



Bureau of Workers' Compensation

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Governor **Mike DeWine**
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To: Legislative Service Commission
Chair, Senate Transportation, Commerce and Workforce Committee
Chair, Senate Insurance and Financial Institutions Committee
Chair, House Insurance Committee

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

Date: October 30, 2020

Re: ORC 4121.125 Actuarial Analysis of Pending Legislation – House Bills 571, 573, 605, 633, 667, and 668

Attached you will find an actuarial analysis of House Bills 571, 573, 605, 633, 667, and 668, which would provide presumptive Ohio workers' compensation benefits for certain eligible employees who have contracted COVID-19. This report fulfills ORC 4121.125 (C)(6) and (7), which 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.

In conducting the analysis, BWC's Actuarial staff has performed extensive research of publicly available related studies and their underlying assumptions for use in development of an estimate of the potential fiscal impact to the State Insurance Fund.

In summary, the actuarial estimates of the potential impact of the presumptive coverage as a result of the enactment of these bills is summarized in the table below:

Actuarial Estimate of Costs Related to Presumptive Coverage of COVID-19

	Optimistic Estimate	Conservative Estimate
HB571: First Responders	\$10.6 million	\$21.4 million
HB573: Report to Work	\$407.2 million	\$938.0 million
HB605: Food Establishments	\$15.9 million	\$32.1 million
HB633: Health Care	\$40.3 million	\$108.5 million
HB667: Corrections Officers	\$6.5 million	\$13.2 million
HB668: First Responders	\$13.3 million	\$26.8 million

While the extent of the potential impact is difficult to predict with any degree of precision due to significant data limitations, we feel the estimates provided are reasonable. Details of the estimates can be found in the BWC Actuarial staff's analysis, as further detailed in the attached report.

Please feel free to contact our BWC staff if you have further questions.



To: Chan Cochran, Chairman of the Board of Directors
Stephanie McCloud, Administrator and CEO

From: Christopher Carlson, FCAS, MAAA
Daniel Myers, FCAS, MAAA

Date: September 16, 2020

Re: Actuarial Estimate of Proposed Legislation: Presumptive Workers' Compensation Coverage for Employees Who Have Contracted COVID-19

Executive Summary

Six pieces of legislation have been introduced, each of which proposes enactment of a presumption of workers' compensation coverage should exist for certain eligible employees who have contracted COVID-19. Some of these bills apply the presumption for cases arising only during a specific time period while others have no defined beginning date or termination date. The Actuarial Division of the Bureau of Workers Compensation has developed estimates of the potential costs of these legislative proposals as follows:

- HB573 presumptively covers all essential employees who are not required to work from home during Governor DeWine's emergency order. The estimated potential costs of HB573 are reasonably expected to fall within the range of \$407 million and \$938 million.
- HB571 presumptively covers police, fire, and EMT employees during Governor DeWine's emergency order. The estimated potential costs of HB571 are reasonably expected to fall within the range of \$10.6 million and \$21.4 million.
- HB605 presumptively covers restaurant and food processing employees during Governor DeWine's emergency order. The estimated potential costs of HB605 are reasonably expected to fall within the range of \$15.9 million and \$32.1 million.
- HB633 presumptively covers employees of nursing homes, residential care facilities, and health care locations during Governor DeWine's emergency order. The estimated potential costs of HB633 are reasonably expected to fall within the range of \$40.3 million and \$108.5 million.
- HB667 presumptively covers corrections officers with no time limitations. The estimated potential costs of HB667 are reasonably expected to fall within the range of \$6.5 million and \$13.2 million.
- HB668 presumptively covers police, fire, and EMT employees with no time limitations. The estimated potential costs of HB668 are reasonably expected to fall within the range of \$13.3 million and \$26.8 million.

