From John Burton's Workers' Compensation Resources

# ORKERS' OMPENSATION POLICY REVIEW

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In This Issue: Featured Topics	
Summary of the Contents	1
Workers' Compensation Incurred Benefits: 1985 to 2001	3
Information on the Work- ers' Compensation Com- pendium 2005-06	30

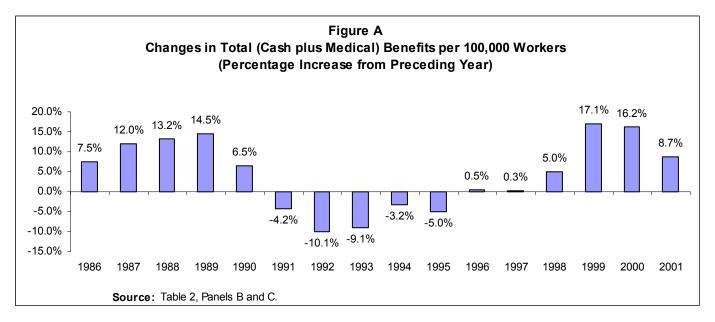
### Summary of the Contents

Workers' compensation incurred benefits per 100,000 workers vary markedly among jurisdictions in a particular year as well as nationally over time. This issue provides information on cash benefits, medical benefits, and total (cash plus medical) benefits per 100,000 workers for up to 47 jurisdictions for each of the years from 1985 to 2001.

Figure A provides an historical record of changes in the national averages of total benefits per 100,000 for the same 43 jurisdictions between 1985 and 1998, plus 42 identical jurisdictions for 1998 to 2001. The national averages include California and New York in all years and account for most of the benefit payments in the U.S.

The national data exhibit an interesting pattern over time. Total benefits increased for the five years between 1986 and 1990; declined for the five years between 1991 and 1995; marked time in 1996 and 1997; and then increased in each of the past four years. Particularly noteworthy is the slowdown in the rate of increase in total benefits in 2001. Also of interest, as documented in the article, cash benefits increased only 3.4 percent in 2001, while medical benefits grew by 13.9 percent.

The article also examines the changes in cash and medical benefits (as well as total benefits) from 1985 to 2001 for individual states. One striking result is that interstate differences in both cash and medical benefits have narrowed considerably over these 17 years, although there has been an increase in the dispersion of benefits per 100,000 workers among states between 1998 and 2001.



Research and Public Policy for the Workers' Disability System

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2

#### Workers' Compensation Incurred Benefits: 1985 to 2001

by Florence Blum and John F. Burton, Jr.

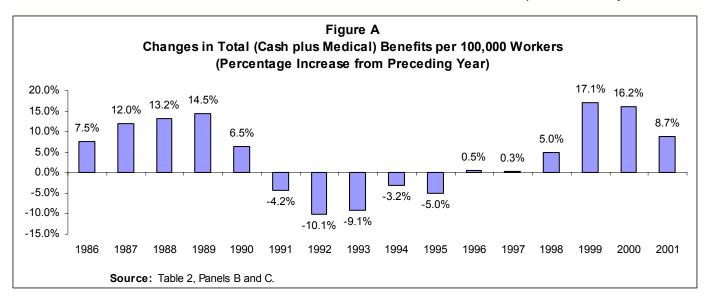
Workers' compensation incurred benefits increased nationally by 8.7 percent in 2001 from the previous year. The data in Figure A show the annual changes for 16 years in total benefits (cash plus medical benefits) per 100,000 workers. The results are based on information from 43 states in most years, although the 1999 to 2001 data are based on only 42 states because data on West Virginia are not available for those years.

The results in Figure A document the substantial fluctuations over time in benefits provided by the workers' compensation program. From 1986 until 1990, benefits increased by over six percent in every year and were up by at least twelve percent a year between 1987 and 1989. Then benefits declined in every year between 1991 and 1995, with the sharpest drop in 1992 exceeding ten percent. Benefits were relatively tranquil in 1996 and 1997, increasing by less than one percent a year. Total incurred benefits then increased by 5.0 percent in 1998, by 17.1 percent in 1999, and by 16.2 percent in 2000. These increases in 1999 and 2000 were particularly noteworthy because these were the first double-digit increases since 1989. The increase of 8.7 percent in 2001 represents only about half the rate of increase in the two previous years. In essence, between 1985 and 2000, there were five years of increases in incurred benefits, five years of declines in benefits, two years of relatively stable benefits, and four years (1998 to 2001) when benefits increased at least five percent a year.

The recent experience in national workers' compensation benefit payments is also interesting when the data are separated into cash benefits and medical benefits. As shown in Figure B, both types of benefits increased in 2001, although medical benefits increased faster (13.9 percent) than cash benefits (3.4 percent). Cash benefits had increased by 15.6 percent in 1999 and 12.2 percent in 2000, and so the modest increase of 3.4 percent in 2001 is striking. The 13.9 percent increase of medical benefits in 2001 was also down from rate of increase in the previous two years -- medical benefits had increased 18.8 percent in 1999 and 20.2 percent in 1999 -- but the medical benefits increase in 2001 was nonetheless higher than in any of the years between 1991 and 1998.

#### **Plan for Article**

A companion article (Blum and Burton 2004b) in an earlier issue of the *Workers' Compensation Policy Review* provided three types of data on incurred benefits not included in this article. First, we included state data on frequency of claims per 100,000 workers for four types of cash benefits and for medical benefits. Second, we provided state data on average benefits per claim for the four types of cash benefits and for medical benefits. Third, we provided state data on cash benefits. These three types of data were presented for 1995 to 2000. The previous article is reprinted in Burton, Blum, and Yates (2005) and will be updated in a forthcoming issue of the *Workers' Compensation Policy Review*.



We also wrote an article (Burton and Blum 2004a) that presents our traditional tables and figures containing information on cash benefits, medical benefits, and total (cash and medical benefits) per 100,000 workers for 1985 to 2000. The present article updates these traditional tables and figures through 2001, the latest year for which data are currently available. We also provide revised versions of the tables with data for 1998 to 2000, which incorporate recent revisions in the New York data for those years.<sup>1</sup> The data are presented at both a national level and for individual states. This article also contains Appendix A, which provides extended discussions of our methodology and sources of data for these articles.

#### National Data

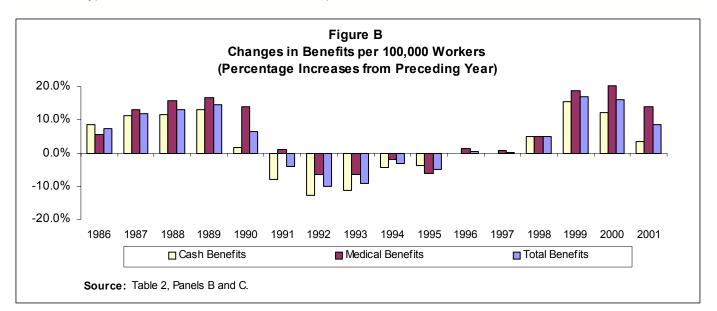
The incurred benefits per 100,000 workers for 2001 in the 46 jurisdictions for which we have data for that year are provided in Table 1.2001. Similar data for 1998 to 2000 are included in Table 1.1998 to Table 1.2000.

Panel A of Table 1.2001 presents information on cash benefits, Panel B provides the data for medical benefits, and Panel C presents data for total (cash plus medical) benefits. As explained in Appendix A, we primarily rely on information published by the National Council on Compensation Insurance (NCCI) to develop our data. The NCCI publishes information on the frequency per 100,000 workers and the average cost per claim for four types of cash benefits: temporary total, permanent partial disability, permanent total, and fatal. We multiply the NCCI frequency and average cost per claim to obtain the cash benefits per 100,000 workers for each of the four types of cash benefits. The sum of these four types of cash benefits is \$15,359,951 per 100,000 Alabama workers in 2001, as shown in column (1) of Table 1.2001.

The derivation of the medical benefits per 100,000 workers in Panel B of Table 1.2001 is straightforward. The NCCI publishes the frequency of medical claims per 100,000 workers and the average medical benefits per claim. The data are for all claims, including the medical benefits in claims with cash benefits and the medical benefits in claims without cash benefits (the "medical only" category). We multiply the NCCI frequency and average cost per claim to obtain the medical benefits per 100,000 workers. The result of this multiplication for Alabama for 2001 is the medical benefits of \$32,991,647 per 100,000 workers in column (4) of Table 1.2001.

The derivation of the total (cash plus medical) benefits per 100,000 workers in Panel C of Table 1.2001 is also straightforward. For example, the 2001 Alabama total benefits of \$48,351,598 per 100,000 workers in column (7) are the sum of the cash benefits of \$15,359,951 in column (1) and the medical benefits of \$32,991,647 in column (4) of Table 1.2001.

The data from Tables 1.1998 through Table 1.2001 and similar tables for earlier years were used to produce the national data in Table 2. Panel A of the table shows the national averages for cash benefits, medical benefits, and total (cash plus medical) per 100,000 workers for all of the states available in each year between 1985 and 2001. Comparisons among years of the data in Panel A are inappropriate, however, because the number of states used to calculate the national average varies from year to year, depending on the available data. Nevada data, for example, only became available in 1996 after private carriers were per-



#### November/December 2005 -

	Pa	nel A: Cash Bene	fits	Pan	el B: Medical Ber	nefits	Panel C: To	tal (Cash plus Mee	dical) Benefits
State	Dollar Amount (1)	State's Benefit as a Percentage of US Average (2)	Rank Among 46 Jurisdictions (3)	Dollar Amount (4)	State's Benefit as a Percentage of US Average (5)	Rank Among 46 Jurisdictions (6)	Dollar Amount (7)	State's Benefit as a Percentage of US Average (8)	Rank Among 46 Jurisdictions (9)
Alabama	15,118,875	72.1	34	29,596,060	143.7	6	44,714,935	107.5	16
Alaska	32,226,767	153.6	7	42,083,468	204.3	2	74,310,235	178.7	3
Arizona	12,760,928	60.8	40	22,113,233	107.4	21	34,874,161	83.9	31
Arkansas	7,903,513	37.7	47	13,495,285	65.5	44	21,398,798	51.5	47
California	35,175,660	167.7	3	26,930,227	130.7	8	62,105,887	149.4	4
Colorado	25,908,040	123.5	9	19,543,163	94.9	25	45,451,203	109.3	14
Connecticut	21,745,340	103.6	16	15,542,328	75.5	39	37,287,668	89.7	25
Delaware	17,622,863	84.0	24	28,123,032	136.5	7	45,745,895	110.0	12
Dis. of Columbia	8,802,863	42.0	24 45	6,702,503	32.5	48	15,505,366	37.3	48
Florida	21,726,766	103.6	17	34,697,526	168.5	3	56,424,292	135.7	6
Georgia	13,923,122	66.4	36	13,333,632	64.7	45	27,256,754	65.6	42
Hawaii	22,901,088	109.1	12	15,988,405	77.6	33	38,889,493	93.5	22
Idaho	18,307,005	87.3	22	23,274,660	113.0	13	41,581,665	100.0	18
Illinois	20,477,752	97.6	20	16,781,064	81.5	30	37,258,816	89.6	26
Indiana	6,932,826	33.0	48	14,516,074	70.5	42	21,448,900	51.6	46
Iowa	16,686,189	79.5	28	16,454,998	79.9	32	33,141,187	79.7	34
Kansas	13,040,070	62.2	39	17,283,237	83.9	29	30,323,307	72.9	39
Kentucky	10,564,519	50.4	43	22,597,500	109.7	19	33,162,019	79.8	33
Louisiana	21,428,915	102.1	18	23,302,814	113.1	12	44,731,729	107.6	15
Maine	22,537,683	107.4	13	21,561,045	104.7	22	44,098,728	106.1	17
Maryland	17,732,558	84.5	23	17,565,845	85.3	28	35,298,403	84.9	30
Massachusetts	22,295,737	106.3	15	10,888,325	52.9	47	33,184,062	79.8	32
		78.0	29	15,932,896	77.4	35		73.0	36
Michigan	16,374,702	78.0	29 35	, ,	76.1	38	32,307,598	73.5	38
Minnesota	14,903,448			15,674,592			30,578,040		
Mississippi	13,604,661	64.8	37	17,763,791	86.2	27	31,368,452	75.4	37
Missouri	18,864,932	89.9	21	19,767,328	96.0	24	38,632,260	92.9	23
Montana	23,390,157	111.5	11	30,482,300	148.0	5	53,872,457	129.6	7
Nebraska	15,837,850	75.5	31	21,120,307	102.5	23	36,958,157	88.9	27
Nevada	33,596,480	160.1	4	26,351,731	127.9	9	59,948,211	144.2	5
New Hampshire	16,738,249	79.8	27	24,450,607	118.7	11	41,188,856	99.1	19
New Jersey	15,128,024	72.1	33	11,313,540	54.9	46	26,441,564	63.6	43
New Mexico	12,242,195	58.3	41	17,811,960	86.5	26	30,054,155	72.3	40
New York	32,239,332	153.7	6	15,729,372	76.4	37	47,968,704	115.4	11
North Carolina	20,845,734	99.4	19	14,825,559	72.0	41	35,671,293	85.8	29
Oklahoma	25,516,848	121.6	10	23,105,104	112.2	15	48,621,952	116.9	9
Oregon	15,671,740	74.7	32	22,691,900	110.2	17	38,363,640	92.3	24
Pennsylvania	26,425,392	125.9	8	22,669,524	110.2	18	49,094,916	118.1	8
Rhode Island	33,404,544	159.2	5	15,092,245	73.3	40	48,496,789	116.6	10
South Carolina	16,959,600	80.8	26	15,980,130	77.6	34	32,939,730	79.2	35
South Dakota	9,028,173	43.0	44	15,881,454	77.1	36	24,909,627	59.9	44
Tennessee	17,395,920	82.9	25	22,205,820	107.8	20	39,601,740	95.2	21
Texas	15,897,420	75.8	30	25,234,902	122.5	10	41,132,322	98.9	20
USL&HW	149,510,354	712.6	1	134,003,296	650.6	1	283,513,650	681.9	1
Utah	8,361,512	39.9	46	14,179,420	68.8	43	22,540,932	54.2	45
Vermont	22,426,968	106.9	14	23,141,808	112.4	14	45,568,776	109.6	13
Virginia	11,116,951	53.0	42	16,591,207	80.5	31	27,708,157	66.6	41
West Virginia	43,961,146	209.5	2	32,083,898	155.8	4	76,045,044	182.9	2
Wisconsin	13,151,842	62.7	38	22,714,992	110.3	16	35,866,834	86.3	28
	10,101,072	02.1	00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	110.0	10	00,000,004	00.0	20
National	00.004.400			00 507 400			44 570 00 1		
Average*	20,981,403		ling the District of	20,597,402			41,578,804		

\*Weighted averaged based on 46 jurisdictions (including the District of Columbia), using 1998 state employment as weights. Data from USL&HW were not used to calculate national averages.

