IN THE COMMONWEALTH COURT OF PENNSYLVANIA

Peter Demchenko, Petitioner	:	
v.	:	No. 2164 C.D. 2015
	:	Submitted: April 22, 2016
Workers' Compensation Appeal Board (City of Philadelphia), Respondent	:	

BEFORE: HONORABLE MARY HANNAH LEAVITT, President Judge
HONORABLE PATRICIA A. McCULLOUGH, Judge
HONORABLE DAN PELLEGRINI, Senior Judge

OPINION
BY PRESIDENT JUDGE LEAVITT FILED: October 26, 2016

Peter Demchenko (Claimant) petitions for review of an adjudication of the Workers' Compensation Appeal Board (Board) denying him compensation benefits for his prostate cancer. Using different reasons, the Board affirmed the decision of the Workers' Compensation Judge (WCJ). It held that Claimant, a retired firefighter, did not prove that prostate cancer is caused by exposure to IARC Group I carcinogens and, thus, an occupational disease under Section 108(r) of the Workers' Compensation Act.[1] The Board also held that Claimant could not use the statutory presumption in Section 301(f) of the Act[2] that assists a firefighter in proving that his occupational disease is compensable because he filed his claim

[1] Act of June 2, 1915, P.L. 736, *as amended*, added by the Act of December 6, 1972, P.L. 930, 77 P.S. §27.1(r). Section 301(c)(2) of the Act, 77 P.S. §411(2), provides that the term "injury" as used in the Act shall include an "occupational disease" as defined in Section 108 of the Act. The Act of July 27, 2011, P.L. 251, commonly known as Act 46, amended Section 108 to include: "(r) Cancer suffered by a firefighter which is caused by exposure to a known carcinogen which is recognized as a Group 1 carcinogen by the International Agency for Research on Cancer." 77 P.S. §27.1(r).

[2] 77 P.S. §414.

petition more than 300 weeks after his last day of work as a firefighter. Finally, the Board agreed with the WCJ that Claimant did not prove that his prostate cancer was caused by his workplace exposure to Group 2A carcinogens and, thus, an occupational disease under the "catch all" provision in Section 108(n) of the Act. We affirm.

Background

The City of Philadelphia (Employer) hired Claimant as a firefighter in 1974. After additional training, he began working as both a firefighter and a paramedic. By January of 1980, he was working exclusively as a paramedic. In May of 2006 Claimant retired. One month later, Claimant was diagnosed with prostate cancer, which was successfully treated with surgery.

In June of 2012, Claimant filed a claim petition alleging that his prostate cancer was caused by exposure to International Agency for Research on Cancer (IARC) Group 1 carcinogens while working as a firefighter. Claimant sought payment of disability compensation from November 27, 2006, to January 15, 2007, and medical bills. Employer filed an answer denying the allegations.[3] At the hearing before the WCJ, both Claimant and Employer presented evidence.

Claimant testified by deposition. He explained that he had worked at numerous fire stations in the City where he was exposed to diesel fuel emissions because the fire trucks were kept running inside the building. In addition, fire stations were full of secondhand tobacco smoke because firefighters were permitted to smoke inside the buildings. Claimant also testified about the carcinogens in the smoke and burning debris to which he was exposed while

[3] Claimant also filed a penalty petition, but the WCJ denied it. Claimant has not appealed that ruling.

fighting fires. Further, during his service as a firefighter, he did not always wear a self-contained breathing apparatus (SCBA). After fighting a fire, it was not unusual for Claimant to have soot all over his face and in his nostrils. Claimant stated that the last active fire he fought as a firefighter was in 1979 or 1980.

Claimant also testified about his work as a paramedic providing medical services to victims and to firefighters. Providing these services exposed him to smoke and the diesel emissions from the running trucks, as well as the smoke in the burning buildings. Claimant acknowledged that paramedics mainly respond to car fires and medical emergencies, such as a person choking on food at a restaurant. Claimant estimated that he responded to three active fires in his last year of work for Employer as a paramedic.

In June 2006, one month after his retirement, Claimant was diagnosed with prostate cancer. Claimant had not been previously diagnosed with any type of cancer. Further, Claimant does not have a family history of prostate cancer, but his mother suffered pancreatic cancer. Claimant acknowledged that he has been smoking cigarettes since 1968.[4]

Claimant submitted a report from Virginia M. Weaver, M.D., M.P.H., who has studied the occupational diseases of firefighters. Dr. Weaver found that the smoke to which firefighters are exposed contains the following IARC Group 1 carcinogens: arsenic; asbestos; benzene; benzo[a]pyrene; 1, 3-butadiene;

[4] Claimant explained that his daily cigarette smoking has varied over the years. He estimated that, on average, he smoked half a pack a day. On cross-examination, Claimant acknowledged that although the affidavit he provided to his medical expert, Dr. Singer, stated that at most he smoked one pack of cigarettes a day, his medical records might reflect that he smoked one to two packs of cigarettes a day at one point. He was not smoking at the time of his affidavit, but he has since resumed smoking.

formaldehyde; and soot. These carcinogens enter the body through inhalation, skin absorption, and ingestion of contaminated nasopharyngeal secretions. Further, the National Institute for Occupational Safety and Health (NIOSH) has shown that diesel exhaust is carcinogenic. Dr. Weaver opined that firefighters are exposed to IARC Group 1 carcinogens in the course of their work, but she did not specify the types of cancer that can be caused by Group 1 carcinogens.

