



**Pennsylvania Compensation Rating Bureau**

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November 13, 2018

**VIA SERFF**

The Honorable Jessica K. Altman  
Insurance Commissioner  
Commonwealth of Pennsylvania - Insurance Department  
1311 Strawberry Square  
Harrisburg, PA 17120

Attention: Mark Lersch, Director, Bureau of Property & Casualty Insurance  
Michael McKenney, Actuarial Supervisor, Bureau of Property & Casualty Insurance

**RE: PCR B Filings C-372 and C-373, January 1, 2019 Loss Cost Filings**

Dear Commissioner Altman:

On behalf of the members of the Pennsylvania Compensation Rating Bureau (PCR B), we hereby submit Filings C-372 (the Interim Loss Cost Filing) and C-373 (the Protz Adjustment Filing) (together, the "Filings"). The Protz Adjustment Filing, which presupposes that the Interim Loss Cost Filing will be approved by the Department, contains workers compensation loss costs and rating values proposed to be **effective 12:01 a.m., January 1, 2019** with respect to new and renewal policies having effective dates on or after that date.

As the PCR B has discussed with your staff, the Interim Loss Cost Filing has been made in response to the PCR B's determination that the financial data valued as of December 31, 2016, reported by a PCR B member and used in the development of Filing No. C-370 were incorrect (Filing C-370 was approved by the Pennsylvania Insurance Commissioner effective April 1, 2018, resulting in an overall average increase of 0.70% in collectible loss costs). This member's reported losses were, mistakenly, materially overstated, necessitating the preparation of the Interim Loss Cost Filing.

The Interim Loss Cost Filing is a submission of updated loss costs and related rating values with an overall average change of -10.02 percent, relative to current rating values (which became effective on and after April 1, 2018).

The Protz Adjustment Filing has been made in response to the requirement, contained in HB-1840 (signed into Pennsylvania law as Act 111 of 2018, effective October 24, 2018), that:

- (1) within 90 days following October 24, 2018 (i.e., by January 22, 2018) the PCR B must calculate the savings achieved through the implementation of Section 1 of HB-1840 (which amends Section 306 (A.3) of the Pennsylvania Workers' Compensation Act by adding a new Impairment Rating Evaluation (IRE) provision), and

The Honorable Jessica K. Altman  
Insurance Commissioner  
November 13, 2018  
Page 2

(2) “immediately following this calculation, the amount of savings shall be used to provide an immediate reduction in rates, equal to the savings, applicable to employers' workers' compensation policies.”

See Section 3.(3) of HB-1840 (amending Section 306 (A.3) of the Pennsylvania Workers' Compensation Act). The Protz Adjustment Filing was not affected by the member data issue discussed above.

The Protz Adjustment Filing submission is an update of loss costs and related rating values with an overall average change of -5.24 percent, relative to approval of the rating values proposed in the Interim Filing.

The combined effect of both filings proposes an overall average change of -14.74% relative to the loss costs contained in Filing C-370 (which became effective April 1, 2018), prior to application of the assessment for the Office of the Small Business Advocate and loadings for the Pennsylvania Construction Classification Premium Adjustment Program, Merit Rating Plan off-balance and Certified Safety Committee credits.

In preparing for these submissions, the PCRB has carefully considered current Pennsylvania experience and has applied a variety of actuarial analytical techniques. The Filings reflect all initial and continuing effects of both Act 44 of 1993 and Act 57 of 1996, the anticipated savings from the enactment of House Bill 1846 of 2014, and the anticipated savings from the enactment of HB1840 (the Protz Adjustment legislation). A detailed discussion of the considerations, methods, and exhibits is provided in the accompanying Actuarial Memorandum.

The PCRB respectfully requests a timely review of these filings, allowing implementation on a new and renewal basis **effective January 1, 2019**. A timely review will allow adequate advance notice of final loss costs and related rating values to all participants in the Pennsylvania marketplace. Toward that objective, the PCRB will be pleased to answer any questions or provide any available supplementary information which you or your staff may require.

Please direct all questions to William Taylor, President, or to Kenneth Creighton, Chief Actuary.

Sincerely,

William V. Taylor  
President



## Pennsylvania Compensation Rating Bureau

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To: The Honorable Jessica K. Altman  
Pennsylvania Insurance Commissioner

From: Peter Yoon, ACAS, MAAA  
Director of Actuarial Research

Date: November 13, 2018

Subject: PCRB Filing C-373  
Workers Compensation Loss Cost Filing  
Proposed Effective Date: January 1, 2019

This actuarial memorandum provides a discussion of the analysis performed by the PCRB that results in the following proposed change from the loss costs proposed in PCRB Filing C-372, which was filed concurrently with this filing.

Indicated and Proposed Change	
Pennsylvania Loss Costs	-5.24%

The change is based on the PCRB's analysis of the impact of Pennsylvania House Bill 1840 of 2017 (HB 1840), which became law on October 24, 2018. This legislation was enacted in response to the Pennsylvania Supreme Court decision in *Protz v. WCAB (Derry Area School District)* (Protz decision). The change has been applied uniformly to the PCRB classes, with a few exceptions<sup>1</sup>. The PCRB proposes that this change apply to new and renewal policies that are effective on or after January 1, 2019.

This filing relies on analysis using practical assumptions and straightforward calculations based on actual data, consistent with the approach taken in PCRB Filing C-369, which reflected the impact on loss costs due to the Protz decision.

There are two additional points regarding this filing and the Protz decision. First, the analysis produces an indicated change in prospective loss costs and is based on estimates of changes in future costs. Second, the filing does not address or include a provision for retroactive changes in cost.

