



**TOWERS
PERRIN**

TILLINGHAST

California Workers Compensation Update

**CAS 2005 Spring Meeting
Phoenix, Arizona
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Summary of Recent Reforms

- AB227/SB228
 - Indemnity changes
 - repeal of voc rehab
 - Medical changes
 - fee schedules
 - utilization guidelines
- SB899
 - Indemnity changes
 - Limit on TD duration
 - PD changes
 - Apportionment
 - # of weeks
 - Two-tier
 - Medical changes
 - Networks
 - Immediate medical care

AB227/SB228 – Application

<i>Change</i>	<i>Effective Date</i>
Repeal of voc rehab	Injuries after 1/1/04
Medical fee schedules	Treatment after 1/1/04, all injury dates
Utilization guidelines	Treatment provided after April 2004, all injury dates

SB899 – Application

<i>Change</i>	<i>Effective Date</i>
Limit on TD duration	Injuries after 4/19/04
Apportionment	Injuries without an existing order/decision/award as of 4/19/04
Change in # of PD weeks	Injuries after 1/1/05
Two-tier PD benefits	Injuries after 1/1/05
Medical provider networks	Treatment after 1/1/05
Immediate medical care	Injuries after 4/19/04

How will loss data be affected by reforms?

- Drop in medical loss development factors along diagonal due to fee schedule/guideline impact
- Latest accident years will show improvement over prior years
- Indemnity development patterns for accident years 2004 and subsequent will change

How to adjust loss data for reform impact?

- Restate paid data triangles as if reforms had been in effect since beginning of accident period
- Restate outstanding triangles if it is believed that claims adjusters have started to take reforms into account in case estimates
- Restate Bornhuetter-Ferguson initial expected estimates as if the reforms had been effect since the beginning of accident period
- Use adjusted triangles to get unpaid and unreported and then add to unadjusted paid and reported to get ultimate which is mixture of pre- and post-reform

Determination of Adjustment Factors

- Based on published estimates
- Review of actual data pre- and post-reform

Simple Example

Paid Loss

Accident Period	Evaluation Age in Months									
	12	24	36	48	60	72	84	96	108	120
1995	1,000	1,800	2,520	3,024	3,402	3,674	3,858	3,954	4,033	4,087
1996	1,050	1,890	2,646	3,175	3,572	3,858	4,051	4,152	4,225	
1997	1,103	1,985	2,778	3,334	3,751	4,051	4,253	4,347		
1998	1,158	2,084	2,917	3,501	3,938	4,253	4,440			
1999	1,216	2,188	3,063	3,676	4,135	4,426				
2000	1,276	2,297	3,216	3,859	4,284					
2001	1,340	2,412	3,377	3,971						
2002	1,407	2,533	3,424							
2003	1,477	2,518								
2004	1,364									

Paid Loss Development Factors

Accident Period	Age Interval in Months									
	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - Ult
1995	1.800	1.400	1.200	1.125	1.080	1.050	1.025	1.020	1.013	
1996	1.800	1.400	1.200	1.125	1.080	1.050	1.025	1.018		
1997	1.800	1.400	1.200	1.125	1.080	1.050	1.022			
1998	1.800	1.400	1.200	1.125	1.080	1.044				
1999	1.800	1.400	1.200	1.125	1.070					
2000	1.800	1.400	1.200	1.110						
2001	1.800	1.400	1.176							
2002	1.800	1.352								
2003	1.704									
2004										

Simple Average of Latest 3

[1] 1.768 1.384 1.192 1.120 1.077 1.048 1.024 1.019 1.013 1.208

Simple Average of Latest 5

[2] 1.781 1.390 1.195 1.122 1.078 1.049 1.024 1.019 1.013 1.208

Incremental Paid Loss

Accident Period	Age Interval in Months									
	0 - 12	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120
1995	1,000	800	720	504	378	272	184	96	79	53
1996	1,050	840	756	529	397	286	193	101	73	
1997	1,103	882	794	556	417	300	203	94		
1998	1,158	926	833	583	438	315	187			
1999	1,216	972	875	613	459	291				
2000	1,276	1,021	919	643	425					
2001	1,340	1,072	965	594						
2002	1,407	1,126	892							
2003	1,477	1,040								
2004	1,364									