Claimant also offered the deposition testimony of Barry L. Singer, M.D., a physician, who is board certified in internal medicine, hematology, and medical oncology. Dr. Singer, who has treated cancer patients for more than 40 years, focuses on breast, colon, and lung cancers. Dr. Singer is not an epidemiologist or toxicologist, and he does not specialize in the etiology of cancer.

Dr. Singer stated that, in 2008, he was contacted by Claimant's counsel to evaluate the cancer history of a number of firefighters to determine whether their cancer was work-related and, thus, compensable under the Act. Dr. Singer estimated that since 2008 he has reviewed 40 to 50 cases on referral from Claimant's counsel. Approximately 25 of those referrals involved firefighters with prostate cancer.

With each referral, Claimant's counsel sends Dr. Singer the firefighter's medical history, and an affidavit from the firefighter about his job duties, length of service, and family medical history. Dr. Singer did not conduct a physical examination of any firefighter referred to him. Claimant's counsel also sends Dr. Singer articles from the medical literature relevant to firefighters and cancer. Dr. Singer evaluates these materials and prepares a report. This process was followed in the case of his report on Claimant's prostate cancer.

Dr. Singer testified that he uses a "differential diagnosis" methodology[5] to assess the cause of a firefighter's cancer. Notes of Testimony (N.T.), 12/21/2012, at 46. Practitioners use this methodology to assess the history and symptoms of their patients. Dr. Singer acknowledged the absence of scientific authority for the use of this methodology to determine a causal connection between a given agent and a given cancer.

Dr. Singer's report on Claimant's prostate cancer stated that Claimant was exposed to Group 1 carcinogens commonly found in smoke, *i.e.*, arsenic; asbestos; benzene; benzo(a)pyrene; 1, 3-butadiene; formaldehyde; and soot. It also stated that smoke contains IARC Group 2A carcinogens, including creosote, diesel engine exhaust, polychlorinated biphenyls, polycyclic aromatic hydrocarbons and styrene. Dr. Singer identified four studies he reviewed that relate prostate cancer and firefighting:

> 1. Fire Engineering, "A Cohort Mortality Study of Philadelphia Firefighters".
>
> 2. LeMasters, Grace, et al, "Cancer Risk Among Firefighters: A review and Meta-analysis of 32 Studies".
>
> 3. Samet, Jonathan, M.D., et al, "An Occupational Health Investigation of Cancer Among Fire Fighters in Anne Arundel County, Maryland".

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[5] Dr. Singer described the differential diagnosis methodology as follows:

> A differential diagnosis is what we use to list all of the possibilities in terms of diagnosis that a patient can have in terms of diseases, causes of the disease. And essentially we knock off causes or conditions that we don't believe are by ruling them out and eventually come down to what we consider a final diagnosis and most probably diagnosis.

Notes of Testimony, 12/21/2012, at 46. Dr. Singer's deposition of December 21, 2012, is not contained in the reproduced record.

4. Bates, Michael, Ph.D., "Registry-Based Case-Control Study of Cancer in California Firefighters".

Reproduced Record at 21 (R.R. __). Dr. Singer opined that Claimant's exposure to Group 1 and Group 2A carcinogens while working for Employer was "a substantial contributing factor in the development of his prostate cancer." *Id.* Dr. Singer explained that his use of the words "substantial contributing factor" meant that if that factor did not exist, more likely than not the firefighter would not have developed the disease when he did. N.T., 12/21/2012, at 56. Stated otherwise, the exposure explained the timing of the disease's onset.

On cross-examination, Dr. Singer acknowledged that he had not considered the methodologies used by public health experts to determine what exposures cause cancer, including studies published by the EPA, Veteran's Administration, the National Academy of Science and the IARC. Nor did Dr. Singer consider the American Medical Association's Guides to the Evaluation of Disease and Injury Causation, the Federal Court handbook or the Bradford Hill criteria.[6] Dr. Singer did not do his own analysis of studies reported in the literature or do any lab testing.

Dr. Singer stated that most firefighters will not develop prostate cancer. N.T., 1/28/2013, at 73; R.R. 101. Of those firefighters that do develop prostate cancer, some will develop it for reasons unrelated to firefighting, such as age. Dr. Singer testified that in all but one of the cases he reviewed, a significant factor contributing to the cancer was exposure to carcinogens at work.

[6] Following his December 2012 deposition, Dr. Singer reviewed the American Medical Association's Evaluation of Disease and Injury Causation and testified that his methodology followed the steps on causation analysis.

