



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 a period of several 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 three Score Cards in the series focused on claims filed by residents of Los Angeles County, the Inland Empire/Orange County and the Central Valley. This Score Card looks at claims filed by residents of the San Francisco Bay Area, a region that encompasses nine primarily urban and suburban counties: Alameda; Contra Costa; Marin; Mendocino; Napa; San Francisco; San Mateo; Santa Clara; and Sonoma. Together, residents of these nine counties account for 17.5% of all California workers' compensation claims and 15.4% of 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.

Interactive Table of Contents

Regional Claim and Payment Distributions	2
Bay Area Claims as a Percent of All California Claims by Accident Year	2
Claim Distribution by Premium Size	2
Injured Worker Profile	3
Distribution by Industry Sector	3
Cause of Injury	4
Nature of Injury	4
Claim and Payment Distributions by Diagnosis	5
Claim and Payment Distributions by Claim Type (Med-Only, TD, PD, Death)	6
Median and Average Notice and Treatment Time Lags	7
Average Claim Duration (Closed and Resolved Claims)	8
Claim Closure Rates by Claim Type at 24 Months Post Injury	8
Attorney Involvement Rates for Indemnity (TD & PD) Claims	9
Attorney Involvement Rates for PD Claims ≥ 36 Months Old	9
Permanent Disability Rates at 36 Months Post Injury	10
Average Number of Visits and Average Amounts Paid at 12 and 24 Months by Fee Schedule Section	11
PPO/MPN Utilization	12
Regional Distribution of Claims with Sleep Studies, Nerve Conduction Tests, and MRIs/Diagnostic Tests	13
Loss Development at 12, 24, and 36 Months Post Injury	14
Regional Distribution of Prescription Drugs by Drug Category (CY 2014 Prescriptions)	15
Regional Distribution of Prescription Drug Payments by Drug Category (CY 2014 Prescriptions)	15
Top 20 Prescription Drugs by Volume (CY 2014 Prescriptions)	16
Top 20 Prescription Drugs by Total Payments (CY 2014 Prescriptions)	17
Distribution of California Workers' Compensation Claims With Lien Payments by Region	18
Distribution of California Workers' Compensation Lien Dollars Paid by Region	18



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%

IRIS Regional Score Cards analyze data from California workers' comp claims that have been grouped into eight regions based on the injured workers' home 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 nine-county San Francisco Bay Area, which runs from Santa Clara/Silicon Valley in the south, up the peninsula to San Francisco and north to Marin and the Napa/Sonoma/Mendocino wine country, as well as east to Oakland/Berkeley, and the bedroom communities of Alameda and Contra Costa Counties. The region is home to 6.8 million people and nearly 22% of the California workforce. For the 11-year period covered by the Score Card, the IRIS database captured data on nearly 333,000 job injury claims filed by Bay Area residents, or 17.5% of the roughly 1.9 million claims in the Score Card sample of California claims and 15.4% of the \$29.5 billion in benefits paid on those claims.

Bay Area 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
Bay Area	15.9%	16.6%	17.4%	17.8%	18.2%	18.5%	18.5%	18.3%	17.4%	17.4%	18.0%
All Other	84.1%	83.4%	82.6%	82.2%	81.8%	81.5%	81.5%	81.7%	82.6%	82.6%	82.0%

From AY 2005 through AY 2015, the percentage of California work injury claims filed by Bay Area residents ranged from a low of 15.9% in AY 2005 to a high of 18.5% in AY 2010 and 2011. The percentage of claims from the Bay Area trended up for several years prior to the beginning of the recession in late 2008, but once the economy stabilized and the recovery gained steam, the Bay Area's share of California workers' compensation claims peaked and by AY 2012, began to edge down. The latest data show that Bay Area residents accounted for 18.0% of the claims filed in the state in AY 2015.

