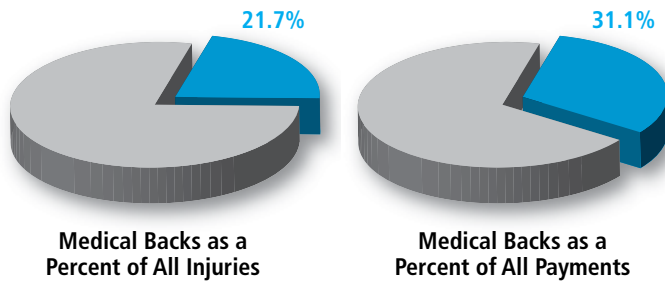




ICIS Injury Series SCORE CARD

Medical Back Problems w/o Spinal Cord Involvement

Top Work Injury Categories



Injury Category	% Injuries	% of Payments
<b>Medical Back Problems w/o Spinal Cord Involvement</b>	<b>21.7%</b>	<b>31.1%</b>
Sprain of Shoulder, Arm, Knee, Lower Leg	13.4%	10.0%
Spine Disorders w/Spinal Cord or Root Involvement	2.0%	8.3%
Ruptured Tendon, Tendonitis, Myositis & Bursitis	5.1%	6.4%
Degenerative, Infective & Metabolic Joint Disorder	3.0%	5.9%
Carpal Tunnel Syndrome	1.1%	2.9%
Other Diagnoses of Musculoskeletal Systems	1.6%	1.7%
<b>Subtotal</b>	<b>47.9%</b>	<b>66.4%</b>

This scorecard focuses on California workers' compensation injuries in which the primary diagnosis was a medical back problem without spinal cord involvement ("medical backs"). It is the first in a series of analyses that will provide data from CWCI's Industry Claims Information System (ICIS) database on 7 of the top work injury categories, which encompass 1/2 of all job injuries in the state and 2/3 of all claim payments. Medical backs are the single most common job injury category in California – accounting for more than 1 out of 5 claims and nearly 1 out of 3 benefit dollars paid.

Injured Worker Profile

2002 – 2005 Claimants

	Medical Backs	All Claims
Average Age (Years)	36.9	36.7
Average Tenure (Years)	3.6	3.6
<b>Gender</b>		
Male	68.1%	65.3%
Female	31.9%	34.7%
<b>Location of Residence</b>		
Northern California	41.0%	41.1%
Southern California	59.0%	58.9%

The profile of medical back claimants closely tracks the profile for all injured workers. Both groups average just under 37 years of age and 3.6 years of job tenure at injury. Females account for a slightly lower share of medical back injuries, but the regional distribution of medical backs by claimant residence matches the proportion noted for all claims.

Diagnoses

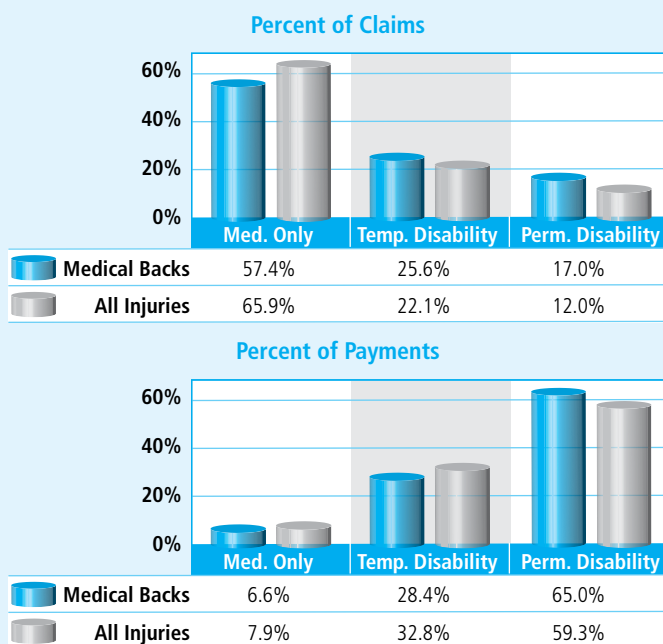
Medical Back Problems w/o Spinal Cord Involvement