Dr. Singer acknowledged that the level of exposure to a given agent impacts the causation of cancer. Dr. Singer also acknowledged that the IARC Monograph contained findings that showed that the carcinogenic exposure faced by firefighters is limited. For instance, 90% of all fires are extinguished in less than ten minutes; less than half of all fire runs involve actual fires; and less than half of the actual fires involve observable flames. IARC also found that most fires are fought from the outside of the structure rather than from the inside of the structure, and that in a given year, firefighters spent one to two percent of their time on the job actually fighting fires.

Dr. Singer acknowledged that the greatest risk factor for prostate cancer is age. Other risk factors include race and family history. These factors differed greatly among the 25 cases he reviewed. However, these differences did not impact his opinion that exposure to carcinogens was a significant contributing factor to each firefighter's development of prostate cancer.

Dr. Singer testified that the carcinogens that are related to prostate cancer are: arsenic; cadmium; benzo(a)pyrene, which is related to or found in polycyclic aromatic hydrocarbons (PAHs); and dioxin. He was unable to cite any studies linking cadmium to prostate cancer. He also conceded that he could not opine that prostate cancer is related generally to firefighting because it was beyond his expertise. N.T., 1/14/2013, at 292-93.[7] Further, Dr. Singer agreed that "we don't know precise etiologies for most cancers," which means that, for about 70% of the population with cancer, no one can pinpoint a precise etiology for those cancers. *Id.* at 294.

[7] Dr. Singer's deposition of January 14, 2013, is not contained in the reproduced record.

Dr. Singer acknowledged that studies have related prostate cancer to hormones or endocrine disruption. For example, a higher level of androgens (testosterone) increases the probability of prostate cancer. Other studies have related diet to increased risk of prostate cancer. However, the only accepted risk factors for prostate cancer are race, family history and age.

With regard to Claimant, Dr. Singer acknowledged that he did not know when he issued his report that Claimant worked as a fire paramedic, not a firefighter, at the engine companies listed in Claimant's affidavit. Dr. Singer also acknowledged that he did not know that Claimant stopped working as a firefighter in 1980.

Finally, in a letter dated November 20, 2012, Dr. Singer addressed the opinion of Employer's Expert, Tee L. Guidotti, M.D., M.P.H., D.A.B.T., that the apparently increased incidence of prostate cancer in firefighters was due to Prostate Specific Antigen (PSA) detection bias. Because firefighters have generous health insurance, they are regularly tested for prostate cancer. Dr. Singer disagreed with Dr. Guidotti, explaining that prostate cancer "screening did not become fairly common in the U[nited] S[tates] until around 1990." R.R. 124. Because 30% of the studies of firefighters with prostate cancer were conducted prior to 1990, Dr. Singer did not believe they were affected by screening bias.

After Dr. Singer reviewed Claimant's deposition testimony, he issued another report, again opining that Claimant's prostate cancer was related to his work as a firefighter and paramedic. In this report, Dr. Singer stated that, although Claimant worked strictly as a paramedic from 1980 to his retirement, there were times he had to enter a burning building to rescue people, which exposed him to soot and smoke, and he was exposed to diesel fuel exhaust emissions from the fire

trucks. Dr. Singer opined that Claimant's significant smoking history was not a risk factor for prostate cancer.

In opposition to Claimant's claim petition, Employer submitted the deposition testimony of Dr. Guidotti, who is board certified in internal medicine, pulmonary medicine, occupational medicine, and has a degree in toxicology.[8] Dr. Guidotti is also trained in epidemiology, which he described as the "science of the patterns of diseases in populations." N.T., 1/21/2013, at 11; R.R. 148. Dr. Guidotti has undertaken a number of research projects that have been published in peer-reviewed journals. For the past 20 years, Dr. Guidotti has been investigating the relationship between the toxin exposures associated with firefighting and cancer. Dr. Guidotti has testified as an expert on the etiology of various diseases related to occupations; on methodology; and on prostate cancer.

Dr. Guidotti testified about Dr. Singer's two reports and criticized their lack of methodology. He explained:

> In all of the statements from Dr. Singer that I saw, I could not really discern that any methodology was, in fact, used. They were all essentially identical.
>
> The language was almost rubber-stamped. The conclusions were identical. There was no weighing of evidence or discussion of individual studies. There was no discussion of alternative explanations or potential exposures to rule them out or rule them in in any particular case.
>
> It was like they were Xerox'd and only the names were changed.

[8] Dr. Guidotti explained that toxicology is the science of how chemicals affect the body and how the body responds to those chemicals.

N.T., 1/21/2013, at 21-22; R.R. 151. According to Dr. Guidotti, the reports offered "no evidence that a methodology was, in fact, followed, let alone described." *Id.* at 49; R.R. 158.

Dr. Guidotti testified that Dr. Singer's approach to causation did not match the generally accepted standard of practice in the field, and it did not conform to generally accepted scientific principles. Dr. Guidotti stated:

> Q. Doctor, do you have an opinion within a reasonable degree of medical certainty as to whether Dr. Singer selected and appropriately applied generally accepted scientific methodologies for the purpose of offering an opinion on etiology of cancer at a general causation level?
>
> A. Based on the evidence and the opinions that he wrote and in his deposition and everything else I have seen, my opinion is that it does not conform to the usual standard.

