident or by occupational disease. Section 287.020.2 RSMo defines an “accident” and provides, in relevant part, as follows:

The word “accident” as used in this chapter shall, unless a different meaning is clearly indicated by the context, be construed to mean an unexpected or unforeseen identifiable event or series of events happening suddenly and violently, with or without human fault, and producing at the time objective symptoms of an injury.

Section 287.067.1 RSMo defines an “occupational disease” and provides, in relevant part, as follows:

In this chapter the term "occupational disease" is hereby defined to mean, unless a different meaning is clearly indicated by the context, an identifiable disease arising with or without human fault out of and in the course of the employment. Ordinary diseases of life to which the general public is exposed outside of the employment shall not be compensable, except where the diseases follow as an incident of an occupational disease as defined in this section. The disease need not to have been foreseen or expected but after its contraction it must appear to have had its origin in a risk connected with the employment and to have flowed from that source as a rational consequence.

We have found that the physical and emotional stress stemming from employee’s work for employer on October 5, 2004, resulted in an increased demand on employee’s heart, which culminated in ischemia, which deteriorated to heart failure in the hours leading up to his death early the following morning. We have found that employee’s coworkers observed him to appear ashy-colored, pale, and sweaty in the hours leading up to his death, and that employee told both his coworkers and his wife that he didn’t feel well. We conclude that these circumstances, taken together, constitute an unexpected or unforeseen identifiable series of events happening suddenly and violently and producing at the time objective symptoms of injury. Accordingly, we conclude that employee suffered an “accident” for purposes of the Missouri Workers’ Compensation Law.

Notice

Employer identified notice as an issue for determination by the administrative law judge. Section 287.420 RSMo sets forth the requirements for the notice that must be given employers regarding a work injury, and provides, as follows:

No proceedings for compensation under this chapter shall be maintained unless written notice of the time, place and nature of the injury, and the name and address of the person injured, have been given to the employer as soon as practicable after the happening thereof but not later than thirty days after the accident, unless the division or the commission finds that

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there was good cause for failure to give the notice, or that the employer was not prejudiced by failure to receive the notice. No defect or inaccuracy in the notice shall invalidate it unless the commission finds that the employer was in fact misled and prejudiced thereby.

The parties provided no discussion of the issue of notice in their briefs. Searching the record, we were unable to find evidence establishing when employer first received written notice of employee's death. But we have found that Chief Birch, employee's direct supervisor, learned of employee's death when employee's wife called him early on the morning of October 6, 2004, to tell him what had happened. It is well settled that notice of a potentially compensable injury acquired by a supervisory employee is imputed to the employer. *Hillenburg v. Lester E. Cox Medical Ctr.*, 879 S.W.2d 652, 654-55 (Mo. App. 1994). We conclude employer had actual notice of employee's death almost immediately after it occurred. Accordingly, the burden shifts to employer to demonstrate it was prejudiced by the failure to receive written notice of employee's death within thirty days. *Sell v. Ozarks Med. Ctr.*, 333 S.W.3d 498, 511 (Mo. App. 2011).

We search in vain for any evidence employer was prejudiced by failing to receive a written notice of employee's death within thirty days of its occurrence, and as we have noted, employer failed to brief the issue. The purpose of the notice requirement under § 287.420 is to provide employer "timely opportunity to investigate the facts surrounding the accident and, if an accident occurred, to provide the employee medical attention in order to minimize the disability." *Doerr v. Teton Transp., Inc.*, 258 S.W.3d 514, 527 (Mo. App. 2008). There was no question of employer's providing medical attention to employee, so the only way employer could have been prejudiced is if it was hampered in its ability to investigate the facts and circumstances surrounding employee's death. But Chief Birch learned of employee's death almost immediately after it occurred. At that point employer had every opportunity to investigate the surrounding circumstances. We are convinced employer cannot seriously claim to have been prejudiced where employee's supervisor was notified as to what happened almost immediately.

We conclude employer was not prejudiced and that claimants' claim is not barred by § 287.420 RSMo.

Medical causation

We have concluded employee sustained an "accident" for purposes of the Missouri Workers' Compensation Law. We turn now to the question of medical causation of employee's injury and death. Section 287.020 RSMo provides the relevant statutory framework for our analysis, and provides, in relevant part, as follows:

2. ... An injury is compensable if it is clearly work related. An injury is clearly work related if work was a substantial factor in the cause of the resulting medical condition or disability. An injury is not compensable merely because work was a triggering or precipitating factor.

We have found Dr. Schuman most credible regarding the nature of employee's cardiac injury and death. We have found the physical and emotional stress stemming from

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employee's work for employer on October 5, 2004, resulted in an increased demand on employee's heart, which culminated in ischemia, which deteriorated to heart failure in the hours leading up to his death early the following morning. We conclude that work was not merely a triggering or precipitating factor, but instead was a substantial factor in the cause of employee's ischemia, heart failure, and death.

Whether employee's death arose out of and in the course and scope of employment

The parties dispute whether employee's death arose out of and in the course and scope of his employment. Section 287.020.3(2) RSMo sets forth the relevant statutory framework for our analysis, and provides, in relevant part, as follows:

An injury shall be deemed to arise out of and in the course of the employment only if:

- (a) It is reasonably apparent, upon consideration of all the circumstances, that the employment is a substantial factor in causing the injury; and
- (b) It can be seen to have followed as a natural incident of the work; and
- (c) It can be fairly traced to the employment as a proximate cause; and
- (d) It does not come from a hazard or risk unrelated to the employment to which workers would have been equally exposed outside of and unrelated to the employment in normal nonemployment life;

We have already determined that employee's work, or employment, was a substantial factor in causing his injury and death. We are convinced that the testimony from Dr. Schuman, which we have credited, satisfies the other elements set forth in the foregoing statute. Dr. Schuman testified employee's work tasks caused him stress which resulted in an increased demand on his heart, which in turn culminated in ischemia, which deteriorated to heart failure. Although Dr. Thompson minimized the stresses involved in employee's job, we have found his testimony lacking credibility. We conclude that employee's injury and death can be seen to have followed as a natural incident of his work, and that it can be fairly traced to the employment as a proximate cause, and that employee's injury and death did not come from a hazard or risk unrelated to the employment to which workers would have been equally exposed outside of and unrelated to the employment in normal nonemployment life.

Burial expenses and death benefits

Finally, the parties dispute whether claimants are entitled to burial expenses in the amount of the statutory maximum of \$5,000.00. Section 287.240 RSMo provides, in relevant part, as follows:

If the injury causes death, either with or without disability, the compensation therefor shall be as provided in this section:

- (1) In all cases the employer shall pay direct to the persons furnishing the same the reasonable expense of the burial of the deceased employee not exceeding five thousand dollars.

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We have found that claimants' funeral expenses totaled \$10,447.50. We conclude claimants are entitled to, and employer is obligated to pay, burial expenses in the amount of the statutory maximum of \$5,000.00.

As we have determined that employee suffered a compensable work injury that resulted in his death, pursuant to § 287.240(2) RSMo, Vicki Riley and Landon Riley are entitled to weekly death benefits if the evidence shows that they were employee's total dependents at the time of his death. Section 287.240(4) provides, as follows:

The word "dependent" as used in this chapter shall be construed to mean a relative by blood or marriage of a deceased employee, who is actually dependent for support, in whole or in part, upon his or her wages at the time of the injury. The following persons shall be conclusively presumed to be totally dependent for support upon a deceased employee, and any death benefit shall be payable to them to the exclusion of other total dependents:

(a) A wife upon a husband with whom she lives or who is legally liable for her support, and a husband upon a wife with whom he lives or who is legally liable for his support; ...

(b) A natural, posthumous, or adopted child or children, whether legitimate or illegitimate, under the age of eighteen years, or over that age if physically or mentally incapacitated from wage earning, upon the parent legally liable for the support or with whom he, she, or they are living at the time of the death of the parent.

We have found that employee and Vicki Riley were married in 1982. We have found that, at the time of employee's death, employee was living with Vicki Riley and their child, Landon, who was under the age of eighteen years. Applying the statutory presumption pursuant to the foregoing section, we conclude that Vicki Riley and Landon Riley were employee's total dependents at the time of his death. Accordingly, we conclude that Vicki Riley and Landon Riley are entitled to death benefits in the amount of \$675.90 per week. The dependents are entitled to an equal share of the weekly death benefit. Landon Riley's portion of the weekly death benefit shall be payable to Vicki Riley for Landon Riley's support, maintenance, and education pursuant to § 287.240(5) RSMo.

The weekly death benefits are due beginning October 6, 2004, and shall continue thereafter in accordance with the terms of § 287.240 RSMo.

Conclusion

We reverse the award of the administrative law judge. We conclude employee's work was a substantial factor causing his death on October 6, 2004.

Employer is liable for burial expenses in the amount of \$5,000.00.

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Dependents are entitled to, and employer is ordered to pay, death benefits in the amount of \$675.90 per week.

This award is subject to a lien in favor of Stacey Dungan, Attorney at Law, in the amount of 25% for necessary legal services rendered.

