REPORTED

IN THE COURT OF SPECIAL APPEALS

OF MARYLAND

No. 1281

September Term, 1999

CITY OF FREDERICK, ET AL.

v.

DONALD W. SHANKLE

Murphy, C.J., Salmon, *Thieme,

JJ.

Opinion by Salmon, J.

Filed: January 31, 2001

*Thieme, J., participated in the hearing and conference in this case while an active member of this Court; he participated in the adoption of this opinion as a retired, specially assigned member of this Court. Under Maryland Workers Compensation law, state and municipal police officers (and others) who have heart disease that results in partial or total disability are entitled to a presumption that they have a compensable occupational disease that was suffered in the line of duty. <u>See</u> Md. Code Ann., Lab. & Empl. ("LE") § 9-503 (1999 Repl. Vol. & Supp. 2000).¹

¹LE § 9-503 reads, in part:

Same - Presumption - Firefighters, fire fighting instructors, rescue squad members, advanced life support unit members, and police officers.

(a) <u>Heart disease</u>, hypertension, and lung disease – Firefighters, fire fighting instructors, rescue squad members, advanced life support unit member, and police officers. – A paid firefighter, paid fire fighting instructor, or sworn member of the Office of the State Fire Marshal employed by an airport authority, a county, a fire control district, a municipality, or the State or a volunteer firefighter, volunteer fire fighting instructor, volunteer rescue squad member, or volunteer advanced life support unit member who is a covered employee under § 9-234 of this title is presumed to have an occupational disease that was suffered in the line of duty and is compensable under this title if:

(1) the individual has heart disease, hypertension, or lung disease;

(2) the heart disease, hypertension, or lung disease results in partial or total disability or death; and

(3) in the case of a volunteer firefighter, volunteer fire fighting instructor, volunteer rescue squad member, or volunteer advanced life support unit member, the individual has met a suitable standard of physical examination before becoming a firefighter, fire fighting instructor, rescue squad member, or advanced life support unit member.

(b) <u>Heart disease or hypertension</u> – Police officers. – (1) A paid police officer employed by an airport authority, a county, the Maryland-National Capital Park and Planning Commission, a municipality, or the State, a deputy sheriff of Montgomery County, or, subject to paragraph (2) of this subsection, a Prince George's County deputy sheriff or Prince George's County correctional officer is presumed to be suffering from an

(continued...)

The presumption is rebuttable, but neither the statute nor Maryland precedent spells out what type of testimony can be presented by the employer to rebut the presumption. More specifically, Maryland case law leaves it unclear whether an expert's testimony should be excluded if one of the grounds for the expert's opinion is that there is no scientific basis to support the view (impliedly embraced by the General Assembly) that there is sometimes a link between the high level of stress associated with certain occupations (fire fighter, police officer, etc.) and the development of heart disease.

In the case <u>sub judice</u>, the trial judge ruled that the videotaped deposition of the employer's expert, a cardiologist, was inadmissible because one of the grounds for

(ii) the heart disease or hypertension results in partial or total disability or death.

¹(...continued)

occupational disease that was suffered in the line of duty and is compensable under this title if: (i) the police officer, deputy sheriff, or correctional officer is suffering from heart disease or hypertension; and

⁽²⁾⁽i) A Prince George's County deputy sheriff is entitled to the presumption under this subsection only to the extent that the individual suffers from heart disease or hypertension that is more severe than the individual's heart disease or hypertension condition existing prior to the individual's employment as a Prince George's County deputy sheriff.

⁽ii) To be eligible for the presumption under this subsection, a Prince George's County deputy sheriff, as a condition of employment, shall submit to a medical examination to determine any heart disease or hypertension condition existing prior to the individual's employment as a Prince George's County deputy sheriff.

his opinion that the claimant's heart disease was not related to his occupation was the expert's belief that there is no link between stress and heart disease. That ruling left the employer with no evidence to rebut the presumption set forth in section 9-503(b) and left the trial court with no choice but to grant summary judgment in favor of the police officer. On appeal, appellants (the City of Frederick/insurer) raise several questions, which we have rephrased and condensed:

- Did the circuit court err when it struck the expert testimony of Alan G. Wasserman, M.D., on the grounds that one of the reasons for Dr. Wasserman's opinion that Officer Shankle did not suffer from an occupational disease was his belief that there was no link between occupational stress and heart disease?
- 2. Is an expert cardiologist required to accept that occupational stress causes coronary artery disease in order to testify, even when he testified that "it is not accepted in the medical community that stress causes coronary artery disease or [is] a risk factor for it?"
- 3. Is it possible for any employer to ever rebut the presumption in LE §9-503(b)(1), if experts are not allowed to express their opinions that a claimant's coronary artery disease is unrelated to his occupation, in part because they believe occupational stress does not cause coronary artery disease?

I. FACTS AND PROCEDURAL BACKGROUND

A. General Background

Donald Shankle joined the Frederick City ("the City") police force in 1975. Approximately twenty years later, when he was forty-five years of age, he was admitted to Washington Hospital Center where he was diagnosed with coronary artery disease. He returned to his job in late December of 1995 and worked for seven weeks, but then stopped working because his heart disease prevented him from performing his police duties. In May of 1996, Officer Shankle underwent bypass surgery.²

Officer Shankle filed a claim with the Maryland Workers' Compensation Commission ("the Commission") in 1996. He alleged, <u>inter alia</u>, that his coronary artery disease constituted an "occupational disease" that arose out of his employment as a City police officer. The City and its insurer opposed the claim and maintained that Officer Shankle's heart problem was not work-related.