The discussion is organized by the following topics:

- Summary of the Protz Decision
- Summary of HB 1840
- Overall Impact of HB 1840
- Impact of the Reinstatement of Impairment Rating Evaluations (IREs)
- Impact of the Increase in Burial Benefits from \$3,000 to \$7,000

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<sup>1</sup> The following classes are not affected: 9740, 9741, 0162 and 0164.

- Adherence to Actuarial Principles and Standards of Practice
- Closing Comments and Qualifications
- Index of Exhibits

### **SUMMARY OF THE PROTZ DECISION**

On June 20, 2017, the Pennsylvania Supreme Court issued its decision in *Protz v. WCAB (Derry Area School District)*, Nos 6 WAP 2016, 7 WAP 2017, holding that Section 306(a.2) of the Workers' Compensation Act (77 P.S. § 511.2) is an unconstitutional delegation of legislative authority. The Court concluded that the entirety of Section 306(a.2) was unconstitutional. Specifically, the Court upheld the Commonwealth Court order declaring that the portion of the Act requiring physicians to apply the methodology set forth in “the most recent edition” of the American Medical Association *Guides to the Evaluation of Permanent Impairment* violates the constitutional requirement that all legislative power “be vested in a General Assembly which shall consist of a Senate and a House of Representatives.”

On June 21, 2017, the Pennsylvania Department of Labor & Industry, Bureau of Workers' Compensation announced that, effective immediately, the Bureau of Workers' Compensation would no longer authorize physicians to perform Impairment Rating Evaluations (IREs).

### **SUMMARY OF HB 1840**

As noted above, in the Protz decision, the Pennsylvania Supreme Court concluded that the entirety of Section 306(a.2) was unconstitutional. This meant that the criteria related to an employee's impairment rating was no longer available to determine whether an employee was considered totally disabled and could receive total disability compensation benefits.

HB1840 reinstates the use of IREs in determining whether an injury was classified as Permanent Total or Permanent Partial. However, the impairment threshold percentage to determine permanent disability was reduced from 50% to 35% as a result of the legislation.

Further, the legislation increases the burial benefits for claimants from \$3,000 to \$7,000. When an employee in Pennsylvania dies from a work-related illness or injury, the employee's spouse, children, and other dependents may be eligible for death benefits under the state's workers compensation laws. Pennsylvania workers compensation insurance includes burial benefits as part of its death benefits, and, under the new law, pays the family of an eligible worker up to a \$7,000 burial benefit.

### **OVERALL IMPACT OF HB 1840**

The PCRB performed an analysis of HB1840 to determine its effects on workers compensation loss costs. The calculation of the effect of HB1840 is summarized in **Exhibit 1**. Based on the analysis, it is estimated that the impact on indemnity loss costs would be a decrease of 10.42% due to the reinstatement of IREs and an increase of 0.03% due to the increase in burial benefits. The impact on overall indemnity loss costs would be decrease of 10.39% and an overall reduction in loss costs of 5.24%.

### **IMPACT OF REINSTATEMENT OF IMPAIRMENT RATING EVALUATIONS (IREs)**

The Pennsylvania Department of Labor and Industry provided the PCRB with data for over 9,500 IREs submitted during 2009 through 2017. The IRE data is shown in **Exhibit 3**.

**Exhibit 3** also includes the calculation of a factor of 3.227, based on the IRE data, which represents the increase in the number of IREs, when the impairment threshold percentage is reduced from 50% to 35%.

The top half of **Exhibit 2** shows the same claim count and average severity data by injury type as was presented in PCRB Filing C-369, the Protz filing. This data reflects an impairment threshold percentage for Permanent Total claims of 50%, which was in effect prior to the Protz decision. The bottom half of **Exhibit 2** shows the same average severity data by injury type as the top half of the exhibit. However, the Permanent Total claim counts have been adjusted by the 3.227 factor from **Exhibit 3**. The claim counts for Major, Minor and Temporary Total have been changed to reflect the same distribution of the number of claims that were changed from Major, Minor and Temporary Total claims to Permanent Total claims as a result of the Protz decision as seen in PCRB Filing C-369, the Protz filing.

### **IMPACT OF THE INCREASE IN BURIAL BENEFITS FROM \$3,000 TO \$7,000**

The Pennsylvania Workers Compensation Act provides benefits to workers who die in the course and scope of their employment. Prior to the passage of HB1840, the family of an eligible worker received a percentage of the deceased worker's salary and up to a \$3,000 burial benefit.

With the passage of HB1840, the maximum burial benefit payable to the worker's designated beneficiary is increased to \$7,000.

To measure the impact of the increase in burial benefit, the PCRB examined the data collected from Individual Case Reports (ICRs), which carriers are required to submit for all Pennsylvania workers compensation claims involving death and permanent total benefits.

Using the ICR data, the PCRB identified 224 death claims with a \$3,000 burial benefit, 18 claims with other than a \$3,000 burial benefit and 189 death claims whose burial benefits were combined with the indemnity benefits with no separate detail. Based on this review, the PCRB concluded that the beneficiaries received the \$3,000 maximum for death claims.

Further, the PCRB looked to determine whether it was reasonable to assume that the \$7,000 maximum would be paid for future death claims. The previous burial benefit was set at \$3,000 in 1993 and, when adjusted for inflation, the benefit would have been approximately \$7,200. Also, the Calendar Year 2016 national median cost of a funeral with a viewing and burial was approximately \$8,500. Based on this information, the use of the \$7,000 assumption was appropriate.