N.T., 1/21/2013, at 73; R.R. 164. Dr. Guidotti observed that because Dr. Singer never heard of the Bradford Hill criteria, this suggested that he was "not familiar with mainstream epidemiology methodology."[9] *Id.* at 33; R.R. 154. Dr. Guidotti also observed that what knowledge of etiology Dr. Singer has was "probably derived from his experience as an oncologist, which is all treatment-oriented." *Id.*

When asked about Dr. Singer's review of the epidemiologic literature, Dr. Guidotti responded:

> Q. Dr. Singer testified that he can draw some inferences from the number of studies for a proposition and the number of studies against a proposition.

[9] Dr. Guidotti testified that essentially everybody in epidemiologic research uses the Bradford Hill criteria. N.T., 1/21/2013, at 32; R.R. 153.

> Specifically, when asked about prostate cancer as an example, he said there were 16 or 17 articles for an association and two against, therefore he could [con]clude that there was an association.
>
> Is that an appropriate methodology for an expert to use in determining the strengths and weaknesses of epidemiological studies?
>
> A. No. And I'm speechless that in this day and age somebody would think it is.

N.T., 1/21/2013, at 26; R.R. 152. Dr. Guidotti explained that when reviewing epidemiological literature, one needs to analyze the quality of the studies, including their statistical work, which Dr. Singer testified he did not do. Simply counting the articles "for" and "against" a connection between a particular agent and cancer is a meaningless observation. *Id*.

Dr. Guidotti testified that prostate cancer is the leading type of cancer among men and opined that prostate cancer is not attributed to occupational exposures. He explained that it is more "a disease of aging than it is of external influences." N.T., 1/21/2013, at 63; R.R. 207. The older the individual, the greater his risk of developing prostate cancer. Family history is also a factor.[10]

Dr. Guidotti addressed the problem of detection or screening bias. He explained this bias as follows:

[10] Dr. Guidotti explained that "99 percent of all prostate cancers are one particular tissue type," and "unlike other organ systems, the variation and aggressiveness [does not] have to do with differences in tissue type." N.T., 1/21/2013, at 11; R.R. 194. In many cases, prostate cancer develops very quickly, "metastasizes early and is highly aggressive and malignant." *Id.* The other form of it is called indolent, meaning it is slow growing and does not metastasize within the lifetime of the individual and rarely causes a health problem. *Id.* at 11-12; R.R. 194.

> Screening bias applies when you have a screening technology or some medical intervention that is used to screen for a disease and it's applied more reliably or with greater adherence to the population you're concerned about compared to the general population.

N.T., 1/21/2013, at 21; R.R. 197. The PSA test creates a screening bias because (1) it picks up disease that might never be detected and (2) it picks up disease when the firefighter is younger. This will inflate the number of cancers among firefighters when compared to the population at large. Dr. Guidotti further explained as follows:

> [t]he screening bias issue means that it's very easy to create an epidemic simply by being more adherent and by being more effective at screening for the disease, because you'll pick up more indolent cases, that the magnitude of the association is weak.
>
> Even if the cases that were be[i]ng reported, nominal cases, were, in fact, mainstream malignant behaving prostate cancer, we're not talking about an elevation anywhere near close to the other cancers that I would assert are associated with firefighting.

Id. at 63-64; R.R. 207.

Employer also offered a report from Janet L. Stanford, Ph.D., a prostate cancer researcher at the Fred Hutchinson Cancer Research Center in Seattle, Washington.[11] Her report explained the median age at diagnosis of prostate cancer is 67 years and that the "well-established risk factors for prostate

[11] Dr. Stanford also works as a Professor in the Department of Epidemiology at the University of Washington's School of Public Health and Community Medicine; is an affiliate member in the Cancer Prevention Research Program at the Fred Hutchinson Cancer Research Center's Division of Public Health Sciences; and is an Adjunct Professor at the University of Washington's Department of Urology.

cancer include age, race/ethnicity, and family history of prostate cancer." R.R. 143. The report further explained:

> [E]pidemiological studies are based on observational data (as opposed to a randomized trial where one could randomly assign individuals to an exposure and follow them up over time to assess the exposure's effect on disease incidence) and the analyses are designed to determine whether or not there is evidence for an association between a specific exposure and disease status.

Id. An association does not mean causation, which is difficult to prove in the absence of a controlled randomized trial. With respect to relating prostate cancer to occupational exposures, Dr. Stanford's report explained that environment, lifestyle and genetics play a role, "*but it is not possible to prove causality*." *Id.* at 144 (emphasis added). Further, "the interaction between genetic and environmental/lifestyle factors has not yet been well studie[d] due to the large sample sizes needed to assess potential synergistic or antagonistic effects of specific gene-environment interactions." *Id.* In short, she opined that causation cannot be proven for prostate cancer because it is a complex disease.

In rebuttal to Dr. Guidotti, Claimant submitted a November 20, 2012, report from Grace K. LeMasters, Ph.D., M.S., and an affidavit of January 25, 2013. The LeMasters report observed that Dr. Guidotti did not consider recent published scientific articles related to firefighters, exposures, and "the possible health effects on reproductive organs in general, and prostate cancer in particular." R.R. 119. It also challenged Dr. Guidotti's conclusion that detection (or screening) bias explained the increased risk estimate for firefighters because 30% of the studies were generally completed before the PSA was in wide use.