Any past due compensation shall bear interest as provided by law.

The award and decision of Administrative Law Judge Kenneth J. Cain, issued January 13, 2012, is attached solely for reference.

Given at Jefferson City, State of Missouri, this 14th day of November 2012.

LABOR AND INDUSTRIAL RELATIONS COMMISSION

V A C A N T

Chairman

James Avery, Member

Curtis E. Chick, Jr., Member

Attest:

Secretary

FINAL AWARD

Employee: William Riley (deceased) Injury No. 04-144638
Dependents: Vicky Riley (widow)
Landon Riley, date of birth, March 3, 1996
Employer: City of Liberty
Additional Party: N/A
Insurer: Midwest Public Risk of Missouri
Hearing Date: November 17, 2011
Final briefs filed: December 19, 2011 Checked by: KJC/cy

FINDINGS OF FACT AND RULINGS OF LAW

1. Are any benefits awarded herein? No.
2. Was the injury or occupational disease compensable under Chapter 287? No.
3. Was there an accident or incident of occupational disease under the Law? No.
4. Date of accident or onset of occupational disease: alleged October 5, 2004.
5. State location where accident occurred or occupational disease was contracted: alleged Liberty, Clay County, Missouri.
6. Was above employee in employ of above employer at time of alleged accident or occupational disease? Yes.
7. Did employer receive proper notice? Yes.
8. Did accident or occupational disease arise out of and in the course of the employment? No.
9. Was Claim for Compensation filed within time required by Law? Yes.
10. Was employer insured by above insurer? Yes.

11. Describe work employee was doing and how accident occurred or occupational disease contracted: The deceased employee's dependents alleged that the deceased employee's death on October 6, 2004 was caused by an accident and/or occupational disease. The alleged causes of his death were stress, arguments with a dispatcher and his boss on the day prior to his death, heavy lifting on the day before his death and the duties of a firefighter.
12. Did accident or occupational disease cause death? No. Date of death? October 6, 2004
13. Part(s) of body injured by accident or occupational disease: Death
14. Nature and extent of any permanent disability: None.
15. Compensation paid to-date for temporary disability: N/A.
16. Value necessary medical aid paid to date by employer/insurer? None.
17. Value necessary medical aid not furnished by employer/insurer? None.
18. Employee's average weekly wages: \$1,176.92
19. Weekly compensation rate: \$675.90.
20. Method wages computation: By agreement.

COMPENSATION PAYABLE

21. Amount of compensation payable:
None Unpaid medical expenses:
N/A weeks for permanent partial disability
N/A weeks for temporary total disability
N/A weeks for disfigurement
None for death benefits
None for burial allowance

22. Second Injury Fund liability: N/A

TOTAL: None.

23. Future requirements awarded: None

Said payments to begin N/A and to be payable and be subject to modification and review as provided by law.

The compensation awarded to the claimant shall be subject to a lien in the amount of N/A percent of all payments hereunder in favor of the following attorney for necessary legal services rendered to the claimant: Ms. Stacy Dungan.

FINDINGS OF FACT and RULINGS OF LAW:

Employee: William Riley (deceased) Injury No. 04-144638

Dependents: Vicky Riley (widow)
Landon Riley (dependent son)

Employer: City of Liberty

Additional Party: N/A

Insurer: Midwest Public Risk of Missouri

Hearing Date: November 17, 2011

Final briefs filed: December 19, 2011 Checked by: KJC/cy

Prior to the hearing, the parties entered into various admissions and stipulations. The remaining issues were as follows:

1. Whether the deceased employee sustained an accident and/or occupational disease arising out of and in the course and scope of his employment as a Deputy Fire Chief for the Liberty Fire Department;
2. Notice;
3. Whether the deceased employee's work was a substantial factor in causing his death;
4. Whether the deceased employee's death arose out of and in the course and scope of his employment;
5. Liability of the employer for the \$5,000 burial allowance; and
6. Whether all the conditions complained of by the deceased employee through his dependents were caused by the alleged accident and/or occupational disease.

The deceased employee, Mr. William Riley, was survived by his widow, Ms. Vicky Riley (hereinafter referred to as Claimant) and two children, De Ann and Landon Riley, 34 and 15 years old, respectively. Claimant testified that she and the deceased employee were married in 1982.

Claimant testified that her husband was the Deputy Fire Chief for the City of Liberty when he died. She stated that he died on October 6, 2004. She stated that he had retired as a division

head for the Kansas City, Missouri Fire Department (KCFD) in 2002. She stated that he had worked for the KCFD for 25 years.

Claimant testified that Mr. Riley was initially a firefighter for the KCFD. She stated that as a firefighter, he would often come home from work with his clothes smoky and bloody. She stated that sometimes she could only see the whites of his eyes due to the smoke and smut on his face. She stated that in his early days as a fireman they did not wear masks. She stated that he was involved in an "extreme" trauma case with the KCFD. She stated that trauma cases involving small children were particularly difficult for him.

Claimant testified that she was not aware that her husband had a heart condition. She stated that his family doctor had prescribed cholesterol medication. She stated that her husband was 46 years old when he died. She stated that his father died in his 70s, but not of heart related problems. She stated that his mother died in her 40s of chronic obstructive pulmonary disease. She stated that his mother was also a diabetic and a recovering drug abuser.

Claimant testified that her husband never smoked. She stated that he did not drink alcohol. She stated that he exercised every night on a treadmill. She stated that in the 1990s he was diagnosed with sleep apnea. She stated that he was using a mask and a CPAP machine. She stated that to her knowledge, he was never diagnosed with arteriosclerosis or an enlarged heart.

Claimant testified that as a Deputy Fire Chief with the City of Liberty, her husband responded to calls at least once per month. She stated that during the two-week period before his death he was working at home as well as in the office to set up a 911 billing system to save the city money. She stated that because he was part of the emergency response team, he received telephone calls at night to respond to emergencies.

Claimant testified that her husband seemed fine at breakfast and at lunch on October 5, 2004, the day prior to his death. She stated that while shopping with her husband after lunch, on that day he received a response call on his radio. She stated that around 5:00 p.m. that day he phoned her and told her that he would be late getting home due to some personnel issues. She stated that he sounded "pretty" upset on the phone.

Claimant testified that when her husband got home that evening, he was really pale and appeared to be "really" upset. She stated that he was just "dragging." She stated that he did not eat his dinner. She stated that she had never seen him that upset before. She stated that he mentioned some type of altercation with someone and told her that he did not want to talk about it. She also stated that during that period, the City and the fire union were in negotiations.

Claimant testified that between 4:00 a.m. and 4:30 a.m. on October 6, 2004, she went upstairs and saw her husband sitting in a chair holding his head. She stated that he told her that he had a "really" bad headache and that his throat was hurting. She stated that they went downstairs to get some hot tea and Ibuprofen and that her husband indicated that he was going to lie in their son's bed. She indicated that after lying down, he went into cardiac arrest and died.

Claimant testified that her husband was a licensed EMT. She stated he took his blood pressure readings on a regular basis and usually about three times daily. She stated that when he went to the doctor, he sometimes had white coat syndrome. She stated that the blood pressure readings he took varied a little, but that they were not consistently over the targeted range.

On cross-examination, Claimant admitted that her husband had high cholesterol. She admitted that he had only worked for the City of Liberty from August 2003 to October 2004. She admitted that he did not come home with the smoky, bloody clothes while working for the City of Liberty Fire Department.

Claimant admitted that in 1999, her husband had an incident where he was driving and told her that he had a "funny" feeling in his chest and that she needed to drive him to a fire station. She admitted that she drove him to a fire station where an ambulance was called and that he was taken to an emergency room for treatment. She admitted that her husband's mother died of congestive heart failure.

On redirect examination, Claimant testified that on the day her husband went to the emergency room as referred to above, she was told that various test results did not show any heart related problems. She stated that her husband had no stress in his personal life in the week or two prior to his death. She stated that in September 2004, her husband was injured at work when he fell through the floor of a house after an accident in which a car had driven into the house. She stated that he told her that he had hurt himself "really" bad.

Medical evidence

Gerald B. Lee, M.D. testified by deposition on Claimant's behalf. His curriculum vitae showed that he was born in 1932. He admitted that he was retired from treating patients.

Dr. Lee testified that he was board certified in internal medicine and in cardiovascular diseases. He stated that a man's heart should typically weigh about 300 grams. He stated that Mr. Riley's heart per the autopsy report weighed 430 grams. He stated that the autopsy showed that Mr. Riley's left ventricle was thickened. He stated that hypertension was a cause of left ventricular hypertrophy. He stated that the size of Mr. Riley's heart was "prima facie" evidence that Mr. Riley had intermittent severe hypertension. He stated that there was prima facie evidence that Mr. Riley had concentric hypertrophy.

Dr. Lee concluded that concentric left ventricular hypertrophy, such as Mr. Riley had at the time of his death, was a "stand-alone" risk factor for sudden death and that it did not require any other risk factors to result in death. He stated that with untreated concentric left ventricular hypertrophy, "you're going to come up with death."