The calculation of the impact of the increase in burial benefits is summarized in **Exhibit 4**. The distribution of death claims by policy year underlying PCRB Filing C-372, the January 1, 2019

loss cost filing, is shown in the upper portion of the exhibit. The entries for the last column, "Post-HB 1840 Death Benefits", are computed as follows:

$$\text{Post-HB 1840 Death Benefits} = \\ \text{Pre-HB 1840 Death Benefits} + [\text{Death Claim Count} \times (\$7,000 - \$3,000)]$$

Therefore, the impact of the increase in burial benefit on total death benefits is estimated to be 1.40%. The death benefits shown in the upper portion of **Exhibit 4** were used in the lower portion of the exhibit, along with the unchanged loss dollars for the other injury types, to calculate an overall effect on indemnity loss of 0.032%.

### **ADHERENCE TO ACTUARIAL PRINCIPLES AND STANDARDS OF PRACTICE**

A fundamental actuarial principle applicable to this memorandum is:

*"A rate is reasonable and not excessive, inadequate or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer."*

The immediate impact of HB 1840 was an overstatement in current PCRB loss costs, which is the reason the PCRB has submitted this filing.

It is reasonable to conclude that, with the reinstatement of the IRE process (albeit at a reduced impairment threshold percentage), greater efficiency in determining the length of time over which benefits would be paid will result. In turn, claim closure rates are likely to increase on average, causing total indemnity benefits to be reduced.

### **CLOSING COMMENTS AND QUALIFICATIONS**

The PCRB respectfully requests a timely review of this filing, allowing implementation on a new and renewal basis **effective January 1, 2019**. A timely review will allow advance notice of final loss costs and related rating values to all participants in the Pennsylvania marketplace. The PCRB will be pleased to answer any questions or provide any available supplementary information which you or your staff may require.

This filing has been developed by and under the direction of Peter H. Yoon, ACAS, MAAA and Kenneth M. Creighton, ACAS, MAAA who meet the Qualification Standards of the American Academy of Actuaries to provide the actuarial opinion contained within this filing.

Please direct all questions to:

Peter Yoon  
Director of Actuarial  
Research  
[pyoon@pcrb.com](mailto:pyoon@pcrb.com)  
215-320-4483

Kenneth Creighton  
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#### INDEX OF EXHIBITS

Exhibit 1	Effects of HB 1840
Exhibit 2	Effects of HB 1840 - Reinstatement of Impairment Rating Evaluations
Exhibit 3	Pennsylvania Impairment Rating Evaluations (by range of scores)
Exhibit 4	Effects of HB 1840 - Increase of the Burial Benefits from \$3,000 to \$7,000
Exhibit 5	Proposed Loss Costs and Expected Loss Factors

**PENNSYLVANIA COMPENSATION RATING BUREAU**  
**Effects of HB 1840**

	Impact on Indemnity Loss Cost
Reinstatement of Impairment Rating Evaluations	-10.42%
Increase in Burial Benefit	0.03%
<b>Total *</b>	<b>-10.39%</b>

	Weight**	Combined Effect
Indemnity	50.44%	-10.39%
Medical	49.56%	0.00%
<b>Indicated Change***</b>		<b>-5.24%</b>

\*  $-10.39\% = (1 - 0.1042) \times (1 + 0.0003) - 1$

\*\* PCRB Filing No. C-372 January 1, 2019 Loss Cost Filing (Exhibit 1, Line (10))

\*\*\*  $(\text{Impact on Indemnity Loss Cost}) \times (\text{Indemnity Weight}) + (1.00) \times (\text{Medical Weight})$





**PENNSYLVANIA COMPENSATION RATING BUREAU**  
 Pennsylvania Impairment Rating Evaluations \*  
 IRE Submission Year ( 2009 - 2017\*)

Low	High	Count	%	Impact of HB 1840
IRE Score = 0		25	0.3%	3.227 ** =5.5%/1.7%
0.01	4.99	1596	16.8%	
5	9.99	2368	24.9%	
10	14.99	2082	21.9%	
15	19.99	1188	12.5%	
20	24.99	633	6.6%	
25	29.99	791	8.3%	
30	34.99	317	3.3%	
35	39.99	167	1.8%	
40	44.99	123	1.3%	
45	49.99	73	0.8%	
50	54.99	57	0.6%	
55	59.99	36	0.4%	
60	64.99	29	0.3%	
65	69.99	20	0.2%	
70	74.99	10	0.1%	
75	79.99	3	0.0%	
80	84.99	5	0.1%	
85	89.99	1	0.0%	
90	94.99	1	0.0%	
95	99.99	0	0.0%	
IRE Score = 100		1	0.0%	
Grand Total		9526	100.0%	

Source: Pennsylvania Department of Labor and Industry

\* Based on data submitted through May, 2017

\*\* Cumulative distribution greater than 35% / Cumulative distribution greater than 50%

**PENNSYLVANIA COMPENSATION RATING BUREAU**  
**Effects of HB 1840 - Increase of the Burial Benefits from \$3,000 to \$7,000**

Policy Year	Death Claim Count	Pre-HB 1840 Death Benefits	Post-HB 1840 Death Benefits *
2010	90	22,224,500	22,584,500
2011	100	28,025,800	28,425,800
2012	89	29,394,600	29,750,600
2013	88	21,920,300	22,272,300
2014	70	23,324,000	23,604,000
<b>Total</b>	<b>437</b>	<b>124,889,200</b>	<b>126,637,200</b>