Claim Distribution by Premium Size – Bay Area 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
Bay Area	2.3%	9.7%	19.9%	13.0%	29.2%	8.7%	17.2%
Other Regions	1.8%	9.3%	18.8%	11.8%	30.6%	10.4%	17.4%

A higher share of Bay Area claims involved employers that paid less than \$100,000 in annual premium (44.9% vs. 41.7% in other regions), while a slightly lower share of Bay Area claims involved employers paying over \$100,000 in premium (55.1% vs. 48.3%).

**Injured Worker Profile**

AY 2005 – AY 2015 Claims

	Bay Area	All Other	Statewide
Average Age	38.9	38.2	38.3
Average Tenure	5.1	4.5	4.6
Gender			
% Male	60.7%	64.1%	63.5%
% Female	39.3%	35.9%	36.5%
% of Claims			
All Claims Statewide	17.5%	82.5%	100.0%
% of Calif WC Translation Svcs.*	10.9%	89.1%	100.0%

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

The average age of injured workers from the Bay Area was 38.9 years – more than a half year older than the average for injured workers from other parts of California – while their average tenure on the injury date was 5.1 years -- 6 months longer than the average for injured workers from other regions. More than 6 out of 10 Bay Area claims were filed by males, but females filed a relatively high percentage of the claims in the region, accounting for 39.3% of the AY 2005-2015 claims vs. 35.9% in other parts of the state. From 2013-2015, 10.9% of California workers' comp medical translation services were for injured workers from the Bay Area, which was a disproportionately low percentage relative to the 17.5% of all California claims that came from the region.

Distribution by Industry Sector

Bay Area vs. All Other (AY 2005-2015 Claims)

Industry	Bay Area	All Other	Statewide
Health Care	13.4%	12.1%	12.3%
Retail Trade	13.1%	11.5%	11.8%
Construction	12.0%	10.1%	10.4%
Hotel and Food Services	9.5%	8.5%	8.7%
Manufacturing	9.4%	13.7%	13.0%
Clerical Workers	7.3%	7.2%	7.2%
Transportation and Warehousing	6.5%	5.6%	5.7%
Admin Support/Waste Remediation	4.5%	3.3%	3.5%
All Other	21.3%	24.7%	24.1%
Grand Total	100.0%	100.0%	100.0%

Nearly 1 in 7 Bay Area injured workers was employed in health care (vs. 1 out of 8 injured workers from other regions) making this the leading sector for claims in the region. Other sectors where the Bay Area had a relatively high percentage of claims compared to the rest of the state included retail trade, construction, hotel and food services, transportation and warehousing, administrative support and waste remediation, and professional and technical services. On the other hand, manufacturing, agriculture and wholesale trade represented a relatively low proportion of Bay Area claims compared to other parts of California.



Cause of Injury

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

Cause of Injury	Percent of Claims		
	Bay Area	All Other Regions	Statewide
Strain/Injury: Lifting	10.9%	10.7%	10.7%
Strain/Injury: Not Otherwise Classified (NOC)	9.8%	8.7%	8.9%
Miscellaneous Cause: Other Injury (NOC)	5.0%	5.6%	5.5%
Fall/Slip: Miscellaneous	4.8%	4.8%	4.8%
Fall/Slip: On Same Level	4.2%	4.1%	4.2%
Strain/Injury: Pushing or Pulling	4.2%	4.0%	4.0%
Repetitive Motion (Carpal Tunnel Syndrome)	4.1%	2.8%	3.1%
Struck/Injured by Falling or Flying Object	4.0%	4.2%	4.2%
Miscellaneous (Cut, Puncture, Scrape)	3.1%	3.3%	3.2%
Struck/Injured by: (NOC)	3.0%	2.9%	3.0%
All Other	46.9%	48.9%	48.4%

The 10 leading causes of injury cited in Bay Area claims accounted for 53.1% of all claims in the region. The distribution across the major causation categories differed only slightly from other regions, with strains and injuries due to lifting and not otherwise classified activities topping the list, followed by slips and falls. Repetitive motion (carpal tunnel) was cited in more than 4% of the Bay Area claims, which was the highest level in the state and well above the 2.8% of claims from all other regions that cited this as the cause of injury.