Dr. Lee noted that Mr. Riley did not have a heart attack or myocardial infarction on the day of his death. He noted that Mr. Riley had a 95 percent obstruction of the left descending coronary artery, which in the medical field was known as the "widow maker." He stated that Mr. Riley had a moderate obstruction of the left main coronary artery.

Dr. Lee admitted that the autopsy report showed that Mr. Riley died of hypertensive and arteriosclerotic heart disease. He stated that arteriosclerotic heart disease was caused by hypertension, diet and age. He stated that Mr. Riley's enlarged heart and the left ventricular hypertrophy were clear-cut signs that Mr. Riley was heading towards sudden cardiac death. He also acknowledged that Mr. Riley's cholesterol was "not good" and that it was significantly elevated. He admitted that Mr. Riley was a "little" over weight.

Dr. Lee, however, indicated that there were medical studies showing a relationship between stress and heart disease. He stated that there were "reputable" studies showing significantly increased hypertension in firefighters, police officers and emergency responders due to a lack of regular exercise, poor nutrition caused by work hours and the nature of their work, shift work, sleep disturbance, noise exposure, and post traumatic stress disorder. He concluded that Mr. Riley had several work-related stressful events in his life leading up to his death.

Dr. Lee concluded that the straws that "broke the camel's back" and caused Mr. Riley's death were his work as a firefighter, including the stress from his recent union negotiations, the yelling contest or argument with a fire dispatcher on the day prior to his death, and the physical labor he performed in helping to lift and carry a heavy patient on the day prior to his death.

On cross-examination by Mr. Riley's employer, Dr. Lee admitted that Claimant's attorney had made a \$500 donation to his not-for-profit organization. He admitted that he gave his initial report to Claimant's attorney before he wrote the final report.

Dr. Lee admitted that he no longer had a medical practice. He admitted that he had not written any medical articles since at least 1972. He admitted that he no longer had the right to prescribe narcotic medication. He admitted that a federal court in Phoenix, Arizona had excluded his medical opinions as not being fully supported by medical literature and as not being based on "substantially valid principles."

Dr. Lee admitted that Mr. Riley had a number of personal risk factors for heart disease. He admitted that some of Mr. Riley's blood pressure readings were "clearly" indicative of advanced hypertension such as 180/100 and 170/90. He admitted that he did not know when Mr. Riley

had last engaged in union negotiations. He admitted that he did not know when Mr. Riley was last exposed to any toxic fumes or substances while fighting fires.

On cross-examination by the Board of Trustees of the Missouri Local Government Employees Retirement System, Dr. Lee admitted that there were studies which had concluded that there was no scientific or objective or statistically significant link between firefighting and heart disease.

Dr. Lee admitted that he believed that Mr. Riley's high cholesterol was more familial than work related. He admitted that it generally took 15 to 20 years of hypertension to develop ventricular hypertrophy. He acknowledged that he believed that Mr. Riley had some family stress in the weeks before his death. He noted Mr. Riley's daughter's pregnancy and Mr. Riley and his wife's decision to adopt the baby. He admitted that Mr. Riley's records showed that Mr. Riley had an anxiety attack in 1999 and sought treatment for it.

Claimant also offered into evidence the deposition testimony of Thomas Gill, M.D.¹ Dr. Gill testified that he was board certified in anatomic, neuro and forensic pathology. He stated that from 2002 to 2006 he was the deputy medical examiner for Jackson County. He stated that from 1976 to 1991 he was on the faculty of a medical school in Oregon. He stated that he did the autopsy on Mr. Riley.

Dr. Gill testified that he had performed approximately 5,000 autopsies. He stated that about 90 percent of his practice now involved forensic pathology. He stated that arteriosclerosis involved cholesterol deposits in the arteries which the body breaks down to form plaque. He stated that there were two types of hypertension; idiopathic or essential and secondary hypertension where the root-cause for the condition was from another system in the body. He stated that left ventricular hypertrophy could cause a fatal cardiac arrhythmia.

Dr Gill testified that Mr. Riley died of arteriosclerotic and hypertensive heart disease. He described Mr. Riley as borderline obese at 207 pounds. He stated that Mr. Riley had a 60 percent occlusion of the left main coronary artery and a 95 percent occlusion of the left anterior descending artery. He stated that Mr. Riley had an old healed myocardial infarct of the posterior wall on the left ventricle.

Dr. Gill concluded that Mr. Riley's work was a significant contributor to his underlying coronary artery disease, enlarged heart, the hypertensive heart condition and the final resultant fatal cardiac arrhythmia. He noted that firefighters did not wear masks until the 1990s and that prior to that time they were exposed to carbon monoxide and hydrogen cyanide. He also stated that the shift work and noise exposure were risk factors for firefighters and heart conditions. He concluded that Mr. Riley's fatal cardiac arrhythmia was "substantially" caused by the stress he experienced in his work situation several hours prior to the fatal event.

¹ Pages 45 to 61 of the deposition testimony was missing from the transcript.

On cross-examination by the attorney for the employees' retirement system, Dr. Gill admitted that he was not a cardiologist. He admitted that he did not subscribe to any medical journals pertaining to cardiology. He admitted that he had never read any articles linking fire fighters to heart disease until Claimant's attorney furnished him with two such articles. He admitted that he did not do any independent research to determine whether there were any contrary findings in any studies.

Dr. Gill admitted that prior to Mr. Riley's case he had never rendered an opinion that heart disease and/or a heart attack was substantially caused by work as a firefighter. He admitted that he did not do so in Mr. Riley's case until four years after he did the autopsy and until after he was hired by Claimant's attorney to render an opinion in the case.

Dr. Gill admitted that his medical license had been suspended in the past. He stated that it was suspended by the State of Indiana because he had failed to notify the state that he had moved to California and was practicing there. He also admitted, however, that he was asked to leave his job at a pathologist in Indiana because the findings he had made in several autopsies were disputed.

Dr. Gill admitted that Mr. Riley had significant personal risk factors for heart disease other than allegedly his work as a firefighter. He admitted that he did not know when Mr. Riley had last participated in any labor negotiations.

On cross-examination by Mr. Riley's employer, Dr. Gill admitted that he sent three drafts of his opinion to Claimant's attorney before he wrote his final report. He admitted that Claimant's attorney told him to change the wording in his opinion in the final report. He admitted that he had initially stated that Mr. Riley's work had precipitated or significantly contributed to Mr. Riley's death. He stated that Claimant's attorney wanted him to say that Mr. Riley's death was "substantially caused" by the "stress he experienced in his work situation." He admitted that he did, in fact, change the wording in his opinion in his final report to state what the attorney had requested.

Dr. Gill admitted that prior to asking him to change his opinion, Claimant's attorney had communicated with him by e-mail. He stated that she asked him to change his opinion by telephone. He admitted that he did some research to find evidence to support his opinion that Mr. Riley's work had substantially caused his death and that his research was not productive in finding any such evidence to support that conclusion. He admitted that he had no knowledge as to whether Mr. Riley was exposed to any smoke or carcinogens while working as a Deputy Fire Chief for the Liberty Fire Department.

Finally, Dr. Gill admitted that Mr. Riley's death was caused by arteriosclerotic and hypertensive heart disease which occurred over "decades." He admitted that Mr. Riley could not have developed those types of long-term changes over a few years. He admitted that he believed that the "precipitating" cause of Mr. Riley's death was the environment. He admitted

that without the underlying heart disease, the stressors in Mr. Riley's life could not have "precipitated this kind of event." (emphasis added) He admitted that in his opinion, Mr. Riley would not have suffered the fatal cardiac event absent the underlying cardiovascular disease. He stated that "I would feel uncomfortable with just purely these stress factors, you know, standing alone as the basis for - - a cause of death."

Claimant's Exhibit D was the deposition testimony of Michael Francis, M.D. taken in Claimant's case against the Missouri Local Government Employees' Retirement System. The deposition was taken by the attorney for the retirement system. Claimant's employer appeared by counsel at the deposition and objected to the use of any opinions rendered by the doctor in the workers' compensation case on the basis that no medical report containing any opinions rendered by the doctor was furnished to the employer pursuant to § 287.210.3 RSMo. 1994.

The statute as cited above provides that the testimony of any physician who has treated or examined the patient shall be admissible, but only if the medical report of the physician has been made available to all the parties. *Id.* The statute also states that an element or elements of a complete medical report may be met by the physician's records. *Id.*

Dr. Francis testified that he was a family practitioner and that he treated Mr. Riley twice in 2001 and once in 2004. He stated that he was not board certified in any field. He stated that he sat for the board certification test in internal medicine on a couple of occasions.

Dr. Francis testified that Mr. Riley was 5 foot 7 inches tall and that he weighed 216 pounds. He admitted that Mr. Riley had elevated blood pressure levels during each of his examinations of him. He admitted that Mr. Riley had high cholesterol. He admitted that Mr. Riley's blood pressure reading of 180/100 on one examination was "quite" high. He stated that Mr. Riley's cholesterol level was 292 and that the target for cholesterol readings was below 200. He stated that Mr. Riley's triglycerides reading was 234 and that the preference was for 150. He stated that he prescribed cholesterol reducing medication for Mr. Riley who failed to make a follow-up appointment for a recheck of his cholesterol, as he had requested Mr. Riley to do.