Sources: NCCI, Annual Statistical Bulletin, 1986-2005 editions.

#### November/December 2005

	Pa	inel A: Cash Bene	fits	Par	nel B: Medical Be	netits	Panel C: To	tal (Cash plus Mec	dical) Benefits
State	Dollar Amount (1)	State's Benefit as a Percentage of US Average (2)	Rank Among 46 Jurisdictions (3)	Dollar Amount (4)	State's Benefit as a Percentage of US Average (5)	Rank Among 46 Jurisdictions (6)	Dollar Amount (7)	State's Benefit as a Percentage of US Average (8)	Rank Among 46 Jurisdictions (9)
Alabama	15,430,939	65.1	36	33,714,483	139.1	6	49,145,421	102.5	13
Alaska	37,882,057	159.8	4	48,604,268	200.5	3	86,486,325	180.4	3
Arizona	11,876,808	50.1	43	20,681,498	85.3	23	32,558,306	67.9	37
Arkansas	9,465,810	39.9	44	15,519,114	64.0	42	24,984,924	52.1	45
California	49,424,104	208.5	2	40,512,979	167.2	5	89,937,083	187.6	2
Colorado	24,946,008	105.3	12	22,207,256	91.6	21	47,153,264	98.4	15
Connecticut	24,951,336	105.3	11	19,672,318	81.2	28	44,623,654	93.1	20
Delaware	21,527,212	90.8	18	29,575,856	122.0	10	51,103,068	106.6	10
Dis. of Columbia	8,436,727	35.6	46	4,903,805	20.2	47	13,340,532	27.8	47
Florida	22,395,662	94.5	15	40,639,375	167.7	4	63,035,037	131.5	5
Georgia	16,031,340	67.6	34	16,317,891	67.3	39	32,349,231	67.5	38
Hawaii	26,304,108	111.0	9	19,235,070	79.4	29	45,539,178	95.0	19
Idaho	16,655,452	70.3	32	24,710,696	102.0	15	41,366,148	86.3	24
Illinois	22,375,573	94.4	16	18,641,822	76.9	30	41,017,395	85.6	25
Indiana		32.9	47	16,286,663	67.2	30 40		50.2	25 46
	7,789,883						24,076,546		
lowa	17,739,433	74.9	27	18,293,515	75.5	32	36,032,947	75.2	31
Kansas	13,865,270	58.5	38	18,394,378	75.9	31	32,259,648	67.3	40
Kentucky	13,733,323	57.9	39	29,092,763	120.0	11	42,826,086	89.3	21
Louisiana	27,238,802	114.9	7	28,534,887	117.7	12	55,773,689	116.3	8
Maine	19,278,388	81.3	24	20,665,311	85.3	24	39,943,699	83.3	26
Maryland	18,221,798	76.9	25	15,253,886	62.9	43	33,475,683	69.8	36
Massachusetts	22,601,192	95.4	14	11,733,878	48.4	46	34,335,070	71.6	34
Michigan	19,902,707	84.0	20	15,879,975	65.5	41	35,782,681	74.6	33
Minnesota	17,778,740	75.0	26	21,685,040	89.5	22	39,463,780	82.3	27
Mississippi	17,056,177	72.0	28	22,363,176	92.3	20	39,419,353	82.2	28
Missouri	21,656,659	91.4	17	20,603,600	85.0	25	42,260,259	88.2	23
Montana	20,804,069	87.8	19	56,432,660	232.8	2	77,236,729	161.1	4
Nebraska	16,173,275	68.2	33	19,806,005	81.7	27	35,979,279	75.1	32
Nevada	30,945,753	130.6	6	25,632,889	105.8	14	56,578,642	118.0	6
New Hampshire	16,788,810	70.8	30	30,810,270	127.1	7	47,599,080	99.3	14
New Jersey	15,821,660	66.8	35	12,144,040	50.1	45	27,965,700	58.3	43
New Mexico	12,428,141	52.4	41	19,909,179	82.1	26	32,337,320	67.5	39
New York	34,259,232	144.6	5	16,804,672	69.3	36	51,063,904	106.5	11
North Carolina	19,694,906	83.1	23	14,408,082	59.4	44	34,102,988	71.1	35
Oklahoma	24,306,792	102.6	13	22,531,936	93.0	19	46,838,728	97.7	17
Oregon	16,875,859	71.2	29	29,952,282	123.6	9	46,828,141	97.7	18
Pennsylvania	26,091,650	110.1	10	24,608,140	101.5	16	50,699,790	105.8	12
Rhode Island	39,398,193	166.2	3	16,381,452	67.6	38	55,779,645	116.4	7
South Carolina	19,819,918	83.6	21	17,244,891	71.1	34	37,064,808	77.3	30
South Dakota	12,817,436	54.1	40	16,680,428	68.8	37	29,497,864	61.5	41
Tennessee	19,801,187	83.6	22	22,967,337	94.8	18	42,768,524	89.2	22
Texas	16,736,568	70.6	31	30,197,496	124.6	8	46,934,064	97.9	16
USL&HW	170,703,150	720.3	1	93,944,781	387.6	1	264,647,931	552.1	1
Utah	8,790,645	37.1	45	16,925,913	69.8	35	25,716,558	53.6	44
Vermont	26,488,286	111.8	8	27,417,714	113.1	13	53,906,000	112.5	9
Virginia	11,934,273	50.4	42	17,366,939	71.7	33	29,301,211	61.1	42
Wisconsin	14,696,370	62.0	37	23,819,910	98.3	17	38,516,280	80.3	29
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National Average*	23,699,079			24,237,493			47,936,572		

Sources: NCCI, Annual Statistical Bulletin, 1986-2005 editions.

#### November/December 2005 -

	Pa	nel A: Cash Bene	fits	Par	el B: Medical Ben	nefits	Panel C: Tota	al (Cash plus Medi	cal) Benefits
State	Dollar Amount (1)	State's Benefit as a Percentage of US Average (2)	Rank Among 46 Jurisdictions (3)	Dollar Amount (4)	State's Benefit as a Percentage of US Average (5)	Rank Among 46 Jurisdictions (6)	Dollar Amount (7)	State's Benefit as a Percentage of US Average (8)	Rank Among 46 Jurisdictions (9)
Alabama	16,119,893	61.4	37	33,332,167	115.4	8	49,452,060	89.6	14
Alaska	46,858,729	178.4	3	59,585,060	206.2	3	106,443,789	193.0	3
Arizona	11,467,526	43.7	42	26,115,304	90.4	17	37,582,830	68.1	34
Arkansas	10,612,724	40.4	44	18,125,157	62.7	36	28,737,881	52.1	43
California	62,081,792	236.3	2	67,129,485	232.3	2	129,211,277	234.2	2
Colorado	24,003,274	91.4	15	23,708,102	82.1	22	47,711,376	86.5	20
Connecticut	27,384,035	104.3	8	21,826,723	75.5	28	49,210,758	89.2	15
Delaware	23,497,656	89.5	16	30,474,744	105.5	11	53,972,400	97.8	9
Dis. of Columbia	7,461,183	28.4	47	6,313,742	21.9	47	13,774,925	25.0	47
Florida	22,932,126	87.3	19	35,967,085	124.5	5	58,899,211	106.8	4
Georgia	17,515,008	66.7	33	17,082,719	59.1	39	34,597,727	62.7	40
Hawaii	26,941,518	102.6	9	19,453,945	67.3	33	46,395,463	84.1	22
Idaho	16,310,856	62.1	36	24,233,086	83.9	20	40,543,942	73.5	29
Illinois	24,186,252	92.1	14	19,125,939	66.2	34	43,312,191	78.5	26
Indiana	8,384,647	31.9	46	16,957,937	58.7	40	25,342,584	45.9	46
lowa	18,733,800	71.3	27	19,533,374	67.6	32	38,267,173	69.4	33
Kansas	15,204,008	57.9	40	20,837,534	72.1	31	36,041,541	65.3	38
Kentucky	18,618,847	70.9	28	36,538,155	126.5	4	55,157,001	100.0	7
Louisiana	27,879,222	106.1	6	28,504,380	98.6	13	56,383,602	102.2	5
Maine	21,178,377	80.6	24	23,984,341	83.0	21	45,162,718	81.9	24
Maryland	18,052,457	68.7	24 29	14,385,318	49.8	44	43,102,718	58.8	42
Massachusetts	24,482,078	93.2	12	12,113,265	49.0	44 45	36,595,343	66.3	42
Michigan	23,313,087	93.2 88.8	12	18,327,801	63.4	45 35	41,640,888	75.5	28
Minnesota	, ,	74.6	25		84.4	19		79.8	25
	19,596,480			24,398,199			43,994,679		25 30
Mississippi	16,790,267	63.9	34 18	23,555,200	81.5	24 26	40,345,467	73.1 82.2	23
Missouri	23,125,424	88.0		22,238,219	77.0		45,363,643		
Montana	22,085,300	84.1	21	33,838,347	117.1	7	55,923,647	101.4	6
Nebraska	17,795,205	67.7	31	22,375,582	77.4	25	40,170,787	72.8	31
Nevada	26,940,951	102.6	10	23,626,319	81.8	23	50,567,270	91.7	13
New Hampshire	19,390,313	73.8	26	29,199,103	101.1	12	48,589,415	88.1	19
New Jersey	17,981,460	68.5	30	14,934,434	51.7	43	32,915,894	59.7	41
New Mexico	15,267,997	58.1	39	21,707,709	75.1	29	36,975,706	67.0	35
New York	35,926,209	136.8	4	17,771,292	61.5	37	53,697,501	97.3	10
North Carolina	21,393,378	81.4	23	15,242,871	52.8	42	36,636,249	66.4	36
Oklahoma	24,382,017	92.8	13	24,411,467	84.5	18	48,793,484	88.5	18
Oregon	17,623,764	67.1	32	31,391,192	108.6	9	49,014,956	88.9	16
Pennsylvania	27,545,448	104.9	7	27,153,442	94.0	14	54,698,890	99.2	8
Rhode Island	28,378,808	108.0	5	11,153,722	38.6	46	39,532,530	71.7	32
South Carolina	22,431,297	85.4	20	20,880,145	72.3	30	43,311,442	78.5	27
South Dakota	12,877,782	49.0	41	22,160,460	76.7	27	35,038,242	63.5	39
Tennessee	21,869,660	83.3	22	26,946,812	93.3	15	48,816,472	88.5	17
Texas	16,601,628	63.2	35	35,535,630	123.0	6	52,137,258	94.5	12
USL&HW	146,513,152	557.8	1	134,587,200	465.8	1	281,100,352	509.6	1
Utah	9,313,796	35.5	45	17,334,254	60.0	38	26,648,050	48.3	45
Vermont	26,729,888	101.8	11	26,731,328	92.5	16	53,461,216	96.9	11
Virginia	11,001,683	41.9	43	16,868,165	58.4	41	27,869,848	50.5	44
Wisconsin	15,787,059	60.1	38	30,854,670	106.8	10	46,641,729	84.6	21
National									
Average*	26,267,096			28,894,646			55,161,743		

\*Weighted averaged based on 46 jurisdictions (including the District of Columbia), using 2000 state employment as weights. Data from USL&HW were not used to calculate national averages.

Sources: NCCI, Annual Statistical Bulletin, 1986-2005 editions.