Nature of Injury

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

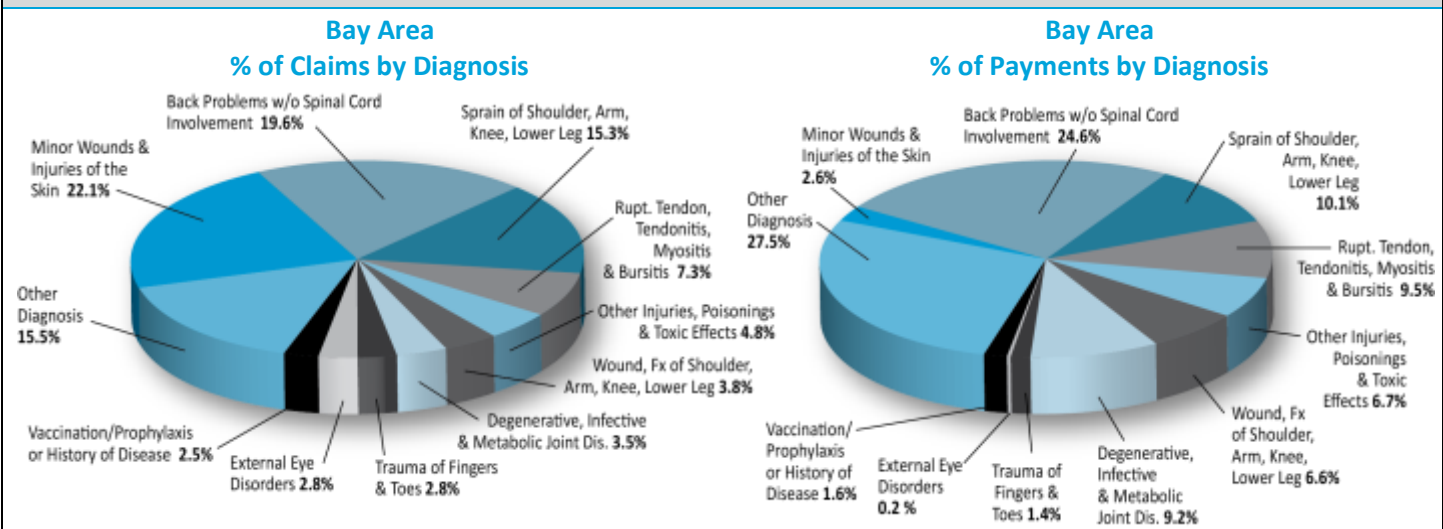
Nature of Injury	Percent of Claims		
	Bay Area	All Other Regions	Statewide
Strain	31.1%	28.4%	28.9%
Laceration	12.5%	12.4%	12.4%
Sprain	10.7%	9.2%	9.5%
All Other, Not Otherwise Classified (NOC)	10.2%	10.0%	10.0%
Contusion	9.9%	10.1%	10.1%
All Other Cumulative Injuries	4.4%	5.1%	4.9%
Puncture	3.5%	3.6%	3.6%
Fracture	3.4%	3.4%	3.4%
Inflammation	2.5%	2.2%	2.3%
Foreign Body	2.2%	2.9%	2.8%
All Other	9.6%	12.7%	12.1%

Strains were the number one nature of injury category in all regions of California, but the percentage of claims involving strains is 2.7 percentage points higher in the Bay Area than in other parts of the state. The distribution of claims by nature of injury also shows sprains account for a higher proportion of the work injuries in the Bay Area, while a slightly smaller share of the claims from this region were categorized as “all other cumulative injuries” or injuries due to foreign bodies. Other than those categories, overall, the mix of claims by nature of injury was similar in the Bay Area to other parts of the state.