Impact of Burial Benefit Change on Death Claims \*\* = 1.014 ≈ 1.40%

Source: PCRB Filing No. C-372 January 1, 2019 Loss Cost Filing, Table III - Section C

\* Pre-HB 1840 Death Benefits + Death Claim Count x (\$7,000-\$3,000)

\*\* 126,637,200 / 124,889,200 = 1.014

**Impact on Indemnity Loss**

Policy Year	Pre-HB 1840		Post-HB 1840	
	Death	Other than Death	Death	Other than Death
2010	22,224,500	1,059,077,200	22,584,500	1,059,077,200
2011	28,025,800	1,039,084,600	28,425,800	1,039,084,600
2012	29,394,600	1,025,612,300	29,750,600	1,025,612,300
2013	21,920,300	1,106,840,000	22,272,300	1,106,840,000
2014	23,324,000	1,119,790,700	23,604,000	1,119,790,700
<b>Total</b>	<b>124,889,200</b>	<b>5,350,404,800</b>	<b>126,637,200</b>	<b>5,350,404,800</b>

Impact of Burial Benefit Change on Indemnity Claims \* = **1.00032** ≈ **0.032%**

Source: PCRB Filing No. C-372 January 1, 2019 Loss Cost Filing, Table III - Section C

\* (126,637,200 + 5,350,404,800) / (124,889,200 + 5,350,404,800) = 1.00032

**LOSS COSTS AND EXPECTED LOSS FACTORS  
FOR PENNSYLVANIA WORKERS COMPENSATION INSURANCE**  
Proposed Effective Date: January 1, 2019 on New and Renewal Business

CODE NO	LOSS COST	EXPERIENCE RATING PLAN EXPECTED LOSS FACTORS TABLE *			HAZARD GROUP A - G
		A-1	A-2	A-3	
005	9.58	6.83	8.68	9.61	F
007	3.84	2.74	3.48	3.86	C
009	15.34	10.94	13.90	15.40	G
015	7.98	5.69	7.23	8.00	E
025	3.07	1.94	2.39	2.60	G
028	2.03	1.28	1.58	1.72	F
050	2.85	1.80	2.22	2.41	F
051	2.82	1.78	2.19	2.38	F
055	3.31	2.08	2.57	2.80	F
059	4.13	2.61	3.22	3.50	E
101	2.32	1.58	2.01	2.23	E
103	1.01	0.69	0.88	0.98	C
104	2.79	1.89	2.40	2.67	B
105	2.90	1.97	2.50	2.78	D
106	4.36	2.96	3.76	4.18	C
107	1.95	1.33	1.68	1.87	B
108	2.17	1.48	1.87	2.08	C
109	3.20	2.17	2.76	3.07	C
110	2.25	1.53	1.94	2.16	B
111	5.61	3.81	4.84	5.38	C
112	6.99	4.75	6.02	6.70	C
113	1.64	1.12	1.42	1.58	C
114	4.65	3.16	4.01	4.46	E
115	1.89	1.28	1.62	1.81	D
119	2.57	1.74	2.21	2.46	C
130	3.96	2.70	3.42	3.80	E
132	2.29	1.55	1.97	2.19	C
134	2.47	1.68	2.13	2.37	C
135	1.95	1.33	1.68	1.87	C
136	2.20	1.50	1.90	2.11	C
139	3.26	2.22	2.82	3.13	C
141	3.50	2.38	3.02	3.35	B
142	1.81	1.23	1.57	1.74	C
161	1.42	0.97	1.23	1.36	C
163	2.93	1.99	2.53	2.81	C
165	4.68	3.19	4.04	4.50	B
166	2.34	1.59	2.02	2.25	C
185	5.08	3.45	4.38	4.87	B
187	3.34	2.27	2.88	3.20	B
189	2.81	1.91	2.42	2.69	C
191	2.51	1.71	2.17	2.41	C
201	3.10	2.11	2.68	2.98	D
204	2.21	1.50	1.91	2.12	B
205	2.28	1.55	1.96	2.18	B
221	1.52	1.03	1.31	1.46	C

\* Table A-1 applies to the most current policy year, Table A-2 to the first prior policy year, and Table A-3 to the second prior policy year.

**LOSS COSTS AND EXPECTED LOSS FACTORS  
FOR PENNSYLVANIA WORKERS COMPENSATION INSURANCE**  
Proposed Effective Date: January 1, 2019 on New and Renewal Business