On October 31, 1997, the Commission ruled that the claimant's coronary artery disease was work-related. It awarded Officer Shankle legal fees, medical benefits, and compensation for temporary total disability for a period of approximately eleven months. The City and its insurer filed a

²Officer Shankle suffered a heart attack at some point. The rather limited record in this case does not reveal when — but the heart attack was apparently after his December 1995 admission to the Washington Hospital Center and before his May 1996 by-pass surgery.

timely petition for judicial review in the Circuit Court for Frederick County and prayed for a jury trial.

In preparation for trial, counsel for Officer Shankle took a discovery deposition of the employer/insurer's expert -Dr. Alan Wasserman. Later, a video deposition of Dr. Wasserman was taken for use at trial.

B. Video Deposition Testimony of Alan Wasserman, M.D.

Dr. Alan Wasserman, at all times here pertinent, was: (1) Chief of Medicine at George Washington University in Washington, D. C., (2) board certified in both medicine and cardiology,³ and (3) a professor of cardiology at George Washington University Medical School. Additionally, he has served as Chief of Cardiology at George Washington University. Over the years, Dr. Wasserman has had extensive experience in conducting medical research and has received "multiple" research grants. As a researcher, one of his major interests has been the detection, treatment, and prevention of heart disease. He has published approximately one hundred articles in various medical journals.

Dr. Wasserman reviewed Officer Shankle's medical records with the goal of discovering the cause of his coronary artery disease.⁴ According to Dr. Wasserman, the six major risk

³Cardiology is the study and treatment of diseases of the heart. ⁴Dr. Wasserman explained:

factors⁵ for coronary artery disease are male gender, family history of a parent or sibling with diagnosed coronary artery disease by age sixty or below, diabetes, high cholesterol, hypertension, and smoking.

1. Claimant's Medical Records

A review of claimant's medical records revealed that at age sixty Officer Shankle's father died suddenly. Although no autopsy was performed, Officer Shankle was told that his father died of a heart attack (myocardial infarction).

Prior to Officer Shankle's leaving the police force he had smoked at least a pack of cigarettes a day for "many

⁴(...continued)

. .

⁵Dr. Wasserman testified that a risk factor is "something that would make you prone to develop" any given disease. He said:

> Now over the last few years we have been able to start to identify other potential risk factors that have not yet been clarified. We believe there are probably more risk factors for coronary artery disease than these. Insulin resistance being one, high homocystine levels being one, high levels of fibrinogen, a blood product, being another one, high levels of PAI or PAI-1 resistance being another one, and there are probably more that are being added all the time. None of these we are quite sure of yet, but, you know, certainly as the years go by, may be added to our risk factor list.

> Obesity is another one that many people put on their risk factor list. I have a lot of reservations about using that as a risk factor, for many reasons. .

The cause of coronary artery disease is the laying down of plaque in the coronary arteries that then builds and continues to build . . . [resulting in] an obstruction of that artery . . . [T]he artery can be thought of as a pipe, a pipe in your basement that supplies water, and as it builds up and corrodes and builds up and gets smaller and smaller in diameter, the water flow goes down.

years." He started smoking at age 15, but his consumption greatly increased after he became a police officer.

Before the onset of Officer Shankle's disability, he had a "very high [blood] cholesterol level." His low-density lipoprotein (LDL) or "bad" cholesterol was "very elevated," and his high-density lipoprotein (HDL) or "good" cholesterol was "very low."⁶

2. Dr. Wasserman's Opinion as Expressed on Direct Examination

In Dr. Wasserman's opinion, Officer Shankle developed coronary artery disease because he had four of the six major risk factors, i.e., he was male, "he had a horrendously abnormal cholesterol level, he smokes, and had a family history" of heart disease. The claimant's "occupation was a nonfactor for when he developed [coronary artery disease] or if he developed it." Dr. Wasserman also expressed the view that, given the presence of four of the major risk factors, the claimant would have developed coronary artery disease if he had been a "lawyer, doctor, teacher, or [was engaged in] any other occupation." The witness admitted that sudden stress (such as stress that might be encountered as a policeman) could precipitate a heart attack – but, in his

⁶The record does not reveal Officer Shankle's exact blood cholesterol reading or when it was discovered that his "bad" cholesterol was elevated and that his "good" level was low.

opinion, would not cause the underlying coronary disease process.⁷

Dr. Wasserman was asked whether he agreed with the medical opinion expressed by claimant's expert, i.e., that occupational stress was one of the causes of Officer Shankle's coronary artery disease. He said that he did not and explained why:

> There is no body of literature that is accepted in the cardiac field that says that stress is a risk factor for coronary artery disease. If one wants to search hard enough, one can find evidence in the literature for anything anybody wants.

You can find evidence that snake oil can prevent diabetes. You can find evidence that chelation therapy can prevent coronary artery disease. There are tons of

⁷Dr. Wasserman explained:

A simple thing like aspirin maybe makes it less prone for it to bleed, and there may be other medications. What makes it prone to bleed and break off we are not quite sure, but I have seen enough patients in my experience that had coronary artery disease that had a heart attack after having an argument with their wife, getting into a car accident, so something that might increase the stress level and increase the epinephrine level, the hormones in your body that makes you, you know, your heart race, that may be something that in some people help cause the blood clot to break off and form and cause the heart attack, and that is what I was referring to.

Once you have developed plaque in your arteries, that plaque can break, bleed and cause a blood clot that just blocks off that artery. What causes that plaque to break off and bleed we still don't know, unfortunately. If we did know, we would be able to more efficiently prevent heart attacks. We do know some things can stabilize plaque, such as lowering your cholesterol level, probably makes it less prone for that plaque to break and bleed.

garbage journals that publish garbage that are not peer reviewed, as we discussed before. So there are opinions in the literature. It does not mean that it's correct or gospel.