Decision on Claim Petition

The WCJ credited the testimony of Claimant on his work history.[12] The WCJ credited the testimony of Dr. Singer and the report of Dr. LeMasters that Claimant had been exposed to Group 1 carcinogens during his career as a firefighter and paramedic. However, the WCJ rejected Dr. Singer's testimony on causation, explaining:

> a) He has never designed a study protocol, has never published on the etiology of cancer or on firefighters specifically and has performed no research on the etiology of prostate cancer.
>
> b) He did not know the methodologies to use in attempting to link a given exposure to a given cancer….
>
> c) He was not able to cite authority for his assertion that the differential diagnosis methodology is the accepted methodology for determining a potential causative relationship between a given agent and a given cancer.
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> d) Regarding the studies on which he relied, he agreed that he is not an epidemiologist and that he was not able to assess reliability based on study design. He also was not familiar with the Bradford Hill criteria used in epidemiological research to determine a cause and effect relationship between a particular agent and the development of a disease….
>
> e) He agreed that the [Centers for Disease Control and Prevention] and other sources have articulated that most commonly [the] risk factors for prostate cancer were race, family history and age.
>
> f) In his April 1, 2013[,] addendum report, Dr. Singer had the understanding that Claimant began working exclusively as a

[12] The WCJ has responsibility for questions of credibility, conflicting medical evidence and evidentiary weight. *Sherrod v. Workmen's Compensation Appeal Board (Thoroughgood, Inc.)*, 666 A.2d 383, 385 (Pa. Cmwlth. 1995).

> paramedic in 1989, which was contrary to Claimant's testimony that he had not fought a fire since 1980….
>
> g) Dr. Singer never treated or examined the Claimant and the medical records that he reviewed only went back to 2004. He agreed that his reports did not mention other potential causes other than firefighting that contributed to the development of cancer, such as potential exposures at Claimant's second job, his ethnic background, diet, geography and possible exposures during military service.
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> h) In his April 1, 2013[,] addendum report, he agreed that Claimant had a significant smoking history, but opined that smoking was not a risk factor for prostate cancer. This opinion conflicted with his testimony, in which he agreed that all of the Group 1 carcinogens outlined in his report as exposures for firefighters were also in cigarette smoke.

WCJ Decision at 19-20; Finding of Fact No. 19. The WCJ credited Dr. Guidotti's testimony that Dr. Singer did not use accepted epidemiologic standards for a general causation opinion and that "any elevated risks for prostate cancer among firefighters might also be explained by other factors, such as detection bias, ethnicity and geography." *Id.* at 20; Finding of Fact No. 20. Based upon these findings, the WCJ denied the claim petition.

The WCJ reached several legal conclusions. First, because Claimant retired prior to his cancer diagnosis, his cancer did not cause a post-retirement compensable disability and, thus, he was not entitled to use the statutory presumptions available to claimants seeking compensation for an occupational disease. Second, Claimant did not prove that prostate cancer is an occupational disease under Section 108(r) of the Act because his evidence did not show that exposure to Group 1 carcinogens has been linked to prostate cancer. Third, because Claimant did not demonstrate that prostate cancer is an occupational disease for firefighters, he had to prove that his prostate cancer was caused by his

workplace exposures, such as Class 2A carcinogens, as allowed under Section 108(n) of the Act;[13] however, his medical evidence was not credited. In any case, assuming Claimant was entitled to a presumption that his prostate cancer was caused by firefighting, the WCJ concluded that Employer's evidence rebutted it.

Claimant appealed to the Board, and it affirmed. It upheld the WCJ's factual findings and agreed with the WCJ that Claimant did not prove that prostate cancer is an occupational disease under Section 108(r) of the Act. The Board also agreed that Claimant was not entitled to use the statutory presumption to prove his claim, albeit for another reason than used by the WCJ.[14] To use the statutory presumption in Section 301(f) of the Act,[15] a claimant must file his claim petition within 300 weeks of the last day of occupational exposure to the carcinogen. *Id.* Claimant retired in May 2006, and he did not file his claim petition until June 13, 2012, which was 315 weeks after his last day of employment as a firefighter. The

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[13] Under Section 108(n) of the Act, the term "occupational disease" includes

> [a]ll other diseases (1) to which the claimant is exposed by reason of his employment, and (2) which are causally related to the industry or occupation, and (3) the incidence of which is substantially greater in that industry or occupation than in the general population.

77 P.S. §27.1(n).

[14] The WCJ found that because Claimant retired prior to his diagnosis, he could not benefit from a causation presumption set forth in Section 301(e) of the Act, which requires the occupational disease to cause a disability, *i.e.*, a loss of earning power. 77 P.S. §413. *See* n.19, *infra*, and accompany text.