ICD9 Descriptions	% of Claims	% of Total Paid
Sprain Lumbar Region	35.5%	37.3%
Sprain Lumbosacral	15.3%	10.5%
Sprain of Neck	15.2%	15.4%
Sprain Thoracic Region	9.3%	5.0%
Lumbago	5.8%	4.4%
Backache Not Otherwise Specified	3.1%	5.3%
Sprain of Back Not Otherwise Specified	3.0%	0.6%
Lumbar/Lumbosacral Disc Degeneration	2.0%	8.9%
Cervicalgia	1.8%	2.2%
Sprain Sacroiliac Region	1.8%	0.7%
Sprain Sacroiliac Not Otherwise Specified	1.4%	0.3%
Sprain of Other Unspecified Parts of Back	1.3%	0.6%
Other	4.5%	8.8%

The medical back group could be more commonly named "sprained backs." Sprains of various parts of the back comprise 83% of claims in this group and 70% of the dollars paid, with the top 4 diagnoses alone accounting for 75% of medical backs and 68% of the dollars paid.

Claim and Payment Distribution by Claim Type

Medical Backs vs. All Injuries (AY 2002 – 2005)



Nearly 43% of medical backs result in lost time (TD and/or PD) vs. 34% of all injuries. About 1 in 6 medical backs ends up with a permanent disability -- compared to a rate of 1 in 8 claims for all injuries. Thus, PD claims account for 65 cents of every dollar paid for medical backs, compared to 59 cents of every dollar paid for all injuries.

Distribution by Industry Sector

Medical Backs vs. All Injuries (AY 2002 – 2005)

Industry Sector	% of Med Backs by Sector	Med Backs as % of Injuries in Sector
Manufacturing	15.5%	19.4%
Construction	15.4%	18.4%
Mercantile	14.5%	24.3%
Professional and Clerical Services	11.4%	21.9%
Agriculture	7.2%	21.7%
Restaurants	4.6%	19.4%
Parcel Delivery Companies	3.4%	27.7%
Hospitals	2.9%	25.3%
Nursing Homes	2.1%	32.3%
Trucking	1.9%	24.8%
Other Industry	21.1%	23.1%
<b>TOTAL</b>	<b>100.0%</b>	<b>21.7%</b>

Over 1/2 of medical backs come from the manufacturing, construction, mercantile and professional/clerical sectors. Medical backs are very prevalent among nursing home employees, where they comprise 1 out of 3 work injuries, though they also account for around 1 in 4 injuries among parcel delivery, hospital, trucking and mercantile workers.



Average Benefits by Injured Worker County of Residence						
Medical Back vs. All Claims (Select Counties AY 2002 - 2005)						
County	% of Med Backs	% of All Claims	Avg. Paid Per Claim		Avg. Paid As % of Statewide Avg.	
			Med Backs	All Claims	Med Backs	All Claims
Los Angeles	21.5%	21.8%	\$16,783	\$11,025	126%	119%
San Diego	8.3%	8.0%	\$12,142	\$8,417	91%	91%
Orange	6.3%	6.2%	\$15,956	\$10,575	120%	114%
San Bernardino	5.5%	5.5%	\$14,858	\$9,872	112%	107%
Riverside	5.1%	5.0%	\$15,013	\$10,320	113%	112%
Sacramento	4.5%	4.2%	\$10,223	\$7,856	77%	85%
Alameda	3.9%	3.8%	\$12,899	\$10,231	97%	111%
Santa Clara	3.7%	3.8%	\$11,965	\$9,275	90%	100%
Fresno	3.7%	3.8%	\$8,650	\$6,916	65%	75%
Ventura	2.6%	2.4%	\$16,569	\$11,197	125%	121%
San Francisco	1.7%	1.7%	\$11,208	\$7,653	84%	83%
Other Counties	33.2%	33.8%	\$11,289	\$8,074	85%	87%
<b>Statewide</b>	<b>100.0%</b>	<b>100.0%</b>	<b>\$13,299</b>	<b>\$9,253</b>	<b>100%</b>	<b>100%</b>