CODE NO	LOSS COST	EXPERIENCE RATING PLAN EXPECTED LOSS FACTORS TABLE *			HAZARD GROUP A - G
		A-1	A-2	A-3	
222	1.85	1.25	1.59	1.77	C
225	2.07	1.40	1.78	1.98	C
227	2.43	1.65	2.10	2.33	C
255	2.02	1.37	1.74	1.93	E
257	1.97	1.34	1.70	1.89	C
261	2.19	1.49	1.89	2.10	C
263	1.51	1.03	1.30	1.45	C
265	2.00	1.36	1.72	1.92	C
275	2.62	1.78	2.25	2.51	C
276	3.24	2.21	2.80	3.11	C
281	1.75	1.19	1.52	1.69	B
282	4.25	2.89	3.66	4.07	D
285	1.65	1.12	1.43	1.58	B
291	3.18	2.16	2.74	3.05	E
297	3.08	2.10	2.66	2.96	B
301	4.48	3.04	3.86	4.29	F
305	3.14	2.14	2.71	3.01	D
306	2.82	1.91	2.43	2.70	B
311	2.12	1.44	1.83	2.04	C
319	3.13	2.13	2.70	3.00	A
323	2.83	1.92	2.44	2.71	C
327	2.10	1.42	1.81	2.01	C
402	2.79	1.89	2.40	2.67	E
403	2.09	1.42	1.80	2.00	C
404	2.24	1.52	1.93	2.15	E
406	2.51	1.71	2.17	2.41	E
407	2.38	1.62	2.06	2.28	C
411	3.64	2.47	3.14	3.49	E
413	3.81	2.59	3.29	3.66	E
415	2.47	1.68	2.13	2.37	E
416	1.31	0.89	1.13	1.25	C
421	4.98	3.38	4.29	4.77	E
425	5.49	3.73	4.73	5.26	E
427	3.04	2.07	2.63	2.92	E
429	2.84	1.93	2.44	2.72	D
431	3.90	2.65	3.36	3.74	C
433	2.43	1.65	2.10	2.33	C
435	2.79	1.89	2.40	2.67	C
441	0.90	0.61	0.78	0.87	C
445	1.65 a	1.12	1.43	1.58	C
446	0.94	0.64	0.81	0.90	B
447	3.20 b	2.17	2.76	3.07	E
449	1.65	1.12	1.43	1.58	D
451	2.47	1.68	2.14	2.38	D
454	2.12	1.44	1.83	2.04	C

\* Table A-1 applies to the most current policy year, Table A-2 to the first prior policy year, and Table A-3 to the second prior policy year.

a OD: \$0.06 Supplemental is not subject to experience rating. Code as 0067.

b OD: \$0.05 Supplemental is not subject to experience rating. Code as 0066.

**LOSS COSTS AND EXPECTED LOSS FACTORS  
FOR PENNSYLVANIA WORKERS COMPENSATION INSURANCE**  
Proposed Effective Date: January 1, 2019 on New and Renewal Business

CODE NO	LOSS COST	EXPERIENCE RATING PLAN EXPECTED LOSS FACTORS TABLE *			HAZARD GROUP A - G
		A-1	A-2	A-3	
456	2.41	1.64	2.08	2.31	D
457	2.34	1.59	2.02	2.25	C
458	1.31	0.89	1.13	1.25	B
459	0.66	0.45	0.57	0.64	C
461	1.88	1.27	1.62	1.80	D
463	2.11	1.44	1.82	2.03	D
465	2.45	1.67	2.11	2.35	D
467	3.03	2.06	2.62	2.91	B
471	0.78	0.53	0.67	0.75	B
472	0.80	0.54	0.69	0.76	B
473	1.99	1.35	1.72	1.91	B
474	1.54	1.04	1.33	1.47	C
475	1.34	0.91	1.15	1.28	D
476	0.93	0.63	0.80	0.89	C
477	1.43	0.97	1.23	1.37	C
483	1.18	0.80	1.01	1.12	B
485	0.86	0.59	0.75	0.83	B
486	0.98	0.67	0.85	0.94	C
487	0.78	0.53	0.67	0.75	C
488	0.63	0.42	0.54	0.60	B
489	0.88	0.60	0.76	0.85	B
491	3.54	2.40	3.05	3.39	C
493	2.86	1.95	2.47	2.75	C
495	4.38	2.98	3.78	4.20	D
497	1.38	0.94	1.19	1.33	B
499	2.33	1.59	2.01	2.24	D
501	3.02	2.05	2.60	2.89	E
502	2.58	1.75	2.22	2.47	A
506	1.37	0.93	1.18	1.31	C
507	1.67	1.14	1.44	1.60	F
509	4.11	2.79	3.54	3.93	G
511	4.29	2.91	3.70	4.11	E
512	3.16	2.15	2.73	3.03	E
513	2.36 c	1.61	2.04	2.27	B
514	3.34	2.27	2.88	3.20	E
520	0.27	0.20	0.25	0.28	C
521	0.65	0.47	0.59	0.66	B
522	1.11	0.79	1.00	1.11	C
523	1.90	1.35	1.72	1.90	C
524	2.80	1.99	2.53	2.81	B
525	4.80	3.26	4.14	4.60	D
526	7.05	5.02	6.38	7.07	E
527	11.05	6.97	8.60	9.35	E
528	16.32	11.09	14.08	15.65	E
529	26.20	16.53	20.40	22.17	G

\* Table A-1 applies to the most current policy year, Table A-2 to the first prior policy year, and Table A-3 to the second prior policy year.

c OD: \$0.12 Supplemental is not subject to experience rating. Code as 0176.

**LOSS COSTS AND EXPECTED LOSS FACTORS  
FOR PENNSYLVANIA WORKERS COMPENSATION INSURANCE**  
Proposed Effective Date: January 1, 2019 on New and Renewal Business

