



IRIS Regional Score Cards use subsets of accident year (AY) 2005-2015 claims data from CWCI's Industry Research Information System (IRIS) database to measure and analyze various aspects of claims experience within 8 regions of California. Over the next few months, CWCI will issue Score Cards for all 8 regions of the state, each profiling claimant characteristics and showing distributions of claims within the region broken out by industry sector; premium size; claim type; common "nature" and "cause" of injury categories; and primary diagnoses. Several exhibits compare results for the highlighted region against all other regions in the state, and in many cases the exhibits also show the statewide results, providing a wealth of detailed data not only on claims within the region, but within all of California.

The first two Score Cards in the series focused on claims filed by residents of Los Angeles County and residents of the "Inland Empire" east of Los Angeles, and Orange and Imperial Counties to the south. This Score Card looks at a distinctly different region, the largely agricultural region stretching from Kern County in the south up through the San Joaquin and Sacramento Valleys to Glenn and Butte Counties in the north. For the purpose of this Score Card, this region will be referred to as the "Central Valley." The Score Card notes that 18.1% of all California workers' compensation claims are filed by residents of this region, while benefit payments on those claims account for 15% of total workers' compensation paid losses in the state.

A list of the exhibits included in the Score Card is provided below. Click the title to go directly to an exhibit.

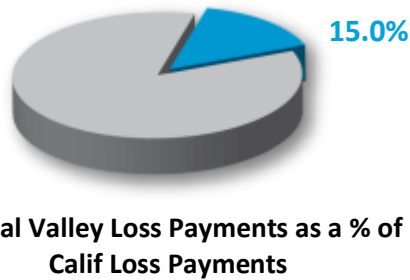
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Regional Claim and Payment Distributions

AY 2005 – AY 2015 Claims



Region	% of Claims	% of Payments
Los Angeles County	25.6%	31.9%
Inland Empire/O.C.	19.0%	21.0%
Central Valley	18.1%	15.0%
Bay Area	17.5%	15.4%
San Diego	8.1%	6.2%
Central Coast	6.7%	6.3%
North Counties	3.3%	2.5%
Sierras	1.7%	1.7%
Grand Total	100.0%	100.0%

The IRIS Regional Score Card series analyzes data from California workers' comp claims that have been grouped into eight geographic regions based on injured workers' ZIP codes. Each Score Card contains accident year (AY) 2005-2015 claims data from CWCI's Industry Research Information System (IRIS) database, plus IRIS data on prescription drugs filled in calendar year 2014; sleep studies, MRIs/diagnostic tests, and nerve conduction studies from calendar years 2013-2015; and data on claims through 2015 that had lien payments. This Score Card focuses on claims filed by workers from the Central Valley, an area encompassing 18 counties stretching 450 miles through California's farm belt from Kern County in the south to Glenn and Butte Counties in the north. The region is home to 6.9 million people, and accounts for 1/6 of the California workforce. For the 11-year period covered by the Score Card, the IRIS database captured data on nearly 344,000 claims from residents of this region, which represents 18.1% of the roughly 1.9 million claims in the Score Card sample and 15% of the \$29.5 billion in benefits paid on those claims.

Central Valley Claims as a Percent of All California Claims by Accident Year

AY 2005 – 2015

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Central Valley	19.7%	19.2%	18.6%	18.3%	17.8%	17.3%	16.9%	16.8%	17.2%	17.3%	18.4%
All Other	80.3%	80.8%	81.4%	81.7%	82.2%	82.7%	83.1%	83.2%	82.8%	82.7%	81.6%

Between AY 2005 and AY 2015, the proportion of California job injury claims filed by Central Valley residents was as high as 19.7% (in AY 2005) and as low as 16.8% (in AY 2012). The percentage of claims from the region was already declining when the recession hit in late 2008, but the downtrend continued well after the recovery began in 2009, and did not reverse course until AY 2013. The latest data show 18.4% of AY 2015 California job injury claims involved workers living in the Central Valley.

Claim Distribution by Premium Size – Central Valley vs. Other Regions

AY 2005 – 2015 Claims

	Under \$1,000	\$1,000 to \$9,999	\$10,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$499,999	\$500,000 to \$999,999	Over \$1,000,000
Central Valley	1.5%	9.0%	19.5%	12.6%	32.3%	10.6%	14.4%
Other Regions	2.0%	9.4%	18.8%	11.9%	29.9%	10.0%	18.1%

Three quarters of the Central Valley claims involved employers who paid between \$10,000 and \$1 million in annual premium (vs. 70.6% elsewhere), while a smaller share of the claims involved employers with less than \$10,000 or over \$1 million in premium.

**Injured Worker Profile**

AY 2005 – AY 2015 Claims

	Central Valley	All Other	Statewide
Average Age	37.4	38.5	38.3
Average Tenure	4.2	4.7	4.6
Gender			
% Male	68.5%	62.4%	63.5%
% Female	31.5%	37.6%	36.5%
% of Claims			
All Claims Statewide	18.1%	81.9%	100.0%
% of Calif WC Translation Svcs.*	18.9%	81.1%	100.0%

* CY 2013-2015 service dates only. Translation services identified by procedure code.

The average age of injured workers from the Central Valley was 37.4 years – more than a year below the average for injured workers from other parts of California – and their average tenure on the injury date was 4.2 years -- 6 months less than the average for injured workers from other regions. Males filed a high percentage of the Central Valley claims, accounting for 68.5% of Central Valley claims from AY 2005-2015. From 2013-2015, 18.9% of California workers' comp medical translation services were for injured workers from the Central Valley, just slightly above the proportion of all claims that came from the region.

Distribution by Industry Sector

Central Valley vs. All Other (AY 2005-2015 Claims)

Industry	Central Valley	All Other	Statewide
Agriculture	17.5%	4.4%	6.8%
Construction	11.9%	10.1%	10.4%
Manufacturing	11.5%	13.3%	13.0%
Healthcare	11.4%	12.5%	12.3%
Retail Trade	10.8%	12.0%	11.8%
Hotel and Food Services	5.6%	9.4%	8.7%
Clerical Workers	5.1%	7.7%	7.2%
Transportation and Warehousing	4.9%	5.9%	5.7%
All Other	21.3%	24.7%	24.1%
Grand Total	100.0%	100.0%	100.0%

Agriculture is the leading industry in the Central Valley and 17.5% of the claims from the region involve agriculture workers, 4 times the percentage for the rest of the state.

While much of the Central Valley is rural, 5 of the 20 largest cities in California are located in the region (#5 Fresno, #6 Sacramento, #9 Bakersfield, #13 Stockton, and #18 Modesto), and even though agriculture is the top industry, the region has a diverse economy and job base, as evidenced by the nearly 83% of the claims in the region involving non-agricultural workers. The construction industry also accounts for a high percentage of the claims in the Central Valley -- nearly 1 out of 8 claims in the region (vs. 1 in 10 claims elsewhere). Manufacturing, healthcare, and retail trade each account for about 1 out of 9 Central Valley claims, while hotel and food services, clerical work, and transportation and warehousing round out the top 8 sectors, each with about 5 to 6 percent of the Central Valley claims. However, because agriculture claims represent such a large proportion of the Central Valley caseload, claims from each of those other sectors account for a relatively small percentage of the region's claims compared to other regions of the state.