I can tell you from 20 years of experience and from teaching preventive medicine and preventive cardiology that it is not accepted in the medical community that stress causes coronary artery disease or is a risk factor for it.

3. Cross-Examination of Dr. Wasserman

A significant portion of the cross-examination of Dr. Wasserman by claimant's counsel was devoted to questions concerning the presumptions set forth in LE section 9-503. In this regard, Dr. Wasserman stressed that he had never read the statute and did not believe he was competent to interpret it. Nevertheless, he was shown a copy of section 9-503 as well as excerpts from two Maryland appellate decisions that discussed that statute. Over objection, Dr. Wasserman was questioned as to whether he agreed or disagreed with the scientific premise underlying section 9-503, i.e., that the stress brought about by employment as a police officer (or a firefighter) sometimes caused coronary artery disease. Dr. Wasserman answered:

> I still today believe and I believe the medical literature and the entire medical community supports this, that there is no reason to believe that being a policeman or fireman contributes anything to developing coronary artery disease.^[8]

 $^{^8{\}rm This}$ is a but one of several similar answers given on cross-examination. (continued...)

He was next asked:

If I would ask you to assume that the purpose and the premise behind this statute that we have discussed is that the unusual stress or occupation of a police officer or fire fighter contributes to the development of coronary artery disease, not asking about the statute, but is it my understanding that you disagree with that premise?

Dr. Wasserman answered, "I disagree with the premise. . . ."

C. Claimant's Motion to Exclude Dr. Wasserman's Testimony

On the morning that Officer Shankle's compensation case was to be heard by a jury, claimant's counsel filed a written motion <u>in limine</u> to prohibit the jury from considering any part of Dr. Wasserman's videotaped deposition. Claimant argued:

> Dr. Wasserman expressly rejects the legislature of the State of Maryland's statutory presumption of compensability for firefighters and police officers who develop hypertension [sic]. Dr. Wasserman has, in fact, stated that in his opinion, medicine does not recognize stress as a factor in the development of heart disease. Therefore, according to Dr. Wasserman, Mr. Shankle's job did not, and could not, contribute to his heart disease. In other words, Dr. Wasserman seeks to repeal the legislation which has been in force in Maryland for decades.

> > * * *

Officer Shankle's counsel went on to argue:

⁸(...continued)

Counsel for Officer Shankle repeated basically the same question a number of times - although counsel varied the wording.

[A]n expert's opinion, where legally mistaken or based on an erroneous concept of law, is devoid of competency . . . Clearly, Dr. Wasserman's opinion in this case, which is clearly contrary to the express provisions of the Maryland worker's compensation statute, is based on the erroneous concept of the law and is legally mistaken. Thus, his opinion must be excluded.

(Citations omitted.)

D. Hearing on the Motion to Strike Dr. Wasserman's Testimony

In his oral opposition to the motion to strike, counsel for the employer/insurer stressed that he had objected when claimant's counsel asked Dr. Wasserman whether he agreed with the premise underlying section 9-503. Defense counsel maintained that answers to such questions should be stricken as irrelevant. He did not, however, contend that Dr. Wasserman's explanation as to why he disagreed with plaintiff's expert should be stricken. Instead, defense counsel contended that Dr. Wasserman was competent to give his opinion as to the cause of Officer Shankle's coronary artery disease - even though one of the bases for his opinion was his belief that there was no link between the stress of being a police officer and the development of coronary artery disease.

E. The Trial Judge's Ruling

The trial court, relying on <u>Franch v. Ankney</u>, 341 Md. 350 (1996), and other cases cited by claimant in his motion,

struck Dr. Wasserman's video-taped deposition testimony in its entirety. The court further explained:

I do note, and I know [counsel for the employer/insurer] didn't indicate otherwise, that the authority from the other states that specifically decided this issue, do not allow an expert to testify, basically that they disagree with one of the presumptions of the statute, so the authority is in accord with <u>Franch</u>, that says, no, that is not admissible. I think based on [<u>Montgomery County v. Pirrone</u>, 109 Md. 201 (1996)], based on <u>Franch</u>, I do find that the claimant's motion is proper, and I am going to grant the motion in limine.

II. ANALYSIS

The Nature of the Section 9-503 Presumption

Section 9-503 has its origin in Chapter 695 of the Acts of 1971, which became Code 1957, article 101, section 64A. In <u>Colgan v. Board of County Commissioners</u>, 21 Md. App. 331 (1974), Judge Menchine for this Court explained some of the legislative history surrounding the passage of Chapter 695:

> In the course of its passage through the legislature, both the title and the body of the Bill (H.B. 433) were amended. As introduced, the title of the bill had provided, <u>inter alia</u>, that its purpose was to "establish certain medical conditions where the death or disability of a fire fighter is <u>presumed to be accidental</u> and as a result of his employment." An amendment to the title of the bill struck out the above quoted language and declared that its purpose was to "provide that there is <u>a</u> <u>presumption of compensable occupational</u> disease in cases of certain fire fighters

sustaining temporary or total disability or death under certain conditions."

The body of the bill at introduction had contained the words: "presumed to have been accidental and to have been suffered in the course of his employment." (Emphasis added.) By amendment in the course of passage the above quoted language was stricken and the following words substituted: "presumed to be compensable under this Article and to have been suffered in the line of duty and as a result of his employment."

<u>Id.</u> at 335 (emphasis in original) (footnote omitted). In 1972, the General Assembly added "paid state, municipal, county, or airport authority police officers" to those entitled to the presumption. <u>See</u> Chapter 382, Laws of Maryland 1972, page 840. Later, some deputy sheriffs received the benefit of the presumption. See supra note 1.