Claim and Payment Distributions by Diagnosis

Claim and Payment Distributions for AY 2005-2015 Claims



		Bay Area		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	22.1%	2.6%	22.5%	2.4%	22.4%	2.4%
	Medical Back Problems w/o Spinal Cord Involvement	19.6%	24.6%	19.9%	26.7%	19.8%	26.4%
	Sprain of Shoulder, Arm, Knee, Lower Leg	15.3%	10.1%	13.8%	9.0%	14.0%	9.2%
	Ruptured Tendon, Tendonitis, Myositis & Bursitis	7.3%	9.5%	5.3%	6.2%	5.6%	6.7%
	Other Injuries, Poisonings & Toxic Effects	4.8%	6.7%	5.8%	6.6%	5.6%	6.7%
	Wound, Fracture of Shoulder, Arm, Knee, Lower Leg	3.8%	6.6%	3.7%	5.6%	3.7%	5.8%
	Degenerative, Infective & Metabolic Joint Disorders	3.5%	9.2%	4.1%	8.3%	4.0%	8.5%
	Trauma of Fingers & Toes	2.8%	1.4%	3.0%	1.4%	3.0%	1.4%
	External Eye Disorders	2.8%	0.2%	3.7%	0.2%	3.6%	0.2%
	Vaccination/Prophylaxis or History of Disease	2.5%	1.6%	1.4%	1.2%	1.6%	1.2%
	Other Diagnosis	15.5%	27.5%	15.2%	26.1%	15.3%	26.3%

The two leading diagnostic categories associated with Bay Area workers' compensation claims were minor wounds and injuries to the skin and medical back problems without spinal cord involvement (back sprains and strains), which together accounted for nearly 42% of the claims in the region, similar to the proportion noted in other regions of the state. Among other categories, shoulder, arm, knee, and lower leg sprains; ruptured tendons, tendonitis, myositis and bursitis; and vaccination/prophylaxis or history of disease (most of which are screenings for harmful exposures) represented a larger share of Bay Area claims compared to other regions; while diagnoses of other injuries, poisonings and toxic effects; degenerative, infective and metabolic joint disorders; and external eye disorders were less prevalent in the Bay Area than in other regions.

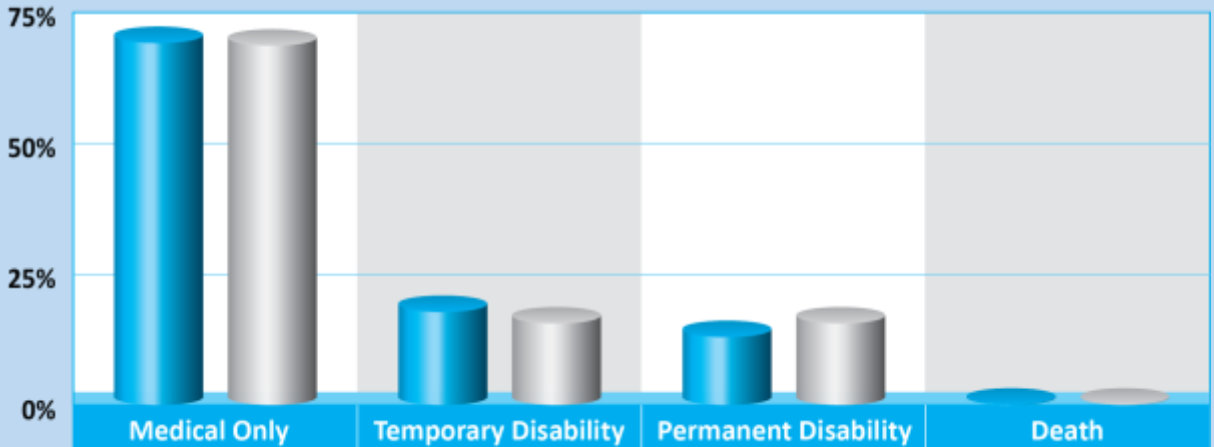
With the slightly different mix of diagnoses, the distribution of loss payments across the major diagnostic categories also varied from other parts of the state. For example, a slightly higher proportion of paid losses on Bay Area claims went toward shoulder, arm, knee, or lower leg sprains; ruptured tendons, tendonitis, myositis & bursitis; and degenerative, infective and metabolic joint disorders, while a smaller share of the payments went toward medical back problems without spinal cord involvement -- typical back sprain and strain claims.