Cause of Injury

Claim Distributions for the Central Valley, All Other Regions and Statewide (AY 2005 – 2015 Claims)

Cause of Injury	Percent of Claims		
	Central Valley	All Other Regions	Statewide
Strain/Injury: Lifting	10.2%	10.8%	10.7%
Strain/Injury: Not Otherwise Classified (NOC)	8.7%	8.9%	8.9%
Miscellaneous Cause: Other Injury (NOC)	6.0%	5.4%	5.5%
Fall/Slip: Miscellaneous	4.8%	4.8%	4.8%
Struck/Injured by: Falling or Flying Object	4.0%	4.2%	4.2%
Strain/Injury: Pushing or Pulling	4.0%	4.0%	4.0%
Fall/Slip: On Same Level	3.9%	4.2%	4.2%
Miscellaneous (Cut, Puncture, Scrape)	3.3%	3.2%	3.2%
Miscellaneous Cause: Foreign Body in Eye	3.3%	2.4%	2.6%
Hand Tool, Utensil; Not Powered	3.0%	2.9%	2.9%
All Other	48.8%	49.2%	49.0%

The top 10 causes of injury cited in Central Valley claims accounted for just over half of all claims in the region, and the overall distribution by cause of injury was similar to other regions, with only slight differences in the percentage of claims in which the various causes were cited. Different types of slips and falls were listed in 8.7% of the Central Valley claims vs. 9% of claims from other regions, while injuries caused by foreign bodies in the eye were more common in this region, accounting for 3.3% of the work injury claims vs. 2.4% elsewhere.

Nature of Injury

Claim Distributions for Central Valley, All Other Regions and Statewide (AY 2005 – 2015 Claims)

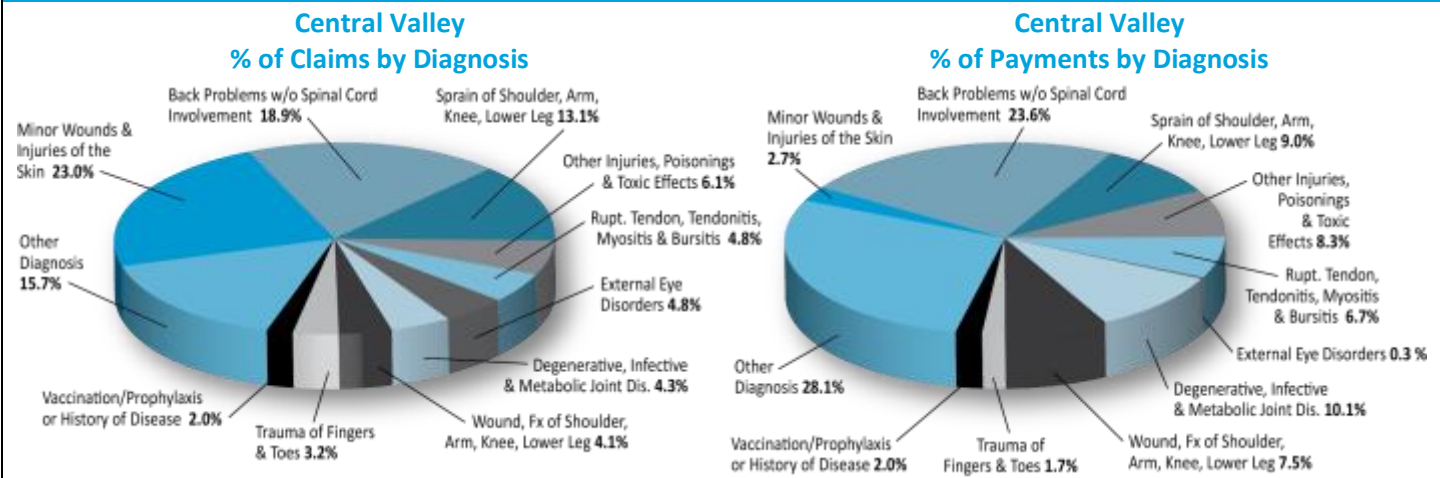
Nature of Injury	Percent of Claims		
	Central Valley	All Other Regions	Statewide
Strain	29.0%	28.9%	28.9%
Laceration	12.6%	12.3%	12.4%
Contusion	10.3%	10.0%	10.1%
Sprain	9.2%	9.6%	9.5%
All Other, Not Otherwise Classified (NOC)	8.7%	10.4%	10.0%
All Other Cumulative Injuries	4.2%	5.1%	4.9%
Puncture	3.8%	3.5%	3.6%
Fracture	4.0%	3.3%	3.4%
Foreign Body	3.8%	2.5%	2.8%
Inflammation	2.2%	2.3%	2.3%
All Other	12.2%	12.1%	12.1%

As in the rest of the state, strains were by far the leading nature of injury category in the Central Valley, representing about 29% of all claims, more than twice the proportion for lacerations, which ranked second, and nearly three times the proportion for contusions, which ranked third. Non-specific nature of injury categories (i.e., “all other injuries not otherwise classified” and “all other cumulative injuries” were less prevalent among Central Valley claims compared to other regions, as were sprains; while several specific injury types (punctures, fractures, and foreign bodies) accounted for a greater share of the Central Valley claims.



Claim and Payment Distributions by Diagnosis

Claim and Payment Distributions for AY 2005-2015 Claims



	Central Valley		All Other Regions		Statewide	
	% of Claims	% of Total Paid	% of Claims	% of Total Paid	% of Claims	% of Total Paid
Minor Wounds & Injuries to the Skin	23.0%	2.7%	22.3%	2.4%	22.4%	2.4%
Medical Back Problems w/o Spinal Cord Involvement	18.9%	23.6%	20.0%	26.9%	19.8%	26.4%
Sprain of Shoulder, Arm, Knee, Lower Leg	13.1%	9.0%	14.3%	9.2%	14.0%	9.2%
Other Injuries, Poisonings & Toxic Effects	6.1%	8.3%	7.3%	12.6%	7.0%	11.9%
Ruptured Tendon, Tendonitis, Myositis & Bursitis	4.8%	6.7%	5.8%	6.6%	5.6%	6.7%
External Eye Disorders	4.8%	0.3%	3.3%	0.2%	3.6%	0.2%
Degenerative, Infective & Metabolic Joint Disorders	4.3%	10.1%	3.9%	8.2%	4.0%	8.5%
Wound, Fracture of Shoulder, Arm, Knee, Lower Leg	4.1%	7.5%	3.7%	5.5%	3.7%	5.8%
Trauma of Fingers & Toes	3.2%	1.7%	2.9%	1.4%	3.0%	1.4%
Vaccination/Prophylaxis or History of Disease	2.0%	2.0%	1.5%	1.1%	1.6%	1.2%
Other Diagnosis	15.7%	28.1%	14.8%	19.6%	15.3%	20.0%

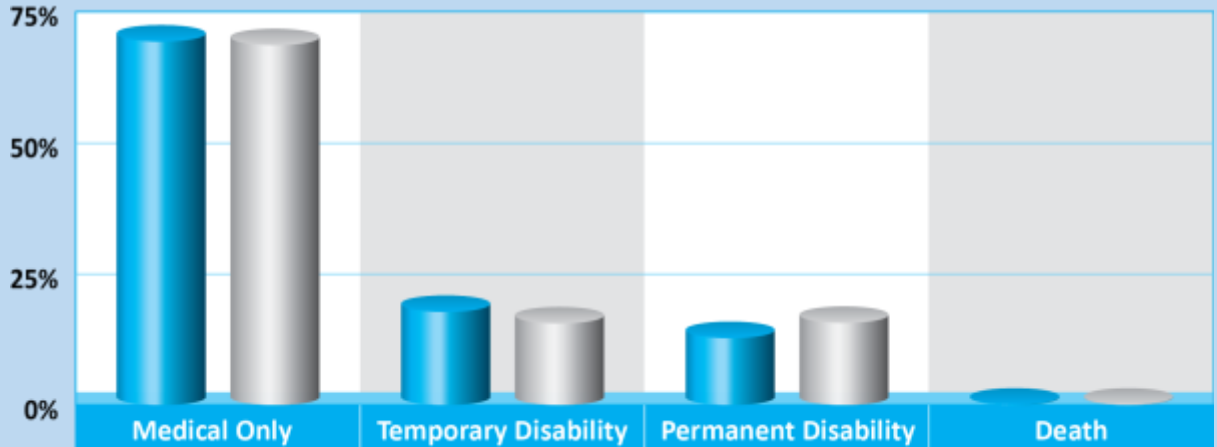
The top 3 workers' compensation diagnostic categories in the Central Valley matched the top 3 for the state: minor wounds and injuries to the skin, medical back problems without spinal cord involvement (back sprains and strains), and sprains of the shoulder, arm, knee and lower leg. Even though the rankings of the most common diagnoses were similar to those in other regions, the proportion of Central Valley claims and claim dollars associated with many of the diagnostic categories varied from other parts of the state. For example, back sprains and strains; shoulder, arm, knee, or lower leg sprains; other injuries, poisonings & toxic effects; and ruptured tendons, tendonitis, myositis & bursitis all accounted for a smaller share of Central Valley claims, while external eye disorders; degenerative, infective & metabolic joint disorders; and vaccination/prophylaxis or history of disease (primarily screenings for harmful exposures) all accounted for a larger share of the claims as well as a larger share of the claim payments. Back problems with spinal cord involvement comprised just 1.4% of the Central Valley claims, and were not among the top 10 diagnostic categories in the region, but they consumed 7.7% of the paid losses in the Central Valley, so in terms of dollars paid they ranked fifth.