7

#### November/December 2005

	Pan	el A: Cash Benefi	ts	Pane	B: Medical Bene	fits	Panel C: To	tal (Cash plus Meo	dical) Benefits
State	Dollar Amount (1)	State's Benefit as a Percentage of US Average (2)	Rank Among 46 Jurisdictions (3)	Dollar Amount (4)	State's Benefit as a Percentage of US Average (5)	Rank Among 46 Jurisdictions (6)	Dollar Amount (7)	State's Benefit as a Percentage of US Average (8)	Rank Among 46 Jurisdictions (9)
Alabama	15,359,951	57.0	39	32,991,647	100.7	11	48,351,598	81.0	23
Alaska	49,514,458	183.7	3	70,290,848	214.5	3	119,805,305	200.6	3
Arizona	9,861,839	36.6	45	26,435,025	80.7	23	36,296,864	60.8	42
Arkansas	10,227,594	37.9	44	21,907,219	66.8	32	32,134,813	53.8	43
California	61,688,800	228.9	2	80,693,152	246.2	2	142,381,952	238.4	2
Colorado	22,302,656	82.7	23	25,087,157	76.6	25	47,389,813	79.3	26
Connecticut	31,846,947	118.1	5	24,015,659	73.3	27	55,862,605	93.5	14
Delaware	25,290,825	93.8	16	38,212,544	116.6	7	63,503,369	106.3	6
Dis. of Columbia	10,899,576	40.4	43	7,151,157	21.8	47	18,050,732	30.2	47
Florida	22,204,715	82.4	24	36,973,347	112.8	8	59,178,062	99.1	9
Georgia	19,419,150	72.0	32	19,429,505	59.3	39	38,848,655	65.0	38
Hawaii	28,430,317	105.5	9	22,909,547	69.9	30	51,339,864	86.0	18
Idaho	20,121,475	74.6	31	27,724,490	84.6	18	47,845,965	80.1	24
Illinois	25,600,434	95.0	15	21,172,997	64.6	36	46,773,431	78.3	27
Indiana	8,622,113	32.0	47	17,235,027	52.6	44	25,857,140	43.3	46
									40 35
lowa	20,318,714	75.4	30	20,165,631	61.5	37	40,484,345	67.8	
Kansas	16,006,851	59.4	37	21,912,546	66.9	31	37,919,397	63.5	41
Kentucky	23,484,447	87.1	20	48,678,463	148.5	5	72,162,910	120.8	5
Louisiana	24,020,248	89.1	19	29,170,106	89.0	15	53,190,354	89.1	17
Maine	30,359,077	112.6	7	30,407,611	92.8	13	60,766,688	101.7	8
Maryland	20,770,737	77.1	29	21,570,389	65.8	34	42,341,126	70.9	32
Massachusetts	26,701,558	99.1	12	13,062,669	39.9	45	39,764,226	66.6	36
Michigan	21,984,867	81.6	25	19,307,466	58.9	41	41,292,333	69.1	34
Minnesota	21,715,824	80.6	23	27,131,220	82.8	22	48,847,044	81.8	20
									20
Mississippi	17,776,122	65.9	34	27,263,174	83.2	21	45,039,296	75.4	
Missouri	24,140,575	89.6	18	23,320,464	71.2	29	47,461,039	79.5	25
Montana	29,819,496	110.6	8	56,145,304	171.3	4	85,964,800	143.9	4
Nebraska	18,544,322	68.8	33	24,028,857	73.3	26	42,573,178	71.3	31
Nevada	27,141,880	100.7	11	34,308,300	104.7	9	61,450,180	102.9	7
New Hampshire	21,776,606	80.8	26	34,278,910	104.6	10	56,055,516	93.9	12
New Jersey	23,380,379	86.7	21	19,864,295	60.6	38	43,244,674	72.4	29
New Mexico	16,889,281	62.7	36	21,638,851	66.0	33	38,528,131	64.5	39
New York	37,223,736	138.1	4	19,320,712	59.0	40	56,544,448	94.7	11
North Carolina	21,483,672	79.7	28	21,297,053	65.0	35	42,780,725	71.6	30
Oklahoma	25,935,078	96.2	14	29,334,385	89.5	14	55,269,463	92.5	15
Oregon	17,722,572	65.7	35	30,657,780	93.6	12	48,380,352	81.0	22
Pennsylvania	27,456,576	101.9	10	28,430,649	86.8	16	55,887,225	93.6	13
Rhode Island	26,071,360	96.7	13	12,396,672	37.8	46	38,468,032	64.4	40
South Carolina	25,020,663	92.8	17	23,436,827	71.5	28	48,457,490	81.1	21
South Dakota	11,873,480	44.0	42	27,284,120	83.3	20	39,157,600	65.6	37
Tennessee	23,075,434	85.6	22	27,776,015	84.8	17	50,851,450	85.1	19
Texas	15,387,300	57.1	38	39,267,424	119.8	6	54,654,724	91.5	16
USL&HW	132,699,456	492.3	1		259.2	1	217,648,836	364.4	1
				84,949,380					
Utah	9,230,796	34.2	46	18,249,011	55.7	43	27,479,807	46.0	45
Vermont	30,781,059	114.2	6	25,948,643	79.2	24	56,729,702	95.0	10
Virginia	12,527,226	46.5	41	18,750,600	57.2	42	31,277,826	52.4	44
Wisconsin	14,816,424	55.0	40	27,511,906	84.0	19	42,328,330	70.9	33
National									
Average*	26 054 967			32,771,314			59,726,181		
Avelaye	26,954,867			52,111,514			03,120,101		

calculate national averages. Sources: NCCI, Annual Statistical Bulletin, 1986-2005 editions.

#### Table 2: National Averages of Benefits Per 100,000 Workers By Policy Year

		Cash	Benefits	Medica	l Benefits	Total	Benefits
Policy Year	No. of States Used To Construct Avg.*	Dollar Amounts	Increase from Previous Year	Dollar Amounts	Increase from Previous Year	Dollar Amounts	Increase from Previous Year
1985	44 (DE, NV, PA)	20,225,149		12,834,744		33,059,893	
1986	45 (DE, NV)	22,303,501	10.3%	13,793,727	7.5%	36,097,228	9.2%
1987	44 (NV, PA, TX)	24,076,722	8.0%	14,936,712	8.3%	39,013,434	8.1%
1988	45 (NV, PA)	27,393,892	13.8%	17,945,293	20.1%	45,339,185	16.2%
1989	45 (NV, TX)	31,203,168	13.9%	20,885,719	16.4%	52,088,887	14.9%
1990	46 (NV)	31,373,803	0.5%	23,795,210	13.9%	55,169,013	5.9%
1991	46 (NV)	28,584,224	-8.9%	24,609,640	3.4%	53,193,864	-3.6%
1992	46 (NV)	25,077,618	-12.3%	22,543,962	-8.4%	47,621,580	-10.5%
1993	46 (NV)	22,122,739	-11.8%	20,757,648	-7.9%	42,880,387	-10.0%
1994	46 (NV)	21,177,960	-4.3%	20,523,481	-1.1%	41,701,441	-2.7%
1995	46 (NV)	20,271,454	-4.3%	19,394,209	-5.5%	39,665,663	-4.9%
1996	47	20,147,966	-0.6%	19,411,614	0.1%	39,559,580	-0.3%
1997	47	20,157,540	0.0%	19,726,066	1.6%	39,883,606	0.8%
1998	47	20,981,403	4.1%	20,597,402	4.4%	41,578,805	4.3%
1999	46 (WV)	23,689,140	12.9%	24,237,493	17.7%	47,926,633	15.3%
2000	46 (WV)	26,234,216	10.7%	28,894,646	19.2%	55,128,862	15.0%
2001	46 (WV)	26,812,473	2.2%	32,771,314	13.4%	59,583,787	8.1%

#### Panel A: All States with Data for the Particular Policy Year

Panel B: Forty-three States with Data for Policy Years 1985 - 1998

		Cash	Benefits	Medica	l Benefits	Total	Benefits
Policy Year	No. of States Used To Construct Avg.**	Dollar Amounts	Increase from Previous Year	Dollar Amounts	Increase from Previous Year	Dollar Amounts	Increase from Previous Year
1985	43	19,969,289		12,481,272		32,450,561	
1986	43	21,673,534	8.5%	13,195,645	5.7%	34,869,179	7.5%
1987	43	24,116,168	11.3%	14,937,465	13.2%	39,053,633	12.0%
1988	43	26,901,361	11.5%	17,312,102	15.9%	44,213,463	13.2%
1989	43	30,446,891	13.2%	20,196,293	16.7%	50,643,184	14.5%
1990	43	30,929,031	1.6%	22,998,538	13.9%	53,927,569	6.5%
1991	43	28,409,985	-8.1%	23,251,226	1.1%	51,661,211	-4.2%
1992	43	24,736,191	-12.9%	21,718,996	-6.6%	46,455,187	-10.1%
1993	43	21,922,860	-11.4%	20,285,280	-6.6%	42,208,140	-9.1%
1994	43	20,958,596	-4.4%	19,880,113	-2.0%	40,838,709	-3.2%
1995	43	20,143,073	-3.9%	18,635,803	-6.3%	38,778,876	-5.0%
1996	43	20,073,784	-0.3%	18,906,882	1.5%	38,980,666	0.5%
1997	43	20,036,698	-0.2%	19,042,530	0.7%	39,079,228	0.3%
1998	43	21,034,286	5.0%	19,996,069	5.0%	41,030,355	5.0%

Panel C: Forty-Two States with Data for Policy Years 1998 - 2001

		Cash E	Benefits	Medical	Benefits	Total	Benefits	
Policy Year	No. of States Used To Construct Avg.**	Dollar Amounts	Increase from Previous Year	Dollar Amounts	Increase from Previous Year	Dollar Amounts	Increase from Previous Year	
1998	42	20,877,895		19,913,614		40,791,509		
1999	42	24,126,216	15.6%	23,655,727	18.8%	47,781,943	17.1%	
2000	42	27,065,103	12.2%	28,440,613	20.2%	55,505,716	16.2%	
2001	42	27,973,340	3.4%	32,382,056	13.9%	60,355,396	8.7%	

\* Maximum number of states is 47, including the District of Columbia. States missing from all years are four states with exclusive state funds, namely, North Dakota, Ohio, Washington, and Wyoming. States missing for a particular year in Panel A are shown in parentheses. In addition, the USL&HW is excluded from all calculations of National Averages.

\*\*The states excluded from Panel B are the same states missing in Panel A plus Delaware, Nevada, Pennsylvania, and Texas.

\*\*\*The states excluded from Panel C are the same states missing in Panel B plus West Virginia.

#### 9

mitted to provide workers' compensation insurance in the state. Since Nevada has paid above average benefits in 1996 to 1999 (as shown in Tables 1.1999 and similar tables for earlier years), the national averages for 1996 to 1999 shown in Panel A of Table 2 are not comparable to the national average for earlier years.<sup>2</sup> There are also some years when data from Delaware, Pennsylvania, Texas, and/or West Virginia are unavailable, which again limits the comparability of the data in Panel A of Table 2.<sup>3</sup>

The data in Panels B and C of Table 2 are more comparable among years than the Panel A data, and were therefore used to produce Figures A and B. Panel B of Table 2 presents national averages for cash, medical and total benefits per 100,000 workers for the same 43 states for 1985 to 1998. Because data for West Virginia are not available for 1999 to 2001, Panel C presents national averages for cash, medical, and total benefits per 100,000 workers for the same 42 states for 1998 to 2001. The national averages in Panels B and C are not comparable (since the exclusion of West Virginia data probably lowers the 1999 to 2001 national averages for cash benefits, medical benefits, and total benefits), but the percentage increases for benefits between 1998 and 2001 shown in Panel C are based on the same set of states and therefore the percentage increases for 1998 to 2001 are reasonably comparable to the increases in earlier years.

The data in Panels B and C of Table 2, and the results in Figures A and B, document the dramatic fluctuations in incurred workers' compensation benefits in recent decades. For the four years from 1986 through 1989, total benefits per 100,000 workers increased at least 12 percent a year. The fastest growth year was 1989, when total benefits were up 14.5 percent from the previous year. Then a sudden deceleration occurred, with total benefits per 100,000 workers up only 6.5 percent in 1990 from the previous year. Deceleration was followed by decline: total benefits were down 4.2 percent in 1991 from the previous year, and 1991 was followed by another four years of decline. Then total benefits were relatively stable in 1996 and 1997, followed by a 5.0 percent increase in 1998, a 17.1 percent increase in 1999, a 16.2 percent increase in 2000, and an 8.7 percent increase in 2001, which is the most recent year for which we have data.

The data on total benefits per 100,000 workers are the combined total of cash benefits per 100,000 workers and medical benefits per 100,000 workers. Panels B and C of Table 2 and Figure B provide information on the development in all three measures of benefits since 1985. The movements through time have been similar for the three measures: initially several years when benefits were generally accelerating, followed by decelerating benefits in 1990, followed (with a minor exception) by a period of decline in benefits until 1995, then relative stability in 1996 and 1997, followed by an increase in both types of benefits in 1998, 1999, 2000, and 2001. The similarity in movement of cash and medical benefits should not be exaggerated, however. In 2001, for example, the increase in cash benefits of 3.4 percent was much more modest than the 13.9 percent increase in medical benefits.