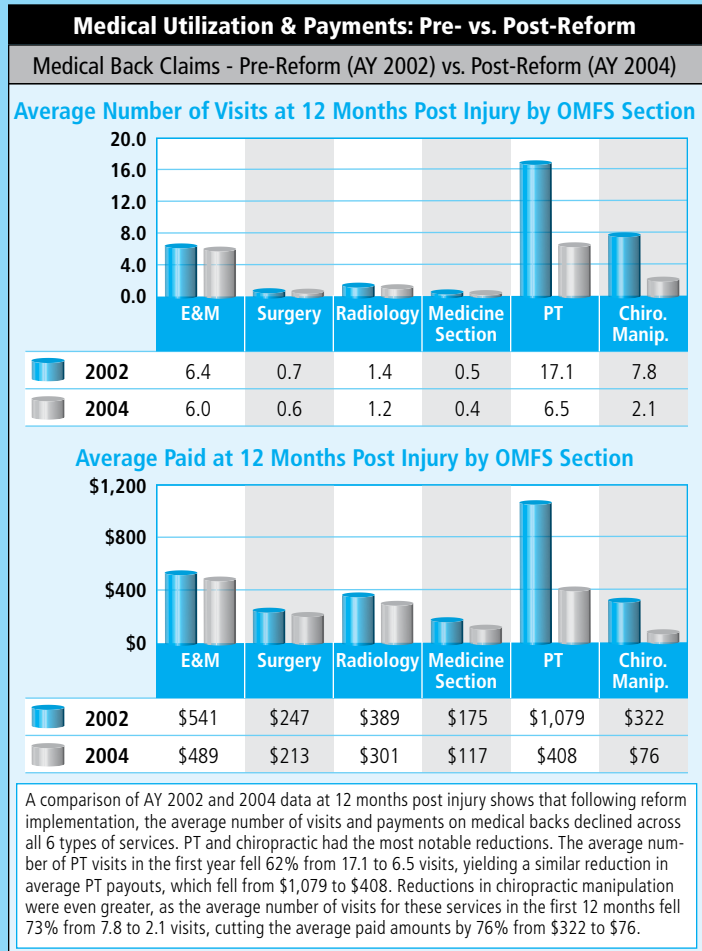
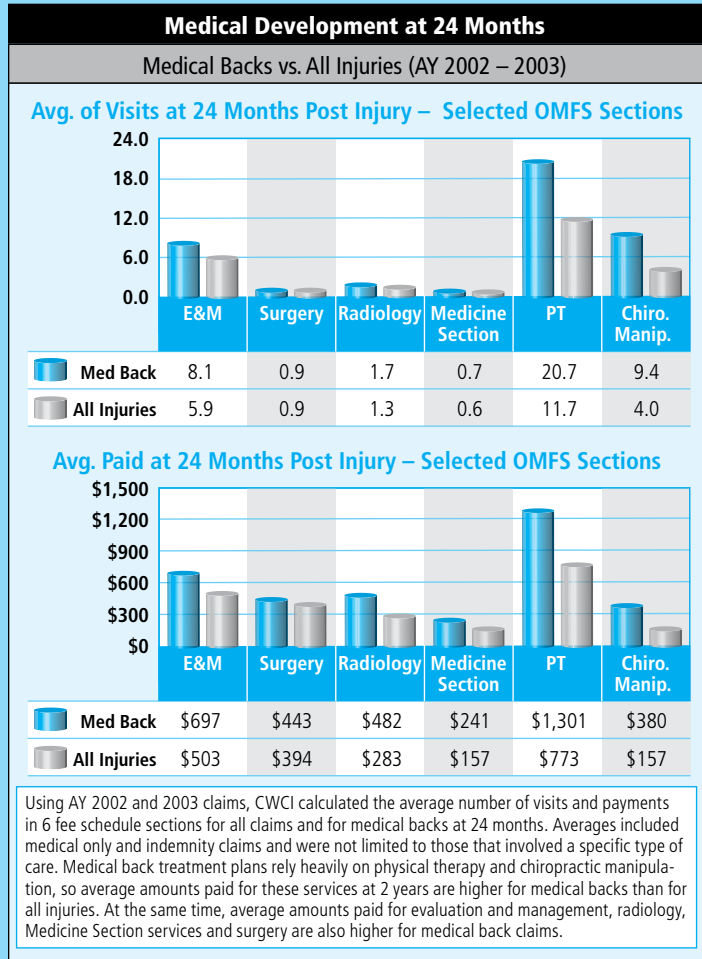
More than 1 in 5 injured workers in California as well as 1 in 5 medical back claimants lives in Los Angeles County, where claim costs are among the highest in the state--119% of the state average for all claims, 126% of the state average for medical backs.

Except for San Diego County, benefit payments were higher in Southern California and lower in the north and in rural areas that comprise most "Other Counties."