Claim and Payment Distribution by Claim Type (Med-Only, TD, PD, Death)

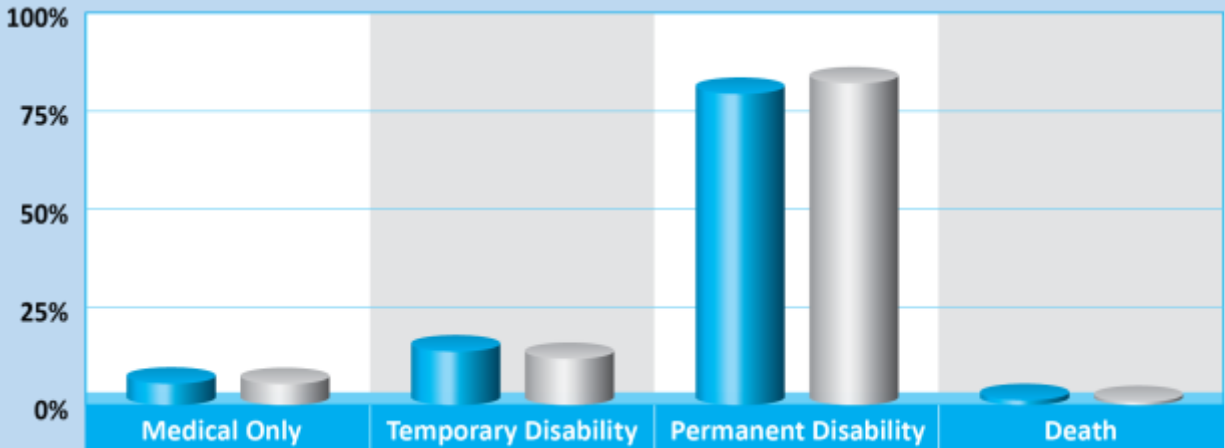
Central Valley vs. All Other Regions (AY 2005 – AY 2015 Claims)

Percent of Claims



Region	Medical Only	Temporary Disability	Permanent Disability	Death
Central Valley	69.4%	17.8%	12.8%	< 0.1%
All Other	68.7%	15.6%	15.7%	< 0.1%
Statewide	68.8%	16.0%	15.1%	< 0.1%

Percent of Payments



Region	Medical Only	Temporary Disability	Permanent Disability	Death
Central Valley	5.5%	13.7%	79.4%	1.3%
All Other	5.4%	11.8%	82.1%	0.8%
Statewide	5.4%	12.1%	81.7%	0.8%

The mix of injuries by claim type differs in the Central Valley from other regions, with permanent disability claims comprising just 12.8% of all claims vs. 15.7% in other parts of the state, while temporary disability and medical-only claims account for a larger share of the Central Valley caseload. The smaller percentage of PD claims in the Central Valley may reflect a number of factors, including lower incomes (and greater financial hardship if the worker does not return to work quickly); demographic differences, including the presence of undocumented workers in the work force; differences in the types of injuries; and lower levels of attorney involvement. The distribution of paid losses by claim type over the 11-year period shows that compared to other parts of the state, TD and death claims accounted for a higher percentage of the total paid losses in the Central Valley, while payments on PD cases accounted for a smaller share: 79.4% of paid losses in the Central Valley vs. 82.1% in all other regions.

**Median and Average Notice and Treatment Time Lags**

Injury Date to Employer Notice, Carrier Notice & First Treatment: Central Valley vs. All Other Regions (AY 2005 vs. 2013)

		AY 2005		AY 2013	
		Median Number of Days	Average Number of Days	Median Number of Days	Average Number of Days
Employer Notification	Central Valley	1.0	8.4	1.0	6.0
	All Other Regions	1.0	13.2	1.0	14.2
	Statewide	1.0	12.0	1.0	12.0
Carrier Notification	Central Valley	7.0	26.2	5.0	19.9
	All Other Regions	8.0	38.7	7.0	37.4
	Statewide	8.0	35.8	6.0	34.0
Time to First Treatment	Central Valley	1.0	22.1	1.0	23.9
	All Other Regions	1.0	30.2	1.0	37.1
	Statewide	1.0	28.6	1.0	34.8

The table above compares the time lags between the date of injury and the employer notice, carrier notice, and initial treatment for AY 2005 and AY 2013 claims filed by workers in the Central Valley, other regions, and statewide. The median is the midpoint in a series of numbers – the point at which half the values are greater than amount shown, and half are less. Among AY 2005 and AY 2013 claims from the Central Valley, other regions and statewide, the median time to employer notice was 1 day, so in half of all claims the employer knew of the injury within a day. The median time to carrier notice for Central Valley claims improved from 7 days to 5 days between AY 2005 and AY 2013, while the median for other regions declined from 8 to 7 days, so the statewide median dropped from 8 to 6 days. The median time to first treatment for Central Valley claims remained at 1 day, matching the median for other regions and statewide.

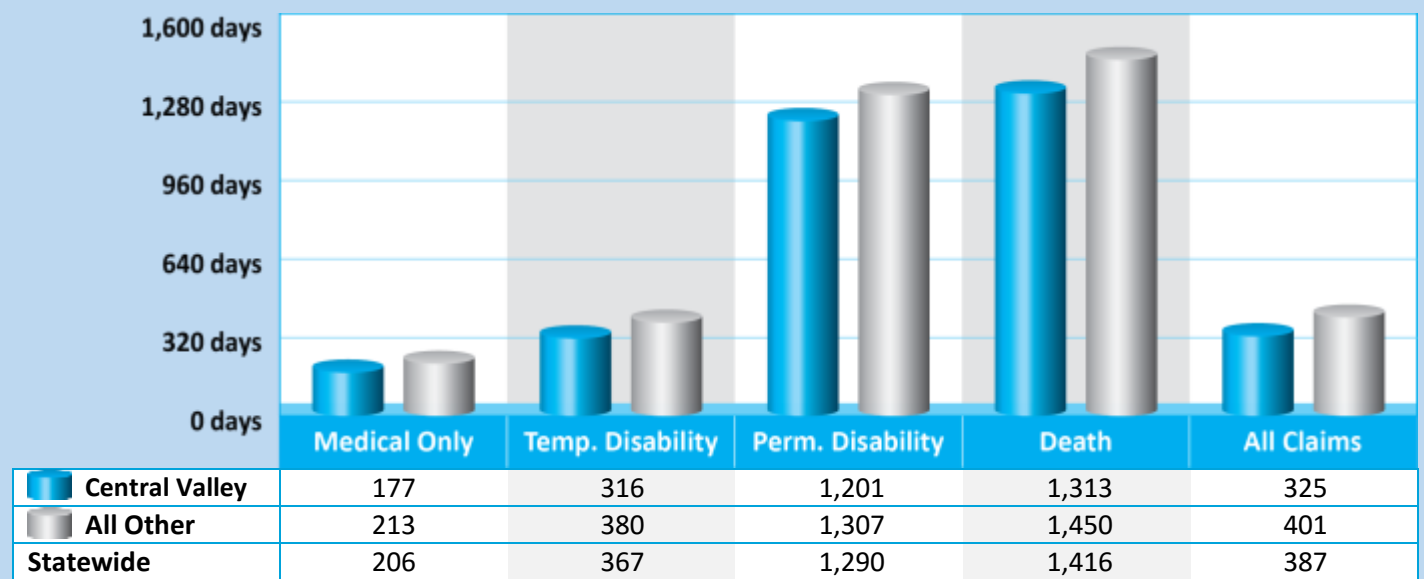
The differences between the average and median time lags for all 3 of these benchmarks were less for Central Valley claims than for claims from other regions, indicating that the average time lags in the Central Valley are less skewed by outlier claims in which notifications or treatment were delayed for long periods. Among the Central Valley claims, the average number of days between the injury date and employer notification, and between the injury date and carrier notification both improved between AY 2005 and AY 2013, while the average number of days to initial treatment grew slightly, increasing from 22.1 days in AY 2005 vs. 23.9 days in AY 2013. At the same time, however, in other regions the time lag to employer notification increased rather than decreased, the time lag to carrier notification declined by only 1.3 days compared to the 6.3 day decline in the Central Valley, while the average time lag to initial treatment climbed by nearly a week vs. an increase of 1.8 days for Central Valley claims.