The data in Table 2 are for benefits in current dollars unadjusted for inflation. The benefits adjusted for changes in the CPI are shown in Table 3. The decline in benefits during the 1990s is even more dramatic when measured in constant (1982-84) dollars. Measured in current dollars, total benefits per 100,000 workers declined by 27.5 percent in the 43 jurisdictions between 1990 and 1997 (Table 3, Column (9)). Measured in constant dollars, total benefits per 100,000 workers declined by 45.1 percent from 1990 to 1997 (Table 3, Column (10)). Moreover, in constant dollars, the decline in total benefits began in 1990 and continued through 1997; this eight-year stretch of declining total benefits in constant dollars is three years longer than the decline in total benefits measured in current dollars between 1991 and 1995. Of particular interest is that in constant dollars, cash, medical, and total benefits each increased by more than 13 percent between 1998 and 1999, but each increased by less than 9 percent between 2000 and 2001.

#### **Explanations of the National Developments**

The latest national data on incurred benefits per 100,000 workers indicate that both cash and medical benefits declined substantially during most of the 1990s. Between 1990 and 1997, as previously noted, the cumulative decline in total benefits per 100,000 workers in current dollars was 27.5 percent in the 43 jurisdictions with data available for all years. The components of total benefits also experienced decline over this period, albeit at different rates, with cash benefits down 35.2 percent and medical benefits down 17.2 percent measured in current dollars.

Why did incurred benefits decline so rapidly during these years? One partial explanation is that the work-place appears to have become safer during the 1990s. The annual number of lost workday cases per 100 full-time workers in the private sector dropped from 4.1 in 1990, to 3.8 in 1994, to 3.3 in 1997.<sup>4</sup> These declines in the occupational injury and injury rate translated into lower cash and medical benefits per 100,000 workers.

			Cash	Benefits			Medical	Benefits			Total Benet	fits
Policy Year	No. of States Used To Construct Avg.*	Benefits in Current \$ (1)	CPI (2)	Benefits in 82-84 \$ (3)	Increase from Previous Year (4)	Benefits in Current \$ (5)	CPI (6)	Benefits in 82-84 \$ (7)	Increase from Previous Year (8)	Benefits in Current \$ (9)	Benefits in 82-84 \$ (10)	Increase from Previous Year (11)
1985	43	19,969,289	107.2	18.628.068		12,481,272	113.5	10,996,715		32,450,561	20 624 784	
1985	43	21,673,534		19,920,528	 6.9%	13,195,645	122.0	10,896,715	-1.6%	34,869,179	, ,	 3.8%
1987	43	24,116,168		21,417,556	7.5%	14,937,465	130.1	11,481,526	6.2%	39,053,633	, ,	7.0%
1988	43	26,901,361		22,992,616	7.4%	17,312,102	138.6	12,490,694	8.8%	44,213,463	, ,	7.9%
1989	43	30,446,891		24,874,911	8.2%	20,196,293	149.3	13,527,323	8.3%	50,643,184	, ,	8.2%
1990	43	30,929,031		24,013,223	-3.5%	22,998,538	162.8	14,126,866	4.4%	53,927,569	, ,	-0.7%
1991	43	28,409,985		21,233,173	-11.6%	23,251,226	177.0	13,136,286	-7.0%	51,661,211	, ,	-9.9%
1992	43	24,736,191		17,989,957	-15.3%	21,718,996	190.1	11,425,037	-13.0%	46,455,187	, ,	-14.4%
1993	43	21,922,860		15.526.105	-13.7%	20.285.280	201.4	10.072.135	-11.8%	42,208,140	, ,	-13.0%
1994	43	20,958,596	144.7	14,484,171	-6.7%	19,880,113	211.0	9,421,855	-6.5%	40,838,709	23,906,026	-6.6%
1995	43	20,143,073	148.6	13,555,231	-6.4%	18,635,803	220.5	8,451,611	-10.3%	38,778,876	22,006,842	-7.9%
1996	43	20,073,784	152.8	13,137,293	-3.1%	18,906,882	228.2	8,285,224	-2.0%	38,980,666	21,422,518	-2.7%
1997	43	20,036,698	156.3	12,819,385	-2.4%	19,042,530	234.6	8,117,020	-2.0%	39,079,228	20,936,405	-2.3%
1998	43	21,034,286	158.6	13,262,475	3.5%	19,996,069	242.1	8,259,425	1.8%	41,030,355	21,521,901	2.8%
				Panel B: Fo	rty-Two States v	vith Data for Poli	cy Years 1	1998 - 2001				
	,		Cash	Benefits			Medical	Benefits			Total Benef	fits
Policy	No. of States Used	Benefits in	CPI	Benefits in	Increase from	Benefits in	CPI	Benefits in	Increase from	Benefits in	Benefits in	Increase from
Year	To Construct Avg.*	Current \$		82-84 \$	Previous Year	Current \$		82-84 \$	Previous Year	Current \$	82-84 \$	Previous Year
1998	42	20.877.895	158.6	13,163,868		19,913,614	242 1	8,225,367	-	40,791,509	21 389 235	
1999	42	24,126,216		14,892,726	13.1%	23,655,727		9,439,636	14.8%	47,781,943	, ,	13.8%
2000	42	27,065,103		16,177,587	8.6%	28,440,613		10,905,143	15.5%	55,505,716	, ,	11.3%
2001	42	27,973,340		16,273,031	0.6%	32,382,056		11,870,255	8.9%	60,355,396	, ,	3.9%

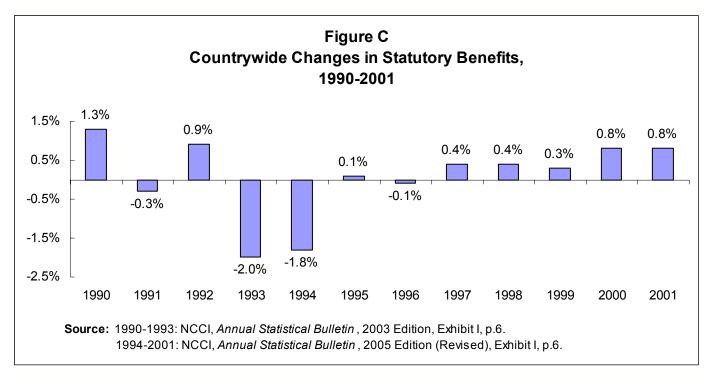
Another factor that explains at least a part of the decline in cash benefits paid to workers during most of the 1990s is that the statutory level of cash benefits provided by workers' compensation statutes were scaled back during several years in the period, as shown in Figure C. Benefits were scaled back in four of the eight years between 1990 and 1997, and the net effect of the statutory changes during the eight years was to reduce benefits, which is a record that probably cannot be matched since at least the 1930s.

A possible explanation of the decline in incurred medical benefits during the period from 1990 to 1997 was the rapid emergence of managed care and the general increase in employer control over provision of medical care for injured workers. While we are skeptical that large reductions in medical expenditures due to managed care can be sustained over an extended period, it is possible that the rapid spread of HMOs, PPOs, et al in workers' compensation programs in the early 1990s drove down incurred medical benefits between 1990 and 1997.

Another possible explanation for the decline in both cash and medical benefits per 100,000 workers between 1990 and 1997 that may be of major significance is the tightening of the eligibility standards for workers'

compensation benefits that occurred in a number of jurisdictions during the 1990s. The trend to limit compensability of workers' compensation claims nationally was documented by Spieler and Burton (1998). In Oregon, Thomason and Burton (2001) estimated that the effect of a series of statutory changes in the late 1980s and early 1990s was to reduce benefit payments by 20 to 25 percent below the amounts workers would have received in the absence of these statutory changes. Thus, the reductions in benefits paid to disabled workers through 1997 may not have reflected just the beneficial consequences of safer workplaces and the reductions of unnecessary medical treatment resulting from managed care, but may also have reflected the shifting of costs of workplace disability to other public and private sources of cash and medical benefits or to the workers and their families.

The increases in total incurred benefits by at least five percent a year between 1998 and 2001 may suggest that we have entered a new phase in the cycle of workers' compensation benefits in the U.S, but the story is more complicated when we separate cash and medical benefits. The increase in incurred medical benefits from 1998 to 2001 does not appear to reflect an acceleration of health care costs in the U.S. The annual rates of increase in the consumer price index



(CPI) for medical care included in Column (6) of Table 3 indicate that the price of medical care was increasing at less than five percent a year from 1998 to 2001. For example, in 2000, the medical CPI was up only 4.1 percent from the previous year (1.041 = 260.8/250.6), and in 2001, the medical CPI was only up 4.6 percent (1.046 = 272.8/260.8). The 18.8 percent surge in health care costs in workers' compensation in 1999, the 20.2 percent increase in 2000, and the 13.9 percent increase in 2001 (Table 2, Panel C) are products of changes in the price per unit of health care service times the changes in the number of health care units used in workers' compensation. Since the price per unit of health care does not appear to have increased rapidly between 1998 and 2001, the implication is that the quantity of health care provided to injured workers increased rapidly during 1999 to 2001. This may suggest that the various health-care cost containment policies introduced into workers' compensation in the early and mid-1990s have failed.

The explanation of the annual changes in incurred cash benefits from 1998 to 2001 is less obvious. The rapid increases in cash benefits per 100,000 workers in 1999 and 2000 were surprisingly large. The economic expansion that began in 1992 continued in those years, there were only modest increases of less than 1.0 percent in the statutory level of benefits in 1999 and 2000 (as shown in Figure C), and the injury rate dropped from 3.1 lost time injuries per 100 workers in 1998 to 3.0 in 1999 and 2000. These factors could have been expected to produce relatively modest increases in in-

curred cash benefits. The 15.6 percent increase in incurred cash benefits in 1999 and the 12.2 percent increase in 2000 (Table 2, Panel C) suggests that injuries were becoming more severe or that the amount of cash benefits per claim were rapidly accelerating in those years, but it is unclear why these developments occurred.

The explanation for the sudden slowdown in cash benefits to a 3.4 percent increase in 2001 is also not evident. The injury rate dropped to 2.8 lost time injuries per 100 workers, which could help explain part of the decline, but in part this was offset by an 0.8 percent increase in the workers' compensation benefit prescribed by statute (Figure C). One important development affecting the labor market was the beginning of the recession in March 2001, which was associated with a 0.1 percent decline in the number of workers covered by workers' compensation nationally that year (Sengupta, Reno, and Burton 2005, 8-9). However, since we are examining incurred benefits per 100,000 workers, the slowdown in our measure of benefits controls for the decline in incurred benefits directly due to the reduction in employment. Since the number of workers covered by the workers' compensation program continued to decline in 2002 and 2003 (Sengupta, Reno, and Burton 2005, 9), we will be interested to see if there is a continuing decline in incurred cash benefits per 100,000 workers when data for 2002 and 2003 become available.

#### November/December 2005

These catalogues of the possible causes and consequences of the rapid decline in cash and medical benefits from 1991 to 1997, and the increase of these incurred costs in 1998 to 2001 are meant to be suggestive, rather than conclusive. For the sake of workers, employers, and other participants in the workers' compensation program, we need careful studies that will help us better understand these recent developments in benefit payments.

#### Comparisons of Individual States for 2001

The 2001 data in Table 1.2001 allow comparisons among 47 jurisdictions for that year. The cash benefits per 100,000 workers in 2001 ranged from \$132,699,456 in the USL&HW program to \$8,622,113 in Indiana. Medical benefits per 100,000 workers varied from \$84,949,380 in the USL&HW program to \$7,151,157 in the District of Columbia. Total benefits (cash plus medical) per 100,000 workers were highest in the USL&HW program at \$217,648,836 and were lowest in the District of Columbia at \$18,050,732. These data were used to construct Figures D through F.

Cash Benefits. Each of the state's cash benefits per 100,000 workers as a percentage of the U.S. average payment in 2001 is shown in column (2) of Panel A of Table 1.2001. (The averages were calculated excluding the USL&HW program because that program is obviously an outlier.) States were ranked in Figure D in terms of how their cash benefits compared to the national average.