CODE NO	LOSS COST	EXPERIENCE RATING PLAN EXPECTED LOSS FACTORS TABLE *			HAZARD GROUP A - G
		A-1	A-2	A-3	
535	1.99	1.35	1.72	1.91	C
536	4.30	2.92	3.70	4.12	C
551	0.95	0.65	0.82	0.91	F
553	0.93	0.63	0.80	0.89	G
555	0.30	0.21	0.27	0.29	B
563	0.96	0.65	0.83	0.92	C
571	1.86	1.26	1.60	1.78	C
573	2.95	2.00	2.54	2.83	F
581	1.20	0.81	1.03	1.14	E
587	1.69	1.15	1.46	1.62	C
601	5.39	3.36	4.15	4.51	G
603	4.96	2.99	3.69	4.01	F
605	5.82	3.59	4.43	4.81	E
606	4.13	2.55	3.14	3.42	G
607	2.48	1.55	1.92	2.08	F
608	5.26	3.22	3.98	4.33	F
609	3.22	2.00	2.47	2.68	F
611	7.52	4.62	5.70	6.20	E
615	7.22	4.44	5.48	5.95	G
0152	0.78				G
617	2.33	1.45	1.79	1.94	F
645	5.88	3.51	4.33	4.71	F
646	4.29	2.61	3.22	3.50	E
647	5.94	3.71	4.53	4.98	D
648	5.30	3.28	4.05	4.40	E
649	3.27	1.94	2.39	2.60	E
651	5.28	3.24	4.00	4.34	F
652	7.58	4.77	5.89	6.40	F
653	6.08	3.72	4.59	4.99	F
654	6.20	3.74	4.62	5.02	F
655	9.25	5.67	7.00	7.61	G
656	4.38	2.71	3.35	3.64	G
657	6.61	4.08	5.04	5.47	F
658	7.41	4.49	5.54	6.03	F
659	12.94	8.06	9.95	10.81	G
660	2.01	1.23	1.52	1.65	E
661	2.71	1.60	1.98	2.15	E
662	4.41	2.78	3.43	3.72	E
663	3.00	1.84	2.27	2.46	E
664	2.90	1.75	2.16	2.35	E
665	6.61	4.08	5.04	5.47	F
666	5.88	3.53	4.35	4.73	E
667	1.55	0.95	1.17	1.27	F
668	6.14	3.75	4.62	5.02	E
669	5.41	3.25	4.01	4.36	F

\* Table A-1 applies to the most current policy year, Table A-2 to the first prior policy year, and Table A-3 to the second prior policy year.

Associated classes - both codes must be applied. The second code is not subject to experience rating and applies to the full payroll of the associated class.

d OD: \$0.74 Supplemental applies when coverage for Federal black lung is provided. It is not subject to experience rating. Code as 0164.

**LOSS COSTS AND EXPECTED LOSS FACTORS  
FOR PENNSYLVANIA WORKERS COMPENSATION INSURANCE**  
Proposed Effective Date: January 1, 2019 on New and Renewal Business

CODE NO	LOSS COST	EXPERIENCE RATING PLAN EXPECTED LOSS FACTORS TABLE *			HAZARD GROUP A - G
		A-1	A-2	A-3	
670	4.84	2.88	3.55	3.86	E
673	4.61	2.88	3.55	3.86	F
674	4.02	2.50	3.09	3.36	E
675	2.69	1.68	2.07	2.25	F
676	3.77	2.31	2.85	3.10	E
677	2.54	1.57	1.94	2.11	G
679	6.55	4.04	4.98	5.42	F
681	4.65	2.88	3.55	3.86	F
691	5.10	3.14	3.88	4.21	F
693	8.20	5.06	6.25	6.79	F
695	4.06	2.51	3.10	3.37	E
709	1.43	0.90	1.11	1.21	G
716	2.17	1.37	1.69	1.84	E
718	2.21	1.39	1.72	1.87	E
721	7.02	4.77	6.05	6.73	F
744	0.28	0.20	0.25	0.28	D
751	1.03	0.71	0.89	1.00	E
752	0.71	0.48	0.61	0.68	G
753	2.42	1.65	2.09	2.32	C
755	1.03	0.71	0.89	1.00	F
757	1.14	0.77	0.98	1.09	E
759	4.80	3.26	4.14	4.60	E
801	5.90	4.21	5.35	5.92	E
802	3.63	2.59	3.29	3.64	E
803	10.56	7.54	9.58	10.60	E
804	2.89	2.06	2.62	2.90	E
805	3.93	2.30	3.56	3.94	E
806	7.43	5.30	6.74	7.46	E
807	4.04	2.88	3.66	4.05	E
808	3.17	2.26	2.87	3.18	E
809	4.56	3.25	4.14	4.58	F
810	3.14	2.24	2.85	3.15	F
0162	0.74				E
811	5.54	3.95	5.01	5.55	E
812	5.37	3.83	4.87	5.39	F
813	3.44	2.45	3.12	3.45	D
814	1.72	1.23	1.56	1.73	C
815	2.46	1.75	2.23	2.47	D
816	1.78	1.27	1.62	1.79	D
817	4.27	3.04	3.87	4.28	E
818	0.99	0.71	0.90	0.99	D
819	1.03	0.74	0.94	1.04	D
820	1.78	1.27	1.62	1.79	D
821	4.33	3.09	3.93	4.35	C
825	2.91	2.08	2.64	2.92	C

\* Table A-1 applies to the most current policy year, Table A-2 to the first prior policy year, and Table A-3 to the second prior policy year.

0162 Associated classes - both codes must be applied. The second code is not subject to experience rating and applies to the full payroll of the associated class.