The AY 2013 claims data show that the average time lags from the date of injury to each of the 3 key benchmarks were significantly shorter for Central Valley claims than for claims from other regions. On average it took less than half as long for the employer to be notified of the injury (6.0 days vs. 14.2 days); 17.5 days less for the carrier to be notified (19.9 days vs. 37.4 days); and 13.4 days less for the first treatment visit (23.9 days vs. 37.1 days).



Average Claim Duration

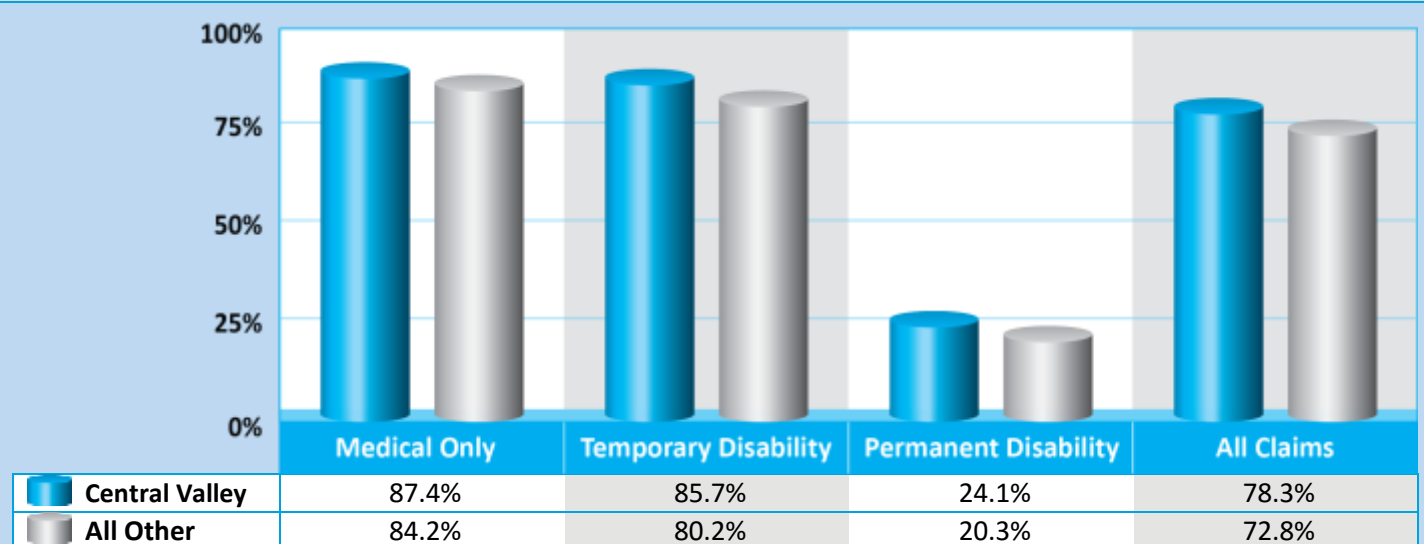
Average Number of Days (AY 2005-2015 Closed & Resolved Claims)



Average claim durations for all types of claims were significantly shorter in the Central Valley than in other regions. Overall, AY 2005-2015 claims filed by Central Valley residents took an average of 325 days from the claim filing to the claim closure, 76 days less than the average for other regions and 63 days less than the statewide average. Among factors that may be associated with the shorter durations: faster notifications and less time to initial treatment; a high percentage of claims involving low-paid agricultural workers who may have a greater financial need to return to work quickly; differences in the mix of injuries (e.g., fewer non-specific and cumulative injuries); a different treatment mix, with less reliance on Medicine Section services, physical therapy and chiropractic care that often continue for extended periods; lower attorney involvement rates; and a lower percentage of claims resulting in PD.

Claim Closure Rates by Claim Type at 24 Months Post Injury

Central Valley vs. All Other Regions (AY 2005 – AY 2013 Claims)



At 24 months, 78.3% of all AY 2005-2013 Central Valley claims were closed, 5-1/2 percentage points above the claim closure rate for other regions, and lower claim closure rates were consistent across med-only, TD, and PD claims.



Attorney Involvement Rates for Indemnity (TD & PD) Claims

Central Valley vs. All Other Regions (AY 2005 – AY 2015 Claims)

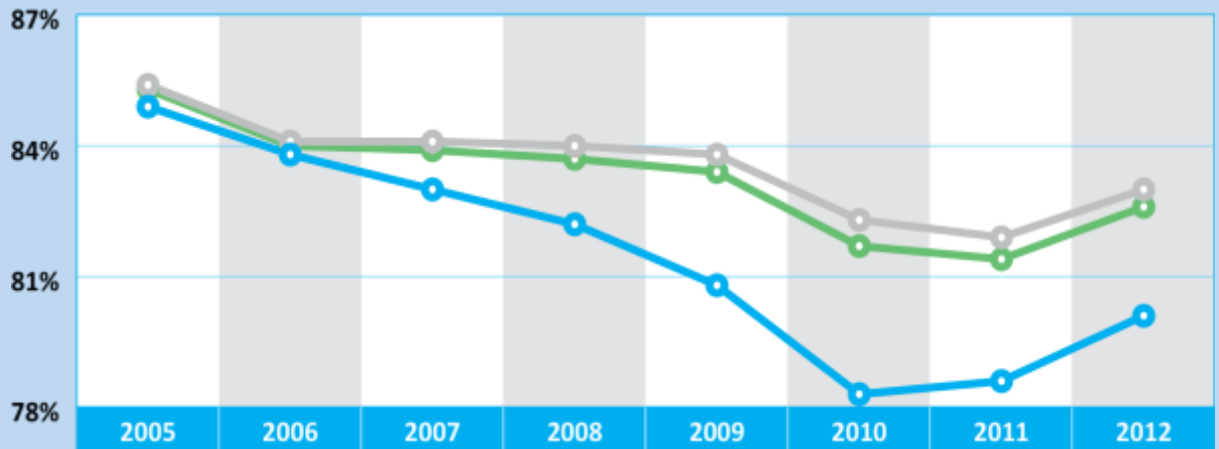


Central Valley	AY 2005 – AY 2015 Average	41.5%
Other Regions	AY 2005 – AY 2015 Average	50.4%
Statewide	AY 2005 – AY 2015 Average	48.8%

The level of attorney involvement on Central Valley indemnity claims was well below that noted for other regions throughout the 11-year period ending in AY 2015, averaging 41.5% over the entire period, or nearly 9 percentage points below the level for other regions. Other than AY 2014 and AY 2015, where the data in the Score Card sample is the least mature, attorney involvement rates for TD and PD claims during this span ranged from 8.3 to 10 percentage points below the rates in other regions.