Two states plus the USL&HW program had cash benefits that were "well above average" - the benefits were more than 50 percent above the national average. The states were Alaska (where benefits were almost 84 percent above the national average) and California (where

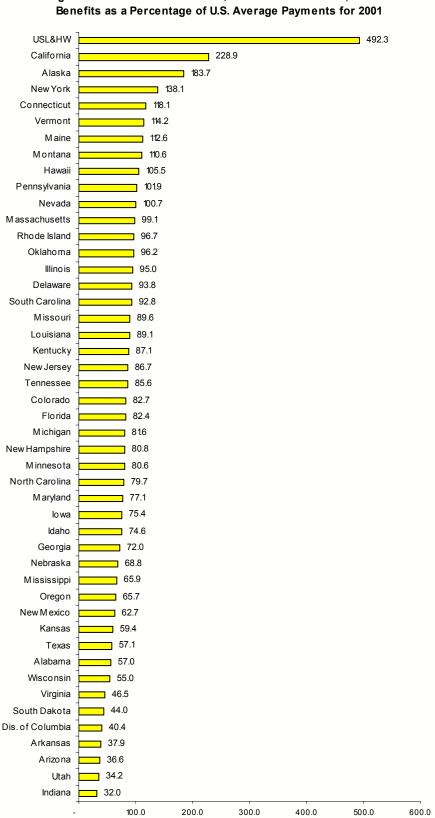


Figure D - Cash Benefits Per 100,000 Covered Workers, State's

#### WORKERS' COMPENSATION POLICY REVIEW

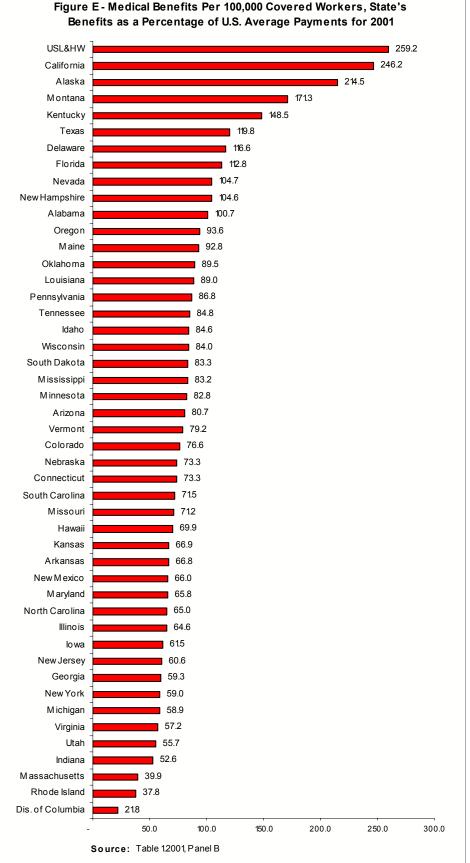
Source: Table 1.2001, Panel A

benefits were 129 percent above the national average). In addition, the USL&HW program had cash benefits that were almost five times the national average. One state, New York, had cash benefits that were "above average" – where cash benefits were more than 25 percent, but less than 50 percent above the national average (New York's cash benefits were 38 percent above the national average).

Other states had much lower cash benefits relative to the national average in 2001. Seven states had cash benefits that were "well below average" - benefits were at least 50 percent below the national average. These states ranged from Virginia (where benefits were 53.5 percent below the national average) to the Indiana, where cash benefits were 68 percent below the national average. In addition, 10 states had cash benefits that were "below average" benefits were at least 25 percent, but no more than 50 percent, below the national average. These states ranged from Idaho (where benefits were more than 25 percent below the national average) to Wisconsin (where benefits were 45 percent below the national average).

There were also 26 states with "average" cash benefits – the cash benefits were within 25 percent of the national average. These states ranged from Iowa (where benefits were almost 25 percent below the national average) to Connecticut (where benefits were over 18 percent above the national average).

**Medical Benefits.** Each of the state's incurred medical benefits per 100,000 workers as a percentage of the U.S. average in 2001 is shown in column (5) of Panel B of Table 1.2001. States were ranked in Figure E in terms of how their medical benefits compared to the national average.



#### November/December 2005

Three states plus the USL&HW program had medical benefits that were "well above average" - the benefits were more than 50 percent above the national average. The states ranged from California (where benefits were 146 percent above the national average) to Montana (where benefits were 71 percent above the national average). In addition, the USL&HW program had medical benefits that were more than one and a half times the national average. Only one state, Kentucky, had medical benefits were "above average" – cash benefits were more than 25 percent, but less than 50 percent above the national average (Kentucky's benefits were 48.5 percent above the national average).

Other states had much lower medical benefits relative to the national average in 2001. Three states had medical benefits that were "well below average" - benefits were at least 50 percent below the national average. These states ranged from Massachusetts (where benefits were 60 percent below the national average) to the District of Columbia where medical benefits were 78 percent below the national average. In addition, 19 states had medical benefits that were "below average" benefits were at least 25 percent, but no more than 50 percent, below the national average. These states ranged from Nebraska (where benefits were almost 27 percent below the national average) to Indiana, where medical benefits were 47 percent below the national average.

There were also 20 states with "average" medical benefits - the medical benefits were within 25 percent of the national average. These states ranged from Colorado (where benefits were a little more than 23 percent below the national average to Texas (where benefits were almost 20 percent above the national average).

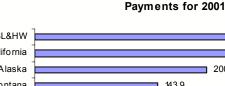
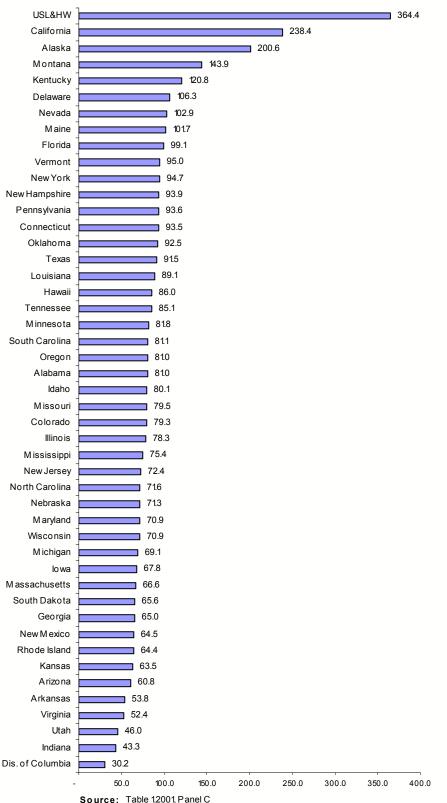


Figure F - Total (Cash plus Medical) Benefits per 100,000 Covered

Workers, State's Benefits as a Percentage of U.S. Average



**Total Benefits.** Each of the state's incurred total (cash plus medical) benefits per 100,000 workers as a percentage of the U.S. average in 2001 is shown in column (8) of Panel C of Table 1.2001. States were ranked in Figure F in terms of how their total benefits compared to the national average.

Two states plus the USL&HW program had total benefits that were "well above average" – the benefits were more than 50 percent above the national average. They are Alaska (where benefits were more than 100 percent above the national average) and California (where benefits were 138 percent above the national average). In addition, the USL&HW program had total benefits that were more than three times the national average. Only Montana had total benefits that were "above average" – where total benefits were more than 25 percent, but less than 50 percent above the national average (Montana's total benefits were almost 44 percent above the national average).

Other states had much lower total benefits relative to the national average in 2001. Three states had total benefits that were "well below average" – benefits were at least 50 percent below the national average. They ranged from the District of Columbia (where benefits were almost 70 percent below the national average) to Utah (where benefits were 54 percent below the national average). Sixteen states had total benefits that were "below average" – benefits were at least 25 percent, but no more than 50 percent, below the national average. These states ranged from New Jersey (where benefits were more than 27 percent below the national average) to Virginia (where benefits were almost 48 percent below the national average).

There were also 24 states with "average" cash benefits – the cash benefits were within 25 percent of the national average. These states ranged from Mississippi (where benefits were almost 25 percent below the national average) to Kentucky (where benefits were almost 21 percent above the national average).

# Historical Comparisons of Individual States

Tables 1.2000 and 1.2001, plus comparable unpublished tables for earlier years, present a formidable amount of data on incurred cash, medical and total benefits per 100,000 workers for each state for each year between 1985 and 2001. Some readers (and surely the authors) are likely to find that much data hard to assimilate. Tables 4 to 6 are designed to facilitate that assimilation. **Cash Benefits.** Table 4 provides summary information on the relative amount of cash benefits for each of the 45 states plus the District of Columbia and the USL&HW for the 17 years included in this study. The coding scheme relies on the classifications previously introduced: a state receives a "++" in a particular year if its cash benefits are well above average; a "+" if the benefits are above average; a "- -" if the benefits are well below average; a "- " if benefits are below average; a "0" if benefits are average; and a "N/A" if data are not available for that year. (The ranges for the various categories are shown in the notes to Tables 4 to 6.)

The entries in Table 4 permit a quick assessment of how the cash benefits in each jurisdiction have compared to the national averages during the 17 years. Some jurisdictions demonstrate a consistent record through the years. The USL&HW program and West Virginia had cash benefits that were well above the national average (benefits were at least 50 percent above the national average) in all years with data. Illinois and Michigan had average benefits (benefits were within 25 percent of the national average) in all 17 years. Kansas had below average cash benefits (benefits were from 25 to 50 percent below the national average) in every vear. Indiana and the District of Columbia had well below average cash benefits (benefits were at least 50 percent below the national average) in all years. There was no state that always had above average cash benefits.

Other states showed somewhat less stability in terms of their benefits relative to the national average over the 17 year period and moved among adjacent categories. Connecticut had average or above average cash benefits in every year. Five states (Arkansas, Mississippi, Utah, Virginia, and Wisconsin) had below average or well below average cash benefits in every year. Nine states (Alabama, Delaware, Georgia, Idaho, Kentucky, Maryland, New Jersey, South Carolina, and Vermont) had cash benefits that moved between average and below average over the 17-year period.

More interesting are the states that moved among three categories in terms of their cash benefits relative to the national averages over the 17 years. Twelve states (Alaska, California, Colorado, Florida, Hawaii, Louisiana, Massachusetts, Montana, Nevada, New York, Oklahoma, and Pennsylvania) varied between average and well above average cash benefits during all the years with data. Of these states, only Alaska and California had well above average benefits in 2001, New York had above average benefits in 2001, and nine states had average cash benefits in 2001, obviously well below their relatively high benefits in earlier years. Seven states (Arizona, Iowa, Missouri, Ne-

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	200
										•	•	•	0				
AL	-	-	-	-	-	-	-	-	-	0	0	0	0	-	-	-	-
AK	++	++	++	+	+	+	+	0	0	0	+	+	+	++	++	++	++
AZ	-	-	0	-	-	0	0	0	0	0	0	-	-	-	-		
AR	-	-	-	-	-	-	-	-	-								
CA	+	+	+	0	0	0	+	0	0	0	+	+	++	++	++	++	++
CO	0	++	0	0	++	+	0	0	0	0	0	+	+	0	0	0	0
CT	0	0	+	+	+	+	+	0	0	0	0	0	0	0	0	0	0
DE	0	0	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0
DC																	
FL	0	+	++	++	++	+	0	0	0	0	0	0	0	0	0	0	0
GA	-	-	0	0	-	0	-	0	0	0	0	-	-	-	-	-	-
HI	0	0	0	0	0	+	++	++	++	++	0	0	0	0	0	0	0
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KS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KY	-	-	-	-	0	0	0	0	0	0	-	-	-	-	-	-	0
LA	+	+	++	++	0	0	0	0	0	0	0	0	0	0	0	0	0
ME	++	++	++	++	++	++	++	+	0	-	0	0	0	0	0	0	0
MD	0	-	-	-	-	-	-	-	0	0	0	-	0	0	0	-	0
MA	+	+	++	++	++	++	0	0	0	0	0	0	0	0	0	0	0
MI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MN	++	+	+	+	0 0	+	0 0	0	Õ	Õ	-	-	-	-	Õ	-	0
MS		-	-	-	-	_	-	-	-	-	_	-	-	-	-	_	-
MO		_	_	_	_	_	_	_	0	0	0	0	0	0	0	0	0
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NE					-	-	-	-	-	-	-	-	-	0	0	0	-
NV	N/A	N/A	N/A	N/A	- N/A	- ++	- ++	++	-+	0	0						
NH	0	0	0	+	+	+	+	+	0	0	0	0	0	0	-	-	0
NJ	0	0	0	т	т	т		0	0		0	0	0		-	-	0
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NM		+	++	+	0	0	0		-	-	-		-		-	-	-
NY	0	0	0	0	0	0	+	++	++	++	++	++	++	++	+	+	+
NC						-	-	-	-	-	-	-	0	0	0	0	0
OK	0	0	0	0	0	0	+	++	++	++	++	+	+	0	0	0	0
OR	++	++	++	++	0	0	0	0	0	0	0	0	0	-	-	-	-
PA	0	+	+	+	+	++	+	++	++	++	++	+	+	+	0	0	0
RI	++	++	++	++	++	++	++	-	-	-	0	0	+	++	++	0	0
SC	-	-	-	-	-	-	-	-	-	0	-	-	-	0	0	0	0
SD	-	-	-	-	-	-	-	0	-	-	0	0			-		
TN			-	-	-	-	-	0	0	0	0	0	0	0	0	0	0
ΤX	0	0	N/A	+	N/A	0	0	-	-	-	0	-	0	0	-	-	-
SL&HW	N/A	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
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VT	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
VA		-	-	-	-	-	-				-	-	-	-	-		
WV	++	++	++	++	++	++	++	++	++	++	++	++	++	++	N/A	N/A	N/A
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Source: Tables 2.1985 - 2.1998; Tables 1.1999 - 1.2001

(Tables 2.1985 - 2.1998 are available upon request to subscribers to the Workers' Compensation Policy Review.)

braska, North Carolina, South Dakota, and Tennessee) varied between average and well below average cash benefits between 1985 and 2001. New Hampshire and Texas varied between above average and below average cash benefits during these years.