Claimant's Exhibit F was the deposition testimony of Stephen Schuman, M.D. Dr. Schuman acknowledged that he was hired to do a records review and to render an opinion on causation. He stated that he specialized in internal medicine with a subspecialty in cardiology. He stated that he had practiced cardiology for 24 years. He stated that he was board certified in internal medicine and in cardiology.

Dr. Schuman concluded that the immediate cause of Mr. Riley death was ischemia resulting in ventricular arrhythmias due to atherosclerotic and hypertensive heart disease which was medically and causally related to his work as a firefighter/EMT. He stated that the immediate cause of the ischemia and the fatal event on October 6, 2004 was a combination of Mr. Riley's pathological physical stress from lifting and packing a patient and emotional stress. He stated

that Mr. Riley was extremely upset and angry over a disagreement or argument with a dispatcher which led to the emotional stress. He stated that the stress on Mr. Riley's heart caused it to beat harder and faster for a long period of time, eventually causing ischemia manifested as throat pain and culminating in cardiac arrest.

Dr. Schulman speculated that Mr. Riley's blood pressure was probably high while he was at work due to stress, but in a more normal range while he was in the more relaxed atmosphere of his home.

On cross-examination by Mr. Riley's employer, Dr. Schulman admitted that he had never published in the field of cardiology. He admitted that he had never done any "peer research" in the field of cardiology. He admitted that Mr. Riley had a number of personal risk factors for cardiovascular disease, irrespective of his work duties with the fire department. He, too, admitted that Mr. Riley's left anterior descending artery was 95 percent occluded and that in the medical field, such a condition was referred to as the "widow maker."

Dr. Schulman admitted that he was not aware of any blood pressure readings taken while Mr. Riley was at work as a firefighter or as a Deputy Fire Chief. He admitted that despite the lack of any such evidence he had concluded that Mr. Riley's blood pressure was probably elevated while he was at work and that the elevated blood pressure while he was at work had resulted in the left anterior descending artery disease and the severe damage to Mr. Riley's heart due to hypertension.

Dr. Schulman admitted that Mr. Riley was "very" close to being considered obese based on the World Health Organization's standards for obesity. He admitted that sleep apnea could impact the right ventricle.

Claimant's employer offered into evidence the medical report of Randall C. Thompson, M.D. of Cardiovascular Consultants, PA. Dr. Thompson's curriculum vitae showed that he was board certified in cardiovascular diseases and in internal medicine. He had previously worked as a professor of medicine at the University of Missouri-Kansas City. He was either the author or co-author of 73 abstracts and letters to the editors of publications in various medical journals and he had authored 38 peer reviewed articles in medical journals and 17 other peer reviewed articles. He had written chapters on cardiology in 10 books and he had two audiotape publications on cardiology.

In his report dated July 8, 2009, Dr. Thompson concluded that the "job duties attributed to Mr. Riley on October 5, 2004 were not a substantial contributing factor in causing his heart attack and death on October 6, 2004." He concluded that Mr. Riley died of a cardiac arrhythmia related to an acute coronary syndrome. He stated that the autopsy showed that Mr. Riley had moderate to severe coronary arteriosclerosis, an old myocardial infarction, a significant stenosis in the left main coronary artery, and a particularly severe stenosis in the left anterior descending coronary artery. He stated that Mr. Riley's heart attack most likely occurred when

an atherosclerotic lesion in his left anterior descending coronary artery developed a plaque rupture and then a totally occlusive or nearby totally occlusive coronary thrombus.

Dr. Thompson indicated that he believed that Mr. Riley had engaged in heavy work-related exertion the afternoon prior to his death. He stated that it was not reasonable to conclude that the exertion caused Mr. Riley's death, noting that Mr. Riley's symptoms did not start until more than 14 hours after the exertion. He noted that medical studies had not found an increased risk of myocardial infarctions after more than about one hour after strenuous exertion. He noted that sedentary people were at a greater risk for a myocardial infarction with strenuous exertion and that the evidence showed that Mr. Riley exercised regularly.

Dr. Thompson recognized that emotional stress such as the death of a spouse or loss of a job was associated with an increased risk of heart attacks. He indicated that the stress could occur months prior to the heart attack. He stated that it was not possible to conclude that Mr. Riley's alleged emotional stress due to job pressure or personnel problems or budgetary difficulties precipitated Mr. Riley's heart attack.

Finally, Dr. Thompson concluded that Mr. Riley had numerous personal risk factors for heart disease, including "very" high cholesterol levels, which were not treated with appropriate dosages of medication, elevated blood pressure which may have been more significant than was recognized by Mr. Riley's doctors, elevated blood sugar readings and sleep apnea. He stated that Mr. Riley based on his autopsy findings was 70 inches tall and that he weighed 207 pounds.² He stated that those measurements gave a calculated body mass index (BMI) of 29.7. He stated that a BMI over 25 was considered overweight and that one over 30 was considered obese.

Dr. Thompson also noted that those studies which indicated that there was an increased frequency of cardiovascular disease in emergency responders such as firefighters had not generally shown an increased rate of cardiovascular disease in men in those occupations as compared to men in other occupations.

Other testimony at the hearing

Ms. Jo Ann Fuller testified at the hearing on Claimant's employer's behalf. She stated that her job title was communications officer for the Liberty police and fire departments. She stated that she did dispatch work.

² Dr. Gill admitted that it was difficult to obtain a height measurement during an autopsy and estimated Mr. Riley's height at 70 inches. Mr. Riley's family physician stated that Mr. Riley was 5 foot 7 inches tall. Mr. Riley's body mass index would have been greater than 29.7 based on a height of 5 foot 7 inches and a weight of 207 pounds, as opposed to a height of 5 foot 10 inches and a weight of 207 pounds, as Dr. Thompson factored in the equation, based on the autopsy findings.

Ms. Fuller denied that she had engaged in any heated arguments with Mr. Riley. She stated that she was not at work on October 5, 2004 the day she allegedly engaged in the heated argument with him. Her time sheets which were admitted into evidence showed that she did not work on October 5, 2004.

Mr. David Tedesco, Ms. Fuller's supervisor, testified that he did not recall Mr. Riley ever making any complaints about Mr. Fuller or any communications officer. He identified as Exhibit 7 the dispatch records for October 5, 2004. The records did not show that Mr. Fuller made any dispatches on that day

Mr. Gary Birch testified at the hearing on Claimant's employer's behalf. He testified that he currently worked for the Holt Community Fire Department. He stated that his prior job was as Fire Chief for the City of Liberty, Missouri where he worked from June 2003 to August 2010. He stated that he had also retired from the KCFD, where he met Mr. Riley.

Mr. Birch testified that he had known Mr. Riley since the late 1970s. He stated that he hired Mr. Riley to be the Deputy Fire chief in Liberty. He stated that he and Mr. Riley were friends.

Mr. Birch testified that as the Deputy Fire Chief, Mr. Riley's primary job was to be the EMS director. He stated that the job was primarily an administrative job. He stated that he and Mr. Riley basically worked an 8:00 a.m. to 5:00 p.m. shift, although they were technically on duty for 24 hours per day for 7 days a week. He stated that Mr. Riley was also the liaison with the communications office and that Mr. Riley was assigned to the union meetings. He stated that both of their jobs were stressful.

Mr. Birch denied that he had a heated argument with Mr. Riley on the morning before Mr. Riley's death. He stated that Mr. Riley answered one call on the day before his death and that a pumper truck and an ambulance were dispatched to the scene to help lift and carry a patient to the ambulance. He stated that after the call, Mr. Riley did mention that it was challenging to place the person on the stretcher and to get him up the stairs, but that he did not recall anything specific about Mr. Riley's demeanor or color and that he was trained as an EMT to recognize symptoms and signs of heart distress.

On cross-examination, Mr. Birch admitted that Mr. Riley had mentioned one instance where he had been involved in an argument with Jo Ann Fuller. He stated that he could not recall whether Mr. Riley fought any fires while with the Liberty Fire department.

Depositions of fact witnesses

Claimant's Exhibit A was the deposition testimony of Michael J. Compton, a captain for the Liberty Fire Department. He stated that on the day before his death Mr. Riley told him that he had been involved in an argument with Jo Ann Fuller. He also stated that Mr. Riley told him that morning that he was highly upset and that he was contemplating resigning because

someone had questioned his integrity. He stated that Mr. Riley remarked that his blood pressure was up twice during that day.

Claimant's Exhibit B was the deposition testimony of Richard Cunningham, a fire captain for the City of Liberty. He stated that he made the run with Mr. Riley on October 5, 2004 to pick up the victim who had fallen and who needed to be lifted and carried to the ambulance. He stated that the victim was a "big" guy. He stated that several firefighters and ambulance personnel carried the victim out of the house.