PPO/MPN Utilization					
% of Visits to Preferred Providers By Type of Service					
Medical Back vs. All Injuries (AY 2002 - 2005)					
Type of Service		PPO			MPN
		2002	2003	2004	2005
E&M	Med Backs	53.3%	50.9%	59.6%	77.9%
	All Injuries	56.7%	56.0%	61.6%	74.0%
Surgery	Med Backs	44.5%	46.5%	55.6%	72.9%
	All Injuries	51.7%	52.6%	55.7%	69.5%
Radiology	Med Backs	41.1%	40.4%	44.8%	59.0%
	All Injuries	45.9%	45.9%	47.2%	58.5%
Medicine Section	Med Backs	27.0%	24.6%	37.3%	70.1%
	All Injuries	39.9%	40.0%	49.3%	70.1%
Physical Therapy	Med Backs	20.2%	20.1%	34.8%	52.9%
	All Injuries	23.3%	23.5%	36.7%	50.3%
Chiropractic Manipulation	Med Backs	8.5%	8.3%	11.9%	34.9%
	All Injuries	8.1%	7.9%	11.2%	32.0%
Total Visits	Med Backs	25.4%	25.4%	42.4%	62.9%
	All Injuries	32.1%	32.6%	47.6%	63.2%

The use of preferred providers to treat injured workers has increased significantly since reform implementation. Overall utilization of preferred providers in California workers' compensation almost doubled from 32% of all visits for AY 2002 injuries to 63% of all visits for AY 2005 injuries. During the same period, preferred provider use for medical back problems rose from 25% to 63%.

These increases coincided with the 2005 introduction of Medical Provider Networks (MPNs) which featured medical control for the life of the claim, a significant change from the pre-reform 30-day medical control window. Although the use of preferred providers has grown across all types of services, the extent to which preferred providers are used varies by type of service. For AY 2005 injuries, preferred provider utilization ranged from about 1 in 3 chiropractic manipulation visits to around 3 out of 4 evaluation and management visits.

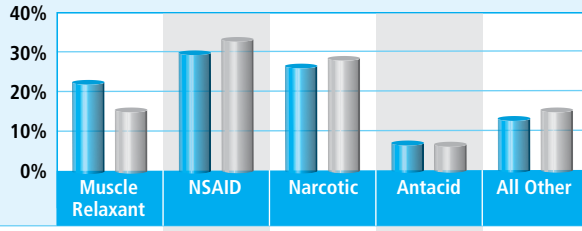




**Prescription Drugs**

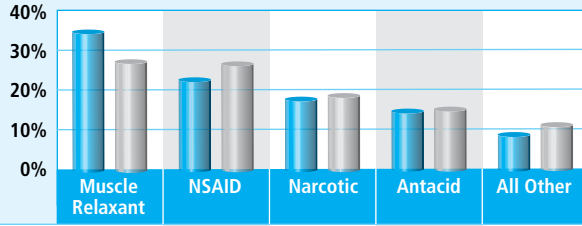
Medical Backs vs. All Injuries (AY 2005)

**Distribution of Prescriptions by Drug Category**



Drug Category	Med. Backs (%)	All Injuries (%)
Muscle Relaxant	22.8%	15.6%
NSAID	30.3%	33.7%
Narcotic	26.9%	28.8%
Antacid	6.9%	6.6%
All Other	13.1%	15.3%

**Distribution of Paid Dollars by Drug Category**



Drug Category	Med. Backs (%)	All Injuries (%)
Muscle Relaxant	35.4%	27.9%
NSAID	23.0%	27.1%
Narcotic	18.0%	18.7%
Antacid	14.8%	15.1%
All Other	8.8%	11.2%

The Institute classified a total of 1.1 million prescriptions from calendar year 2005 into 5 drug categories. Muscle relaxants comprised 22.8% of medical back prescriptions and 35.4% of the payments. Non-steroidal anti-inflammatory drugs (NSAIDs) were the most common type of prescription and represented nearly 1/4 of all prescription dollars paid for medical backs. Narcotics accounted for more than 1/4 of the prescribed drugs and 18% of the payments.