Attorney Involvement Rates on PD Claims ≥ 36 Months Old

Central Valley vs. All Other Regions (AY 2005 – AY 2012 Claims)



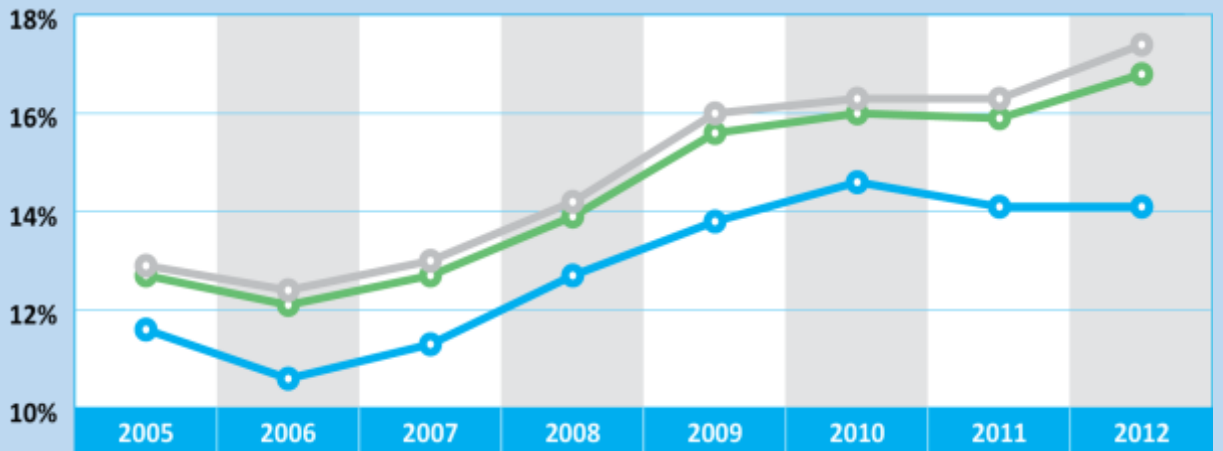
Central Valley	84.9%	83.8%	83.0%	82.2%	80.8%	78.3%	78.6%	80.1%
All Other	85.4%	84.1%	84.1%	84.0%	83.8%	82.3%	81.9%	83.0%
Statewide	85.3%	84.0%	83.9%	83.7%	83.4%	81.7%	81.4%	82.6%

PD claims are the most complex and frequently litigated claims, though attorney involvement typically does not begin until well after the injury date, and often hinges on the potential level of permanent disability, as applicant attorneys are paid a percentage (generally 15%) of the worker's PD award. Among AY the 2005-AY 2012 PD claims that were at least 36 months old, attorney involvement rates in the Central Valley ranged from 0.5 to 4.0 percentage points below the attorney involvement rates for claims from other regions.



Permanent Disability Rates at 36 Months Post Injury

AY 2005 – AY 2012 Claims



Central Valley	11.6%	10.6%	11.3%	12.7%	13.8%	14.6%	14.1%	14.1%
All Others	12.9%	12.4%	13.0%	14.2%	16.0%	16.3%	16.3%	17.4%
Statewide	12.7%	12.1%	12.7%	13.9%	15.6%	16.0%	15.9%	16.8%

The percentage of all Central Valley claims that had PD paid at 3 years post injury was consistently below the level noted for other regions. However, despite a brief dip following the adoption of the 2005 PD rating schedule, it did increase from 11.6% of the AY 2005 claims to 14.1% of the AY 2012 claims. Over that same period the percentage of claims from other regions that involved PD at the 3-year benchmark grew from 12.9% in AY 2005 to 17.4% in AY 2012. The short-term decline in the proportion of claims receiving PD immediately following the adoption of the 2005 PD rating schedule was experienced across all regions, but in all cases that proportion began to trend up beginning with AY 2007 claims. One factor that likely contributed to the increase in PD claims were several court rulings handed down during this period (Almaraz/Guzman, Ogilvie) which allowed PD in cases where previously there had been none.

**Average Number of Visits & Average Amounts Paid at 12 & 24 Months by Fee Schedule Section**

AY 2005-2014* Indemnity Claims, Central Valley vs. All Other Regions and Statewide

Visits at 12 Months

Region	E/M	Surgery	Radiology	Medicine	PT	Chiro
Central Valley	9.1	1.1	2.2	0.8	7.8	0.8
All Other	8.7	1.1	2.1	1.2	9.0	1.0
Grand Total	8.8	1.1	2.1	1.1	8.8	1.0

Paid at 12 Months

Region	E/M	Surgery	Radiology	Medicine	PT	Chiro
Central Valley	\$878	\$1,305	\$414	\$142	\$602	\$27
All Other	\$929	\$1,247	\$477	\$268	\$720	\$38
Grand Total	\$919	\$1,258	\$465	\$244	\$697	\$36

Visits at 24 Months

Region	E/M	Surgery	Radiology	Medicine	PT	Chiro
Central Valley	11.4	1.4	2.6	1.1	9.5	0.9
All Other	11.2	1.4	2.6	1.8	11.3	1.3
Grand Total	11.3	1.4	2.6	1.6	11.0	1.2

Paid at 24 Months

Region	E/M	Surgery	Radiology	Medicine	PT	Chiro
Central Valley	\$1,099	\$1,719	\$515	\$237	\$ 755	\$34
All Other	\$1,220	\$1,737	\$630	\$442	\$ 918	\$48
Grand Total	\$1,196	\$1,733	\$607	\$403	\$ 887	\$45

*12-month data is for AY 2005-2014 claims; 24-month data is for AY 2005-2013 claims.

Data on the number of visits per indemnity claim for different types of medical services at 12 and 24 months post injury and the associated payments for those visits shows Central Valley claims averaged a slightly higher number of Evaluation/Management visits at the 12- and 24-month benchmarks, a similar number of surgery and radiology visits, but fewer visits for physical therapy, chiropractic manipulation, and Medicine Section services (e.g., cardiovascular, nerve and muscle testing, psych testing and psychotherapy, and physician-administered drugs and biologicals).

Except for first-year surgery payments, average amounts paid for medical care at 12 and 24 months post injury were lower for the Central Valley claims than for claims from other regions across all service categories. At the 12-month benchmark, the biggest differences were in the average amounts paid for physical therapy (\$118 less) and Medicine Section services (\$126 less), which may not only reflect fewer visits, but fewer services per visit, and/or differences in the types of services rendered.

At the 24-month benchmark, the biggest differences in the average amounts paid on Central Valley claims vs. other regions continued to be in physical therapy (\$163 less) and Medicine Section services (\$205 less), though at this point average amounts paid for Evaluation/Management also averaged \$121 less and the average paid for Radiology averaged \$115 less, even though there was little to no difference in the average number of visits for these services.