Mr. Cunningham testified that he recalled that when Mr. Riley came out of the shower after working out on the day before his death, that Mr. Riley looked pale and diaphoretic and that Mr. Riley had commented that something he had eaten for lunch did not agree with him and that he was not feeling well.

Mr. Cunningham testified that he recalled that Mr. Riley had a problem with a dispatcher and that it was very possible that the argument occurred prior to September 4, 2004 when he went on leave for back surgery. He stated that he did not recall whether Mr. Riley participated in any fire fighting duties while working for the City of Liberty. He stated that the union meetings that Mr. Riley participated in were not difficult.

Claimant's Exhibit C was the deposition testimony of Gary Birch. His deposition testimony was cumulative of his testimony at the hearing. He indicated in the deposition that Mr. Riley was a little heavy and that Mr. Riley had a stomach and a very large neck. He stated that Liberty did not have many fires and that maybe there were two during Mr. Riley's tenure with the department. He stated that Mr. Riley did not fight any fires during his last five years with the KCFD.

On examination by Mr. Riley's employer, Mr. Birch stated that Mr. Riley was his best friend. He stated that he and Mr. Riley had about a 20 minutes phone conversation on their way home from work on October 5, 2004. He stated that Mr. Riley made no complaints about his physical condition in the 20 minute phone conversation.

Claimant's Exhibits E, I and CC were the depositions of Paul Berardi, a Deputy Fire Chief for the KCFD, Jeff Swan, a fire captain with the City of Liberty and Jo Ann Fuller. Their testimony was cumulative of the other evidence.

Employer and Insurer's Exhibit 10 was the deposition testimony of Philip Richards, taken by Claimant. Mr. Richards testified that he was a firefighter/EMT with the Liberty Fire Department and that he assisted with the lifting and carrying of a patient to an ambulance on October 5, 2004. He stated that the patient had fallen down some stairs and that the patient was a small man who maybe weighed 160 pounds. He stated that he did not recall Mr. Riley assisting with lifting the patient and taking the patient to the ambulance.

Other exhibits

Claimant offered into evidence two articles pertaining to fire fighters and hypertension and cardiovascular disease. Claimant's Exhibit J contained medical records from Centerpoint Medical Center. Records showed that on August 14, 1999, Mr. Riley arrived with paramedics and that he complained of light headiness, hyperventilating and shortness of breath. A cardiac workup was prescribed.

Under social history, it was noted that Mr. Riley had recently lost his grandmother. It was noted that he had been having "problems" with his daughter's son, whom he and his wife had adopted. It was also noted that Mr. Riley had stated that "he has a lot of problems going on with his wife recently."

The diagnoses were anxiety attack, possible bilateral ulnar nerve entrapment, hypocalcemia and hyperglycemia. A diabetes work up was recommended. On physical examination, the doctor noted that Mr. Riley's abdomen was soft and rotund.

Mr. Riley's family physician's records from November 2001 showed that Mr. Riley had indicated that he had been diagnosed with high cholesterol and high triglycerides and that he was not on any medication. Dr. Statsny's notes on January 19, 2004 showed that Mr. Riley was 5 foot 7 seven inches tall and that he weighed 210 pounds. His blood pressure was 170/90.

Mr Riley's medical records from April 24, 1998 showed that he was doing quite well, but had a history of increased stresses, particularly associated with his 20-year-old daughter who was pregnant again. The doctor noted that Mr. Riley was also under stress because his father had recently been hospitalized with an aortic aneurysm. Mr. Riley weighed 216 pounds and his blood pressure was 146/90. In May 1997, Mr. Riley weighed 222 ½ pounds. His blood pressure was 136/96.

Claimant's Exhibit AA contained Mr. Riley's high school records. The records showed that he graduated from Ruskin High School in 1976. He ranked 344 out of 399 students in his class.

Law

After considering all the evidence, including the testimony at the hearing, the numerous medical and other depositions, the medical reports and records, the other exhibits, and after observing the appearances and demeanor of Claimant and the other witnesses who testified at the hearing, I find and believe that Claimant failed to prove that her husband's work as a Deputy Fire Chief for the City of Liberty, Missouri for approximately 14 months was a substantial factor in causing his long standing hypertension which resulted in an enlarged heart, severe left ventricular hypertrophy and arteriosclerosis which culminated in Mr. Riley's death while at home on October 6, 2004. She also failed to prove that her husband was a "firefighter" with the Liberty Fire Department. His job was administrative. She failed to prove that her husband was last exposed to any substances or conditions in his administrative job with the

Liberty Fire Department which could have caused or resulted in his severe and advanced hypertension and arteriosclerosis. Thus, she failed to prove Mr. Riley's employer's liability for death benefits.

Claimant had the burden of proving all material elements of her claim. Fischer v. Arch Diocese of St. Louis – Cardinal Richter Inst., 703 SW 2nd 196 (Mo. App. E.D. 1990); overruled on other grounds by Hampton vs. Big Boy Steel Erections, 121 SW 3rd 220 (Mo. Banc 2003); Griggs v. A.B. Chance Company, 503 S.W. 2d 697 (Mo. App. W.D. 1973); Hall v. Country Kitchen Restaurant, 935 S.W. 2d 917 (Mo. App. S.D. 1997); overruled on other grounds by Hampton. Claimant did not meet her burden of proving that her husband's work as a Deputy Fire Chief for the City of Liberty, Missouri was a substantial factor in causing his cardiovascular disease and death or that it resulted in an occupational disease.

The applicable statute in effect in October 2004 defined the word "accident" as follows:

2. The word "accident" as used in this chapter shall, unless a different meaning is clearly indicated by the context, be construed to mean an unexpected or unforeseen identifiable event or series of events happening suddenly and violently, with or without human fault, and producing at the time objective symptoms of an injury. An injury is compensable if it is clearly work related. An injury is clearly work related if work was a substantial factor in the cause of the resulting medical condition or disability. An injury is not compensable merely because work was a triggering or precipitating factor.

3. (1) In this chapter the term "injury" is hereby defined to be an injury which has arisen out of and in the course of employment. The injury must be incidental to and not independent of the relation of employer and employee. Ordinary, gradual deterioration or progressive degeneration of the body caused by aging shall not be compensable, except where the deterioration or degeneration follows as an incident of employment.

(2) An injury shall be deemed to arise out of and in the course of the employment only if:

(a) It is reasonably apparent, upon consideration of all the circumstances, that the employment is a substantial factor in causing the injury; and

(b) It can be seen to have followed as a natural incident of the work; and

(c) It can be fairly traced to the employment as a natural incident of the work; and

(d) It does not come from a hazard or risk unrelated to the employment to which workers would have been equally exposed outside of and unrelated to the employment in normal nonemployment life; and

(3) An injury resulting directly or indirectly from idiopathic causes is not compensable.

§ 287.020 RSMo. 1994.

The applicable statute in effect in October 2004 pertaining to occupational diseases provided as follows:

287.063. 1. An employee shall be conclusively deemed to have been exposed to the hazards of an occupational disease when for any length of time, however short, he is employed in an occupation or process in which the hazard of the disease exists, subject to the provisions relating to occupational disease due to repetitive motion, as is set forth in subsection 8 of section 287.067.

2. The employer liable for the compensation in this section provided shall be the employer in whose employment the employee was last exposed to the hazard of the occupational disease prior to evidence of disability, regardless of the length of time of such last exposure, subject to the notice provision of section 287.420.

...

§ 287.063 RSMo. 1994.

In addition, the statute pertaining to occupational diseases provided as follows:

287.067. 1. In this chapter the term "occupational disease" is hereby defined to mean, unless a different meaning is clearly indicated by the context, an identifiable disease arising with or without human fault out of and in the course of the employment. Ordinary diseases of life to which the general public is exposed outside of the employment shall not be compensable, except where the diseases follow as an incident of an occupational disease as defined in this section. The disease need not to have been foreseen or expected but after its contraction, it must appear to have had its origin in a risk connected with the employment and to have flowed from that source as a rational consequence.

2. An injury by occupational disease is compensable if it is clearly work related and meets the requirements of an injury which is compensable, as provided in subsections 2 and 3 of section 287.020. An occupational disease is not compensable merely because work was a triggering or precipitating factor . . .

5. Disease of the lungs or respiratory tract, hypotension, hypertension, or disease of the heart or cardiovascular system, including carcinoma, may be recognized as occupational diseases for the purposes of this chapter and are defined to be disability due to exposure to smoke, gases, carcinogens, inadequate oxygen, or psychological stress of firefighters of a paid fire department if a direct causal relationship is established . . . ³

§ 287.067 RSMo. 1994.

Mr. Riley's death was caused by severe and advanced hypertensive cardiovascular disease and arteriosclerosis caused by his hypertension and high cholesterol. He was survived by Claimant, his wife, and one minor child, Landon Riley, date of birth March 3, 1996. He had only worked for the Liberty Fire Department for 14 months at the time of his death on October 6, 2004.

Claimant's own experts agreed that it took 15 to 20 years for Mr. Riley to develop the severe hypertensive cardiovascular disease and the arteriosclerosis as found by his autopsy in October 2004. Thus, clearly his work with the Liberty Fire Department, beginning in August 2003, did not cause either condition.