Any value within this range should be viewed as a reasonably possible outcome based on the data, assumptions, conditions, and limitations of the actuarial analysis contained and described within this report. This actuarial analysis relies on considerations and assumptions that are quite uncertain in nature; actual results will differ – possibly significantly so – from the estimates contained herein. Further, any adjustments to the legislation from the version initially submitted and considered in this

report may result in these estimates no longer being reasonable estimates of expected costs. Extreme care should be used to ensure use of these estimates are consistent with the underlying analysis described in this report.

Background

As outlined in ORC 4123.01 (C) & (F), workers' compensation benefits in Ohio cover accidents received in the course of and arising out of the injured worker's employment. This statute section also covers occupational diseases contracted in the course of employment so long as the employment creates a hazard which distinguishes it from employment generally and the employment creates a risk of contracting the disease in greater degree and in a different manner from the public in general. As such, COVID-19 may already be a covered disease, depending on how an employee contracts it and the nature of their occupation. Generally, communicable diseases like COVID-19 are not compensable as workers' compensation claims because people are exposed in a variety of ways, and few jobs have a hazard or risk of getting the diseases in a greater degree or a different manner than the general public. However, if an employee works in a job that poses a special hazard or risk and the employee contracts COVID-19 from work exposure, BWC could allow the claim.

In response to the arrival of COVID-19 to the state of Ohio, Governor Mike DeWine signed executive order 2020-01D on March 9, 2020 which, among other things, declared a state of emergency for Ohio. This date is the starting point of eligibility for some of the proposed pieces of legislation described in the following section. The Director of the Ohio Department of Health (ODH) at that time, Dr. Amy Acton, over the month of March issued various guidelines and orders related to containing the spread of COVID-19, culminating with a "stay at home" order issued on April 2, 2020 that directed all non-essential Ohioans to stay at home unless performing a list of prescribed essential functions. Additionally, ODH created a website, coronavirus.ohio.gov, with a wealth of information related to COVID-19 and daily press conferences were held by Governor DeWine, Lieutenant Governor Husted, and Director Acton to communicate critical information relevant to COVID-19 and its effects on the residents and businesses of Ohio. The analysis contained in this report relied heavily on the information and data contained on the website and communicated in these press conferences.

The National Council on Compensation Insurance (NCCI) is the well-respected leader in providing actuarial analysis for the workers compensation insurance industry. In response to many states considering or passing legislation that extends presumptive workers' compensation coverage to employees infected by COVID-19, NCCI produced a white paper on April 27, 2020 entitled "COVID-19 and Workers Compensation: Modeling Potential Impacts." This white paper provides guidance on elements to consider and a methodological framework to possibly use when calculating an estimate related to presumptive coverage for the COVID-19 virus. Results of our actuarial analysis were reviewed in light of the guidance from NCCI to ensure that our analysis was consistent with NCCI's approach.

Introduced Legislation

Members of the Ohio General Assembly have recently introduced six separate pieces of legislation proposing that a presumption of workers' compensation coverage will exist for eligible employees who have contracted COVID-19. Eligible employees differ among these six proposals. Likewise, there is variation between the six pieces of legislation regarding the time period of eligibility. The eligible employees and the time in which claims are eligible for presumptive coverage are generally described as follows:

- HB571: any peace officer, firefighter or emergency medical worker starting March 9, 2020 (when Governor DeWine issued executive order 2020-01D that declare a state of emergency in Ohio) and ending 14 days after the expiration of the state of emergency
- HB573: any essential employee who is required to report to work outside of his or her home starting March 9, 2020 and ending 14 days after the expiration of the state of emergency
- HB605: any employee of a retail food establishment or a food processing establishment starting March 9, 2020 and ending 14 days after the expiration of the state of emergency
- HB663: any employee of a nursing home, residential care facility, or health care facility starting March 9, 2020 and ending 14 days after the expiration of the state of emergency
- HB667: any corrections officer of a public or private place of incarceration with no time limitation on when the employee contracted COVID-19
- HB668: any peace officer, firefighter or emergency medical worker with no time limitation on when the employee contracted COVID-19

ORC 4121.125(C)(6) & (7) require an actuarial estimate to be completed of any legislation that is expected to have a measurable financial impact on the workers' compensation system is introduced. This report fulfills this requirement.