[15] In a footnote, the Board questioned whether Claimant timely filed his claim petition under Act 46, because, while Claimant indicated he had some periodic exposure to smoke while working as a paramedic, he testified that he last actively fought fires as a firefighter in 1980. Board Opinion at 17 n. 7. The Board wrote: "Assuming December 31, 1980, was his last day of employment with exposure to the hazard, as a firefighter, he did not file his Claim Petition until June 13, 2012, 1,641 weeks later. He therefore appears to have filed his Claim Petition outside of the delineated 600 weeks, making his claim untimely." *Id.*

Board held that Claimant did not satisfy the deadline for being able to use the presumption in Section 301(f) of the Act. Claimant then petitioned for this Court's review.

Appeal

On appeal,[16] Claimant raises three arguments. First, Claimant contends that the Board erred in construing the Act to require a firefighter seeking compensation for cancer pursuant to Section 108(r) of the Act to file his claim petition within 300 weeks of his last day of work. Second, Claimant argues that if Section 301(f) of the Act imposes a deadline for filing a claim petition for occupational disease, then the discovery rule should apply. Third, Claimant contends that Employer's medical evidence was not competent and did not rebut the statutory presumption in favor of compensating his prostate cancer as an occupational disease.

Analysis

We begin with a review of the statutory provisions relevant to occupational disease. Section 301(c)(2) of the Act states that a compensable "injury" includes "occupational disease as defined in section 108 of this act." 77 P.S. §411(2). In turn, Section 108 of the Act lists a number of occupational diseases. In 2011, the General Assembly enacted what is known as Act 46,[17] which, *inter alia*, added cancer to the list of occupational diseases for firefighters. This addition is found in Section 108(r), and it states:

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[16] This Court's review determines whether the necessary findings of fact are supported by substantial evidence, whether Board procedures were violated, and whether constitutional rights were violated or an error of law was committed. *City of Philadelphia v. Workers' Compensation Appeal Board (Brown)*, 830 A.2d 649, 653 n.2 (Pa. Cmwlth. 2003).

[17] Act of July 7, 2011, P.L. 251, No. 46.

> Cancer suffered by a firefighter which is caused by exposure to a known carcinogen which is recognized as a Group 1 carcinogen by the International Agency for Research on Cancer.

77 P.S. §27.1(r). Recently, in *City of Philadelphia Fire Department v. Workers' Compensation Appeal Board (Sladek)*, 144 A.3d 1011 (Pa. Cmwlth. 2016) (*en banc*), this Court vacated the Board's award of benefits to a firefighter with malignant melanoma because the award was based upon an incorrect construction of Section 108(r) of the Act. In its adjudication, the Board had construed Section 108(r) to mean that a firefighter's cancer is presumed work-related if the firefighter was exposed to a Group 1 carcinogen at work, regardless of whether the firefighter's cancer is a type of cancer known to be caused by exposure to Group 1 carcinogens. We rejected the Board's construction of Section 108(r) of the Act and held, instead, that Section 108(r) requires the firefighter to show that the Group 1 carcinogens to which he was exposed have been shown to cause the type of cancer for which the claimant has been diagnosed.[18] In *Sladek*, the WCJ did not rule on whether the claimant's evidence showed that his cancer, *i.e.*, melanoma, is a type of cancer caused by exposure to Group 1 carcinogens; accordingly, this Court remanded. *Sladek* also clarified that only after a firefighter establishes that his cancer is an occupational disease under Section 108(r) of the Act do the rebuttable presumptions in Sections 301(e) and (f) come into play.

[18] In this case, a differently composed Board construed Section 108(r) of the Act as this Court construed it in *Sladek*, at least with respect to the need for the firefighter to show his type of cancer can be caused by Group 1 carcinogens.

Section 301(e) of the Act establishes a "presumption regarding occupational disease" that applies to any occupational disease sustained by any employee in any line of work. It states:

> *If it be shown that the employe, at or immediately before the date of disability, was employed in any occupation or industry in which the occupational disease is a hazard*, it shall be presumed that the employe's occupational disease arose out of and in the course of his employment, but this presumption shall not be conclusive.

77 P.S. §413 (emphasis added).[19] However, there is a special presumption where the occupational disease is cancer and the employee is a firefighter. Act 46 added Section 301(f) to the Act related to compensation for cancer suffered by a firefighter. It states as follows:

> *Compensation pursuant to cancer suffered by a firefighter shall only be to those firefighters who have served four or more years in continuous firefighting duties, who can establish direct exposure to a carcinogen referred to in section 108(r)* relating to cancer by a firefighter and have successfully passed a physical examination prior to asserting a claim under this subsection or prior to engaging in firefighting duties and the examination failed to reveal any evidence of the condition of cancer. The presumption of this subsection may be rebutted by substantial competent evidence that shows that the firefighter's cancer was not caused by the occupation of firefighting. Any claim made by a member of a volunteer fire company shall be based on evidence of direct exposure to a carcinogen referred to in section 108(r) as documented by reports filed pursuant to the Pennsylvania Fire Information Reporting System and provided that the member's claim is based on direct exposure to a carcinogen referred to in section 108(r). Notwithstanding the limitation under subsection (c)(2) with respect to disability or

[19] Section 301(e) was added by the Act of October 17, 1972, P.L. 930, No. 223.