**LOSS COSTS AND EXPECTED LOSS FACTORS  
FOR PENNSYLVANIA WORKERS COMPENSATION INSURANCE**  
Proposed Effective Date: January 1, 2019 on New and Renewal Business

CODE NO	LOSS COST	EXPERIENCE RATING PLAN EXPECTED LOSS FACTORS TABLE *			HAZARD GROUP A - G
		A-1	A-2	A-3	
828	5.01	3.57	4.54	5.02	E
855	3.12	2.23	2.83	3.13	E
857	3.35	2.38	3.03	3.35	E
858	4.53	3.23	4.11	4.55	F
859	4.94	3.52	4.47	4.95	E
860	5.15	3.67	4.67	5.17	E
862	4.96	3.53	4.49	4.97	E
865	3.41	2.43	3.09	3.42	C
867	6.01	4.29	5.45	6.03	D
871	5.38	3.84	4.88	5.40	D
877	2.25	1.60	2.04	2.26	B
879	3.11	2.22	2.82	3.12	B
880	3.98	2.84	3.61	4.00	C
881	3.44	2.45	3.12	3.45	B
882	4.24	3.02	3.84	4.25	B
883	2.64	1.88	2.39	2.64	B
884	0.84	0.60	0.77	0.85	B
885	2.11	1.51	1.92	2.12	C
886	1.48	1.05	1.34	1.48	B
887	0.56	0.40	0.50	0.56	C
888	3.02	2.16	2.74	3.04	C
889	0.21	0.15	0.19	0.21	B
890	0.34	0.25	0.31	0.35	C
891	0.87	0.62	0.79	0.88	B
892	0.59	0.42	0.53	0.59	B
893	0.54	0.38	0.49	0.54	B
894	1.38	0.99	1.25	1.39	B
895	0.79	0.56	0.71	0.79	B
896	1.05	0.75	0.96	1.06	A
897	1.24	0.88	1.12	1.24	A
898	1.56	1.11	1.41	1.56	C
899	0.99	0.71	0.90	0.99	C
903	0.20	0.14	0.18	0.20	E
904	1.00	0.72	0.91	1.01	E
905	0.07	0.05	0.06	0.07	D
907	3.13	2.23	2.84	3.14	B
910	3.67	2.62	3.33	3.68	C
911	4.75	3.38	4.30	4.76	B
914	1.24	0.88	1.12	1.24	B
915	1.59	1.14	1.45	1.60	C
916	1.20	0.85	1.08	1.20	B
917	1.56	1.11	1.41	1.56	C
918	1.55	1.10	1.40	1.55	C
919	1.40	1.00	1.27	1.41	B
920	0.28	0.21	0.26	0.29	C

\* Table A-1 applies to the most current policy year, Table A-2 to the first prior policy year, and Table A-3 to the second prior policy year.

**LOSS COSTS AND EXPECTED LOSS FACTORS  
FOR PENNSYLVANIA WORKERS COMPENSATION INSURANCE**  
Proposed Effective Date: January 1, 2019 on New and Renewal Business

CODE NO	LOSS COST	EXPERIENCE RATING PLAN EXPECTED LOSS FACTORS TABLE *			HAZARD GROUP A - G
		A-1	A-2	A-3	
921	3.74	2.66	3.39	3.75	D
922	2.54	1.82	2.31	2.55	D
923	1.83	1.30	1.65	1.83	B
924	2.65	1.88	2.39	2.65	B
925	1.34	0.95	1.21	1.34	B
926	2.02	1.44	1.83	2.02	B
927	0.79	0.56	0.71	0.79	B
928	1.44	1.03	1.31	1.45	B
932	0.67	0.48	0.61	0.67	C
933	2.72	1.94	2.46	2.73	C
934	2.46	1.75	2.23	2.47	C
935	0.89	0.64	0.81	0.90	C
936	0.41	0.29	0.37	0.40	D
939	3.82	2.73	3.46	3.84	F
940	3.58	2.55	3.24	3.59	C
941	1.85	1.32	1.67	1.85	C
942	2.24	1.60	2.03	2.25	C
943	2.60	1.85	2.35	2.60	C
944	1.29	0.92	1.17	1.29	B
945	1.81	1.29	1.65	1.82	A
946	2.45	1.75	2.22	2.46	C
948	1.53	1.09	1.38	1.53	A
949	0.25	0.18	0.23	0.25	C
951	0.22	0.16	0.20	0.22	E
952	0.55	0.39	0.50	0.55	C
953	0.10	0.08	0.10	0.11	C
954	1.68	1.20	1.52	1.69	E
955	0.18	0.13	0.17	0.18	D
956	0.08	0.05	0.07	0.08	D
957	0.30	0.22	0.28	0.31	C
958	0.85	0.61	0.77	0.86	C
959	1.15	0.82	1.04	1.15	C
960	1.93	1.37	1.74	1.93	C
961	0.71	0.51	0.64	0.71	C
962	0.03	0.02	0.03	0.03	F
963	0.30	0.22	0.28	0.31	B
964	1.48	1.05	1.34	1.48	B
965	0.43	0.30	0.38	0.42	B
966	2.40	1.71	2.18	2.41	E
967	0.75	0.53	0.68	0.75	D
968	0.86	0.62	0.78	0.87	B
969	1.69	1.21	1.53	1.70	C
970	3.89	2.77	3.53	3.90	B
971	2.74	1.95	2.48	2.75	C
972	1.26	0.90	1.14	1.26	C

\* Table A-1 applies to the most current policy year, Table A-2 to the first prior policy year, and Table A-3 to the second prior policy year.

