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Re: Actuarial Projections
Firefighter's Cancer Presumption S-716

It is projected that S-716 as introduced will cost approximately \$220 million per year and will double the cost of workers' compensation coverage for municipalities (See Exhibit A). No state has ever implemented cancer presumption legislation that is as broad or expensive. (See exhibit B).

All of the 24 states with workers' compensation cancer presumptions include reasonable controls such as a science based definition of the types of cancers covered, a statute of limitations and a reasonable standard to rebut the presumption. The cost if New Jersey adopts similar legislation is projected at \$13 million per year.

The most recent trend is to cover firefighters in a program *outside* of Workers' Compensation. This approach was recently adopted by New York, Connecticut, Colorado, Michigan, and Georgia and was supported by both firefighters and municipalities. The current rates in Colorado are a reasonable \$265 per full-time firefighter and \$86 per volunteer firefighter. If New Jersey adopts this approach, the cost will be in the range of \$5 million per year.

Five factors determine the cost of cancer presumption legislation:

1. Is the program inside or outside of Workers' Compensation? The problem with including the presumption inside workers' compensation is that it requires local taxpayers to pay almost \$50 million per year in medical bills that would otherwise be paid by the federal government or health insurers. Establishing a program outside of workers' compensation avoids this cost and also avoids legal expenses, estimated at \$23 million per year under the proposed legislation.
2. Does the law presume that all cancers are work related? Almost all states limit the types of cancer covered under the presumption. Any presumption should be based on scientific evidence that establishes those cancers that firefighters develop at a higher rate than the general population. According to the National Cancer Society, the US lifetime cancer rate for the general population is 39.6 per 100. The most comprehensive study to date concerning firefighters published by the prestigious National Institute for Occupational Safety and Health (NIOSH) estimated that the rate for firefighters is 9% higher, or approximately 43 per 100. The NIOSH study focused on 30,000 career firefighters in three major cities who were for the most part exposed before the widespread use of air breathing apparatus. The study concluded that these firefighters had a significantly higher rate of mesothelioma and testicular cancer, as well as elevated rates of respiratory, digestive, and urinary cancers. Therefore, the potential cost of any presumption legislation is substantially higher unless the presumption is limited to the specific types of cancers linked to firefighting.

3. What if any is the statute of limitations for the presumption? Of 24 states currently with workers' compensation cancer presumptions, in five of these states the firefighter must be currently employed when the cancer is diagnosed. In the other states, the most common cutoff for the presumption is five years from the date an individual retires from the fire service, or age 65 when the firefighter becomes eligible for Medicare. The lack of a statute of limitations in S-716 at least doubles the cost.
4. What is the legal standard to rebut the presumption? S-716 as written will make it almost impossible to question claims. Under current New Jersey law, the standard to rebut a presumption is "preponderance of the evidence". In S-716, the standard is raised to "clear and convincing" evidence that equates to blanket compensability. No expert will be able to say that exposures to dusts, fumes, chemical odors, etc. had de minimis contributions to a given cancer because there are no scientific studies that focus on "de minimis" levels of contribution. The studies focus on possible causes or likely causes but not on specific agents that have no effect whatsoever on a given condition. The effect of this change is to make all such cancers compensable.
5. Are Volunteers covered under the presumption? Seven of the 24 states with cancer presumptions in workers' compensation exclude volunteers from the presumption and another seven exclude current and former smokers. 84% of the expected cost of this legislation is for claims from volunteers even though they usually do not have the same exposure as career firefighters and often have exposures in their regular employment. However, based on the experience in states such as Pennsylvania, the annual cost for volunteers is under \$100 per firefighter when the legislation includes a science based definition of the types of cancer covered, a statute of limitations and a reasonable standard to rebut the presumption.

To summarize, the bill as currently written would double workers' compensation costs for municipalities. This projection is driven by the fact that using the workers' compensation system requires local taxpayers to pay for medical expenses that would otherwise be paid by Medicare and health insurers. Unlike almost every other state, the proposed New Jersey legislation includes all cancers and lacks a statute of limitations. The proposed "clear and convincing" standard for the rebuttable presumption will also make it impossible to contest claims even when it is highly unlikely that firefighting was involved.

The most recent trend is to cover firefighters in a program outside of the Workers' Compensation law. This approach was recently adopted by New York, Connecticut, Colorado, Michigan, and Georgia and was supported by both firefighters and municipalities.