Analysis

With COVID-19 being a new virus that is much more aggressive and impactful than typical influenza, there is little relevant data to rely on in performing actuarial analyses. Many studies are actively being developed and published contemporaneously with this report that use a wide range of assumptions of how this virus functions and how the workers' compensation system will be impacted. This report relied most heavily on information from the Ohio Department of Health (ODH), including its website, coronavirus.ohio.gov, with supplemental consideration given to information from NCCI, the Bureau of Labor & Statistics, and a handful of other sources.

Beginning in March, ODH has daily monitored and published numbers related to COVID-19, including count of infected people, hospitalized people, ICU admittances, and deaths by age, gender, and county. Based on this, we can reach some conclusions to the impact of COVID-19 on workers' compensation in Ohio. Most notably:

- Roughly 20% of known cases appear to require hospitalization
- Of those cases requiring hospitalization, approximately 25% are admitted to ICU

- Age range of hospitalizations and deaths are highly skewed toward older population, which is more concentrated by retired or unemployed segments who are ineligible for workers' compensation benefits

Further, there is anecdotal evidence to suggest that younger aged groups who acquire COVID-19 and then require hospitalization may be skewed toward having associated health conditions such as cigarette use, asthma, diabetes, or other respiratory or immunodeficiency conditions.

The prevailing expectation in the virology community is that upwards of 75% of the population will eventually contract COVID-19, the large majority of which will be asymptomatic or only exhibit minor symptoms consistent with normal influenza. It is expected that these people will introduce little to no costs to the workers' compensation system.

A cursory view of the fatality rate suggests it may be as high as 6%. This rate should be used with caution. The fatality rate may actually be higher than this after considering there is a long lag time from initial symptoms to death, perhaps as much as 8 weeks. However, it is overstated – perhaps by a wide margin – given the limited testing capacity; when only people with severe symptoms are tested while those with minor or no symptoms are not tested, the ratio of fatalities to cases is biased upward. There also is evidence to suggest that deaths attributed to COVID-19 could be more accurately attributed to other health conditions as the primary cause of death.

ODH has developed a model that projects the number of COVID-19 cases expected in Ohio. The model anticipates and assumes that there will be strict adherence to social distancing protocols and Director Acton's "stay at home" order, thus tempering the spread of COVID-19. The model has gone through several updates. As of the publication of this report, the most recent version of ODH's model was published April 5, 2020 with an estimated 53,000 cases occurring in the state of Ohio between February and June and the peak number of cases occurring in late April.

We increased our estimate of infections above ODH's modeled count of 53,000 to reflect recent results. The model anticipated COVID-19 would have run its course by the end of June and that the number of new cases of infection would be 0 per day in July and beyond. Actual results have not trailed off like the model anticipated; in fact, results have already surpassed 53,000 and are still averaging a few hundred cases per day in July. Our estimate of the final count of COVID-19 infections considers this prolonged pattern.

The 53,000 cases estimated by the ODH model are from the entire population of Ohio. It must be reduced to recognize that some of these will be children, retirees, and other people who are not eligible for workers' compensation benefits. Most notable among the group is the unemployed population, which sharply increased in March when businesses began responding to Director Acton's "stay at home" order. Further, it must be recognized that some infected employees would be provided coverage in today's environment without presumptive coverage prescribed in the six proposed pieces of legislation while some employees who are eligible for benefits under this legislation may not file for them. Because of the degree of uncertainty surrounding these considerations, a range of reasonably foreseeable covered workers' compensation cases has been estimated from the 53,000 developed by the ODH model and adjusted to reflect the prolonged emergence pattern. Our estimates are based on total case numbers for the Ohio population between 70,000 and 90,000.