Incremental Paid Loss – Year to Year Changes

Accident Period	Year-to-Year Percentage Change									
	0 - 12	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120
1996/1995	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	-7.6%
1997/1996	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	-7.6%	
1998/1997	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	-7.6%		
1999/1998	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	-7.6%			
2000/1999	5.0%	5.0%	5.0%	5.0%	5.0%	-7.6%				
2001/2000	5.0%	5.0%	5.0%	-7.6%						
2002/2001	5.0%	5.0%	-7.6%							
2003/2002	5.0%	-7.6%								
2004/2003	-7.6%									

Reform Adjustments to Paid Loss

Accident Period	Evaluation Age in Months										
	12	24	36	48	60	72	84	96	108	120	
1995	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.880	1.000
1996	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.880	1.000	
1997	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.880	1.000		
1998	0.880	0.880	0.880	0.880	0.880	0.880	0.880	1.000			
1999	0.880	0.880	0.880	0.880	0.880	1.000					
2000	0.880	0.880	0.880	0.880	1.000						
2001	0.880	0.880	0.880	1.000							
2002	0.880	0.880	1.000								
2003	0.880	1.000									
2004	1.000										

Incremental Paid Loss Adjusted for Reform

Accident Period	Age Interval in Months									
	0 - 12	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120
1995	880	704	634	444	333	240	162	85	70	53
1996	924	739	665	466	349	251	170	89	73	
1997	970	776	699	489	367	264	178	94		
1998	1,019	815	733	513	385	277	187			
1999	1,070	856	770	539	404	291				
2000	1,123	899	809	566	425					
2001	1,179	943	849	594						
2002	1,238	991	892							
2003	1,300	1,040								
2004	1,364									

Paid Loss Adjusted for Reform

Accident Period	Evaluation Age in Months									
	12	24	36	48	60	72	84	96	108	120
1995	880	1,584	2,218	2,661	2,994	3,233	3,395	3,480	3,549	3,603
1996	924	1,663	2,328	2,794	3,143	3,395	3,565	3,654	3,727	
1997	970	1,746	2,445	2,934	3,301	3,565	3,743	3,836		
1998	1,019	1,834	2,567	3,081	3,466	3,743	3,930			
1999	1,070	1,925	2,696	3,235	3,639	3,930				
2000	1,123	2,022	2,830	3,396	3,821					
2001	1,179	2,123	2,972	3,566						
2002	1,238	2,229	3,120							
2003	1,300	2,340								
2004	1,364									

Paid Loss Adjusted for Reform – Development Factors

Accident Period	Age Interval in Months									
	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - Ult
1995	1.800	1.400	1.200	1.125	1.080	1.050	1.025	1.020	1.015	
1996	1.800	1.400	1.200	1.125	1.080	1.050	1.025	1.020		
1997	1.800	1.400	1.200	1.125	1.080	1.050	1.025			
1998	1.800	1.400	1.200	1.125	1.080	1.050				
1999	1.800	1.400	1.200	1.125	1.080					
2000	1.800	1.400	1.200	1.125						
2001	1.800	1.400	1.200							
2002	1.800	1.400								
2003	1.800									
2004										

Simple Average of Latest 3

[1] 1.800 1.400 1.200 1.125 1.080 1.050 1.025 1.020 1.015 1.208

Simple Average of Latest 5

[2] 1.800 1.400 1.200 1.125 1.080 1.050 1.025 1.020 1.015 1.208

Paid Loss Development Method – No Adjustment

Accident Period (1)	Paid Loss As of 12/31/2004 (2)	Paid Factors to Ultimate (3)	Projected Ultimate Loss (4)	Estimated Unpaid Loss (5)
1995	\$ 4,087	1.208	\$ 4,938	\$ 851
1996	4,225	1.224	5,172	947
1997	4,347	1.247	5,421	1,075
1998	4,440	1.277	5,671	1,231
1999	4,426	1.338	5,924	1,498
2000	4,284	1.441	6,174	1,890
2001	3,971	1.614	6,411	2,439
2002	3,424	1.924	6,589	3,164
2003	2,518	2.663	6,704	4,187
2004	1,364	4.708	6,424	5,060
Totals	\$ 37,087		\$ 59,428	\$ 22,341

Notes:

(4) = (2) x (3)

(5) = (4) - (2)