**PPO/MPN Utilization – 1st Year Visits**

Network Utilization by Type of Service – Central Valley vs. All Other

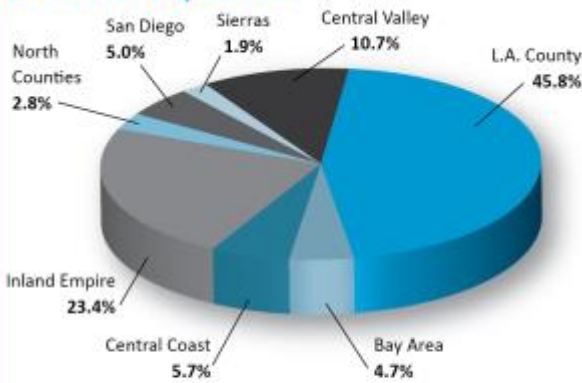
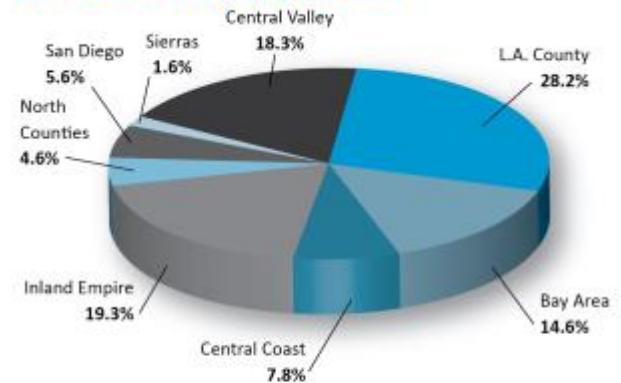
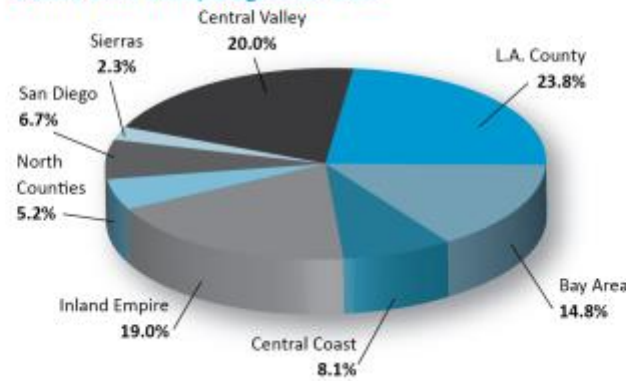
Type of Service		2005 – 2009	2010 – 2015
Evaluation/Management	Central Valley	81.3%	87.0%
	All Other	78.9%	88.3%
Surgery	Central Valley	70.8%	74.7%
	All Other	71.1%	78.9%
Radiology	Central Valley	64.7%	76.0%
	All Other	69.1%	79.3%
Medicine Section	Central Valley	70.5%	78.6%
	All Other	67.6%	76.3%
Physical Therapy	Central Valley	59.3%	75.9%
	All Other	63.9%	77.9%
Chiropractic Manipulation	Central Valley	61.1%	79.8%
	All Other	56.3%	79.3%
Total Visits	Central Valley	71.2%	81.2%
	All Other	71.1%	82.4%

The table above shows the percentage of first-year medical services rendered by network providers, with AY 2005-2009 and AY 2010-2015 results for various medical service categories broken out for claims from the Central Valley and from all other regions. Network utilization for all treatment categories increased steadily following the introduction of medical provider networks in 2005. Among Central Valley claims, the overall network utilization rate grew from 71.2% of all treatment visits in 2005-2009 to 81.2% in 2010-2015, just slightly below the growth in network use within other regions of the state.

The distribution of medical visits by type of service for the most recent six-year period (2010-2015) shows that the use of networks remains greatest for Evaluation/Management services, both in the Central Valley (87.0%) and elsewhere (88.3%). Network utilization rates are slightly lower for other types of medical services, but still range between about 75 to 80% in the Central Valley. Compared to other parts of California, network penetration is slightly less in the Central Valley for Surgery, Radiology and Physical Therapy services, but is slightly higher for Medicine Section services, and nearly identical for Chiropractic Manipulation.

Regional Distribution of Claims with Sleep Studies, Nerve Conduction Tests, & MRIs/Diagnostic Tests

CY 2013 – CY 2015

Claims with Sleep Studies

Claims with Nerve Conduction Tests

Claims with MRIs/Diagnostic Tests


Medical services such as sleep studies, MRIs and diagnostic tests, and nerve conduction tests have been associated with high-cost workers' compensation claims. The pie charts above show the regional distributions of 2013-2015 claims that involved each of these types of services.

Injured workers in the Central Valley accounted for more than 1 out of every 6 California workers' comp claims during this 3-year period, but the distribution of claims with sleep studies shows the region had a disproportionately low share of the claims with sleep studies, accounting for less than 1 out of 9 (10.7%) of these claims, which were more heavily concentrated in Los Angeles County, Orange County and the Inland Empire.

On the other hand, the proportion of claims involving nerve conduction tests was much more in line with the Central Valley's overall claim volume, as 18.3% of these claims came from this region.

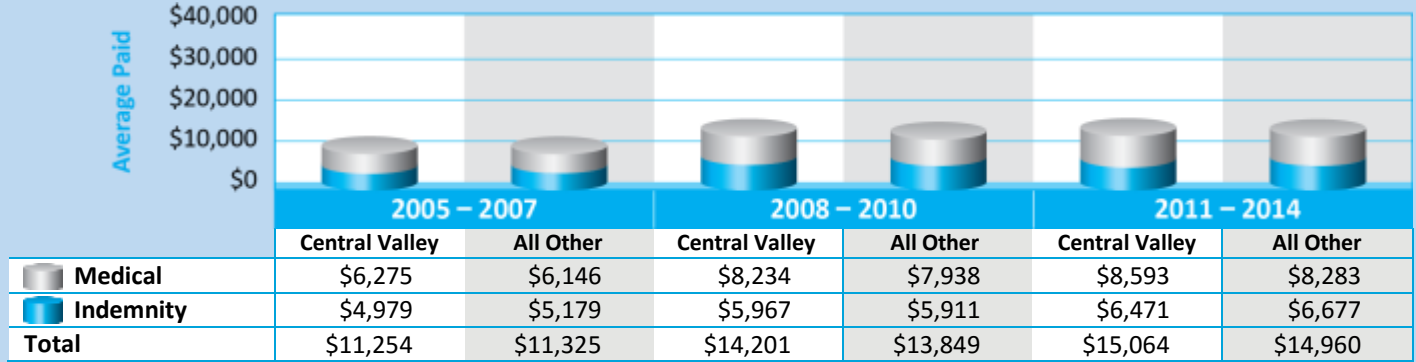
The third pie chart shows that relative to its overall claim volume, the Central Valley had a disproportionately high percentage of claims with MRIs and diagnostic tests, accounting for 20% of all California workers' compensation claims that involved these services, which ranked second only to Los Angeles County.



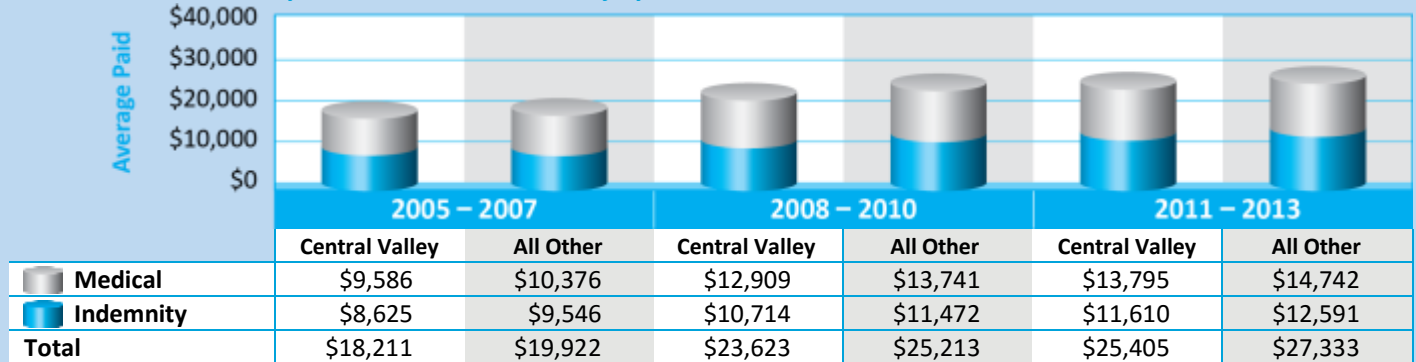
Loss Development at 12, 24 and 36 Months