**Prescription Drugs by Volume and Payment**

Medical Back vs. All Claims (AY 2005)

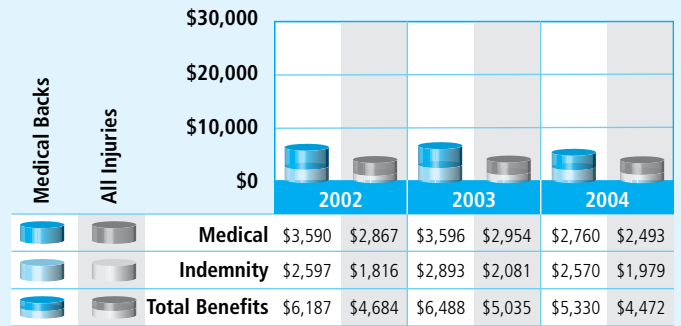
Drug Grouping	Drug Class	% of Total Prescriptions		% of Total Paid	
		Med Backs	All Claims	Med Backs	All Claims
Hydrocodone	Narcotic	12.8%	13.3%	7.3%	7.4%
Carisoprodol	Muscle Relax	10.7%	7.1%	23.7%	17.8%
Ibuprofen	NSAID	9.8%	10.9%	3.0%	3.6%
Naproxen	NSAID	6.6%	6.9%	5.9%	6.7%
Ranitidine	Antacid	5.3%	4.7%	11.5%	11.1%
Cyclobenzaprine	Muscle Relax	5.1%	3.2%	2.8%	2.1%
Propoxy	Narcotic	3.7%	3.7%	2.3%	2.3%
Tramadol	Narcotic	3.1%	2.7%	3.2%	2.9%
Banalg Liniment	Pain Relief Ointment	2.3%	1.9%	0.5%	0.5%
Piroxicam	NSAID	1.9%	1.8%	3.0%	3.2%
Etodolac	NSAID	1.6%	1.5%	2.1%	2.2%
Acetaminophen w/Codeine	Narcotic	1.5%	1.7%	0.7%	0.7%
Diclofenac	NSAID	1.3%	1.2%	1.4%	1.4%
Methocarbamol	Muscle Relax	1.1%	0.7%	0.5%	0.3%
Acetaminophen	Non-Narc. Analgesic	1.1%	1.5%	0.2%	0.2%
<b>Top 15</b>		<b>67.9%</b>	<b>62.8%</b>	<b>68.1%</b>	<b>62.4%</b>

Generic drugs were grouped with their brand equivalents to identify the most commonly prescribed drugs and associated payments. The narcotic Hydrocodone topped the list of most prescribed drugs for medical backs and for all injuries, though in both groups the muscle relaxant Carisoprodol consumed more of the paid dollars than any other drug.

**Loss Development**

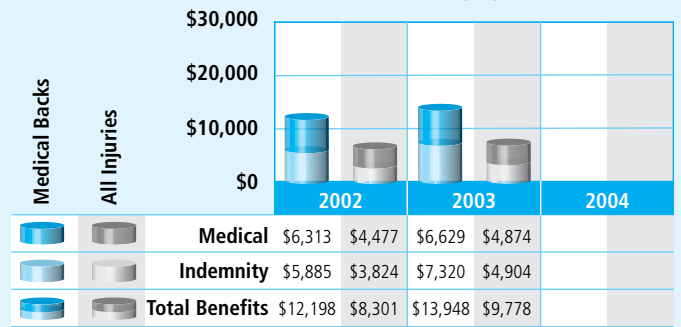
Medical Backs vs. All Injuries

**All Claims 12 Months Post Injury**



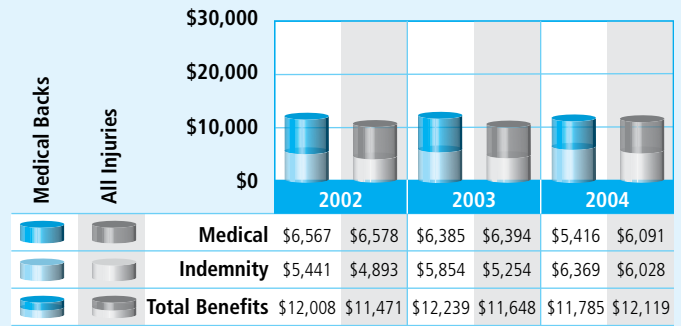
Year	Medical Backs	All Injuries
2002	\$3,590	\$2,867
2003	\$3,596	\$2,954
2004	\$2,760	\$2,493