Reviewed and approved by:



Dennis R. Henry, FCAS, MAAA

Exhibit A
Estimate of annual cost of S716
Firefighters' Workers' Compensation Cancer Presumption

(1)	NJ Career Firefighters	7,287
(2)	NJ Volunteer Firefighters	37,803
(3)	Total NJ Firefighters (1 + 2)	45,090
(4)	Lifetime cancer rate of general population	39.6/100
(5)	Lifetime cancer cases (3 x 4)	17,856
(6)	Increased chance of firefighters being diagnosed with cancer.	9%
(7)	Increased number of Firefighter cancer cases (3 X 6)	1607
(8)	Total number of cancer cases (5 + 7)	19,463
(9)	Estimated number of cases per year (8 divided by 40)	487
(10)	Average indemnity award	\$300,000
(11)	WC Indemnity cost/year (9 x 10)	\$146.1 million
(12)	Annual US cancer medical costs (est. 2020)	\$158 billion
(13)	Rate of new cases/year	484.8/100,000
(14)	US Population	323 million
(15)	Annual new cancer cases (13 x 14)	1,565,900
(16)	Medical Costs per cancer case (12 divided by 15)	\$100,900
(17)	WC Medical Cost (9 x 16)	\$49.1 million
(18)	Subtotal WC cost/year (11 + 17)	\$195.2 million
(19)	Legal fees (18 x 0.12)	<u>\$23.4 million</u>
(20)	Total annual cost (18 + 19)	\$218.6 million

Notes

- (1) Source – NJ Division of Fire Safety
- (2) Source – NJ Division of Fire Safety
- (4) Source – American Cancer Society
- (6) Source – National Institute for Occupational Safety and Health (NIOSH)
- (12) Source – National Institutes of Health
- (13) Source – National Cancer Institute

Exhibit B

Comparison of State Fire Fighter Cancer Presumption Laws

- **Alabama:** No workers' compensation cancer presumption. Eligibility for a disability pension includes a cancer presumption. The firefighter must establish exposure to a carcinogen linked to the type of cancer. The presumption can be rebutted by the "preponderance of the evidence."
- **Alaska:** 7 years minimum employment required for a workers' compensation presumption that expires 5 years after retirement from the fire service. The presumption only applies to certain types of cancer and is rebuttable by "the preponderance of the evidence". The presumption does not apply to smokers.
- **Arizona:** 5 years minimum employment required for a workers' compensation presumption that expires at age of 65. The presumption only applies to certain types of cancer and does not apply to volunteers and smokers.
- **Arkansas:** No workers' compensation cancer presumption. Firefighters who are diagnosed with cancer before age 68 may receive a special \$150,000 benefit from the Arkansas State Claims Commission.
- **California:** The presumption in workers' compensation expires 10 years after retirement. Claims may be rebutted by evidence that the type of cancer is not reasonably related to the fire fighter's exposure.
- **Colorado:** 5 years minimum employment required for a workers' compensation presumption. The presumption is limited to certain types of cancer and may be rebutted by the preponderance of the evidence. In 2016, a Colorado Supreme Court decision (Zukowski v Castle Rock) made it substantially more difficult to establish a claim under the presumption. As a result, a 2017 amendment to the statute permits departments to opt out of the workers' compensation cancer presumption by joining a special heart and cancer benefits trust.
- **Connecticut:** No workers' compensation cancer presumption. In 2016, the state established a firefighters' cancer relief fund.
- **Delaware:** No workers' compensation cancer presumption.
- **Florida:** No workers' compensation cancer presumption.
- **Georgia:** No workers' compensation cancer presumption. Under legislation adopted in 2016, Fire Departments are required purchase a special policy that provides a lump sum benefit when a firefighter is diagnosed with cancer.
- **Hawaii:** No workers' compensation cancer presumption.
- **Idaho:** No workers' compensation cancer presumption
- **Illinois:** 5 years minimum employment required for a workers' compensation presumption. The claimant must be an "active" firefighter when diagnosed. To rebut the presumption, the employer only must offer some evidence to support a finding that something other than the claimant's occupation as a fire fighter caused the condition.
- **Indiana:** Presumption in workers' compensation expires 5 years after retiring from the fire service and only applies to certain types of cancer. The presumption does not apply to volunteers and recent smokers (in the last 5 years).