> death resulting from an occupational disease having to occur within three hundred weeks after the last date of employment in an occupation or industry to which a claimant was exposed to the hazards of disease, *claims filed pursuant to cancer suffered by the firefighter under section 108(r) may be made within six hundred weeks after the last date of employment in an occupation or industry to which a claimant was exposed to the hazards of disease. The presumption provided for under this subsection shall only apply to claims made within the first three hundred weeks.*

77 P.S. §414 (emphasis added).

Here, the Board construed Section 301(f) of the Act to require the firefighter to file a claim petition within 300 weeks of his last day of employment in order to take advantage of the statutory presumption therein that his cancer was work-related. The Board also observed that if a firefighter files a claim petition before 600 weeks have elapsed, then the firefighter may still prove that his cancer is an occupational disease.[20] However, he cannot take advantage of the presumption in Section 301(f) in making this demonstration.

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[20] Section 301(a) of the Act makes the employer "liable for compensation for personal injury ... [incurred] in the course of employment...." 77 P.S. §431. Section 301(c)(1) of the Act defines "injury" and "personal injury" to include "disease or infection." 77 P.S. §411(1). Section 301(c)(2) also provides as follows:

> The terms "injury," "personal injury," and "injury arising in the course of his employment," as used in this act, shall include, unless the context clearly requires otherwise, occupational disease as defined in section 108 of this act.

77 P.S. §411(2). Section 108 of the Act enumerates specific occupational diseases, and it includes a "catch-all" provision that emcompasses:

> (n) All other diseases (1) to which the claimant is exposed by reason of his employment, and (2) which are causally related to the industry or occupation, and (3) the incidence of which is substantially greater in that industry or occupation than in the general population.

(Footnote continued on the next page . . .)

Claimant contends that his claim petition was timely under the discovery rule, because he was diagnosed with prostate cancer within 300 weeks of his last day of work. Thus, he is entitled to the rebuttable presumption found in Section 301(f) of the Act.

Employer responds, first, that Claimant filed his claim petition too late. Claimant stopped working as a firefighter on December 31, 1980, to take up work as a certified paramedic. Section 301(f) of the Act requires a firefighter seeking compensation for his cancer to file a claim within 600 weeks of the firefighter's last date of exposure to a Group 1 carcinogen. Assuming Claimant was exposed to a Group 1 carcinogen on his last day as a firefighter, he filed his claim petition 1,641 weeks, or 31 years, later. Claimant's claim petition should have been dismissed as untimely filed.[21]

(continued . . .)

77 P.S. §27.1(n). Where a claimant fails to make a case under Section 108(r) of the Act, he may show that it was an occupational disease under the catch-all provision in Section 108(n) of the Act.

[21] Employer argues that Section 301(f) of the Act does not supplant the statute of repose found in Section 315 of the Act, 77 P.S. §602. Section 315 of the Act states, in relevant part:

> *In cases of personal injury all claims for compensation shall be forever barred,* unless, within three years after the injury, the parties shall have agreed upon the compensation payable under this article; *or unless within three years after the injury, one of the parties shall have filed a petition as provided in article four hereof....* However, in cases of injury resulting from ionizing radiation in which the nature of the injury or its relationship to the employment is not known to the employe, the time for filing a claim shall not begin to run until the employe knows, or by the exercise of reasonable diligence should know, of the existence of the injury and its possible relationship to his employment. *The term "injury" in this section means, in cases of occupational disease, disability resulting from occupational disease*.

77 P.S. §602 (emphasis added).

Employer argues that, in any case, Claimant misstates Section 301(f) of the Act as allowing a claimant to file a claim within 300 weeks of his cancer diagnosis. Section 301(f) does not use the word "diagnosis," let alone make the date of a diagnosis relevant. Further, the 300-week requirement sets the deadline for using the presumption in Section 301(f) of the Act.

This Court considered these issues in *Earl Hutz v. Workers' Compensation Appeal Board (City of Philadelphia)*, __ A.3d __ (Pa. Cmwlth., No. 2140 C.D. 2015, filed September 7, 2016). In *Hutz*, the claimant, while working for the City as a firefighter, was diagnosed with prostate cancer in February 2006. His treatment caused him to miss approximately three months of work. He retired from the City in January 2008. In April 2012, the claimant filed a claim petition, alleging that his prostate cancer resulted from his exposure to IARC Group 1 carcinogens while working as a firefighter. The Board held that because the claimant filed his claim petition 318 weeks after his last date of exposure, he could not take advantage of the presumption in Section 301(f) of the Act. Nevertheless, the claimant did file within 600 weeks of his last day of work as a firefighter and, thus, his petition was not time-barred.

This Court affirmed for two reasons. First, we held that a claim petition filed more than 300 weeks after the firefighter's last day of exposure bars the use of the presumption in Section 301(f) of the Act. Second, we held that where the firefighter fails to show that his cancer is an occupational disease under Section 108(r) of the Act, he may not use the presumption in Section 301(f). The timeliness of the claim petition, therefore, was simply irrelevant.