**All Claims 24 Months Post Injury**



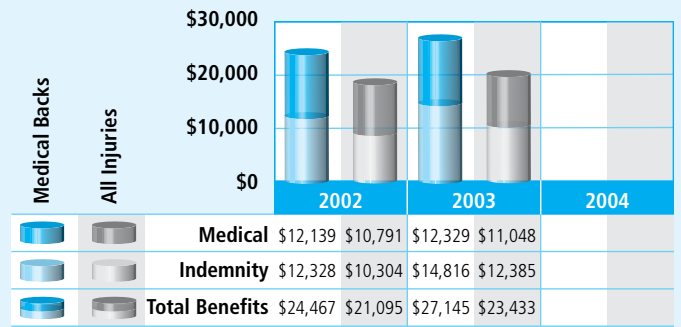
Year	Medical Backs	All Injuries
2002	\$6,313	\$4,477
2003	\$6,629	\$4,874
2004	\$5,416	\$6,091

**Indemnity Claims 12 Months Post Injury**



Year	Medical Backs	All Injuries
2002	\$6,567	\$6,578
2003	\$6,385	\$6,394
2004	\$5,416	\$6,091

**Indemnity Claims 24 Months Post Injury**



Year	Medical Backs	All Injuries
2002	\$12,139	\$10,791
2003	\$12,329	\$11,048
2004	\$27,145	\$23,433

Medical back injuries are relatively expensive. Average benefit costs for all medical back claims and medical back indemnity claims were above those noted for all injuries across almost all study years at both 12 and 24 months post injury.

Payments on medical backs increase sharply during the second year of the life of the claim. For example, at 24 months post injury, payments for AY 2003 medical back indemnity claims climbed to \$27,145 (+ 122%) from the 12-month payment level. In comparison, average payments for indemnity claims for all injuries rose 101% between 12 and 24 months post injury. Among the AY 2003 claims, indemnity payments were the biggest cost driver in the second year following the injury, accounting for 60% of the overall increase in both medical back claims and all injury claims.



**Nature of Injury**

Claim Distributions for Medical Backs vs. Other Injuries & All Injuries (AY 2002 - 2005 Claims)

Nature of Injury	Percent of Claims		
	Medical Backs	Other Types of Injuries	All Injuries
Strain	65.8%	20.9%	29.5%
All Other Cumulative Injuries	13.0%	11.5%	11.8%
All Other, Not Otherwise Classified	7.3%	8.8%	8.6%
Sprain	4.3%	6.8%	6.2%
Multiple Physical Injuries Only	3.4%	2.6%	2.7%
Contusion	3.2%	9.4%	8.2%
Inflammation	0.7%	1.9%	1.6%
Laceration	0.6%	16.4%	13.4%
Fracture	0.5%	4.0%	3.4%
Multiple Injuries Including Physical and Psychological	0.2%	0.2%	0.2%
<b>All Other</b>	<b>1.1%</b>	<b>17.5%</b>	<b>14.4%</b>

"Strains" are the number one nature of injury category accounting for nearly 1/3 of all work injuries and 2/3 of medical back injuries. Strains are often cumulative injuries that occur over time. One in 7 medical backs are other cumulative injuries compared to 1 in 9 work injuries overall. However, specific injuries such as sprains, contusions, lacerations, and fractures are less common as medical back injuries than as other types of injuries.

**Cause of Injury**

Claim Distributions for Medical Backs vs. Other Injuries & All Injuries (AY 2002 - 2005 Claims)

Cause of Injury	Percent of Claims		
	Medical Backs	Other Types of Injuries	All Injuries
Strain/Injury: Lifting	30.7%	6.9%	12.1%
Strain/Injury (not otherwise classified)	13.7%	7.3%	8.7%
Strain/Injury: Pushing or Pulling	6.8%	2.8%	3.7%
Fall/Slip: Miscellaneous	5.4%	5.2%	5.2%
Misc. Causes: Other Injury (not otherwise classified)	5.0%	6.7%	6.3%
Collision with Another Vehicle	3.9%	0.7%	1.4%
Strain/Injury: Holding or Carrying	3.5%	1.2%	1.7%
Fall/Slip: On Same Level	3.2%	3.1%	3.1%
Misc. Causes: Cumulative Injury (not otherwise classified)	2.3%	2.9%	2.8%
Strain/Injury: Reaching	2.1%	0.6%	0.9%
<b>All Other</b>	<b>23.6%</b>	<b>62.7%</b>	<b>54.2%</b>

Most medical back injuries are caused by some type of strain. Almost 1 in 3 medical back injuries is caused by strains due to lifting. Strains caused by pushing or pulling, holding or carrying, reaching, or other unclassified causes account for another 26%, far above the percentage noted for other types of injuries. In addition, nearly 4% of medical back claims result from collisions with vehicles, more than 5 times the percentage noted for other types of injury claims.