No legislative history currently is available showing what medical evidence, if any, was considered by the General Assembly when it enacted the predecessor to section 9-503. But it is obvious that the legislature believed that there was a link between occupational stress and heart disease. <u>See</u> <u>Montgomery County v. Pirrone</u>, 109 Md. App. 201, 216 (1996).

The statute sets forth rebuttable <u>factual</u> presumptions, <u>Board of County Commissioners v. Colgan</u>, 274 Md. 193, 210 (1975), one of which is that a paid police officer who has heart disease is "presumed to be suffering from an occupational disease that was suffered in the line of duty" if

that disease results in "partial or total disability or death." LE § 9-503(b). The presumption is not one of law. <u>Id.</u> Moreover, the presumption is not based on probabilities;⁹ instead, it is "based largely on a legislatively mandated social policy." <u>Montgomery County Fire Bd. v. Fisher</u>, 298 Md. 245, 259 (1983).

The purpose of LE § 9-503 "is to provide a presumption of compensable occupational disease to certain classes of public employees including police officers who, in the course of their daily activities, are subject to unusual hazards, stresses, and strains." <u>Soper v. Montgomery County</u>, 294 Md. 331, 336 (1982). To rebut the presumption, the

⁹McLain <u>Maryland Evidence</u>, vol. 5, section 301.1, p. 190, says:

Other presumptions are based on probabilities. Somewhat akin to judicial notice, they provide a short cut to proof of what is believed to be generally true. For example, an item which has been properly addressed, stamped, and mailed is presumed to have been received by the addressee. This presumption is supported by the probability of receipt, as well as by the fact that the addressee is in a better position to have knowledge of receipt or nonreceipt than is the sender.

Id. (footnotes omitted). Later, McLain says:

Some presumptions seem to rest primarily on policy grounds. The presumption that the person who possesses property owns it is believed to contribute to the stability of our society. Others, such as the presumption of love of life and against suicide and invited injury, may have mixed bases of probabilities and policy considerations.

Id. at 191 (footnotes omitted).

Some courts have opined that the presumptions such as those set forth in LE, section 9-503 are based on probabilities. See Sperbeck v. Dept. of Indus. Labor & Human Relations, 174 N.W.2d 546, 548 (Wis. 1970).

employer/insurer must prove a negative, i.e., that the nonexistence of the presumed fact is more probable than its existence. <u>Pirrone</u>, 109 Md. App. at 214; <u>see also Sunderland</u> <u>v. North Dakota Workmen's Compensation Bureau</u>, 370 N.W. 2d 549, 552 (N.D. 1985), and authorities therein cited.

In <u>Fisher</u>, <u>supra</u>, the claimant (a firefighter) had the benefit of a presumption, which was in all material respects exactly like the one here at issue (<u>see</u> section 9-503(a) quoted <u>supra</u> note 1). The claimant argued that the statute set forth a "Morgan-type" presumption – a presumption that never drops out of the case, and imposed both the burden of proof and the burden of persuasion upon the party against whom the presumption operates. <u>Fisher</u>, 298 Md. at 257. The <u>Fisher</u> Court agreed, saying:

> We think the legislature intended that the Morgan type presumption be applied in adjudicating cases arising under § 64A(a) [now LE § 9-503(a)]. Undoubtedly, as we first recognized in Bd. of Co. Comm'rs v. Colgan, 274 Md. 193, 334 A.2d 89 (1975), and again in Lovellette, supra, § 64A(a) is reflective of a social policy affording preferential treatment to fire fighters disabled by heart disease. Although the presumption of compensability is a rebuttable one of fact, the legislature manifestly intended that the statute impose a formidable burden on the party against whom it operates. Accordingly, both the burden of production and the burden of persuasion remain fixed on the employer; neither ever shifts to the claimant and the presumption constitutes affirmative evidence on the fire fighter's behalf throughout the case, notwithstanding the

production of contrary evidence by the other side.

The Thayer-Wigmore theory of presumptions is simply inappropriate in occupational disease cases brought under § 64A(a) because the presumption of compensability is too easily rebutted. Ιt is extremely unlikely in any case that the presumption's adversary would fail to produce some evidence that heart disease was not due to the fire fighter's employment; thus, if the Thayer-Wigmore approach to presumptions were applied, practically every case would be decided without the benefit of the statutory presumption, thereby emasculating the presumption and subverting the clear legislative policy which undergirds § 64A(a).

Id. at 258-59 (emphasis added) (footnote omitted).

As made clear in <u>Fisher</u>, the "Morgan-type" presumption shifts both the burden of production and the burden of persuasion to the employer. Unlike the presumptions covered by Maryland Rule 5-301(a),¹⁰ the jury need not be notified of a Morgan-type presumption – but the jury must be notified of the

¹⁰Maryland Rule 5-301(a) reads:

Effect. Unless otherwise provided by statute or by these rules, in all civil actions a presumption imposes on the party against whom it is directed the burden of producing evidence to rebut the presumption. If that party introduces evidence tending to disprove the presumed fact, the presumption will retain the effect of creating a question to be decided by the trier of fact unless the court concludes that such evidence is legally insufficient or is so conclusive that it rebuts the presumption as a matter of law.

allocation of the burden of persuasion.¹¹ See Carrion v.

<u>Linzey</u>, 342 Md. 266, 279, 287 (1996).