Four states had cash benefits relative to the national averages that varied among four categories during the 17 years. Maine was well above average for seven years, and then dropped to below average in 1994, before moving to average cash benefits for 1995 to 2001. Minnesota was well above average in 1985, dropped to average for most of the early 1990s, and dropped again to below average cash benefits in 1995 (except for two years of average benefits in 1999 and 2001). Oregon had a similar pattern: cash benefits were well above average from 1985 to 1988, dropped to average cash benefits for most of the 1990s, and had below average benefits from 1998 to 2001. Rhode Island had a unique pattern, beginning with cash benefits well above the national average for seven years, dropped to below average or average cash benefits for most of the 1990s, increased to above average benefits in 1998 and 1999, before dropping again to average in 2000 and 2001.

The most volatile state was New Mexico, which varied between well above average in 1985 and 1987 and well below average in 1996, thus spanning all five categories in Table 4. The experiences in Maine, Minnesota, and New Mexico clearly demonstrate that significant reductions in cash benefits are possible. There are also several states whose experience over the 17 years indicates that substantial increases in cash benefits are possible. The most notable example is New York, which provided average cash benefits from 1985 to 1990, well above average cash benefits from 1992 to 1998, and above average benefits from 1999 to 2001.

**Medical Benefits.** Table 5 provides summary information on the relative generosity of medical benefits for each of the 45 states plus the District of Columbia and the USL&HW for the 17 years included in this study. The entries in Table 5 permit a quick assessment of how generous the medical benefits have been in each jurisdiction during the 17 years.

Some states demonstrate a consistent record in terms of generosity of medical benefits through the years. There were five programs that were in the same category of generosity of medical benefits for all 17 years: two (Idaho and Mississippi) were in the average category every year; one state (New Jersey) was in the below average category every year; one jurisdiction (the District of Columbia) was in the well below average category every year for which data are available; and one jurisdiction (the USL&HW) was in the well above average category every year for which data are available. There was no state in the above average category all 17 years.

There were a number of states that had relatively stable medical costs over the 17 years, with only movements among adjacent categories of relative generosity. For example, only one state, Alaska, moved between above average and well above average medical benefits between 1985 and 2001. Colorado and Kentucky are examples of states that moved between average and above average medical benefits during the 17 years. Georgia had average benefits from 1985 to 1996 and then dropped to below average medical benefits from 1997 to 2001. Indiana began with well below average medical benefits and moved to below average benefits during the period between 1987 and 2001. There are a number of other states that moved between adjacent categories of relative generosity of medical benefits during the 17 years included in Table 5.

As Table 5 also illustrates, there were 16 states that moved among non-adjacent categories during the 17 years. Nine states (Alabama, California, Delaware, Florida, Louisiana, Montana, Oregon, Pennsylvania, and West Virginia) varied among the average, above average, and well above average categories between 1985 and 2001. Six states (Iowa, Maryland, New York, North Carolina, Rhode Island and South Carolina) paid medical benefits that varied among the average, below average, and well below average categories between 1985 and 2001. Only one state, Arkansas, varied among below average, average and above average during the 17 years.

The experiences in Hawaii, Louisiana, Maine, New Mexico, and Pennsylvania clearly demonstrate that significant reductions in medical benefits paid to workers are possible. There were also two states - lowa and New York -- that had well below average medical benefits in 1986, but that paid average medical benefits in 1997, 1998 or 1999. These states demonstrate that states can also substantially increase the medical benefits paid to workers. Of particular interest are two states (Montana and Oregon) that had well above average medical benefits in at least two years between 1985 to 1988, reduced the relative generosity of their medical benefits to the average category for at least one year in the late 1980s or early 1990s, but had well above average medical benefits again in at least two years between 1994 to 2001. The "solutions" to high medical costs in these states are worth further examination.

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36	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
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				++							++	++	++	0 ++	
	++	++	++		+	+	++	++	++	++					++
	+	0	0	0	0	0	+	0	0	0	0	0	0	0	0
	0	0	+	0	0	0	0	0	0	-	-	-	-	-	-
	++	++	+	++	+	+	0	0	0	0	0	+	++	++	++
	0	0	0	0	0	0	0	+	+	+	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	++	+	++	++	+	+	0	0	0
	++	++	++	++	+	++	++	++	++	++	++	++	++	0	0
	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
	0	0	0	+	+	++	++	++	0	0	0	0	0	-	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-	-	-	-	-	0	0	0	0	0	0	0	0	-	-
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	-	-	0	0	0	0	0	-	0	-	0	0	0	-	-
	0	0	0	0	+	+	+	+	+	0	0	0	0	+	+
	++	++	++	+	0	0	0	0	0	0	0	0	0	0	0
	+	++	+	0	0	0	0	0	-	0	0	0	0	0	0
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DE	IWA	IVA	0	0	0	0	0	0	++	+	++	++	Ŧ	Ŧ	0	0	0
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FL	+	+	++	++	++	++	+	++	++	++	++	++	++	++	++	0	0
GA	0	0	0	0	0	0	0	0	0	0	0	0	-	_	-	_	_
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IA	_		_	-	-	-	_	-	-	-	_	_	-	0	0	-	-
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KY	0	0	0	0	0	0	+	+	+	+	+	0	0	0	0	+	+
LA	++	++	++	++	++	+	0	0	0	0	0	0	0	0	0	0	0
ME	+	0	+	++	+	0	0	0	0	0	-	0	0	0	0	0	0
MD	0	-	-	-	-	-	-	-	0	0	-	-	-	0	-		-
MA	_	_	_	-	-	-	_	-	_		_	_	-	_			
M	0	0	0	0	0	0	_	-	-	0	0	0	0	0	_	-	-
MN	++	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0
MS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MO	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	-
MT	+	++	++	+	0	+	+	+	+	++	++	+	+	+	++	0	++
NE	-	-	_	-	_	-	-	0	_	_	0	0	0	0	0	0	-
NV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ŇA	N/A	N/A	N/A	+	0	+	Ő	Ő	0
NH	0	0	0	0	0	0	0	0	0	0	+	0	+	0	+	0	0
NJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NM	+	+	++	++	+	++	+	+	0	0	0	0	0	0	0	0	-
NY	-					-	-	-	-	-	-	-	0	0	-	-	-
NC			-	-	-	-	-	-	-	-	0	-	-	-	-	-	-
OK	0	0	0	0	0	0	0	+	+	+	0	0	0	0	0	0	0
OR	++	++	++	++	+	0 0	0	+	+	0	+	++	++	0	0	0	0
-																	
PA	N/A	0	N/A	N/A	++	++	+	+	0	0	0	0	0	0	0	0	0
RI	0	0	-	0	0	0	-				0	-	-	-	-		
SC	-	-	-		-	-	-	-	-	0	-	-	-	0	-	-	-
SD	-	-	-	-	-	-	0	0	0	0	0	0	-	0	-	0	0
TN	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ТХ	+	+	N/A	+	N/A	0 0	+	0 0	0 0	+	• +	Õ	+	Õ	Õ	0 0	0 0
USL&HW	N/A	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
UT	0	-	-	0	0	0	0	0	0	0	0	0	0	-	-	-	-
VT	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0
VA	-	0	-	-	0	0	-	0	0	-	0	0	0	0	-	-	-
WV	+	+	+	0	0	0	0	+	+	+	++	+	++	++	N/A	N/A	N/A
WI	_	_	_	-	-	-	0	0	0	0	0	0	0	0	0	0	0
V V I							0	0	0	0	0	0	0	0	0	0	0
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Note:	++			re of Na					bove Av								
	+			6 of Nat					Averag	е							
	0	75.0 -	125.0%	of Natio	nal Ave	erage		Averag	ge								
	-	50.0 -	74.9% c	of Nation	al Aver	age			Averag	е							
				of Natio					elow Av								
	N/A		lot Avail														
		Data N															

Tables 2.1985 - 2.1998; Tables 1.1999 - 1.2001 Source:

(Tables 2.1985 - 2.1998 are available upon request to subscribers to the Workers' Compensation Policy Review.)

**Total Benefits**. Table 6 provides summary information on the relative generosity of total (cash plus medical) benefits for each of the 45 states plus the District of Columbia and the USL&HW program for the 17 years included in this study. The entries in Table 6 permit a quick assessment of how generous the total benefits have been in each jurisdiction during these 17 years

Some states demonstrate a consistent record in terms of generosity of total benefits through the years. There were five programs that have been in the same category of generosity of total benefits for all 17 years. Two programs (USL&HW and West Virginia) had well above average total benefits in every year. One state (Alabama) was in the average category every year. One state (Virginia) was in the below average category every year; and one jurisdiction (the District of Columbia) was in the well below average category every year. There were no states that paid above average total benefits in all 17 years.

A number of states had relatively constant total benefits throughout the 17 years and only moved between adjacent categories of relative generosity. Nine states had been in a single category for at least 11 years and changed to an adjacent category for the remaining years. Connecticut had average benefits for 15 years and moved to above average benefits for two years. Three states (Georgia, Idaho and Illinois) had average benefits for at least 12 years and moved to below average benefits for one to six years. Four states (lowa, Kansas, New Jersey and South Carolina) had below average benefits for at least 12 years and moved to average in one to five years. One state (Indiana) had well below average benefits in 14 years, but paid only below average benefits in three years.

As shown in Table 6, there were 17 states that moved among non-adjacent categories during the 17 years shown. Ten states (California, Florida, Hawaii, Louisiana, Maine, Montana, Nevada, Oklahoma, Oregon, and Pennsylvania) had total benefits that varied between average and well above average during the 17 years. Four states (Arizona, Delaware, Massachusetts, and New York) had total benefits that varied among the above average, average, and below average categories of generosity during the 17 years, while three states (Nebraska, North Carolina and Utah) varied among the average, below average, and well below average categories over the years included in Table 6.

Finally, Minnesota, New Mexico and Rhode Island experienced an exhilarating ride over the 17 years that ranged among four categories of generosity of total benefits: the states started with well above average benefits in one of the earlier years, dropped to the average category by at least 1991, and then dropped to the below average category for total benefits for at least one of the four most recent years

The experiences in eight jurisdictions (Hawaii, Louisiana, Maine, Minnesota, Nevada, Oklahoma, Oregon and Pennsylvania) that had average benefits in 2001 following well above average benefits in at least one earlier year make clear that significant reductions in total benefits (cash plus medical) provided to injured workers are possible. The fleeting nature of "reform" in Florida is also evident in the data in Table 6. The state began with average total benefits in 1985, achieved well above average total benefits in 1987-1989, cut total benefits to the average category again in 1991, and then re-achieved well above average total benefits in 1994 and 1996 before dropping to the average category again in 2000 and 2001.

#### Are the States Converging or Diverging?

A casual perusal of the information in Tables 4 to 6 suggests that the differences among states in workers' compensation benefits have narrowed over the 17 years for which we have data. For example, in terms of the data on total benefits (cash plus medical) shown in Table 6, there were eight states with well above average benefits and four jurisdictions with well below average benefits in 1985, while in 2000 there were only two states (Alaska and California) with well above average benefits and three jurisdictions (District of Columbia, Indiana, and Utah) with well below average benefits.

A more rigorous examination of whether the differences among states in the amounts of incurred benefits are narrowing over the 17 years for which we have data is presented in Table 7. For each of the years between 1985 and 1998, Panel A shows the dispersion among the same 43 states in each state's benefits as a percentage of the national average for cash benefits, for medical benefits, and for total (cash plus medical) benefits. Panel B of Table 7 shows the dispersion among the 42 states with data for 1998 through 2001. The dispersion is measured by the standard deviation, which is a commonly used statistical measure of the variability of the values of individual observations around the average value (mean) for all observations.