Paid Loss Development Method – With Adjustment

Accident Period (1)	Paid Loss All Post Reform As of 12/31/2004 (2)	Adjusted Paid Factors to Ultimate (3)	Projected Ultimate Loss All Post Reform (4)	Estimated Unpaid Loss (5)	Paid Loss As of 12/31/2004 (6)	Projected Ultimate Loss (7)
1995	\$ 3,603	1.208	\$ 4,353	\$ 750	\$ 4,087	\$ 4,837
1996	3,727	1.226	4,570	844	4,225	5,069
1997	3,836	1.251	4,799	963	4,347	5,309
1998	3,930	1.282	5,039	1,109	4,440	5,549
1999	3,930	1.346	5,291	1,361	4,426	5,787
2000	3,821	1.454	5,555	1,735	4,284	6,019
2001	3,566	1.636	5,833	2,267	3,971	6,238
2002	3,120	1.963	6,125	3,004	3,424	6,429
2003	2,340	2.748	6,431	4,091	2,518	6,608
2004	1,364	4.946	6,749	5,385	1,364	6,749
Totals	\$ 33,238		\$ 54,746	\$ 21,508	\$ 37,087	\$ 58,595

Notes:

(4) = (2) x (3)

(5) = (4) - (2)

(7) = (5) + (6)

Incurred Loss

Accident Period	Evaluation Age in Months									
	12	24	36	48	60	72	84	96	108	120
1995	2,000	2,900	3,422	3,730	3,991	4,191	4,337	4,446	4,535	4,539
1996	2,100	3,045	3,593	3,916	4,191	4,400	4,554	4,668	4,715	
1997	2,205	3,197	3,773	4,112	4,400	4,620	4,782	4,851		
1998	2,315	3,357	3,961	4,318	4,620	4,851	4,957			
1999	2,431	3,525	4,159	4,534	4,851	5,010				
2000	2,553	3,701	4,367	4,761	4,983					
2001	2,680	3,886	4,586	4,851						
2002	2,814	4,081	4,605							
2003	2,955	4,029								
2004	2,807									

Incurred Loss Development Factors

Accident Period	Age Interval in Months									
	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - Ult
1995	1.450	1.180	1.090	1.070	1.050	1.035	1.025	1.020	1.001	
1996	1.450	1.180	1.090	1.070	1.050	1.035	1.025	1.010		
1997	1.450	1.180	1.090	1.070	1.050	1.035	1.014			
1998	1.450	1.180	1.090	1.070	1.050	1.022				
1999	1.450	1.180	1.090	1.070	1.033					
2000	1.450	1.180	1.090	1.047						
2001	1.450	1.180	1.058							
2002	1.450	1.128								
2003	1.364									
2004										

Simple Average of Latest 3

[1] 1.421 1.163 1.079 1.062 1.044 1.031 1.021 1.015 1.001 1.080

Simple Average of Latest 5

[2] 1.433 1.170 1.084 1.065 1.047 1.032 1.021 1.015 1.001 1.080

Case Reserves

Accident Period	Evaluation Age in Months									
	12	24	36	48	60	72	84	96	108	120
1995	1,000	1,100	902	706	589	516	479	491	501	452
1996	1,050	1,155	947	741	619	542	503	516	489	
1997	1,103	1,213	994	778	649	569	529	504		
1998	1,158	1,273	1,044	817	682	598	516			
1999	1,216	1,337	1,096	858	716	584				
2000	1,276	1,404	1,151	901	699					
2001	1,340	1,474	1,209	880						
2002	1,407	1,548	1,180							
2003	1,477	1,511								
2004	1,443									

Case Reserves – Year to Year Changes

Accident Period	Year-to-Year Percentage Change									
	12	24	36	48	60	72	84	96	108	120
1996/1995	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	-2.3%
1997/1996	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	-2.3%	
1998/1997	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	-2.4%			
1999/1998	5.0%	5.0%	5.0%	5.0%	5.0%	-2.4%				
2000/1999	5.0%	5.0%	5.0%	5.0%	-2.4%					
2001/2000	5.0%	5.0%	5.0%	-2.3%						
2002/2001	5.0%	5.0%	-2.4%							
2003/2002	5.0%	-2.3%								
2004/2003	-2.4%									

Reform Adjustments to Case Reserves

Accident Period	Evaluation Age in Months										
	12	24	36	48	60	72	84	96	108	120	
1995	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.930	1.000
1996	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.930	1.000	
1997	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.930	1.000		
1998	0.930	0.930	0.930	0.930	0.930	0.930	1.000				
1999	0.930	0.930	0.930	0.930	0.930	1.000					
2000	0.930	0.930	0.930	0.930	1.000						
2001	0.930	0.930	0.930	1.000							
2002	0.930	0.930	1.000								
2003	0.930	1.000									
2004	1.000										