Average Paid, AY 05-07, AY 08-10, AY 11-14 Indemnity Claims – Central Valley Vs. All Other

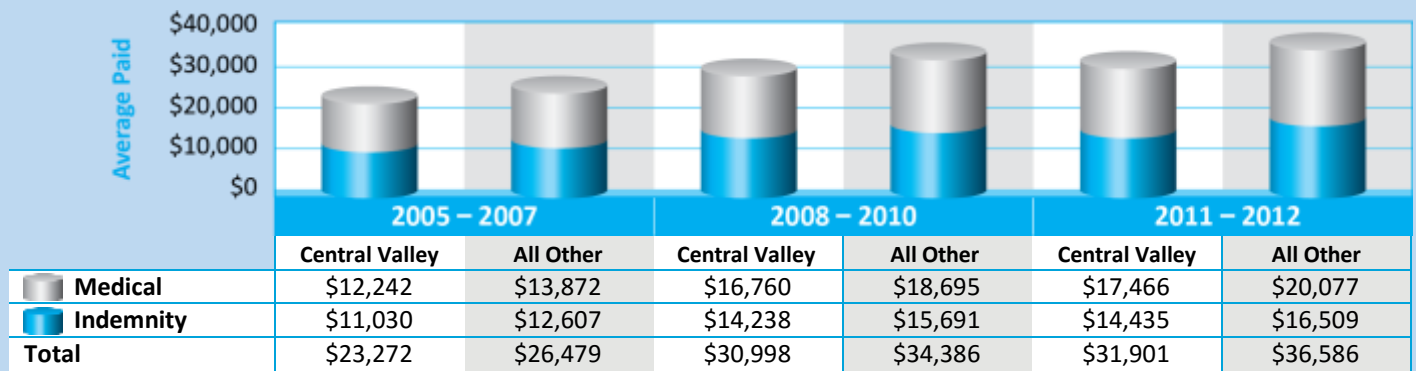
AY 2005 – 2014 Indemnity Claims – 12 Months Post Injury



AY 2005 – 2013 Indemnity Claims – 24 Months Post Injury



AY 2005 – 2012 Indemnity Claims – 36 Months Post Injury



The table above shows the growth in claim payments over the past decade by comparing average paid losses on Central Valley claims to claims from other regions across 3 periods (AY 2005-2007, AY 2008-2010, and AY 2011 through the most recent year available). To show the development of loss payments for claims within each of those 3 periods, average amounts paid for medical and indemnity are noted at 12, 24, and 36 months post injury.

Average 1st year medical payments were higher in the Central Valley than in other regions across all 3 time periods, but were lower at the 24- and 36-month benchmarks. This is consistent with the prior findings that this region has shorter notification and initial treatment time lags, a higher percentage of specific vs. non-specific injuries, fewer PD claims, less attorney involvement and a higher 24-month claim closure rate. Average amounts paid for indemnity also tended to be less in the Central Valley, which reflects factors such as lower TD payments (which are tied to average wages), shorter claim durations, and fewer PD claims. The most fully developed data show average 36-month paid losses on Central Valley indemnity claims increased 37.1% from \$23,272 on AY 2005-2007 claims to \$31,901 on AY 2011-2012 claims, just below the 38.2% growth in average loss payments for claims from other regions, which rose from \$26,479 to \$36,586. Average 36-month medical losses on Central Valley claims rose 42.6%, vs. 44.7% elsewhere, while average 36-month indemnity rose 30.9%, nearly identical to the 31.0% growth in indemnity in other regions.

**Regional Distribution of Prescription Drugs by Drug Category**

CY 2014 Central Valley v. All Other and Statewide

	Central Valley	All Other Regions	Statewide
Analgesics - Opioid	30.5%	26.5%	27.4%
Analgesics - Anti-Inflammatory	18.9%	18.5%	18.6%
Musculoskeletal Therapy Agents	9.5%	9.3%	9.4%
Ulcer Drugs	5.1%	7.4%	6.9%
Anticonvulsants	7.3%	6.8%	6.9%
Antidepressants	6.9%	6.1%	6.3%
Dermatologicals	3.9%	5.4%	5.0%
All Other	17.9%	20.0%	19.5%

For the Score Card prescription drug analysis, generic and brand equivalent drugs in the 2014 prescription drug sample were grouped into 8 categories and prescription drug distributions were determined for claims from each region. As in other regions and statewide, opioid analgesics were the top prescription drug category for Central Valley claims, though in this region they represented a bigger share of the workers' comp prescriptions (30.5% vs. 26.5% elsewhere and 27.4% statewide). Anti-inflammatory analgesics ranked second, and their share of the Central Valley prescriptions (18.9%) was similar to other regions, as was the case for musculoskeletal therapy agents, which ranked third with 9.5% of the prescriptions. Ulcer drugs (5.1%) and dermatologicals (3.9%) each comprised a relatively small share of the region's prescriptions, while compared to other regions, anticonvulsants (7.3%) and antidepressants (6.9%) each accounted for a relatively large share of Central Valley prescriptions.

Regional Distribution of Prescription Drug Payments by Drug Category

CY 2014 Central Valley v. All Other and Statewide

	Central Valley	All Other Regions	Statewide
Analgesics – Opioid	31.1%	24.4%	25.9%
Analgesics - Anti-Inflammatory	12.4%	15.8%	15.0%
Dermatologicals	7.8%	12.1%	11.1%
Antidepressants	7.3%	5.9%	6.2%
Anticonvulsants	7.1%	6.7%	6.8%
Ulcer Drugs	6.4%	9.1%	8.5%
Musculoskeletal Therapy Agents	5.0%	5.5%	5.4%
All Other	22.9%	20.5%	21.1%

The heavy use of opioid analgesics in the Central Valley also is evident in the distribution of drug payments in the region, as opioids accounted for 31.1% of the CY 2014 total drug spend, compared to 24.4% of the workers' compensation prescription drug spend for other regions and 25.9% statewide. A slightly higher proportion of the Central Valley prescription payments also went toward antidepressants and anticonvulsants. In contrast, anti-inflammatory analgesics (i.e., Ibuprofen, Naproxen, Celecoxib) accounted for just 12.4% of the workers' comp prescription dollars in the Central Valley vs. 15.8% in other parts of the state; dermatologicals accounted for 7.8% vs. 12.1% in other regions; and ulcer drugs represented 6.4% of Central Valley prescription drug reimbursements vs. 9.1% in other parts of the state. Payments for musculoskeletal therapy agents comprised about 5% of the Central Valley drug spend, only slightly less than the 5% share noted in other regions.