Claimant, however, argued that Mr. Riley was exposed to smoke, toxins, fumes and other substances while he was a firefighter. She admitted that he was an actual firefighter while he worked for the KCFD. She admitted that he was a Deputy Fire Chief with the Liberty Fire Department and not a firefighter. His job with the Liberty Fire Department was administrative. He did not fight fires. In fact, Chief Birch testified that the Liberty Fire Department only fought two fires during Mr. Riley's tenure with the department.

In addition to the exposure to fires and other substances as set out above, Claimant argued that as a firefighter, her husband had to assist with accident scenes. Again, those duties were with the KCFD. She stated that while with the KCFD, her husband worked out of a station assigned to the old Grandview triangle where an inordinate number of traffic accidents occurred. She stated that her husband was particularly bothered by the accidents involving small children.

Claimant's experts argued that such firefighting duties as shift work, long hours, poor diets caused by their work situation, exposure to fires and other substances and the noise exposure from the loud alarms going off in the middle of the night could cause hypertension. Again, if

³ Mr. Riley was a Deputy Fire Chief for the Liberty Fire Department. He did primarily administrative work. He did not fight fires. Neither Claimant nor Mr. Riley's employer cited any cases or authority showing that the statute pertaining to firefighters of a paid fire department fighting fires applied to an employee of a paid fire department in an administrative position, such as Mr. Riley.

Mr. Riley were, in fact, exposed to those conditions, it was when he worked as an actual firefighter for the KCFD.

More specifically, however, no credible or objective evidence was offered showing that firefighting duties had anything to do with a poor diet. Chief Birch testified that he had lunch with Mr. Riley nearly every day and that Mr. Riley nearly always ate salads. Mr. Riley did not do shift work while employed as a Deputy Fire Chief for the Liberty Fire Department. He worked from 8:00 a.m. to 5:00 p.m. with some overtime. There was no credible evidence showing that he was exposed to fires, smoke and fumes as a firefighter with the Liberty Fire Department. He was not exposed to loud alarms going off in the middle of the night. He was not working the 24 to 48 hours on shifts followed by the 24 to 48 hours off shifts with the Liberty Fire Department.

Under the last exposure rule in effect at the time of Mr. Riley's death, the employer who last exposed the employee to the hazards of the occupational disease was liable. See § 287.063.2 RSMo. 1994. Claimant did not file a claim against the KCFD alleging that Mr. Riley's death was caused by his exposure to the alleged hazards of the occupational disease as set out above. Therefore, benefits cannot be awarded against the KCFD. Benefits cannot be awarded against the Liberty Fire Department because Claimant did not prove that a job related accident caused Mr. Riley's death or that he was exposed to the alleged hazards of the occupational disease while he was working primarily in an administrative position with the Liberty Fire Department.

Nevertheless, Claimant argued that Mr. Riley's death was caused by stress in his job as a Deputy Fire Chief with the Liberty Fire Department resulting from his involvement in union negotiations, personnel matters and the long hours he worked, as well as by an argument with Jo Ann Fuller, a fire dispatcher, on the day prior to his death, an argument with Gary Birch, the Fire Chief, on the day before his death and the physical exertion he experienced on the day before his death when he and several firefighters and ambulance personnel had to lift and carry a heavy patient up some stairs to an ambulance. Claimant did not meet her burden of proof.

First, Mr. Riley did not die while allegedly performing the heavy lifting with his co-workers. He did not die while allegedly engaged in a heated argument with Ms. Fuller or Mr. Birch. He died at home in bed between 4:00 a.m. and 4:30 a.m. on the day after the alleged heavy exertion or more than 14 hours later. One witness whom Claimant deposed even testified that the man lifted and carried to an ambulance on the day prior to Mr. Riley's death was a small man who weighed about 160 pounds.

Mr. Riley's death was also not caused by any alleged heated arguments with co-workers on the day prior to his death. The Liberty Fire Department offered into evidence Ms. Fuller's time records, which showed that she did not work on October 5, 2004, the day prior to Mr. Riley's death. The department also offered into evidence the dispatcher logs for that day which showed that Mr. Fuller did not make any dispatches on the day prior to Mr. Riley's death. Claimant did not prove that her husband had engaged in a heated argument with Ms. Fuller on

the day prior to his death or that any such alleged argument had caused or played any role in his death due to hypertensive cardiovascular disease.

Similarly, Claimant failed to prove that her husband and Fire Chief Birch had engaged in a heated argument on the day prior to Mr. Riley's death. Claimant did not offer the testimony of any witnesses to the alleged argument. Chief Birch denied any such argument. He testified that he and Mr. Riley were best friends. He was responsible for getting Mr. Riley the job as Deputy Fire Chief. He testified that on the day prior to Mr. Riley's death, as was their custom, they talked by telephone for 20 minutes during their drive home from work.

Chief Birch made a credible witness. He no longer works for the Liberty Fire Department. He had no incentive to lie for the Fire Department. After Mr. Riley's death, he aided Claimant in getting certain death benefits due to her husband's death. Claimant did not prove that her husband and Chief Birch had engaged in a heated argument on the day prior to his death or that any such alleged heated argument had caused or played any role in her husband's death.

Claimant argued that stress resulting from her husband's involvement in union negotiations contributed to his death. Again, Claimant failed in her burden of proof. Claimant offered the deposition testimony of Fire Captain Richie Cunningham to support her case. Fire Captain Cunningham testified that he had also participated in the union negotiations. He testified that the union negotiations and meetings were not "difficult."

Mr. Cunningham made a credible witness. Claimant offered no credible testimony or evidence which showed that the union meetings and negotiations were difficult or stressful. She offered no testimony from anyone who participated in the union meetings and negotiations other than Mr. Cunningham. She offered no evidence showing that the union meetings and negotiations involved extraordinary and unusual stress or that any alleged stress from the union meetings and negotiations had caused or played any role in her husband's cardiac event on October 6, 2004.⁴

In fact, Claimant did not even know when her husband had last participated in a union meeting or when he had last done any work involving union activities. There was no evidence as to what he did at the union meetings. There was no evidence as to whether he was involved in union negotiations. It would be pure speculation to conclude that some union meeting which may have occurred months prior to Mr. Riley's death and in which we do not know Mr. Riley's role had caused or played any role in his death.

Chief Birch did testify that Mr. Riley's job was stressful. There was no showing, however, that the stress was extraordinary and unusual. There was no evidence that Mr. Riley had ever

⁴ The statute provides that mental injury resulting from work-related stress does not arise out of and in the course of the employment, unless it is demonstrated that the stress is work related and was extraordinary and unusual. The amount of work stress shall be measured by objective standards and actual events. § 287.120 RSMo. 1994.

sought any treatment for the alleged work-related stress. Claimant did not testify that he had sought any treatment for the alleged stress. No physician, psychologist or health care provider had ever diagnosed Mr. Riley with any work-related stress problems prior to his death.

Mr. Riley did have stress in his personal life. The only treatment he ever sought for alleged stress was for the stress in his personal life. On one occasion, Mr. Riley was taken by ambulance to the emergency room of a hospital after experiencing what appeared to be a panic attack while driving with his wife from a family event. Hospital records showed that Mr. Riley complained of hyperventilating, shortness of breath and light headiness. The records noted that he had recently lost his grandmother. The records noted that he was having problems with his daughter's son.

Other medical records showed that Mr. Riley had stress in his personal life over his daughter's pregnancy. Records indicated that Mr. Riley was stressed over his and his wife's decision to adopt their daughter's son. Medical records in 1998 showed that Mr. Riley was stressed over his father's recent hospitalization with an aortic aneurysm. Medical records from 1999 noted that Mr. Riley "has a lot of problems going on with his wife recently."

There was no credible medical or psychological evidence showing that the stress in Mr. Riley's personal life or that allegedly due to his work had caused his enlarged heart, caused or aggravated his severe and advanced hypertensive cardiovascular disease or caused or aggravated his advanced arteriosclerosis, which resulted from the hypertension and high cholesterol.⁵ Claimant did not prove that the alleged work-related stress was a substantial factor in causing Mr. Riley's death or that a direct causal relationship existed between the alleged work-related stress and his hypertensive cardiovascular disease.

The medical evidence clearly showed that Mr. Riley's death was caused by his long standing untreated and advanced hypertension which led to a grossly enlarged heart and a 95 percent occlusion of his left descending coronary artery, which Claimant's own experts admitted was referred to in the medical field as the "widow maker." The other cause of Mr. Riley's death was arteriosclerosis which resulted from the advanced hypertension and Mr. Riley's high cholesterol.