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

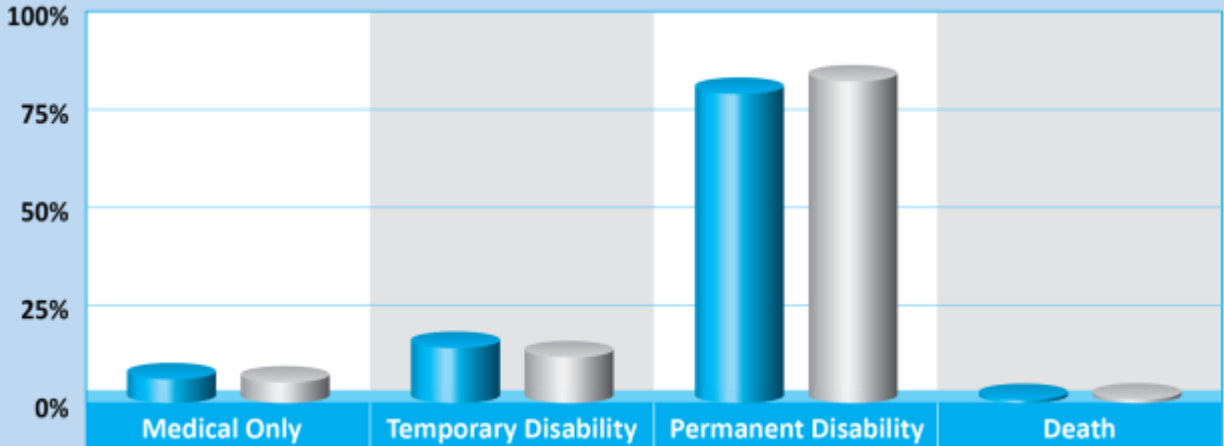
Bay Area vs. All Other Regions (AY 2005 – AY 2015 Claims)

Percent of Claims



Bay Area	69.2%	17.8%	13.0%	< 0.1%
All Other	68.7%	15.6%	15.6%	< 0.1%
Statewide	68.8%	16.0%	15.1%	< 0.1%

Percent of Payments



Bay Area	6.1%	14.1%	79.0%	0.8%
All Other	5.3%	11.7%	82.2%	0.9%
Statewide	5.4%	12.1%	81.7%	0.8%

Medical-only and temporary disability cases comprise a larger share of claims in the Bay Area than in other regions, while more serious permanent disability represent a smaller share of Bay Area claims. Among the factors that may be associated with the smaller percentage of PD claims in the Bay Area are the lower levels of attorney involvement, especially compared to the areas in and around Los Angeles; differences in the job mix and the distribution of claims by industry sector; and faster employer and claims administrator notifications after an injury occurs.

The differences in the mix of claims in the Bay Area are also evidenced by the distribution of paid losses by claim type. Both medical-only claims and temporary disability claims account for a higher proportion of paid losses in the Bay Area compared to other regions, while payments on PD cases accounted for a smaller share: 79% of paid losses in the Bay Area compared to 82.2% of paid losses in all other regions.

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

Injury Date to Employer Notice, Carrier Notice & First Treatment: Bay Area 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	Bay Area	1.0	9.8	1.0	8.4
	All Other Regions	1.0	12.4	1.0	12.5
	Statewide	1.0	12.0	1.0	12.0
Carrier Notification	Bay Area	7.0	31.0	6.0	23.2
	All Other Regions	8.0	36.6	7.0	35.9
	Statewide	8.0	35.8	6.0	34.0
Time to First Treatment	Bay Area	1.0	29.4	1.0	28.5
	All Other Regions	1.0	28.4	1.0	36.1
	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 from the Bay Area, 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 Bay Area, other regions and statewide, the median time to employer notice was one day, so in half of all claims the employer knew of the injury within a day. The median time to carrier notice for Bay Area claims improved from 7 days in AY 2005 to 6 days in AY 2013, while the median for other regions improved from 8 to 7 days, while the statewide median fell 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.