Case Reserves Adjusted for Reform

Accident Period	Evaluation Age in Months									
	12	24	36	48	60	72	84	96	108	120
1995	930	1,023	839	657	548	480	446	457	466	452
1996	977	1,074	881	689	575	504	468	480	489	
1997	1,025	1,128	925	724	604	530	492	504		
1998	1,077	1,184	971	760	634	556	516			
1999	1,130	1,243	1,020	798	666	584				
2000	1,187	1,306	1,071	838	699					
2001	1,246	1,371	1,124	880						
2002	1,309	1,439	1,180							
2003	1,374	1,511								
2004	1,443									

Incurred Loss Adjusted for Reform

Accident Period	Evaluation Age in Months									
	12	24	36	48	60	72	84	96	108	120
1995	1,810	2,607	3,056	3,318	3,542	3,714	3,841	3,937	4,016	4,055
1996	1,901	2,737	3,209	3,484	3,719	3,899	4,033	4,134	4,216	
1997	1,996	2,874	3,370	3,658	3,905	4,094	4,234	4,340		
1998	2,095	3,018	3,538	3,841	4,100	4,299	4,446			
1999	2,200	3,169	3,715	4,033	4,305	4,514				
2000	2,310	3,327	3,901	4,234	4,520					
2001	2,426	3,494	4,096	4,446						
2002	2,547	3,668	4,301							
2003	2,674	3,852								
2004	2,807									

Incurred Loss Adjusted for Reform – Development Factors

Accident Period	Age Interval in Months									
	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - Ult
1995	1.440	1.172	1.085	1.067	1.049	1.034	1.025	1.020	1.010	
1996	1.440	1.172	1.085	1.067	1.049	1.034	1.025	1.020		
1997	1.440	1.172	1.085	1.067	1.049	1.034	1.025			
1998	1.440	1.172	1.085	1.067	1.049	1.034				
1999	1.440	1.172	1.085	1.067	1.049					
2000	1.440	1.172	1.085	1.067						
2001	1.440	1.172	1.085							
2002	1.440	1.172								
2003	1.440									
2004										

Simple Average of Latest 3

[1] 1.440 1.172 1.085 1.067 1.049 1.034 1.025 1.020 1.010 1.080

Simple Average of Latest 5

[2] 1.440 1.172 1.085 1.067 1.049 1.034 1.025 1.020 1.010 1.080

Incurred Loss Development Method – No Adjustment

Accident Period (1)	Incurred Loss As of 12/31/2004 (2)	Incurred Factors to Ultimate (3)	Projected Ultimate Loss (4)	Estimated Unreported Loss (5)
1995	4,539	1.080	\$ 4,902	\$ 363
1996	4,715	1.081	5,096	382
1997	4,851	1.097	5,322	471
1998	4,957	1.121	5,555	598
1999	5,010	1.155	5,787	777
2000	4,983	1.206	6,010	1,027
2001	4,851	1.281	6,215	1,364
2002	4,605	1.383	6,367	1,763
2003	4,029	1.608	6,478	2,449
2004	2,807	2.285	6,415	3,608
Totals	45,346		\$ 58,148	\$ 12,802

Notes:

(4) = (2) x (3)

(5) = (4) - (2)

Incurred Loss Development Method – With Adjustment

Accident Period	Incurred Loss All Post Reform As of 12/31/2004	Adjusted Incurred Factors to Ultimate	Projected Ultimate Loss All Post Reform	Estimated Unreported Loss	Incurred Loss As of 12/31/2004	Projected Ultimate Loss
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1995	4,055	1.080	\$ 4,379	\$ 324	\$ 4,539	\$ 4,863
1996	4,216	1.091	4,598	382	4,715	5,096
1997	4,340	1.112	4,828	488	4,851	5,338
1998	4,446	1.140	5,069	623	4,957	5,580
1999	4,514	1.179	5,323	809	5,010	5,819
2000	4,520	1.236	5,589	1,069	4,983	6,052
2001	4,446	1.320	5,868	1,422	4,851	6,274
2002	4,301	1.433	6,162	1,861	4,605	6,466
2003	3,852	1.680	6,470	2,618	4,029	6,647
2004	2,807	2.419	6,792	3,984	2,807	6,792
Totals	41,497		\$ 55,078	\$ 13,581	\$ 45,346	\$ 58,927

Notes:

(4) = (2) x (3)

(5) = (4) - (2)

(7) = (5) + (6)