Several patterns revealed in Table 7 are worth mentioning. First, there was a pronounced tendency for the dispersion among states in incurred benefits to narrow over the 17 years, although the dispersion has been widening since 1998. Second, this narrowing has occurred for cash benefits, for medical benefits, and for total benefits, although all of the narrowing for medical benefits occurred between 1985 and 1991, and the dif-

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	20
AL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AK	++	++	++	+	+	+	+	+	+	+	++	++	++	++	++	++	+-
AZ	0	0	0	0	0	0	0	0	+	0	0	0	0	0	-	-	-
AR	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
CA	++	+	+	+	+	+	+	0	0	0	0	+	+	+	++	++	+
CO	0	+	0	0	+	+	0	0	0	+	0	+	0	0	0	0	(
CT	0	0	0	+	+	0	0	0	0	0	0	0	0	0	0	0	C
DE	N/A	N/A	0	0	0	-	0	0	+	0	+	+	0	0	0	0	(
DC																	-
FL	0	+	++	++	++	+	0	+	+	++	+	++	+	+	+	0	(
GA	0	0	0	0	0	0	-	0	0	0	0	0	-	-	-	-	-
HI	0	0	0	0	0	+	++	++	++	++	0	0	0	0	0	0	(
ID	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	-	(
L	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
IN													-	-	-		-
A	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	
KS	-	-	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-
KY	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	(
LA	+	+	++	++	+	0	0	0	0	0	0	0	0	0	0	0	(
ME	++	++	++	++	++	++	++	0	0	0	0	0	0	0	0	0	(
MD	0	-	-	-	-	-	-	-	0	Õ	0	-	-	0	-	-	
MA	Õ	0	+	+	+	0	0	0	Õ	Õ	Õ	-	-	Õ	-	-	
M	0	Ő	0	0	0	0	0	0	Ő	0	õ	0	0	0	-	0	
MN	++	0	+	0	0	+	0	0	0	0	-	0	-	-	0	0	(
MS	-	-	0	0	0	0	0	0	-	0	0	0	0	0	0	-	(
MO	-	-	-	0	0	0	-	-	0	0	0	0	0	0	0	0	(
MT	++	- ++	- ++	-+	- ++	- ++	- ++	+	+	++	++	+	+	+	++	0	-
NE		TT	-	-	TT	TT	- -	т	т	TT	- -	0	0	0	0	-	
	 NI/A	- N/A	- N/A		- N//A	- N//A		- NI/A	- N//A	- NI/A		++			0	-0	(
NV	N/A			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		++	+			
NH	0	0	0	+	+	+	+	+	0	0	0	0	0	0	0	0	(
NJ	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-
NM	++	+	++	++	0	+	0	0	0	-	0	-	0	-	-	-	
NY	0	-	-	-	0	0	0	+	+	+	+	+	0	0	0	0	(
NC					-	-	-	-	-	-	-	-	-	0	-	-	
OK	0	0	0	0	0	0	0	+	++	++	+	+	+	0	0	0	(
OR	++	++	++	++	0	0	0	+	0	0	0	+	0	0	0	0	(
PA	N/A	0	N/A	N/A	+	++	+	+	+	+	+	0	0	0	0	0	(
RI	+	++	++	++	++	++	0	-	-	-	0	-	0	0	0	-	
SC	-	-	-	-	-	-	-	-	-	0	-	-	-	0	0	0	(
SD	-	-	-	-	-	-	0	0	0	0	0	0	-	-	-	-	•
TN	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	(
TX	0	0	N/A	+	N/A	0	0	0	0	0	0	0	0	0	0	0	(
L&HW	N/A	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	+
UT	-				-	-	-	0	-	-	0	-	-	-	-		-
VT	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	(
VA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WV	++	++	++	++	++	++	++	++	++	++	++	++	++	++	N/A	N/A	N/
WI	-	-	-	-	-	-	-	-	0	0	0	-	-	0	0	0	-
<b>.</b> .	++	150 10/	or more	of Noti	onal Av	orago				rago							
e:	++	150.1%						Well Ab									
		125.1 -						Above /	-								
	0	75.0 - 1						Average									
	-	50.0 - 7	4.9% Of	Nationa	a Avera	ge		Below A	۰verage								
		49.9% c		A Matte	al A · · -	~~~		Well Be	A								

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Source: Tables 2.1985 - 2.1998; Tables 1.1999 - 1.2001

ferences among states in medical benefits increased significantly between 1998 and 2001. Third, there was a greater dispersion among states for cash benefits than for medical benefits in every year but 1999, 2000, and 2001. Fourth, between 1985 and 2001, the dispersion for cash benefits declined much more substantially than the dispersion for medical benefits.

#### Conclusions

Four conclusions seem warranted for the data on workers' compensation benefits presented in this article. First, as shown in Table 2 and Figures A and B, the national averages of incurred benefits per 100,000 workers have experienced dramatic swings in the last 17 years with available data. For example, cash benefits per 100,000 workers averaged increases of almost 12 percent annually for the four years from 1986 to 1989, but then average annual decreases of six percent occurred from 1991 to 1995. The most recent data show a rapid increase of benefits from 1998 to 2000, and then a sudden slowdown in the most recent year, with incurred cash benefits up by only 3.4 percent in 2001. Similar turnarounds occurred in the averages of medical benefits and total benefits per 100,000 workers over these 17 vears.

Second, data are available for up to 47 jurisdictions for 1985 to 2001 for the averages of cash benefits, medical benefits, and total benefits per 100,000 workers. Again, the experience of states varies widely, including the changes in the amounts of benefits in a state relative to the national averages over the 17 years. Some states, such as Alabama, Indiana, Iowa, Michigan, and New Jersey, have shown little variation over the 17 years in their total benefits (cash plus medical) compared to the national averages in those years. But a number of other states, such as New Mexico, Rhode Island, and Maine, have seen their benefits plummet. Other states, such as New York and Oklahoma, experienced significant increases in total benefits

relative to national averages during the 1990s, although these states had total benefits that were much closer to the national averages in recent years. As these examples indicate, for better or worse, the amount of incurred benefits in a state is not an immutable condition.

Third, the dispersion in benefits among states has narrowed considerably over the 17 years encompassed in this study. The explanation of this phenomenon ap-

# Table 7Standard Deviations for State's Benefitsas a Percentage of U.S. Average

#### Panel A

#### Dispersion Among 43 States in Benefits Per 100,000 Workers for Years 1985-1998

Year	Cash Benefits	Medical Benefits	Total Benefits
1985	100.0	51.1	76.8
1986	96.9	48.0	72.9
1987	76.3	43.6	58.1
1988	69.5	42.1	53.5
1989	67.4	34.6	48.3
1990	63.2	32.3	43.4
1991	49.7	32.5	35.8
1992	48.0	34.5	36.5
1993	46.1	35.8	36.4
1994	46.3	38.2	38.0
1995	39.6	33.9	31.2
1996	37.6	37.3	31.7
1997	38.6	35.8	31.6
1998	37.7	33.7	30.8

#### Panel B

#### Dispersion Among 42 States in Benefits Per 100,000 Workers for Years 1998-2001

Year	Cash Benefits	Medical Benefits	Total Benefits
1998	33.4	32.9	27.8
1999	35.3	41.5	32.2
2000	36.1	39.0	34.4
2001	36.0	42.7	36.4
Note: The 43	3 states are those i	ncluded in Panel	B of Table 2.
	are those include		

parent from the data in this article is that the narrowing of the dispersion is due both to the substantial reductions in the amounts of benefits in well above average states as well as some increases in benefits in well below average states.

Fourth, the national averages of benefits per 100,000 workers were basically stable in 1996 and 1997, but then averages for cash, medical and total

#### November/December 2005 ·

benefits increased at moderate rates in 1998 and at a rapid rate in 1999 and 2000 (as shown in Table 7 and Figures A and B).

The reasons for the acceleration in incurred benefits in 1999 and 2000 are not clear. As we discussed earlier in this article, between 1998 and 2000, the injury rate continued to decline, the CPI for medical care increased less than five percent a year, the economy continued to grow, and statutory changes in cash benefits were modest. One possible explanation for higher medical benefits is that managed care may have lost the ability to constrain the use of medical services.

The rapid deceleration of incurred cash benefits and the less pronounced, but nonetheless significant slow down in the rate of increase of incurred medical benefits in 2001 are also hard to explain. The factors previously discussed that may explain these 2001 developments were the beginning of the recession and the reduction of employment, although it is not evident why our measure of benefits (incurred benefits per 100,000 workers) should have been affected by these labor market developments. Our perusal of the developments since 1998 suggests that the explanations of the causes and consequences of the increases in incurred benefits documented in this article are incomplete. We will continue to monitor these perplexing developments in subsequent issues of the Workers' Compensation Policy Review.

#### APPENDIX A: Data Sources, Terminology, and Methodology

This appendix provides additional information on the data sources and methodology used to prepare this article, as well as a discussion of some of the terminology used for workers' compensation data.

#### Data Sources

The primary source of the data used in this article is the National Council on Compensation Insurance (NCCI). The *Revised 2005 Edition* of the *Annual Statistical Bulletin* published by the NCCI (the *NCCI Bulletin*) provides data for the 46 jurisdictions (including the District of Columbia) in which private insurance carriers sold workers' compensation insurance policies in 2001. For 1985 to 1998, we also obtained information from one state (West Virginia) with an exclusive state fund. (We appreciate the assistance of Judith Greenwood, formerly of the Research, Information and Analysis Division of the West Virginia Bureau of Employment Programs for providing the West Virginia data used in this study.) Comparable data are not available from four states that had exclusive state workers' compensation funds in 2001 (North Dakota, Ohio, Washington, and Wyoming). Several previous editions of the *NCCI Bulletin* did not contain data on some states with private carriers. For example, the 2001 *NCCI Bulletin* did not contain information on two states (Delaware and Pennsylvania), and we obtained information directly from the rating bureaus for those states.

Exclusion of the four states with exclusive state funds for which we do not have data means that 47 is the maximum number of jurisdictions we use in any year to calculate national averages. However, data are lacking for Nevada prior to 1996 and for Delaware, Pennsylvania, Texas, and/or West Virginia in certain years, and the averages in Panel A of Table 2 pertain only to the number of jurisdictions for which data are available in the designated year. (The jurisdictions missing in any year are shown in parentheses.) We also have calculated a national average for those 43 states with data available for all years between 1985 and 1998, and the results are shown in Panel B of Table 2. The latest data for West Virginia are from 1998, and so are not current enough to use for the 1999 through 2001 entries in the tables in the article. One consequence is that there are only 42 states with data available in 1999, 2000, and 2001 and so the averages in Panel C of Table 2 pertain to those 42 states.

In addition to the maximum of 47 jurisdictions used to calculate the national averages, the *NCCI Bulletin* also contains information on the federal Longshore and Harbor Workers' Compensation Act (USL&HW). However, the costs for the USL&HW are considerably higher than those in any other workers' compensation program, and so we do not include USL&HW data in calculating the national averages. We do include information on the USL&HW benefit payments in some of our tables, including Table 1.2001, where we show the USL&HW program's benefits relative to the national average in the other jurisdictions.

Data on the annual frequencies per 100,000 workers and the average costs for five types of injuries are presented in Exhibits XI and XII of the *NCCI Bulletin*. The five types are fatalities, permanent total disabilities, and "medical-only" cases, in which medical benefits but no cash benefits were paid. We used these data to calculate three variants of benefits incurred annually per 100,000 workers: (1) the cash (or "indemnity") benefits (which are the sum of the cash benefits for the four types of cases paying cash benefits); (2) the medical benefits; and (3) the total (cash plus medical) benefits.

#### Insurance Terminology

The benefits are the incurred benefits for the injuries that occurred during the policy periods indicated in Exhibits XI and XII in the 2005 and earlier editions of the *NCCI Bulletin*. The following definitions of terms, such as "policy period" and "incurred," are based on the more definitive descriptions in Appendix B of Thomason, Schmidle, and Burton (2001).

Policy Period. Data for a policy period include reports on all the financial transactions for all the insurance policies with coverage beginning during the policy period. The policy period typically is a 12-month period. In some states, the policy period begins on January 1, and thus the policy period and the calendar year correspond. (For example, the 2001 policy period for South Dakota began on January 1, 2001 and ended on December 31, 2001.) However, the policy period in many states begins on a date other than January 1. (For example, the 2001-02 policy period for Alabama began on May 1, 2001 and ended on April 30, 2002.) The experience in a single policy period occurs over a 24-month time span because a policy may be effective on any date during the policy period and does not expire until 12 months later. Thus the 2001-02 policy-period experience for Alabama includes those accidents that occurred between May 1, 2001 and April 30, 2003, and that were covered by policies sold during the 2001-2002 policy period.

One of the challenges we faced in preparing this and previous versions of this article is that the policy period sometimes changes between successive issues of the NCCI Bulletin. For example, the policy period changed in Florida between the 2003 and 2004 editions of the NCCI Bulletins. The policy period for Florida reported in the 2003 NCCI Bulletin was for the twelve months between October 1, 1998 and September 30 of 1999, while the policy period for Florida reported in the 2004 NCCI Bulletin was for the twelve months between January 1, 2000 and December 31, 2000. This meant that the successive issues of the NCCI Bulletins did not include information on the three months from October 1, 1999 to December 31, 1999. The NCCI provided us unpublished data for these three missing months for Florida, which we used to prepare the tables in this article. (We appreciate the assistance of Derek Schaff, of the NCCI, who provided us the missing data.)

**First Reports.** The data included in the *NCCI Bulletins* are based on the first reports for the each of the policies that are sold in the policy period. These first reports are based on an evaluation of the claims as of 18 months after the inception of each of the policies. Thus, the 2001-02 policy-period experience for Ala-

bama is based on evaluations made between November 1, 2002 (for policies effective May 1, 2001) and October 31, 2003 (for policies effective April 30, 2002). All editions of the NCCI Bulletin prior to 2005 only contained information based on first reports. The *Revised 2005 Version* of the *NCCI Bulletin* also contains information in Exhibit XI on average cost per case for second reports and third reports of earlier policy periods. In order to make the 2001 results in Table 1.2001 of this article comparable to the results for earlier years, we have only used the data based on the first reports.

Paid Benefits and Incurred Benefits. The first reports contain information on the paid benefits (paid losses) that the insurance company has paid as of the valuation date for all the accidents occurring during the policy period. The first reports also contain information on the incurred benefits for these claims. Incurred benefits are the carrier's estimates of the benefits that will ultimately be paid for all of these claims. These incurred benefits include the benefits actually paid to the date of the first report, plus case reserves (anticipated payments for the claims that are known as of the evaluation date), bulk reserves, and IBNR reserves (incurred but not reported reserves) that are reserves for claims that have not yet been reported as of the valuation date even though the claims occurred in the specified period (e.g., during the policy period).