We have observed there are varying degrees of severity for those who contract COVID-19. Most cases develop no symptoms or only minor symptoms that are no worse than the common cold, others are admitted to a hospital for care that we will label as routine (although it may rise to a level that is more involved than that), and a small number of cases will require ICU treatment. We have assumed that 20% of cases require hospitalization, split between 15% for routine hospital care and 5% for ICU.

A small portion of cases will ultimately result in fatality. As outlined above, relying solely on results from ODH may lead to an overestimation of fatalities as it impacts the workers' compensation system. Additional information regarding infection rates, testing rates, and fatality rates across the nation and on an international basis were used to derive an estimate of deaths in Ohio during Governor DeWine's emergency order.

The table shown below estimates the potential number of new workers' compensation claims because of COVID-19. These are claims from employees eligible to file a claim who are not covered today but would be covered under the proposed legislation of presumptive coverage if it were to apply to every employee.

Potential Number of COVID-19 Cases from Eligible Employees

	Optimistic Estimate	Conservative Estimate
No Hospitalization	28,730	42,240
Routine Care at Hospital	4,040	6,090
ICU Treatment	1,200	1,830
Death	680	1,080
Total	34,650	51,240

To be clear, these estimates assume that presumptive coverage were applicable to the entire population of employees. However, four of the six pieces of legislation (excluding HB667 and HB 668) limit the time to Governor DeWine's emergency order and all six limit the scope of the presumptive coverage to a subset of this population. Namely:

- HB571: any peace officer, firefighter or emergency medical worker who contracts COVID-19 during the governor's emergency order
- HB573: any employee who is required to report to work outside of his or her home who contracts COVID-19 during the governor's emergency order
- HB605: any employee of a retail food establishment or a food processing establishment who contracts COVID-19 during the governor's emergency order
- HB633: any employees of nursing homes, residential care facilities, and health care locations who contracts COVID-19 during the governor's emergency order
- HB667: any corrections officers with no time limitation for contracting COVID-19
- HB668: any peace officers, firefighters, or EMT employees with no time limitation for contracting COVID-19

Using data from the Bureau of Labor & Statistics (https://www.bls.gov/oes/current/oes_oh.htm), we arrived at estimates of the population covered by the six bills, as shown in the table on the following page. Estimates suggest that roughly 60% of the current workforce is telecommuting while 40% is required to report to work on a regular basis (<https://globalworkplaceanalytics.com/telecommuting->

statistics). It should be noted that a large portion of the food industry was laid off or furloughed during March and April and thus a lower percentage of the food industry employment population may have contracted COVID-19 and covered by the presumption. The estimate of HB605 employees has been reduced compared to a normal operating environment.

Potential Claims from Eligible Employees Contracting COVID-19 for the Proposed Legislations

		No Hospital	Routine Care	ICU Treatment	Death	Total
HB573	Optimistic	10,056	1,414	420	272	12,162
	Conservative	19,008	2,741	824	432	23,004
HB571	Optimistic	281	40	12	7	339
	Conservative	414	60	18	11	502
HB605	Optimistic	421	59	18	10	508
	Conservative	619	89	27	16	751
HB633	Optimistic	1,069	150	45	25	1,289
	Conservative	2,095	302	91	54	2,542
HB667	Optimistic	173	24	7	4	209
	Conservative	254	37	11	7	308
HB668	Optimistic	352	49	15	8	424
	Conservative	517	75	22	13	627

Potential medical costs and temporary total indemnity benefits were estimated for each of the treatment categories as shown in the table below. In addition, an average survivor benefit was also determined at \$733,000 per claim, assuming 20 years of payments at 2/3 of the median annual Ohio income of approximately \$55,000. For hospital stays, we assumed an average daily cost of \$4,000 for a regular room and for \$6,000 for the ICU.

