



To: Wendy Zhan, Director, Legislative Services Commission
Representative Brian Lampton, Chair, House Insurance Committee
Senator Bob Hackett, Chair, Senate Insurance Committee

From: Chan Cochran, Chair, Bureau of Workers' Compensation (BWC) Board of Directors

Date: August 30, 2024

Subject: ORC 4121.125 Actuarial Analysis of Pending Legislation

ORC 4121.125 (C)(6) and (7) require the BWC Board of Directors to have prepared, by or under the supervision of an actuary, an actuarial analysis of any introduced legislation expected to have a measurable financial impact on the workers' compensation system, and to submit that report to the legislative service commission and the standing committees of the house of representatives and the senate with primary responsibility for the workers' compensation legislation.

On August 29, 2024, the BWC Actuarial Committee reviewed the analysis presented by BWC's chief actuary for House Bill 559 and recommended that the BWC Board of Directors remit the results pursuant to the revised code. House Bill 559 would make peace officers, firefighters, and emergency medical workers diagnosed with psychiatric conditions arising from employment without an accompanying physical injury eligible for coverage under Ohio's Workers' Compensation law. Medical benefits are provided without any restrictions, however wage compensation benefits are limited to one year.

BWC actuaries estimate the costs of House Bill 559 to the Ohio workers' compensation system will be approximately \$20.3 million per year, although there is a high degree of uncertainty supporting it, which means actual results could vary significantly from this estimated amount. The attached actuarial report provides additional details and further explains the work to arrive at this estimate. Please note, that this report does not indicate a position on House Bill 559 by the BWC Board of Directors.



To: **Chan Cochran**, Chairman of BWC Board of Directors
 John Logue, CEO/Administrator

From: **Daniel Myers**, FCAS, MAAA, Chief Actuarial Officer

Date: July 1, 2024

Subject: **Actuarial Report on House Bill 559: Workers' Compensation – Emergency Workers'
 Psychiatric Conditions**

Summary of Actuarial Findings:

House Bill 559 (HB559) proposes to expand workers' compensation eligibility to first responders if they suffer from a psychiatric condition without an accompanying physical injury. As required by law for any proposed legislation that has a measurable impact on the Ohio workers' compensation system, the Actuarial Division of the Bureau of Workers' Compensation (BWC) has conducted an analysis of HB559. As outlined in more detail below, we estimate that:

- Approximately 434 employees may be expected to file a claim per year out of a population of approximately 60,220 employees in eligible occupations
- Each claim will be eligible for medical benefits and up to 1 year of wage compensation benefits
- Annual workers' compensation benefits are expected to be \$20.3 million
- To develop this estimated annual cost of \$20.3 million, a number of assumptions were made, some of which have a high degree of uncertainty. Other reasonable assumptions would result in different estimated annual costs, some that might be higher while others that might be lower.

Scope of HB559:

Under current law, no employee who develops a psychiatric condition in the course of and arising out of their employment would be eligible for workers' compensation coverage if those psychiatric conditions are not brought on by an accompanying physical injury or occupational disease. Psychiatric conditions arising from the normal course of employment without a physical injury are not covered as a compensable injury. HB559 seeks to expand workers' compensation coverage by providing benefits to certain employees if they are diagnosed with a psychiatric condition as a result of their employment without an accompanying physical injury. Eligible employees are specifically defined within HB559 as police officers, firefighters, and emergency medical workers.

Comparison to Similar Proposed Legislation:

Other pieces of legislation have been proposed in the Ohio General Assembly in recent years that are similar to HB559. None of these bills were signed into law:

- Senate Bill 5 during the 131st General Assembly (2015-2016)
- Senate Bill 118 and House Bill 161 during the 132nd General Assembly (2017-2018)

In all of these bills, workers' compensation benefits were proposed to extend to the same occupations as HB559: police officers, firefighters, and emergency medical workers. However, there are two material differences between HB559 and these other bills:

- HB559 uses the term "psychiatric condition" while all the previous bills used "post-traumatic stress disorder" (PTSD) as the qualifying type of injury. We believe this broader definition is a



significant expansion in coverage that will result in more claims than the PTSD definition found in previous bills.

- Senate Bill 5 provided the typical workers' compensation coverage of medical benefits and wage compensation with no time limitations. The other bills provided the same workers' compensation coverage but were limited to 1 year of coverage. HB559 also limits wage compensation to 1 year of coverage but is ambiguously written and vague with regard to whether the time limitation also applies to medical benefits. The analysis underlying this report assumes that HB559 provides medical benefits with no time limitation.

Analysis of HB559:

Actuarial analysis of HB559 and each of the previous bills cited above was conducted by BWC actuarial staff in compliance with ORC 4121.125. The actuarial analysis performed for HB559 heavily relies on the research, assumptions, actuarial methodologies, and findings of the actuarial analyses for these prior bills, especially Senate Bill 118, since this bill is very similar to HB559 and was the most recent analysis to be published. Any reports of actuarial analyses on these prior bills can be provided upon request to the Actuarial Division of BWC. Of note is that this analysis also estimates the increased costs associated with expanding the definition from PTSD to any psychiatric condition in HB559.