Loss Development. The incurred loss development factor is the ratio between (1) incurred losses for a particular policy period (or policy year or accident year) at a particular evaluation date and (2) comparable estimates at a later evaluation date. Incurred loss development factors are available for each state based on historical experience in the state. An incurred loss development factor of 1.200 for first to second means that a 20 percent growth is expected between the first report and the second report. Incurred loss development factors are available from first to second, second to third, etc. through eighth to ultimate. Chain multiplication of the loss development factors means that once a first report is received on actual experience for a policy year, the incurred benefit estimated as of the evaluation date for the first report can be multiplied by the subsequent loss development factors to produce an estimate of the ultimate benefits that will be paid for the injuries and diseases that occurred during that policy period.

The frequency data in Exhibit XII of the 2005 *NCCI* Bulletin are based on actual data from the first reports developed to the fifth reporting basis. The average cost per case (benefits per case) data we use from Exhibit XI of the 2005 *NCCI* Bulletin are based on actual data from the first reports developed to the ultimate reporting basis in most states. (The losses are only developed to

#### November/December 2005

the fifth reporting basis in California, Massachusetts, New Jersey, and New York.)

#### Methodology

There are some limitations of the data on average benefits (losses) per case and frequency per 100,000 workers included in Exhibits XI and XII of the *NCCI Bulletins*. Some are inherent, such as the absence of data from the states with exclusive state workers' compensation funds for which the NCCI does not collect data. Another inherent limitation is that the data pertain only to the experience of employers who purchase insurance from private carriers and from some of the competitive and exclusive state workers' compensation funds. The most significant problem is that the experience of self-insuring employers is not included.

Other drawbacks of the data included in Exhibits XI and XII of the NCCI Bulletins can be overcome, however. We are able to add two states (Delaware and Pennsylvania) with data we obtained directly from these states for some earlier years. Another problem with the information in the NCCI Bulletins used to generate the data for this article is that in some editions of the NCCI *Bulletin*, the age of the first report for policy years varies considerably. In the 2005 NCCI Bulletin, the policy years ranged from the oldest results for California and several other states (January 2001 to December 2001) to the most recent results for Louisiana and Mississippi (September 2001 to August 2002). There is also considerable variation among policy years in earlier editions of the NCCI Bulletin. In the 1997 edition, for example, the policy years ranged from Georgia and Mississippi (January to December 1992) to Montana and South Dakota (January to December 1994). Given the recent volatility in workers' compensation costs, it is questionable whether, for example, the Georgia and Montana data in the 1997 NCCI Bulletin were comparable, since the Montana data were two years more current. Finally, the fact that different states often do not correspond in terms of the months included in their policy years complicates comparisons. For example, as noted, the Alabama policy period in the 2005 NCCI Bulletin covered May 2001 to April 2002, while the South Dakota data covered January to December 2001.

We have dealt with the problem of data with different vintages in a particular issue of the *NCCI Bulletin* and with different months of inclusion in the policy periods by creating a series of tables that reallocate – by calendar year – data from the 1988 to 2005 issues of the *NCCI Bulletin*. Thus three months of data from the Michigan policy period from April 1999 to March 2000 that were published in the 2003 *NCCI Bulletin* were combined with nine months of data from the Michigan policy period from April 2000 to March 2001 that were published in the 2004 *NCCI Bulletin* to calculate a twelve-month average for calendar year 2000 for Michigan.

Table 1.2001 and Tables 2 to 6 present information for those jurisdictions for which data for at least six months in 2001 are found in any of the 18 issues of the *NCCI Bulletin*, or for which unpublished data were provided to us by the NCCI, or for which we were able to obtain data directly from state workers' compensation agencies. In similar fashion, Table 1.2000 and Tables 2 to 6 present information on those jurisdictions for which data for at least six months in 2000 are available from any of these sources.

The data included in this and the previous issues of the Workers' Compensation Policy Review are largely derived from data published in various editions of the NCCI Bulletin. There are several ways in which our tables and analysis are unique, however. First, we have added data from several states not included in the NCCI Bulletin. Second, the NCCI has provided us some unpublished data, such as data for policy periods or months skipped in successive issues of the NCCI Bulletin. Third, we have corrected some of the NCCI data based on error checks of the data and correspondence with the NCCI. Fourth, we have calculated incurred benefits per 100,000 workers, which are results not included in the NCCI Bulletin. Finally, we have reallocated policy period data as published in the NCCI Bulletin to calendar years.

The meaning of our data can be illustrated by reference to Table 1.2001. The data pertain to the incurred cash, medical, and total (cash plus medical) benefits for the policies that were first effective in the twelve months between January and December 2001. For a policy effective on January 1, 2001, the experience thus includes all injuries that occurred between January 1 and December 31, 2001. For a policy effective on December 31, 2001, the experience thus includes all injuries that occurred between December 31, 2001 and December 30, 2002. Thus our calendar year data encompass experience for injuries that occurred over a 24-month period. Ideally, we would like "calendar-accident" year data, which would pertain strictly to those injuries that occurred during a calendar year. That is, 2001 calendar-accident year data would pertain to the experience of all injuries that occurred between January 1 and December 31, 2001. Unfortunately, as far as we know, there are no published frequency and average benefits per case data on a calendar-accident year basis.

# Methodology for the District of Columbia

Our normal methodology for calculating benefits per 100,000 workers is illustrated in this subsection, together with a unique modification we made for the 2001 entry for the District of Columbia.

The 2005 Revised Edition of the NCCI Bulletin contains the information shown in columns (1) and (2) of Table A.1 for incurred indemnity (cash) benefits. We multiply the column (1) data on claim frequency per 100,000 workers by the column (2) data on average claim cost to obtain the column (3) results on indemnity (costs per 100,000 workers. The results in column (3) are not included in the NCCI Bulletin. In this instance, the total indemnity cost per 100,000 workers is \$11,893,696.

As part of our check procedure to make certain we have entered our data properly, we also calculate the average indemnity cost per compensable claim, which as shown in Table A.1 is \$25,969. The *NCCI Bulletin* also includes the average indemnity cost per compensable claim. Normally the *NCCI Bulletin* figure and our figure are identical or differ by a minor amount, but in this case the NCCI average indemnity cost per compensable claim was \$24,497, which is considerably different than our figure.

We sent an inquiry to the Melissa Trost at the NCCI concerning the difference in the averages for indemnity cost per compensable claim. Ms. Trost was very helpful and provided the information shown in Table A.2, which explains how the

NCCI derived their averages. The crucial difference is that the claim frequencies published in the *NCCI Bulletin* are rounded to the nearest integer, while the NCCI uses frequencies carried to six decimal places to calculate their average claim cost per compensable claim. In this instance, the difference in the averages is largely due to the rounding of the claim frequency for fatal cases from 1.507414 to 2.0. Since the average claim

Table A.1
District of Columbia Workers' Compensation Experience

#### Incurred Indemnity - 02/01 to 01/02 Policy Period Data from First Reports

Injury Type (1)	Claim Frequency Per 100,000 Workers (2)	Average Claim Cost (3)	Cost Per 100,000 Workers (4)
Death	2	1,343,489	2,686,978
Permanent Total	0	-	-
PPD	126	63,253	7,969,878
Temporary Total	330	3,748	1,236,840
Total	458		11,893,696
Average per Claim		25,969	
(11,893,696/458)			

**Notes:** Columns (1), (2), and (3) from *2005 Revised Edition* of the *NCCI Bulletin*, Exhibits XI and XII. Column (3) and average per claim calculated by John Burton.

# Table A.2 District of Columbia Workers' Compensation Experience

#### Incurred Indemnity - 02/01 to 01/02 Policy Period Data from First Reports

Injury Type (1)	Claim Frequency Per 100,000 Workers (2)	Average Claim Cost (3)	Cost Per 100,000 Workers (4)
Fatal Permanent Total	1,507,414	1,343,489	2,025,194
Temporary Total PPD	330,338,969 125,546,036	3,748 63,253	1,238,110 7,941,163
Total	457,392,419		11,204,468
Average per Claim	<u>11,204,468</u> 457,392,419	=	24,496
		<b>—</b> ( )) (	

**Notes:** Unpublished data provided by Melissa Trost, National Council on Compensation Insurance.

cost for fatal cases was \$1,343,489, the rounding made our cost per 100,000 workers for fatal cases \$661,784 higher than the NCCI published procedure for cost per 100,000 workers for fatal cases.

We decided to make a unique adjustment in the procedure we use to calculate incurred benefits per

Table A.3 New York Workers' Compensation Experience Average Claim Cost by Injury Type									
	INCURRED INDEMNITY								
Policy Year	Death	Permanent Total	Major Perm. Partial	Minor Perm. Partial	Temporary Total		Total Indemnity		
1998	199,264	257,087	84,269	8,049	3,174		20,012		
1999	175,574	304,760	84,854	8,346	3,248		21,849		
2000	165,024	210,179	86,318	8,585	3,361		23,903		
2001	159,237	216,854	89,235	8,976	3,123		27,512		
2002	194,808	317,278	86,477	9,250	3,474		33,396		
	INCURRED MEDICAL								
Policy Year	Death	Permanent Total	Major Perm. Partial	Minor Perm. Partial	Temporary Total	All	Medical	Total Medical	
rear	Death	Total	Perm. Partial	Perm. Partial	Total	Lost-Time	Only	Medical	
1998	13,741	134,222	28,747	5,893	3,183	8.733	603	3,606	
1999	12,745	116,509	30,024	6,367	3,379	9,634	623	3,919	
2000	17,352	80,926	32.529	6.267	3,368	10,681	647	4,274	
2001	10,778	235,658	32,939	6,797	3,286	13,084	700	5,276	
2002	14,640	311,686	35,525	7,557	3,786	17,060	701	6,960	
			INCORKED IN	DEMNITY AND	WEDICAL				
Policy		Permanent	Major	Minor	Temporary	All	Medical	Total	
Year	Death	Total	Perm. Partial	Perm. Partial	Total	Lost-Time	Only	Incurred	
1000				10.010				40.005	
1998	213,005	391,309	113,016	13,942	6,357	28,745	603	10,996	
1999	188,319	421,269	114,878	14,714	6,627	31,483	623	11,909	
2000	182,376	291,105	118,847	14,852	6,729	34,585	647	12,913	
2001 2002	170,015 209,448	452,512 628,964	122,174 122,001	15,773 16,807	6,410 7,260	40,595 50,456	700 701	15,442 19,737	

**Source:** Table included with December 15, 2005 letter to John Burton from Martin G. Heagen, Vice President and Actuary, New York Compensation Insurance Rating Board.

**Note:** Table based on New York State Unit Statistical Plan Data. Includes all classes. Claims and losses have been developed to a 5th report. Does not include any adjustments to a common benefit level. Does not include any trend projections. 2001 and prior years figures restated to reflect more recent data.

100,000 workers for the District of Columbia for 2001. We have used 1.5 fatal cases per 100,000 workers to calculate the indemnity (cash), medical, and total (cash plus medical) benefits for the District of Columbia entry in Table 1.2001.

#### Methodology for New York

We were unable to replicate the average cash benefits for all compensable claims for New York that were published in the *Revised 2005 Edition* of the *NCCI Bulletin* when we used a procedure similar to that in Table A.1 in conjunction with the data on the separate types of claims included in the *NCCI Bulletin*. We were

referred by the NCCI to the Website maintained by the New York Compensation Insurance Rating Board (NYCIRB). The New York data included on the NY-CIRB website were considerably different than the data in the *NCCI Bulletin*. However, when we calculated the averages for all compensable claims, we still could not match the figures included on the NYCIRB website. We corresponded with the NYCIRB and were informed in a December 15, 2005 letter from Martin G. Heagen, Vice President and Actuary of the NYCIRB, that "the weights used to calculate the total were not the published frequency numbers, which should have been used." Mr. Heagen provided revised data on average incurred indemnity (cash), medical, and total (cash plus

27

Policy		Permanent	Major	Minor	Temporary	Medical	Total
Year	Death	Total	Perm. Partial	Perm. Partial	Total	Only	Indemnity
1998	5	5	287	325	989	2,751	4,362
1998	4	7	305	289	963	2,731	4,302
2000	4	8	328	258	904	2,655	4,158
2001	4	11	333	228	778	2,309	3,662
2002	4	12	397	212	669	2,089	3,384

medical) benefits, which are shown in Table A.3. We have used the revised average claim data in conjunction with the frequency data shown on the NYCIRB website (included in Table A.4) to calculate new figures for cash benefits, medical benefits, and total (cash plus medical) benefits per 100,000 workers for New York for 1998 to 2001. These revised figures for New York are incorporated into Tables 1.1998 to Table 1.2001 in the article.

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#### ENDNOTES

1. Revised data for New York for 1998 to 2002 are included in the Appendix.

2. Presumably, if Nevada data were available and used to construct the national averages for 1985 to 1995, the amounts for those years in Panel A of Table 2 would have been higher.

3. West Virginia data are not available for 1999 to 2001. Based on data from previous years, West Virginia probably had total costs that were well above the national average in 1999 to 2001.

We exclude the United States Longshore and Harbor Workers Act (USL&HW) from these comparisons because the program's costs are so out of line with other program. We also exclude the USL&HW data when we calculate the national averages shown in Tables 1 to 3.

4. Data on work-related injury and illness incidence rates from 1972 to 2003 are included in Table 12 of Burton and Blum (2005).

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#### November/December 2005

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