**LOSS COSTS AND EXPECTED LOSS FACTORS  
FOR PENNSYLVANIA WORKERS COMPENSATION INSURANCE**  
Proposed Effective Date: January 1, 2019 on New and Renewal Business

CODE NO	LOSS COST	EXPERIENCE RATING PLAN EXPECTED LOSS FACTORS TABLE *			HAZARD GROUP A - G
		A-1	A-2	A-3	
973	2.29	1.64	2.08	2.30	B
974	1.60	1.14	1.45	1.61	C
975	1.11	0.79	1.00	1.11	A
976	0.93	0.66	0.84	0.94	B
977	0.40	0.28	0.36	0.40	A
978	2.01	1.43	1.82	2.01	C
979	2.32	1.66	2.11	2.33	C
980	4.06	2.89	3.67	4.07	E
981	1.20	0.86	1.09	1.21	A
982	2.51 e				E
983	4.96	3.53	4.49	4.97	C
984	0.11	0.08	0.10	0.12	C
985	3.03	2.16	2.75	3.05	E
986	1.07	0.77	0.98	1.08	C
987	0.55	0.39	0.50	0.55	C
988	0.15	0.11	0.14	0.15	C
991	2.89	2.06	2.62	2.90	A
992	4.56	3.25	4.14	4.58	E
993	610.03 f	434.93	552.78	612.08	D
994	g	h	h	h	G
995	4.40	3.14	3.99	4.42	F
996	610.03 i	434.93	552.78	612.08	G
997	0.57	0.40	0.51	0.57	D
999	3.19	2.27	2.89	3.20	D
0006	3.22	2.30	2.93	3.24	D
0008	3.11	2.22	2.82	3.12	D
0011	2.11	1.50	1.91	2.11	B
012	3.98	2.84	3.61	4.00	D
0013	2.57	1.83	2.32	2.57	C
0016	1.89	1.34	1.71	1.89	C
0034	2.78	1.98	2.52	2.79	C
0036	2.47	1.76	2.24	2.48	C
0083	2.78	1.98	2.52	2.79	C
0170	1.60	1.14	1.45	1.61	C
4771	2.56	1.74	2.20	2.45	G
0771	0.64				G
4777	4.42	3.15	4.00	4.43	E
7405	1.31	0.93	1.18	1.31	E
7445	0.27				G

\* Table A-1 applies to the most current policy year, Table A-2 to the first prior policy year, and Table A-3 to the second prior policy year.

Associated classes - both codes must be applied. The second code is not subject to experience rating and applies to the full payroll of the associated class.

e Per person per week. A partial workweek is to be counted as a full workweek.

Not subject to Experience or Retrospective Rating.

f Per ambulance corps.

g See appropriate page of Section 2.

h Apply the following percentages (A-1 = 67.38%, A-2 = 85.63%, A-3 = 94.82%) to annual loss cost from the appropriate page of Section 2.

i Per hazardous materials response team.

**LOSS COSTS AND EXPECTED LOSS FACTORS  
FOR PENNSYLVANIA WORKERS COMPENSATION INSURANCE**  
Proposed Effective Date: January 1, 2019 on New and Renewal Business

CODE NO	LOSS COST	EXPERIENCE RATING PLAN EXPECTED LOSS FACTORS TABLE *			HAZARD GROUP A - G
		A-1	A-2	A-3	
7413	0.39	0.27	0.35	0.39	G
7453	0.09				G
7421	0.47	0.34	0.43	0.47	F
7424	1.11	0.79	1.00	1.11	G
7428	2.77	1.97	2.51	2.78	E
9740	k 0.02				
9741	k 0.01				
<b>Per Capita</b>					
0901	19.71	14.05	17.86	19.77	B
0902	0.82	0.58	0.74	0.82	A
0908	147.09	104.87	133.28	147.58	C
0909	50.07	35.70	45.37	50.23	B
0912	312.87	223.06	283.50	313.92	B
0913	310.46	221.34	281.32	311.50	C
<b>A Rated</b>					
9985	A	A	A	A	
0133	A	A	A	A	

\* Table A-1 applies to the most current policy year, Table A-2 to the first prior policy year, and Table A-3 to the second prior policy year.

Associated classes - both codes must be applied. The second code is not subject to experience rating and applies to the full payroll of the associated class.

k Not subject to experience rating.

**PENNSYLVANIA  
VOLUNTEER FIREMEN**

**CODE 994**

**SCHEDULE OF ANNUAL LOSS COSTS**

Proposed Effective Date: January 1, 2019

Population	Annual Loss Cost	Population	Annual Loss Cost
Up to 300	<b>1,847</b>	6,501 to 7,000	<b>7,719</b>
301 to 500	<b>2,268</b>	7,001 to 7,500	<b>8,001</b>
501 to 700	<b>2,639</b>	7,501 to 8,000	<b>8,280</b>
701 to 1,000	<b>3,051</b>	8,001 to 8,500	<b>8,550</b>
1,001 to 1,500	<b>3,588</b>	8,501 to 9,000	<b>8,816</b>
1,501 to 2,000	<b>4,167</b>	9,001 to 9,500	<b>9,071</b>
2,001 to 2,500	<b>4,660</b>	9,501 to 10,000	<b>9,323</b>
2,501 to 3,000	<b>5,099</b>	10,001 to 15,000	<b>10,699</b>
3,001 to 3,500	<b>5,485</b>	15,001 to 20,000	<b>13,082</b>
3,501 to 4,000	<b>5,851</b>	20,001 to 25,000	<b>15,422</b>
4,001 to 4,500	<b>6,189</b>	25,001 to 30,000	<b>17,737</b>
4,501 to 5,000	<b>6,515</b>	30,001 to 35,000	<b>20,015</b>
5,001 to 5,500	<b>6,830</b>	35,001 to 40,000	<b>22,261</b>
5,501 to 6,000	<b>7,131</b>	40,001 to 45,000	<b>24,470</b>
6,001 to 6,500	<b>7,429</b>	45,001 to 50,000	<b>26,641</b>
		For each additional 5,000 population.....	<b>2,180</b>