On the timeliness, this Court stated as follows:

> The issue is not whether the statutory language places a limitation on the time to file a firefighter cancer claim; rather,

> the issue is whether the statutory language limits the time frame in which the presumption of compensability applies.

Hutz, __ A.3d at __, Slip Op. at 33. This Court further explained as follows:

> [The c]laimant filed his claim petition approximately 318 weeks after his radical prostatectomy in March 2006. *See* WCJ Op., F.F. No. 1i; Bd. Op. at 15. [The c]laimant's disability arising from prostate cancer arose in March 2006, and it extended for three months (approximately 12 weeks). After this period, [the c]laimant was not disabled by an occupational disease. Any exposure after his return to work in 2006 and before his retirement in 2008 could not be causally related to his prostate cancer, which was already cured by surgery and therapy before his return to work. Bd. Op. at 15, n.5. Therefore, the Board determined that the WCJ did not err in ruling [the c]laimant ineligible for Section 301(f)'s presumption of compensability. Bd. Op. at 15.
>
> As the Board noted, the pivotal question in this case is causation. Although [the c]laimant's cancer occurred in 2006, he filed his claim petition in 2012, outside of the 300-week period entitling him to the rebuttable presumption of compensability in Section 301(f) of the Act.

Hutz, __ A.3d at __, Slip Op. at 34-35.

Second, we held that the timeliness of the claimant's claim petition was irrelevant, even if the discovery rule were to apply.[22] This is because the presumption in Section 301(f) of the Act applies only where the firefighter has shown that his cancer is an occupational disease under Section 301(f) of the Act. We explained as follows:

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[22] The discovery rule "is a judicially created tenet of statutory construction applicable to statutes of limitations which operates to toll the running of a statute where the existence of a cause of action cannot reasonably be ascertained within the prescribed time." *Levenson v. Souser*, 557 A.2d 1081, 1086 (Pa. Super. 1989) (citations omitted).

> In any event, [the c]laimant failed to establish a causal relationship between his prostate cancer and his occupational exposure to a carcinogen recognized as a Group 1 carcinogen by the IARC. Thus, regardless of the date he filed his claim petition, the presumption of compensability in Section 301(f) of the Act is unavailable to [the c]laimant. *Sladek*. Therefore, any further discussion of whether the discovery rule applies to the 300-week filing limitation period for the application of the presumption of compensability is unnecessary in this case. As such, this issue is moot. *See Battiste v. Borough of G. McKeesport*, 94 A.3d 418 (Pa. Cmwlth. 2014)[].

Hutz, __ A.3d __, Slip Op. at 39.

Notably, the inability of the firefighter to prove that his cancer is an occupational disease under Section 108(r) of the Act does not mean that he cannot pursue a claim for compensation. The Act allows any employee to pursue compensation for any disease "causally related to [his] industry or occupation." 77 P.S. §27.1(n). Thus, using what the WCJ termed "general causation" principles, Claimant had the opportunity to prove that his cancer was caused by his occupation. In this regard, Claimant was not limited to showing that exposures to Group 1 carcinogens caused his cancer. He did identify the Group 2A carcinogens to which he was also exposed. When seeking compensation for an occupational disease under Section 108(n) of the Act, the presumption in Section 301(f) of the Act is irrelevant; rather, it is the presumption in Section 301(e) of the Act that applies. However, Claimant's medical evidence was rejected. Accordingly, the presumption in Section 301(e) never came into play.[23]

[23] In his final issue, Claimant argues that Employer's expert opinion was incompetent. Because Claimant did not establish a causal relationship between his prostate cancer and his occupational exposure to a Group 1 carcinogen, the burden never shifted to Employer. *See Hutz*, __ A.3d at __, Slip Op. at 43. We need not address this issue.

Here, as in *Hutz*, Claimant did not demonstrate that prostate cancer is an occupational disease for firefighters under Section 108(r) of the Act. Accordingly, the presumption in Section 301(f) of the Act was unavailable to Claimant, and the discovery rule is irrelevant.

Conclusion

In sum, Claimant's medical evidence did not establish a causal relationship between prostate cancer and Group 1 carcinogens, and this was necessary in order to establish that his prostate cancer is an occupational disease under Section 108(r) of the Act. As a result, the presumption of compensability in Section 301(f) of the Act was unavailable to Claimant. Claimant's medical evidence was also inadequate to prove his particular cancer was caused by workplace exposures to other carcinogens under Section 108(n) of the Act. As such, the presumption in Section 301(e) of the Act was not available to assist Claimant in making a case that his prostate cancer was a compensable occupational disease.

For these reasons, we affirm the Board.

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MARY HANNAH LEAVITT, President Judge

IN THE COMMONWEALTH COURT OF PENNSYLVANIA

Peter Demchenko, Petitioner	:	
v.	:	No. 2164 C.D. 2015
Workers' Compensation Appeal Board (City of Philadelphia), Respondent	:	

O R D E R

AND NOW, this 26th day of October, 2016, the order of the Workers' Compensation Appeal Board dated October 29, 2015, in the above-captioned matter is hereby AFFIRMED.

MARY HANNAH LEAVITT, President Judge