III. ISSUE 1

Did the circuit court err when it struck the expert testimony of Alan G. Wasserman, M.D., on the grounds that one of the reasons for Dr. Wasserman's opinion that Officer Shankle did not suffer from an occupational disease was the belief that

¹¹Recently, in McQuay v. Schertle, 126 Md. App. 556, 595 (1999), we stated:

In Carrion v. Linzey, 342 Md. 266, 675 A.2d 527 (1996), the Court of Appeals explained that by adopting the hybrid form of presumption articulated in Grier in fashioning Rule 5-301(a), the Rules Committee rejected both the "Thayer-Wigmore" approach to presumptions (found in Fed. R.Evid. 301) and the "Morgan-type" approach to presumptions (found in Unif. R. Evid. 301 (1986)). Id. at 278, 675 A.2d 527. The Court observed that under neither of these rejected approaches will the jury in a civil case be instructed about the existence or effect of a given presumption. Under the "Thayer-Wigmore" approach, the jury is not told of the presumption because once the opponent of the presumption has met his burden of producing evidence to rebut the presumed fact, making the issue a jury question, the presumption disappears from the case altogether. Under the "Morgan" approach, because the presumption operates to shift the burden of persuasion on the issue to which it applies, the court effectuates it by tailoring its burden of proof instruction to incorporate the reallocated burden of persuasion, thereby making a separate jury instruction about the presumption unnecessary.

Examples of other Morgan-type presumptions found in Maryland law are: (1) rebuttable presumption that a person is the legitimate child of the man to whom its mother was married at the time of conception (Md. Code Ann. Fam. Law § 5-1027(c)(1) (1999 Repl. Vol.)); (2) "[w]here it is shown that a will or codicil was in the maker's possession and custody but cannot be found at the time of death despite a diligent search, a rebuttable presumption arises that the maker of the instrument destroyed it" (Plummer v. Waskey, 34 Md. App. 470, 481 (1977)); (3) presumption in civil drug forfeiture cases that money found in close proximity to contraband was used or intended to be used in a drug operation (Ewachiw v. Dir. of Fin., 70 Md. App. 58, 65 (1987)); and (4) alterations on the face of a deed are presumed to have been made either prior to or contemporaneously with its execution (Ruden v. Citizens Bank & Trust Co., 99 Md. App. 605, 634 (1994)). See also Murphy, Maryland Evidence Handbook (3d ed.) § 1001(D)(2), p. 424-25 (1999).

there was no link between occupational stress and heart disease?

A. The Franch Case

In granting appellee's motion <u>in limine</u> to strike Dr. Wasserman's testimony, the trial court placed great reliance on <u>Franch v. Ankney</u>, <u>supra</u>. Appellee likewise relies on <u>Franch</u>, citing it for the proposition that "[a]n expert's opinion predicated upon a faulty interpretation of Maryland law must be stricken."

Franch concerned a legal malpractice case that had its origin in a claim filed with the Workers' Compensation Commission. Franch, 341 Md. at 354. The claimant, Ankney, suffered a back injury on the premises of a third party while in the course of her employment. Id. Ankney, without the permission of either her employer or her employer's insurer, Aetna Casualty & Surety Company (Aetna), settled her claim against the owner of the premises where she was injured. Id. Subsequently, Ankney brought a workers' at 354-55. compensation claim against her employer/insurer to recover certain medical expenses suffered as a result of her workrelated injury. Id. at 355. Aetna opposed the claim and contended that it was no longer liable for the medical expenses because Ankney had settled her claim against the third-party tortfeasor without its authorization. Id. The Commission agreed with Aetna and dismissed the claim. Id.

Ankney then hired William Franch, an attorney, to advise her as to the likelihood of a successful appeal. Id. Franch told Ankney that her appeal probably would not succeed, "apparently based on the view that the unauthorized settlement probably foreclosed Ankney's right to future benefits." Id. Ankney took Franch's advice and did not appeal the Commission's decision. Later, however, Ankney sued Franch and his law firm for legal malpractice. At the malpractice trial, two lawyers testified on behalf of Ankney that the unauthorized settlement by her did not absolve Aetna from liability but would only entitle Aetna to a credit for the amount of the settlement. Id. at 362-63. The foundation of the experts' opinion was their belief that any prejudice Aetna may have suffered because of the settlement was irrelevant to Aetna's liability to pay benefits. Id. at 364. At the conclusion of Ankney's presentation of her malpractice case, the trial judge struck the testimony of both of Ankney's experts on the ground that their testimony "was predicated on a faulty interpretation of Maryland law." Id. at 363.

In <u>Franch</u>, the Court of Appeals held that the amount of prejudice suffered by Aetna was relevant. <u>Id.</u> at 364. It affirmed the trial court's decision to strike the testimony of both experts, <u>id.</u> at 364, and said:

[I]f an expert's opinion testimony is based upon a premise which is shown to be unsound or faulty, the judge should strike the

testimony. See Evans v. State, 322 Md. 24, 34-35, 585 A.2d 204, 209 (1991) ("The expert's opinion is of no greater value than the soundness of the reasons given for it will warrant. If no adequate basis for the opinion is shown, the opinion should not be admitted or, if already admitted, should be stricken.") (quoting MARYLAND EVIDENCE § 705.1, at 256-57). See also State, Use of Stickley v. Critzer, 230 Md. 286, 290, 186 A.2d 586, 588 (1962) ("[N]o matter how highly qualified the expert may be in his field, his opinion has no probative force unless a sufficient basis to support a rational conclusion is shown.") (footnote omitted).

There is a difference between the type of opinion prohibited by the Court in <u>Franch</u> and the testimony struck in the subject case. The plaintiffs' experts in <u>Franch</u> were giving legal opinions as to the status of Maryland law. Legal opinions are admissible in a legal malpractice case if there is an adequate basis for the opinion because the plaintiff must "[establish] the standard of care for a reasonable, prudent lawyer in a particular situation." <u>Id.</u> at 361. But here, Dr. Wasserman did not venture an opinion as to what Maryland law provided. Instead, he testified, in effect, that one of the reasons that he did not believe that there was a link between Officer Shankle's occupation and his heart disease was because he did not subscribe to the premise that undergirds the presumption found in LE section 9-503.