Claimant's own experts admitted that it generally took 15 to 20 years for uncontrolled hypertension to result in severe ventricular hypertrophy, which was the immediate cause of Mr. Riley's death. There was no credible evidence showing that any work activity of Mr. Riley's during the last 14 months of his life as a Deputy Fire Chief with the Liberty Fire Department was a substantial factor in causing the ventricular hypertrophy. Dr. Gill, the pathologist who

⁵Dr. Lee, who testified on Claimant's behalf, attempted to show that Mr. Riley's work had caused Mr. Riley's high cholesterol by arguing that, due to the nature of the work, firefighters tended to eat at fast food restaurants and to consume a lot of food high in cholesterol. There was no evidence to support that conclusory opinion. Also, Dr. Lee's opinion was contradicted by Chief Birch's testimony. Chief Birch indicated that he had lunch Mr. Riley nearly every day and that Mr. Riley usually ate salads for lunch.

performed the autopsy on Mr. Riley and who testified on Claimant's behalf, admitted that Mr. Riley could not have developed the long-term changes found in his cardiovascular system over a few years. He admitted that arteriosclerosis and hypertensive heart disease were slow-developing diseases.

Claimant's own experts admitted that Mr. Riley had severe personal risk factors for heart disease, including the severe and advanced hypertension, severe "bad" high cholesterol readings and low "good" cholesterol readings and his gender. He had sleep apnea. Claimant's own experts admitted that Mr. Riley's medical records showed that he had blood pressure readings of 180/100 and 170/90 during clinical evaluations. Despite the blood pressure readings, Claimant was not prescribed any blood pressure medication. Claimant was prescribed very low dosages of cholesterol medication and failed to follow-up with his family physician to properly monitor his cholesterol. Dr. Thompson, a board certified cardiologist, testified that the dosages prescribed for Mr. Riley's cholesterol were not sufficient to treat the severity of Mr. Riley's cholesterol problem. The evidence supported Dr. Thompson's opinion.

In addition, Mr. Riley had high triglycerides. His family doctor's records showed that he was 5 foot 7 inches tall and that he had weighed as much as 222 1/2 pounds. He weighed 207 pounds at the time of his death. Medical records noted that Mr. Riley's stomach was "rotund" and soft. Chief Birch and another fireman testified that Mr. Riley had a large 22-inch neck.

The World Health Organization has set standards for determining obesity. According to the standards a body mass index of 30 is considered obese. The evidence showed that Mr. Riley's body mass index was at best 29.7. Mr. Riley's weight was clearly a risk factor for heart disease. His family history showed that his mother died of congestive heart failure in her 40s. Mr. Riley died of heart disease in his 40s.

Thus, Mr. Riley clearly had numerous personal risk factors for heart disease. There was no direct causal link or relationship between his administrative job as a Deputy Fire Chief for 14 months with the City of Liberty and his longstanding and advanced hypertension and high cholesterol, as required by the statute, assuming that the statute even applied to Mr. Riley who did not work as a firefighter for the Liberty Fire Department.⁶

Claimant did offer the opinions of Drs. Lee, Gill and Schulman in support of her claim. None of their opinions, however, combined with the other evidence was sufficient to show a direct causal relationship between Mr. Riley's duties as a Deputy Fire Chief and any alleged accident and/or occupational disease which allegedly caused his death.

⁶ The statute requires a direct causal relationship between the firefighters' duties and the hypertension. See § 287.067 (5) RSMo. 1994. Mr. Riley was a Deputy Fire Chief during his tenure with the Liberty Fire Department. He did not fight any fires during that tenure. There was no credible evidence that he experienced any psychological stress from rescuing victims from fires or traffic or other accidents during his 14 month tenure.

Dr. Lee is 79 years old and he has been retired for numerous years from the active practice of cardiology. He admitted that he had not done any scholarly research and writing in the field of cardiology since the late 1960s or early 1970s. On cross-examination, he admitted that a federal court in Arizona had excluded his opinions in a case on the basis that they were not supported by medical literature or valid medical principles.

Dr. Lee's opinions in Claimant's case were clearly entitled to little weight. The evidence did not support his opinions. He offered no objective evidence to support his opinion that Mr. Riley's work had somehow caused his hypertension and arteriosclerosis and high cholesterol. He offered no medical literature to support his opinion. His opinions were not entitled to as much weight as those rendered by Dr. Thompson, who concluded that Mr. Riley's work had not caused the severe and advanced hypertension and severe arteriosclerosis which resulted in Mr. Riley's death. Dr. Thompson, in contrast to Dr. Lee, is still actively practicing in the field of cardiology and he is still actively engaged in scholarly research and writing in the field.

Dr. Gill, who testified on Claimant's behalf, admitted that when he did the autopsy and wrote his findings that he did not conclude that Mr. Riley's death was work related. He admitted that he did not render any such opinion until four years after the autopsy and until after he was hired by Claimant to testify in the case.

Dr. Gill admitted that he was not a cardiologist. He admitted that he did not subscribe to any medical journals pertaining to cardiology. He admitted that he found nothing in his independent medical research to support the conclusion that Mr. Riley's death from arteriosclerotic and hypertensive heart disease was work related. He admitted that without Mr. Riley's underlying heart disease, no stressors in Mr. Riley's life could have "precipitated this kind of event." He stated that "I would feel uncomfortable with just purely these stress factors, you know, standing alone as the basis for a - - a cause of death."

Dr. Gill further admitted that he corresponded with Claimant's attorney by e-mail. He admitted that he wrote three drafts of his opinion before signing off on the final opinion. He admitted that Claimant's attorney contacted him by telephone after she received the draft opinion and asked him to change the wording in the opinion. He admitted that he changed the wording in his opinion at the request of Claimant's attorney. By changing the wording in his opinion, he was changing his opinion as to the liability of the City of Liberty for Mr. Riley's death.

Dr. Gill admitted that in his initial opinion, after he had been retained by Claimant, he had concluded that Mr. Riley's work had "precipitated" or significantly contributed to Mr. Riley's death. The statute in effect in October 2004 provided that an injury was not compensable merely because work was a triggering or precipitating factor. § 287.020 (2) RSMo. 1994. Dr. Gill admitted that Claimant's attorney wanted the phrase "precipitated and substantially contributed" removed from the opinion and replaced by "stress he {Mr. Riley} experienced in his work situation" had "substantially caused" Mr. Riley's death. Dr. Gill admitted that he

complied with the request made by Claimant's attorney and that he used her wording in his final report.

Dr. Gill's opinion was not credible. A physician who changes his opinion at the request of an attorney who hires and pays him to testify in a case is not a credible witness.⁷ Dr. Gill further admitted that his medical license had been suspended in the past. He admitted that he was asked to resign from his job as a pathologist in the State of Indiana because the findings he had made in several autopsies were disputed.

Dr. Gill admitted that, although he had performed thousands of autopsies, he had never found that a decedent's heart disease and/or heart attack was caused by work as a firefighter until he was asked to do so in Mr. Riley's case, four years after he had done the autopsy and failed to make such a conclusion in the autopsy report. Dr. Gill's opinion and the other evidence did not meet Claimant's burden of proving that Mr. Riley's work with the Liberty Fire Department was a substantial factor in causing his death.

Claimant also offered the opinion of Dr. Schulman, a board certified internist and cardiologist. Dr. Schulman concluded that the immediate cause of Mr. Riley's death was the physical exertion Mr. Riley experienced from lifting and packaging a patient at work on the day before his death and from the emotional stress caused by Mr. Riley's argument with a dispatcher at work on the day before his death. Claimant argued that the dispatcher was Ms. Fuller.

As noted earlier, Claimant failed to prove that her deceased husband had an argument with Ms. Fuller at work on the day prior to his death. Thus, Dr. Schulman's opinion was based on unproven and unsubstantiated facts. Also, there was no credible evidence showing that Mr. Riley's death, 14 hours after he and several other workers had lifted and packaged a patient, was caused by that exertion. Dr. Schulman did not know how much the patient weighed. He did not know how many firefighters and ambulance personnel assisted with the lifting of the patient. He did not know how many steps or how steep the steps were that the patient was carried up to get to the ambulance. As Dr. Thompson testified, death following physical exertion generally occurs within an hour of the exertion. Dr. Thompson was credible in his opinion.

In addition, Dr. Schulman's credentials were not as impressive as those of Dr. Thompson. Dr. Schulman admitted that he had never published any articles in the field of cardiology. He admitted that he had never done any peer-reviewed research in the field of cardiology. Dr. Thompson has authored or co-authored 73 abstracts and letters to the editors of various medical journals. He has authored 38 peer-reviewed articles in medical journals and 17 other peer reviewed articles. He has written chapters in 10 books on cardiology.

⁷ Dr. Lee also testified that he sent his draft reports to Claimant's attorney before he signed off on his final report.

Dr. Schulman's opinion that Mr. Riley's blood pressure was elevated only while Mr. Riley was at work and that the elevated blood pressure only while he was at work had caused the severe damage to his heart and the left anterior coronary artery disease was based purely on speculation. He did not explain why, if that were true, Mr. Riley had blood pressure readings of 180/100 and 170/90 at doctors' examinations. Mr. Riley was not at work when those blood pressure readings were taken. There was no evidence to support Dr. Schulman's theory. There were not even any blood pressure readings specifically showing that the measurements were taken while Mr. Riley was at work. Such an outlandish unsupported theory offered by Dr. Schulman clearly showed bias and detracted from the credibility of every other opinion he rendered in the case.