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- **Iowa:** No workers' compensation cancer presumption. Eligibility for a disability pension includes a cancer presumption.
 - **Kansas:** No workers' compensation cancer presumption. Eligibility for a disability pension includes a cancer presumption that requires 5 years minimum employment.
 - **Kentucky:** No workers' compensation cancer presumption.
 - **Louisiana:** 10 years minimum employment required for a workers' compensation presumption and the presumption expires 5 years after retiring from the fire service. The presumption is limited to certain types of cancer and is rebuttable by "evidence meeting judicial standards." The presumption does not apply to volunteers.
 - **Maine:** 5 years minimum employment required for a workers' compensation presumption that expires 10 years after leaving the fire service or at age 70. The presumption is limited to certain types of cancer.
 - **Maryland:** 5 years minimum employment required in the department "where the individual is currently employed or serves."
 - **Massachusetts:** No workers' compensation cancer presumption. Eligibility for a disability pension includes a cancer presumption that requires 5 years minimum employment and expires 5 years after retirement.
 - **Michigan:** No workers' compensation cancer presumption. In 2016, Michigan established a special "First Responders Fund". Coverage requires 5 years minimum employment and limited to full-time firefighters. The cancer must manifest while the firefighter is employed.
 - **Minnesota:** To be eligible for a presumption in workers' compensation, the claimant must be an active fire fighter *immediately* prior to reporting the claim. The presumption is limited to certain cancers and may be rebutted by "substantial factors."
 - **Mississippi:** No workers' compensation cancer presumption.
 - **Missouri:** No workers' compensation cancer presumption. Eligibility for a disability pension includes a cancer presumption.
 - **Montana:** No workers' compensation cancer presumption.
 - **Nebraska:** The workers' compensation presumption expires 3 months after retirement and is limited to certain cancers.
 - **Nevada:** 5 years minimum employment required and the presumption expires 5 years after leaving the fire service. The presumption is rebuttable.
 - **New Hampshire:** The workers' compensation presumption expires 20 years after leaving the fire service or age 65. The presumption is limited to certain cancers.
 - **New Jersey:** The workers' compensation presumption was established by the NJ Supreme Court in the 2003 decision in Lindquist v Jersey City.
 - **New Mexico:** The minimum period of employment for the workers' compensation presumption varies by disease. Volunteers are excluded from the presumption.

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- **New York:** No workers' compensation cancer presumption. Eligibility for a disability pension includes a cancer presumption. In 2017, New York adopted legislation that requires Fire Departments to purchase cancer disability insurance for volunteers.
 - **North Carolina:** No workers' compensation cancer presumption.
 - **North Dakota:** 5 years minimum employment required and the presumption expires 5 years after retirement from the fire service. Volunteers excluded from the presumption.
 - **Ohio:** 6 years minimum employment required and the presumption expires 20 years after retirement or at age 70. The presumption may be rebutted by "competence evidence to the contrary" or that the use of tobacco was a significant factor.
 - **Oklahoma:** The workers' compensation presumption is limited to firefighters while they are employed and the benefit is limited to medical treatment. Eligibility for a disability pension also includes a cancer presumption.
 - **Oregon:** 5 years minimum employment required and the presumption expires 84 months after retirement from the fire service. Volunteers are excluded from the presumption. The presumption is limited to certain cancers and the claim may be rebutted by "clear and convincing evidence" that the condition is not work related or that the use of tobacco was a major contributing cause.
 - **Pennsylvania:** 4 years minimum employment required and presumption expires 300 weeks after retirement.
 - **Rhode Island:** No workers' compensation cancer presumption. Eligibility for a disability pension includes a cancer presumption.
 - **South Carolina:** No workers' compensation cancer presumption.
 - **South Dakota:** No workers' compensation cancer presumption. Eligibility for a disability pension includes a cancer presumption.
 - **Tennessee:** No workers' compensation cancer presumption. Eligibility for a disability pension includes a cancer presumption.
 - **Texas:** 5 years minimum employment required and the presumption expires when the fire fighter retires. Texas excludes smokers from the presumption.
 - **Utah:** No workers' compensation cancer presumption.
 - **Vermont:** 5 years minimum employment required and the presumption expires 10 years after retirement. Claims must also be reported before age 65 and can be rebutted by "the preponderance of the evidence." The presumption does not apply to fire fighters who used tobacco products within 10 years of the date of diagnosis.
 - **Virginia:** 12 years minimum employment required and the claim must be reported within 5 years of leaving the fire service. The presumption can be rebutted by the "preponderance of the evidence." The presumption is limited to certain cancers.
 - **Washington:** 10 years minimum employment required and the presumption expires 5 years after retirement. The presumption can be rebutted by the "preponderance of the evidence". Washington excludes volunteers and smokers from the presumption.

- **West Virginia:** No workers' compensation cancer presumption.
- **Wisconsin:** 10 years minimum employment required and the presumption excludes volunteers and smokers.
- **Wyoming:** No workers' compensation cancer presumption.