B. The Premise Underlying Section 9-503

There is a cleavage in medical opinion as to whether occupational stress, or stress of any kind, causes heart disease. Many prominent cardiologists share Dr. Wasserman's view that there is no link between stress and heart disease. That view finds expression in research articles published in prestigious medical journals. For instance, according to a recent article in the NEW ENGLAND JOURNAL OF MEDICINE,¹² data compiled by researchers suggested, inter alia,

that depression, anxiety, hostility, and <u>stress</u> are not related to coronary-artery calcification

Patrick G. O'Malley, M.D., M.P.H., et al., <u>Lack of Correlation</u> <u>between Psychological Factors and Subclinical Coronary Artery</u> <u>Disease</u>, 343 NEW ENG. J. MED. 1298 (Nov. 2, 2000) (emphasis added).¹³ On the other hand, as pointed out by the claimant's expert, there is medical research that supports the contrary thesis, which holds that job stress is closely linked to the development of heart disease.¹⁴

C. Out-of-State Legal Authority

¹³Researchers had studied:

630 . . . active-duty U.S. Army personnel, 39 to 45 years of age, without known coronary artery disease. Each participant was assessed for depression, anxiety, somatization, hostility, and stress. Subclinical coronary artery disease was identified by electron-beam computed tomography.

¹⁴See, e.g., Workplace demands, economic rewards and progressions of carotid arteriosclerosis. Circulation, 1977 96:302-307.

¹²The authors of the article are Patrick G. O'Malley, M.D., M.P.H., David L. Jones, M.D., M.P.H., Irwin M. Feuerstein, M.D., and Allen J. Taylor, M.D.

One of the cases relied upon by Officer Shankle and by the trial court when it granted the motion <u>in limine</u> was <u>Stephens v. Workmen's Compensation Appeals Board, Department</u> <u>of Corrections</u>, 20 Cal. App. 3d 461 (Cal. Ct. App. 1971).¹⁵ The <u>Stephens</u> case involved a Worker's Compensation claim by a guard at Folsom State Prison. After a long period of stressful service, the guard developed heart disease. He filed for compensation under section 3712.2 of the California Labor Code, which provided, in pertinent part:

> In the case of officers and employees in the Department of Corrections having custodial duties, . . . the term "injury" includes heart trouble which develops or manifests itself during a period while such officer or employee is in the service of such department or hospital.

> > * * *

"Such heart trouble so developing or manifesting itself in such cases shall be presumed to arise out of and in the course of the employment. <u>This presumption is</u> <u>disputable and may be controverted by other</u> <u>evidence</u>, but unless so controverted, the

¹⁵Appellee also cites <u>Pinion v. Board of Retirement</u>, 89 Cal. App. 3d 192 (Dist Cal. 1979), as a case following the precedent established in <u>Stephens</u>, but on April 9, 1979, the California intermediate appellate court ordered that the <u>Pinion</u> case not be published.

appeals board is bound to find in accordance with it."

<u>Id.</u> at 464-65 (emphasis added). In <u>Stephens</u>, the employer took the position that the claimant's heart disease was not related to his occupation and called a cardiologist, Dr. Paul DeSilva, as an expert witness. <u>Id.</u> at 466. According to the Stephens Court, Dr. DeSilva testified

> that in his opinion stress and stressful occupations do not cause or relate to acceleration of any arteriosclerosis. He argued that the majority of medical opinion was to that effect. He even characterized the theory (and thus the opinion of [Stephens's expert]) as being a "ridiculous assumption."

<u>Id.</u> at 466-67. Based on this testimony, the Workmen's Compensation Appeals Board (WCAB) denied Stephens's claim. Id. at 462. The California Court of Appeals reversed, saying:

> Statistically we cannot assert at the appellate level on the basis of this record that the majority of doctors do accept the proposition that stress and tension relate to acceleration of arteriosclerosis of the coronary artery. But what we can and must assert is that the Legislature has declared that in workmen's compensation applications stress and tension are to be taken into consideration. We have pointed out above that sections 3212 and 3212.2 have allied the state in workmen's compensation cases with those medical practitioners who disagree with doctors holding Dr. DeSilva's beliefs. It is impermissible for a compensation carrier to "repeal" this legislation, wiping out the presumption created by section 3212.2 by seeking out a doctor whose beliefs preclude its possible application. It is impermissible for the board or its referee to accept the opinion

of a physician so disposed as the basis for disallowing a claim.

Id. at 467 (emphasis added).

The holding in <u>Stephens</u> was later noted in <u>Bechtel v.</u> <u>Board of Retirement of Contra Costa County Employee Retirement</u> <u>Association</u>, 102 Cal. App. 3d 9, 16 (Cal. Ct. App. 1980). But in <u>Bechtel</u>, the claimant was a building inspector and the presumption mentioned in the <u>Stephens</u> case was inapplicable. <u>Id. Stephens</u> is the only case that discusses the <u>admissibility vel non</u> of expert testimony similar to Dr. Wasserman's and <u>holds</u> that such testimony is inadmissible.

On the other hand, cases from other jurisdictions appear to be unanimous in holding that a presumption - similar to the one here at issue - cannot be overcome by expert testimony that does no more than challenge the premise undergirding the presumption; instead, to overcome the presumption the employer/insurer must produce evidence of some non-job related cause for the disease. <u>Cunningham v. City of Manchester Fire</u> <u>Dep't</u>, 525 A.2d 714, 718 (N.H. 1987); <u>Worden v. County of</u> <u>Houston</u>, 356 N.W.2d 693, 695-96 (Minn. 1984); <u>Linnell v. City</u> <u>of St. Louis Park</u>, 305 N.W.2d 599, 601 (Minn. 1981); <u>Cook v.</u> <u>City of Waynesboro</u>, 300 S.E.2d 746, 748 (Va. 1983); <u>City of</u> <u>Superior v. Dep't of Indus. Labor & Human Relations</u>, 267 N.W.2d 637, 641 (Wis. 1978); <u>Sperbeck v. Dept. of Industry</u>, Labor & Human Relations, 174 N.W.2d 546, 548 (Wis. 1970).