We anticipate minimal medical costs and temporary total benefits to be paid on the “No Hospital” cases since most will require no medical care nor will they require an employee to be out of work for more than the 8-day requirement for temporary total benefits. The costs for the other treatment categories assume increasing lengths of treatment and recovery times as the treatment becomes more pronounced. We assumed that 20% of ICU cases would end up with permanent disability that requires long-term medical care and wage replacement.

Potential per Average Claim Costs Related to Presumptive Coverage of COVID-19

	Medical Costs		Temporary Total Benefits		Long-Term Benefits*	
	Optimistic	Conservative	Optimistic	Conservative	Optimistic	Conservative
No Hospital	\$0	\$2,000	\$0	\$1,406	\$0	\$0
Routine Care	\$28,000	\$40,000	\$1,808	\$2,813	\$0	\$0
ICU Treatment	\$84,000	\$210,000	\$3,918	\$4,922	\$1,250,000	\$1,250,000
Death	\$84,000	\$126,000	\$2,813	\$4,219	\$733,333	\$733,333

* Long-term Benefits consist of Permanent Total Disability and ongoing medical care for ICU cases and Survivor Benefits for Death cases

As displayed in the Conclusion Section below, total costs were calculated by multiplying the number of expected claims with the estimated costs per claim (i.e. medical costs, temporary total benefits, and long-term benefits) for each of the six proposed pieces of legislation.

Uncertainty in Assumptions

We are just beginning to better understand the COVID-19 virus but still know little about it. Among the more relevant unknown items that are germane to the analysis in this report are: infection rate, hospitalization rate, fatality rate, recovery timelines, and the effectiveness in social distancing in curtailing the spread of COVID-19.

Likewise, COVID-19's impact on the workers' compensation system in Ohio is untested. Noteworthy considerations are how medical costs for treating COVID-19 may differ from traditional medical costs, how social distancing orders may impact the ability of the infected population to receive appropriate treatment, to what extent the unemployment spike has been concentrated in certain industries and how that might be correlated with age which we know to be highly correlated with infection rates and fatality rates.

It is also critical to note enacted legislation may be different from the initial proposal contemplated in this analysis and that other Ohio or possibly federal legislation may be implemented in conjunction with this pandemic that may materially alter the assumptions underlying this analysis.

The result of these many unknowns is that the estimates contained in this report rely on many assumptions, each with a high degree of uncertainty. Actual results seen from any enacted legislation may differ – perhaps by a significant amount – from the estimates presented here.

Conclusion

The estimated costs considered in this actuarial analysis are for the entire workers' compensation system in Ohio. This system includes the State Insurance Fund (commonly segmented into Private Employers, Public Employer Taxing Districts, and State Agencies) as well as Self-Insured Employers in the state. No attempt was made to separate costs between State Insurance Fund and Self-Insured Employers.

Given the wide degree of uncertainty inherent in this actuarial analysis, a range of reasonably expected outcomes is provided in the table below. It should not be interpreted that the high end of the range is the least (or most) likely outcome, nor should it be interpreted that the low end of the range is the least (or most) likely outcome. **Any value within this range should be viewed as a reasonably possible outcome based on the data, assumptions, conditions, and limitations of the actuarial analysis contained and described within this report.**

Actuarial Estimate of Costs Related to Presumptive Coverage of COVID-19

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HB667: Corrections Officers	\$6.5 million	\$13.2 million
HB668: First Responders	\$13.3 million	\$26.8 million

Actuarial Qualifications

Christopher Carlson is Chief Actuarial Officer at the Bureau of Workers' Compensation. He is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. He meets the Qualification Standards of the American Academy of Actuaries to produce this actuarial work.

Daniel Myers is Senior Director of Actuarial Analysis at the Bureau of Workers' Compensation. He is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. He meets the Qualification Standards of the American Academy of Actuaries to produce this actuarial work.