**Time Lags**

Date of Injury to Employer Notice, Carrier Notice & First Treatment Medical Back vs. All Injuries (AY 2002 vs. 2004)

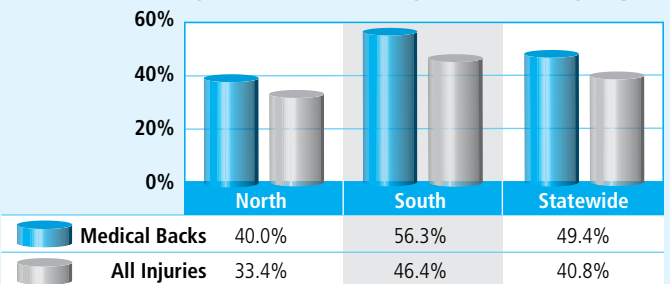
		Median # of Days	
		2002	2004
<b>Employer Notification</b>	Med Backs	0.0	0.0
	All Claims	0.0	0.0
<b>Carrier Notification</b>	Med Backs	7.0	6.0
	All Claims	7.0	6.0
<b>Time to First Treatment</b>	Med Backs	7.0	5.0
	All Claims	3.0	2.0

To gauge how long it takes for the initial stages of a claim to unfold, and how this has changed recently, CWCI compared the median number of days from the injury date to employer notice, carrier notice, and initial treatment for medical backs and all claims from AY 2002 and 2004. A median is the midpoint in a series of numbers, where half the data values are above the median, and half are below. In both years, the median time to employer notice was 0 days for medical backs and for all claims, reflecting same-day notice. The median time to carrier notice fell from 7 days to 6 days between 2002 and 2004, and was the same for medical backs and all claims. The median time to first treatment for medical backs improved from 7 to 5 days, though that is 3 days longer than the median for all claims, which may reflect the subjective nature and prevalence of cumulative traumas among medical backs.

**Attorney Involvement**

Medical Backs vs. All Injuries (AY 2002 - 2005 Claims)

Percent of Indemnity Claims with Attorney Involvement by Region

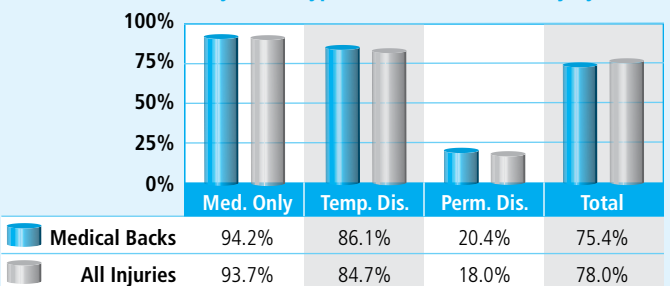


Statewide, attorneys are involved in 1/2 of all medical back indemnity claims vs. 41% of all indemnity claims. Attorney involvement is far greater in Southern California than in Northern California, a regional variation that holds true for both medical backs and all injury claims.

**Claim Closure Rates**

Medical Backs vs. All Injuries (AY 2002 - 2003)

Closure Rates by Claim Type at 24 Months Post Injury



At 24 months, the overall claim closure rate of 75.4% for medical backs is below the 78.0% closure rate for all claims. This is due in part to differences in the mix of claims by claim type, as medical backs are more likely to involve TD and PD and take longer to close.

**ICIS Injury Scorecards** are based on Industry Claims Information System data, compiled and maintained by the California Workers' Compensation Institute, 1111 Broadway, Suite 2350, Oakland CA 94607, (510) 251-9470. Additional injury scorecard data is posted in the ICIS section of the Institute's website ([www.cwci.org](http://www.cwci.org)).

**About CWCI:** The California Workers' Compensation Institute, incorporated in 1964, is a private, non-profit organization of insurers and self-insured employers conducting and communicating research and analyses to improve the California workers' compensation system.