The case <u>sub judice</u> can be distinguished from the cases cited in the preceding paragraph because here the expert both attacked the premise of the presumption <u>and</u> testified to a non-job related cause for the heart disease. Interestingly, however, one court that has closely scrutinized the sufficiency of evidence to rebut the presumption also strongly implied in <u>dicta</u> that evidence that attacks the premise underlying the presumption was inadmissible because it would "vitiate the presumptive effect" of the statute. <u>Cunningham</u>, supra, 525 A.2d at 719.

In <u>Cunningham</u>, the Supreme Court of New Hampshire construed a <u>prima facie</u> presumption that any heart or lung disease of a volunteer or regular member of a fire department was occupationally related, if the firefighter could prove by "reasonable medical evidence" that he was free of such disease at the beginning of his employment. <u>See</u> RSA 281:2, V-a.¹⁶ In the <u>Cunningham</u> case, the administratrix of the estate of a deceased firefighter (Young) who suffered a fatal heart attack, filed a compensation claim against the employer, 525 A.2d at 716. At trial, the employer called a physician as an expert, one Dr. Elliott Sagall. Dr. Sagall's testimony was summarized by the <u>Cunningham</u> Court as follows:

¹⁶RSA 281:2, V-a, reads, in part, as follows:

[[]T] here shall exist a prima facie presumption that heart or lung disease in a firefighter . . . is occupationally related.

Dr. Sagall examined, inter alia, the medical records from Young's November 1979 hospitalization. . . [He] testified on the subject of Young's coronary arteriosclerosis. He stated that, in his opinion, the decedent's arteriosclerosis was not related to his employment as a firefighter. In arriving at his conclusion, Dr. Sagall did not rely on the decedent's medical records; instead he referred to the uncertainty in the medical community on the causation of heart disease, and to studies indicating the absence of a correlation between firefighting and heart disease. Thus, in Dr. Sagall's opinion, there was no medical evidence that the decedent's occupation played a role in the development of his arteriosclerosis. . . .

Id. at 716. Based on Dr. Sagall's testimony, the trial court rejected the administratrix's claim.

On appeal, the New Hampshire Supreme Court, 525 A.2d at 719, relying in part on our Court of Appeals's decision in <u>Fisher</u>, <u>supra</u>, categorized the presumption as "Morgan type" and went on to say:

> Application of the Thayer theory of presumptions simply would not be consistent with the policy objective of RSA 281:2, V-Even a slender amount of rebuttal a. evidence can too handily defeat a Thayer presumption; and RSA 281:2, V-a would be bereft of the strength the legislature wished to give it. For the same reason, the rebuttal evidence adduced must be of a type that addresses factors unrelated to the plaintiff's occupation. Although medical literature acknowledges that the exact cause of heart diseases is unknown, various "risk factors" are thought to influence their development. These risk factors include: smoking, a family history of heart disease, lipid abnormalities, metabolic disorders (such as diabetes or

hyperuricemia), diet, obesity, hypertension, and emotional stress and strain. I. Weinreb, A. Lee, D. Goldberg, W. Breall, Heart Disease, in 2 Attorneys' Textbook of Medicine para. 30.41(1), at 30-23 (R. Gray and L. Gordy 3d ed. 1985). Only evidence of risk factors such as those enumerated above, provided those factors are non-work-related, is acceptable to rebut the presumption of RSA 281:2, V-a. Basic logic dictates that a presumption stating that a disease is job-related can only be rebutted by evidence that the disease was not job-related. Any other interpretation would subvert the manifest intent of the provision. We thus hold that the presumption in RSA 281:2, V-a must be interpreted in accordance with the Morgan theory of presumptions. The defendant bears the burden of persuasion, and can rebut the presumption only by producing evidence that one or more nonoccupationally-related factors were more probably the cause of the plaintiff's heart disease than his firefighter occupation. Needless to say, the sufficiency of any such rebuttal evidence is for the trier of fact to determine.

Id. at 718 (emphasis added).

In analyzing the sufficiency of the evidence, the <u>Cunningham</u> Court returned to an analysis of Dr. Sagall's

testimony. Among other things, Dr. Sagall had testified:

There is no medical indication in any way that his employment contributed to initiate or hastened the development of this disease. The disease is one of unknown cause or causes, and various studies which have appeared in the medical literature concerning the incidence and severity of this type of disease in firefighters as compared to other members of the general population have not indicated any increased number of, or percentage of incidents of this type of heart disease in firefighters.

Id. at 720.

The Cunningham Court criticized that testimony by saying:

The infirmity of Dr. Sagall's citation of medical studies is that such testimony only attacks the rationale of RSA 281:2, V-a. As we have already stated, the legislature was aware that the exact causation of cardiac diseases is unknown, and that the medical community disagrees as to the role of one's occupation in the development of these diseases. The legislature decided, nevertheless, that a sufficiently positive relationship exists between heart disease and the environmental and stressful aspects of firefighting to warrant the creation of RSA 281:2, V-a's presumption. Dr. Sagall's testimony went no further than to question the wisdom of the legislature, without producing evidence of non-work-related causes of Young's arteriosclerosis. This type of testimony is insufficient to rebut the presumption. See Sperbeck, 46 Wis. 2d at 289, 174 N.W.2d at 549; Linnell, 305 N.W.2d at 601; Wright, 289 Or. at 332, 613 P.2d at 760.