The most credible and supported medical opinions in the case were rendered by Dr. Thompson of Cardiovascular Consultants. Dr. Thompson is board certified in cardiology. He has worked as a professor of medicine at the University of Missouri-Kansas City School of Medicine. His numerous and impressive list of publications were as listed above. There was no evidence that any of his medical opinions had ever been excluded by any court on the basis that they were not supported by medical literature or based on valid medical principles. There was no evidence that his medical license had ever been suspended or that he had been asked to resign from a medical position due to the quality of his work. He did not render outlandish and unsupported medical opinions.

Dr. Thompson concluded that Mr. Riley had, in fact, engaged in heavy work-related exertion on the afternoon prior to his death. He stated, however, that medical studies had not found any increased risk of a myocardial infarction after more than one hour after strenuous exertion. He cited a medical study as support for his opinion. He noted that Mr. Riley did not die until 14 hours after the exertion. Dr. Thompson's opinion that Mr. Riley's death was not caused by some physical exertion 14 hours earlier was credible and supported by the evidence. Mr. Riley was at rest and in bed when he died of the cardiac event.

Dr. Thompson noted that it was medically impossible to conclude that Mr. Riley's alleged emotional stress due to job pressure or personnel problems or budgetary difficulties had precipitated Mr. Riley's "heart attack." He concluded that the cause of Mr. Riley's "heart attack" was the underlying premature atherosclerosis, noting that Mr. Riley had severe left ventricular hypertrophy and hypertensive cardiovascular disease. He concluded that Mr. Riley's heart attack most likely occurred when an atherosclerotic lesion in Mr. Riley's left anterior descending coronary artery developed a plaque rupture and a totally occlusive or nearby totally occlusive coronary thrombosis.

Dr. Thompson's opinion was credible. The evidence supported his opinion. He also indicated that he disagreed with the conclusions reached in the two articles Claimant furnished to her experts on firefighting and cardiovascular disease. Dr. Thompson noted that studies had not generally shown an increased rate of cardiovascular disease in firefighters or emergency responders as compared to men in other occupations. Dr. Lee, who testified for Claimant, also

admitted that there were studies which had concluded that there was no scientific or objective or statistically significant link between firefighting and heart disease.

The two studies relied on by Claimant and her experts were not persuasive. Both studies had the same lead author. Neither showed who paid for the research and the conclusions. It was impossible to determine whether an interested party, such as a union representing firefighters or a similar interest group, had commissioned the research and the studies.

Both studies were lacking in objective evidence as support for the conclusory opinions. While both argued that firefighting duties led to an increased rate of cardiovascular disease and hypertension, neither addressed any such risks for non firefighting employees of a fire department, such as Mr. Riley. Statements in the studies were vague and uncertain. The methodology used to arrive at the conclusions in the studies was not based on sound, scientific research or objective evidence.

Neither study made an attempt to evaluate the significance of personal risk factors for hypertension and cardiovascular disease in the firefighter studied. Neither study analyzed personal risk factors such as age, race, smoking, diet, alcohol consumption, high cholesterol, diabetes, family history, exercise history, or general health history. Neither study addressed how long the firefighters had been employed in the field. It could not be determined from the studies whether the firefighters had worked for 30 days as a firefighter or for 20 years.

Neither study addressed the differences in firefighting duties in major metropolitan areas as opposed to those in smaller communities, such as Liberty, Missouri where there were only two fires in 14 months. Neither addressed the differences in the stress level of firefighters in large metropolitan areas as opposed to those in smaller communities.

There was no way to determine whether any of the firefighters in the studies had hypertension and cardiovascular disease due to their work as opposed to their personal risk factors for hypertension and heart disease. If no controls for personal risk factors for hypertension and heart disease are included in any study, any occupation could be found to include a high percentage of workers with those conditions, and ergo that their work had caused the conditions, when in reality the workers may have been predisposed to the conditions and their work may not have caused or played any role in their developing the conditions.

The studies also made a lot of unproven assumptions and conclusions. In the study entitled, "Blood Pressure in Firefighters, Police Officers and other Emergency Responders" the authors admitted when discussing firefighters, that "evidence for a definitive increase in lifetime risk of cardiovascular disease is lacking." (emphasis added). That statement clearly showed that there was insufficient evidence to support the conclusions reached in the study.

Similarly, there was no credible evidence to support the suggestion in the study that firefighters were obese due to their jobs or that firefighting duties resulted in irregular physical exercise and unhealthy diets. There was no credible or objective evidence showing that shift work or the noise exposure experienced by some firefighters caused hypertension. In fact, assuming that those conclusions were true, they would not be applicable to Mr. Riley who as noted earlier ate salads for lunch, exercised daily at the fire station, worked regular hours as a Deputy Fire Chief and he was not exposed to the loud alarms going off in the middle of the night.

In the second study, "Firefighters and on-duty deaths from coronary heart disease: a case control study," the same lead author as in the previous study admitted that "definitive scientific evidence of increased cardiovascular mortality rates among firefighters remains elusive." (emphasis added). Again, that clearly showed that the conclusions were vague and uncertain. The authors admitted that "it remains unclear whether on-duty CHD (coronary heart disease) deaths are work related and which occupational and personal risk factors increase the risks of on-duty CHD deaths."

The study admitted that firefighting was not likely to cause underlying atherosclerosis. Nothing in either study showed or supported a finding that a direct causal relationship existed between Mr. Riley's duties as a Deputy Fire Chief for 14 months with the Liberty Fire Department and his longstanding severe and advanced hypertensive cardiovascular disease and his longstanding and advanced arteriosclerosis which was caused by his high cholesterol and hypertension.⁸

Finally, Claimant argued that the City of Liberty was estopped from asserting that Mr. Riley's death was not job related based on the findings made in an administrative proceeding involving her entitlement to benefits from the Missouri Local Government Employees' Retirement System (LAGERS). Claimant's argument was without merit.

Different statutes are involved in the two cases. The Missouri Division of Workers' Compensation has exclusive jurisdiction over determining whether a work-related accident or occupational disease occurred. Claimant cited no cases showing that any party was estopped from pursuing their rights under the workers' compensation statutes based on some findings in some administrative tribunal where the issue involved retirement benefits. Also, in LAGERS proceedings, there is a presumption that a death is work related, which is not present in the workers' compensation statutes.⁹

⁸ The statute provides that the firefighter must show a direct causal relationship between his firefighting duties and the hypertension and diseases of the heart or cardiovascular system. § 287.067 (5) RSMo. 1994.

⁹ The LAGERS board did not apply the presumption in Mrs. Riley's case because her husband had not passed a physical examination within five years of the date of the filing of the claim.

The parties were not identical in the two cases. The City of Liberty and the Liberty Fire Department were not involved in the LAGERS case. The City of Liberty and the Liberty Fire Department were not privy with the defense in the LAGERS case. The City of Liberty and the Liberty Fire Department argued that they were not even served with notice of the LAGERS hearing. They were not allowed to participate in the LAGERS case. Money awarded in a LAGERS case comes from an employees' retirement fund and not from a city or municipality.

The issues were not identical in the two cases. The standards of proof were not identical in the two cases. The LAGERS decision stated on a crucial issue that "However, as to this very close issue, the Board gives Petitioner the benefit of the doubt and finds that Mr. Riley's fatal heart attack was an injury and was directly caused by the events at work on October 5, 2004, and in the days and weeks leading up to that date." (emphasis added). The statutes governing workers' compensation do not give the benefit of the doubt to either party. The employee or the employee's dependants have the burden of proof. *Id.*

Later, the LAGERS board stated "However on a very close call based upon the admissible evidence in this case, it is the decision of the Board that Petitioner qualifies for retirement benefits under § 70.661.3 for the reason that Mr. Riley's fatal cardiac arrhythmia resulted "naturally, directly, reasonably, and immediately from {Mr. Riley's} actual performance of duty as an employee {of the LFD}." First, there was no showing that the same standard for the admissibility of evidence applied in both cases. Also, again, the standard the LAGERS board used to find in favor of Claimant was different than the standard applicable in a workers' compensation case.

The Missouri Workers' Compensation Act provides that an injury must be clearly work related. § 287.020 RSMo. 1994. That is a different standard than "reasonably," as the LAGERS board used in its decision. In the Missouri Workers' Compensation Act, work must be a substantial factor in causing the resulting medical condition or disability. Again, that is a different standard than the one used by the LAGERS board.

Claimant cited no authority showing that the Liberty Fire Department was estopped from defending itself in a workers' compensation case based on some decision issued by a board allowing retirement benefits based on different statutes and criteria. Claimant's argument was without merit.

In conclusion, Claimant failed to prove that Mr. Riley's work was a substantial factor in causing his death by way of an accident and/or an occupational disease. She also failed to show a direct causal relationship between his death which resulted from severe and advance hypertensive cardiovascular disease and arteriosclerosis and his 14 month administrative job as a Deputy Fire Chief with the Liberty Fire Department.

Made by: _____
Kenneth J. Cain
Administrative Law Judge
Division of Workers' Compensation