In developing the costs to the workers' compensation system from HB559, we sought to identify the following pieces of information:

- Number of employees in covered occupations
- Percentage of employees in those occupations who will develop psychiatric conditions and who will file workers' compensation claims
- Average wage compensation an injured worker will incur for each claim
- Length of time an injured worker will receive wage compensation
- Psychotherapy sessions, pharmaceutical costs, and other medical costs associated with psychiatric conditions

For the covered occupations, the number of employees and their average annual compensation are readily available on public websites such as the Ohio Department of Jobs and Family Services or the Federal Bureau of Labor & Statistics. The number of employees and the average salary in Ohio for 2022, as reported by Ohio Labor Market Information for eligible occupations, are outlined in the following table.

| Occupation | Number of Workers | Average Annual Salary | Average Weekly Salary |
|--------------------|-------------------|-----------------------|-----------------------|
| EMS | 8,550 | \$39,698 | \$763 |
| Firefighters | 21,660 | \$45,361 | \$872 |
| Police and Sheriff | 30,010 | \$72,185 | \$1,388 |
| Total | 60,220 | | |

The percentage of employees who exhibit qualifying psychiatric conditions and the percentage of employees who file claims are much more challenging to quantify. Some research has been conducted regarding the likelihood of people developing PTSD in extreme scenarios like soldiers in combat or people involved in crimes or accidents. However, a limited amount of research has been done outside of those extreme scenarios, and an even narrower body of research exists when limited to PTSD symptoms arising from work conditions (of any occupation, let alone safety responders). This limited body of research was not consistent enough to allow us to determine a reasonably reliable estimate of the percentage of employees with PTSD symptoms. Relying on our analysis from previous bills, we believe



reasonable values could be as low as 10% and as high as 25%. We selected 18% as the percentage of employees with PTSD symptoms. As outlined above, we believe that expanding the scope of claims to consider all psychiatric conditions would increase this percentage, but it is unclear by how much. Based on research from BWC staff, we believe that expanding the types of eligible claims from PTSD symptoms to any psychiatric condition could see claim counts double.

We were unable to find any research or documentation that explores the likelihood of people with psychiatric conditions to seek professional treatment. Still, we expect some people with symptoms will not file workers' compensation claims. Likely reasons would include not being aware their condition qualifies for workers' compensation coverage, being unaware of how debilitating their condition is, or unwillingness to seek professional help. We judgmentally selected 10% as the percentage of employees who exhibit symptoms to follow through with filing a claim. This assumption is based largely upon judgment, and actual results could be significantly different.

We also recognize that claims won't emerge every year for workers who have symptoms. In any given year, some workers will file a claim while others who have filed in previous years would still be working on rehabilitation and returning to the workforce. We have assumed 20% claim emergence in a year, meaning that only 20% of the expected claims will present themselves as meeting the threshold for a qualifying psychiatric condition in any given year. This assumption is based largely upon judgment, and actual results could be significantly different.

| Occupation | Number of Workers | Exhibiting PTSD | Exhibiting Psychiatric Conditions | Filing a Claim per Year | Claim Emergence per Year |
|--------------------|-------------------|-----------------|-----------------------------------|-------------------------|--------------------------|
| EMS | 8,550 | 1,539 | 3,078 | 308 | 62 |
| Firefighters | 21,660 | 3,899 | 7,798 | 780 | 156 |
| Police and Sheriff | 30,010 | 5,402 | 10,804 | 1,080 | 216 |
| Total | 60,220 | 10,840 | 21,679 | 2,168 | 434 |

Subject to some minimums and maximums, wage compensation is generally awarded on a weekly basis at 72% of the injured employee's weekly wage for the first 12 weeks and then 67% after that. Additionally, HB559 limits the length of time to one year for psychiatric claims to be paid wage compensation. Some claims may experience a shorter timespan than one year, but research suggests that claims will often run close to – if not fully up to – one year of coverage. We judgmentally selected 39 weeks as the average length of time that a claim will receive wage compensation. The estimated annual cost for the average claim can be calculated by adding 72% of the average weekly salary for 12 weeks plus 67% of the average weekly salary for the remaining 27 weeks.

Based on guidance from the Official Disability Guidelines and research from BWC staff, we know that medical benefits will typically manifest as psychotherapy sessions and pharmaceutical costs but we may also expect some other treatment costs. These medical costs are expected to be concentrated in the first year when psychotherapy sessions are expected to occur but additional costs will exist into the next few years as pharmaceutical costs and other medical costs persist. We have assumed all medical costs have been realized within 5 years of the claim and that the average cost of all medical benefits will be \$17,000.

Multiplying the estimated number of claims with the estimated annual benefit per claim allows us to arrive at the estimated annual costs from HB559. The table on the next page outlines the calculation of the estimated \$20.3 million of workers' compensation costs.



| Occupation | Number of Claims per Year | Average Annual Benefit (Wage Comp) | Average Medical Benefit | Total Estimated Annual Costs |
|--------------------|---------------------------|------------------------------------|-------------------------|------------------------------|
| EMS | 62 | \$20,406 | \$17,000 | \$2,302,732 |
| Firefighters | 156 | \$23,317 | \$17,000 | \$6,287,563 |
| Police and Sheriff | 216 | \$37,106 | \$17,000 | \$11,690,763 |
| Total | 434 | | | \$20,281,058 |

Uncertainty of Assumptions:

As outlined in the Analysis section above, there are a number of assumptions contemplated in this analysis where there was either no readily available data or any data were not ideally suited to be used without some material adjustment. Any users of this report should recognize that while the actuarial analysis tries to contemplate reasonably likely outcomes, actual results may vary from the assumptions contemplated in this actuarial analysis, perhaps by a significant amount.

Qualifications:

This actuarial report is submitted by Daniel Myers, FCAS, MAA, Chief Actuarial Officer of the Ohio Bureau of Workers' Compensation. Mr. Myers meets the continuing education requirements of the American Academy of Actuaries and the Casualty Actuarial Society to issue this actuarial report.