**Top 20 Prescription Drugs by Volume**

Central Valley vs. Other Regions (Calendar Year 2014)

Generic Name	Common Name	% of Total Prescriptions		
		Central Valley	Other Regions	Statewide
Hydrocodone-Acetaminophen	Vicodin	17.4%	13.9%	14.7%
Ibuprofen	Advil	7.2%	5.6%	5.9%
Naprosyn	Aleve	4.7%	5.4%	5.2%
Tramadol	Ultram	4.4%	4.6%	4.6%
Gabapentin	Neurontin	4.3%	4.1%	4.1%
Cyclobenzaprine	Flexeril	4.0%	4.2%	4.1%
Omeprazole	Prilosec	3.2%	5.0%	4.6%
Diclofenac	Voltaren	2.2%	2.3%	2.3%
Celecoxib	Celebrex	2.1%	1.6%	1.7%
Duloxetine	Cymbalta	1.8%	1.6%	1.6%
Oxycodone-Acetaminophen	Endocet/Perocet	1.7%	1.7%	1.7%
Tizanidine	Zanaflex	1.7%	1.2%	1.3%
Nabumetone	Relafen	1.6%	1.7%	1.7%
Pregabalin	Lyrica	1.6%	1.5%	1.5%
Oxycodone	Oxycontin	1.4%	1.6%	1.6%
Lidocaine	Lidocaine	1.5%	2.0%	1.9%
Carisoprodol	Soma	1.4%	1.3%	1.3%
Zolpidem	Ambien	1.3%	1.6%	1.6%
Meloxicam	Mobic	1.2%	1.2%	1.2%
Tramadol-Acetaminophen	Ultracet	1.1%	1.2%	1.1%
Top 20		65.8%	63.3%	63.7%

The table above shows the top 20 drugs dispensed to injured workers in the Central Valley in calendar year 2014, along with the distribution of those drugs in other regions and statewide. The opioid combination drug Hydrocodone-Acetaminophen (Vicodin) was the most prescribed drug in the Central Valley and in other regions, though it accounted for a larger share of the Central Valley prescriptions (17.4% vs. 13.9% elsewhere). The anti-inflammatory analgesic Ibuprofen ranked second but accounting for 7.2% of the Central Valley prescriptions vs. 5.6% elsewhere, while Naprosyn (4.7%) and Tramadol (4.4%) ranked third and fourth, though each represented a slightly smaller share of the prescriptions in the Central Valley compared to other regions. The antacid Omeprazole, the numbing agent lidocaine, and the sleep aid Zolpidem each accounted for a smaller share the Central Valley prescriptions, while the anti-inflammatory Celecoxib, and the muscle relaxant Tizanidine each accounted for a relatively high percentage of the prescriptions in the region.



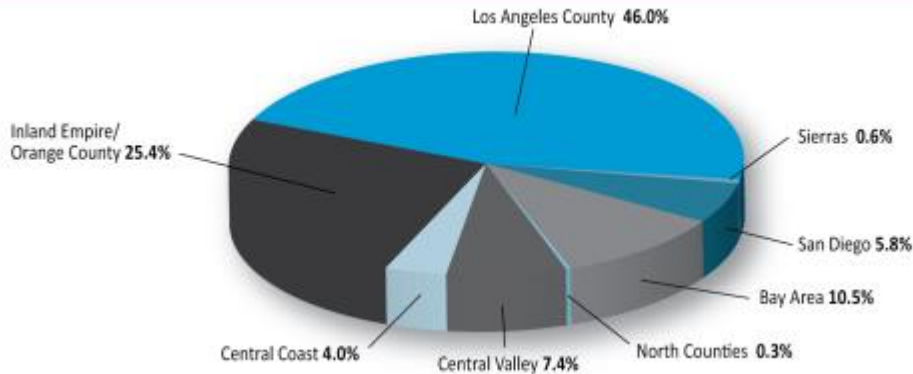
Top 20 Prescription Drugs by Total Payments

Central Valley vs. Other Regions (Calendar Year 2014)

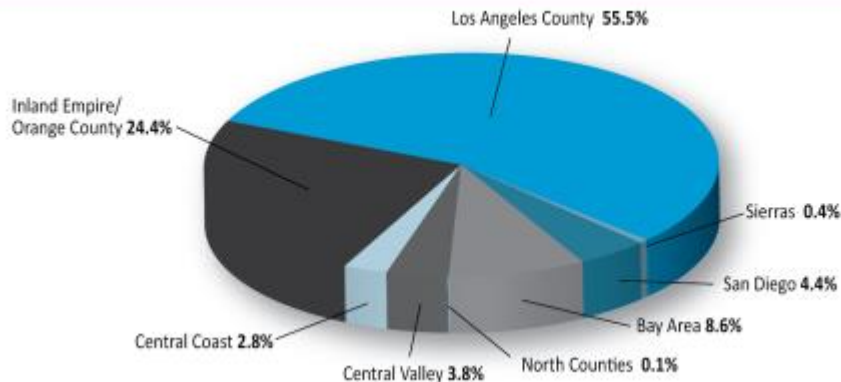
Generic Name	Common Name	% of Total Prescription Payments		
		Central Valley	Other Regions	Statewide
Hydrocodone-Acetaminophen	Vicodin	8.5%	5.9%	6.5%
Oxycodone	Oxycontin	5.5%	5.0%	5.1%
Celecoxib	Celebrex	4.9%	3.6%	3.9%
Lidocaine	Lidocaine	4.5%	5.7%	5.4%
Pregabalin	Lyrica	4.3%	4.0%	4.1%
Duloxetine	Cymbalta	3.9%	3.2%	3.3%
Omeprazole	Prilosec	3.6%	5.9%	5.4%
Fentanyl	Fentanyl	3.5%	1.9%	2.3%
Tramadol	Ultram	2.9%	3.6%	3.4%
Diclofenac	Voltaren	2.9%	2.7%	2.8%
Oxycodone w/ Acetaminophen	Endocet/Percocet	2.5%	2.3%	2.3%
Gabapentin	Neurontin	2.3%	2.1%	2.2%
Naprosyn	Aleve	2.0%	2.7%	2.5%
Morphine	Morphine	2.0%	1.4%	1.5%
Cyclobenzaprine	Flexeril	1.8%	2.6%	2.4%
Flurbiprofen	Ansaid	1.7%	3.8%	3.3%
Tapentadol	Nucynta	1.4%	0.9%	1.0%
Ibuprofen	Advil	1.2%	1.7%	1.6%
Tizanidine	Zanaflex	1.0%	0.6%	0.7%
Pantoprazole	Protonix	0.9%	1.4%	1.3%
Top 20		61.3%	61.0%	61.0%

Opioids accounted for a high percentage of the prescription drug dollars in the Central Valley. Hydrocodone with Acetaminophen (Vicodin) and Oxycodone topped the list in 2014, with Fentanyl and Tramadol also among the top 10 drugs based on dollars paid; and Oxycodone with Acetaminophen, Morphine and Tapentadol among the top 20. Together, these 7 opioids consumed 26.3% of the Central Valley’s 2014 workers’ comp drug spend (vs. 21% in other regions). In addition, opioids such as Buprenorphine, Opana, and Methadone, which were not on the top 20 list, also represented a growing share of the Valley’s total drug spend.

Other drugs that accounted for a higher share of the prescription drug dollars in the Central Valley relative to other regions included the nonsteroidal anti-inflammatory drug (NSAID) Celecoxib; Duloxetine, used as an antidepressant and for nerve pain; and the muscle relaxant Zanaflex. On the other hand, compared to other parts of the state, a smaller share of the Central Valley prescription drug payments went toward the antacids Omeprazole and Pantoprazole (4.5% vs. 7.3%); the numbing agent Lidocaine (4.5% vs. 5.7%); the muscle relaxant Cyclobenzaprine (1.8% vs. 2.6%); and the NSAIDs Naprosyn, Flurbiprofen and Ibuprofen (4.9% vs. 8.2%).

Distribution of California Workers' Comp Claims with Lien Payments by Region


A sample of claims that involved lien payments was drawn from the IRIS database. The regional distribution of those lien claims is shown above. The vast majority of the claims with lien payments were from Los Angeles County and the Inland Empire/Orange County, which together accounted for 71% of these claims. In contrast, the Central Valley accounted for 19% of all California workers' compensation claims, but only 7.4% of the claims with lien payments.

Distribution of California Workers' Comp Lien Dollars Paid by Region


The distribution of lien dollars by region shows that these payments were even more heavily concentrated in and around Los Angeles, with Los Angeles County, Orange County and the Inland Empire together accounting for 79.9% of all California workers' comp lien payments. On the other hand, the Central Valley, which accounted for 15% of total paid losses in California workers' comp, accounted for just 3.8% of lien payments.

IRIS Regional Scorecards are based on Industry Research Information System data, compiled and maintained by the California Workers' Compensation Institute, 1333 Broadway, Suite 510, Oakland CA 94612, (510) 251-9470, 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.

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