Dr. Sagall then went on to testify as follows:

"A So that there would be, in my opinion, no medical evidence that his occupation as a firefighter played any role, whatsoever, in his basic underlying disease.

Q So what you're saying, Doctor, and I want to make sure I understand you correctly, is that Mr. Young has an underlying disease process going on, which, in your opinion, I take it, in reasonable medical probability, was neither caused or accelerated or hastened by his employment as a fireman, is that correct?

A That's correct."

At this point, Dr. Sagall's testimony entered an area on the threshold of valid rebuttal evidence. He refrained from referring to general academic studies, and addressed his remark to the heart condition of the plaintiff's decedent. The weakness of Dr. Sagall's testimony was that he still did not cite evidence of non-work-related risk factors that may have precipitated Young's heart disease. All one can infer from this latter segment of Dr. Sagall's testimony is that his doubts concerning the occupational causes of heart disease, and not a particularized analysis of Young's pathology, formed the foundation for his conclusion.

Id. at 720-21 (emphasis added).

Unlike the situation in <u>Cunningham</u>, some of the answers Dr. Wasserman provided were admissible – at least if viewed in isolation. For instance, he did give a particularized, nonwork-related cause for Officer Shankle's heart disease. Significantly, however, the City did not argue before the trial court, or in this Court, that the trial judge should have parsed through the videotaped deposition and excised answers in which the expert made clear that one of the principal reasons he excluded occupational stress as a cause of Officer Shankle's heart disease was because he believed that occupational stress never caused heart disease. And, as already mentioned, on direct examination by the City's attorney, when Dr. Wasserman was asked to give the reason why he disagreed with plaintiff's expert, he made it crystalline that his reason for disagreement was that he did not accept

the premise that there was a link between occupational stress and heart disease.

"'[T]he admissibility of expert testimony is a matter largely within the discretion of the trial court, and its action will seldom constitute a ground for reversal.'" <u>Myers</u> <u>v. Celotex Corp.</u>, 88 Md. App. 442, 460 (1991). "A trial judge's decision to admit or exclude expert testimony will be reversed only if it is founded on an error or law or some serious mistake, or if the judge has abused his discretion." Franch, 341 Md. at 364 (citations omitted).

The Maryland General Assembly intended that paid police officers be given preferential treatment in compensation cases; it also intended that the presumption set forth in section 9-503 should impose a formidable burden upon employees of those given preferential treatment under the statute. <u>Fisher</u>, 298 Md. at 258-59. Given that legislative intent, we agree with the <u>Stephens</u> Court that employers should not be allowed to circumvent the statute by the simple expedient of producing experts who testify, in effect, that the legislative premise underlying the statute was wrong. Under the circumstance of this case, we do not believe that the trial judge abused her discretion in excluding Dr. Wasserman's video-tape deposition testimony.

IV. ISSUE 2

Is an expert cardiologist required to accept that occupational stress causes coronary artery disease in order to testify, even when he testified that "it is not accepted in the medical community that stress causes coronary artery disease or [is] a risk factor for it?"

We answer this question in the negative.

In Pirrone, we said: "While it may true that the stress of being a firefighter/paramedic neither causes nor leads to coronary artery disease or heart disease, the legislature has determined otherwise." The same holds true for cases involving police officers who suffer from coronary artery disease. This means that if Dr. Wasserman had simply attributed the heart disease to the presence of four of the six major risk factors for cardio-vascular disease, that testimony would have been admissible. See Cunningham, 525 A.2d at 518. Where defense counsel went astray was attempting to bolster that opinion by having Dr. Wasserman tell the jury, on direct examination, that stress never causes heart disease. As a matter of science that may be correct. But because it undercuts the premise of section 9-503, it is not admissible evidence and not a permissible basis for an expert's opinion.

V. ISSUE 3

Is it possible for any employer to ever rebut the presumption in LE §9-503(b)(1), if experts are not allowed to express their opinions that a claimant's coronary artery

disease is unrelated to his occupation, in part because they believe occupational stress does not cause coronary artery disease?

We also answer that question in the affirmative.

Appellant contends that the factual presumption set forth in LE section 9-503 would be irrebuttable unless employer/insurers are able to call experts who are permitted to testify that they do not agree with the legislative premise. As already stated, employers can call experts who disagree with the legislative premise. Such experts simply are prohibited from grounding their opinion as to lack of causation upon such a disagreement. What the Court said in Cunningham is again apposite:

> The law from other jurisdictions thus supports our conclusion that acceptance in rebuttal of anything less than evidence of non-job-related factors would only vitiate the presumptive effect of [the statute]. We emphasize that this standard does not impose upon the defendant the burden of proving the specific cause of the plaintiff's heart disease. Rather, it requires that the defendant provide evidence of non-occupationally-related risk factors from which a reasonable trier of fact could conclude that the plaintiff's heart disease was, more probably than not, caused by one or more of those nonoccupational factors.

Cunningham, 525 A.2d at 719 (emphasis added).

CONCLUSION

The trial judge did not err in disallowing the testimony of Dr. Wasserman because one of the principal reasons that he advanced in support of his opinion that Officer Shankle's heart disease was not caused by occupational stress was his belief that job stress never causes the development of heart disease. That portion of the expert's basis was at odds with the thesis accepted by the legislature when it enacted the predecessor to LE, section 9-503 - which imposes "a formidable burden on the party against whom it operates." <u>Fisher</u>, 298 Md. at 258. If the City, or anyone else, questions the wisdom of the General Assembly in enacting section 9-503, the "remedy is to go back to the Legislature." Sperbeck, supra, 174 N.W.2d at 549.

> JUDGMENT AFFIRMED; COSTS TO BE PAID BY APPELLANTS.