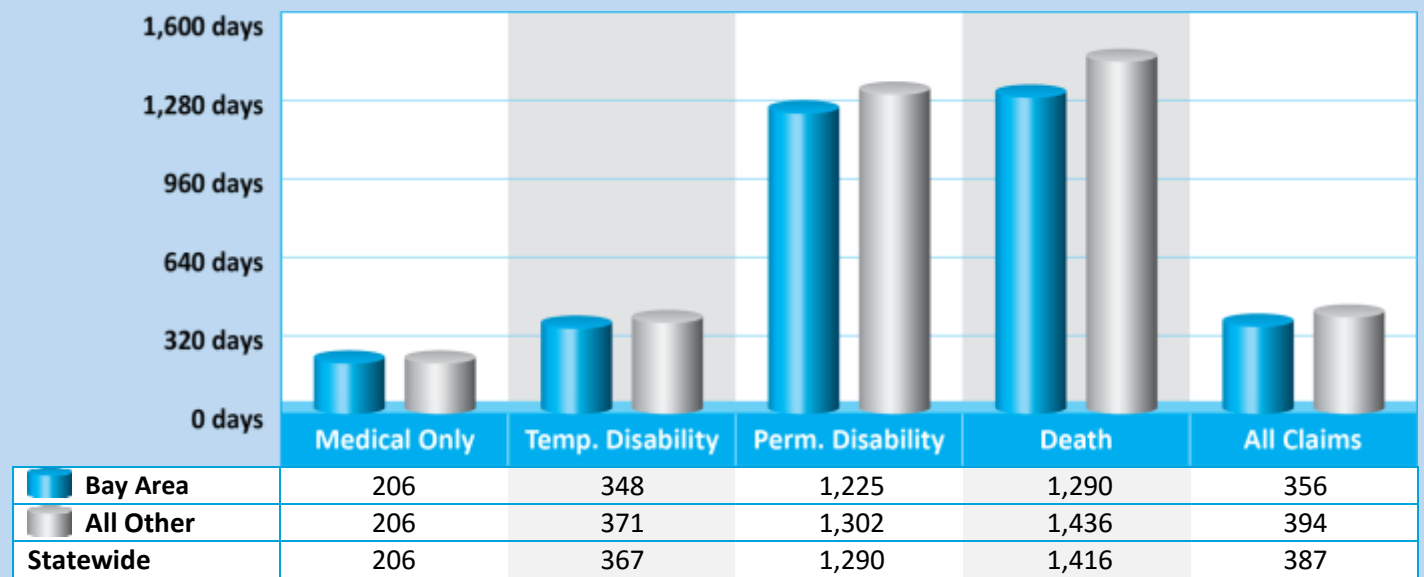
The spreads between the average and median time lags for employer and carrier notifications were less for Bay Area claims than for claims from other regions, which shows that in the Bay Area the average time lags to these two benchmarks are less skewed by outlier claims in which the injury notifications were delayed for long periods. In AY 2005, the spread between the average and median time lag from the date of injury to the date of first treatment was slightly longer in the Bay Area than in other regions, but by AY 2013, that situation had reversed as the average time to first treatment improved from 29.4 days to 28.5 days for Bay Area claims while in other parts of the state the average time to first treatment increased from 28.6 days to 34.8 days.

The AY 2013 claims data show that the average time lags from the date of injury to the employer notification was more than 4 days faster in the Bay Area than in other regions of the state (8.4 days vs. 12.5 days); the average time lag to carrier notification was more than 12 days faster (23.2 days vs. 35.9 days); and the average time to first treatment was more than a week faster (28.5 days vs. 36.1 days).



Average Claim Duration

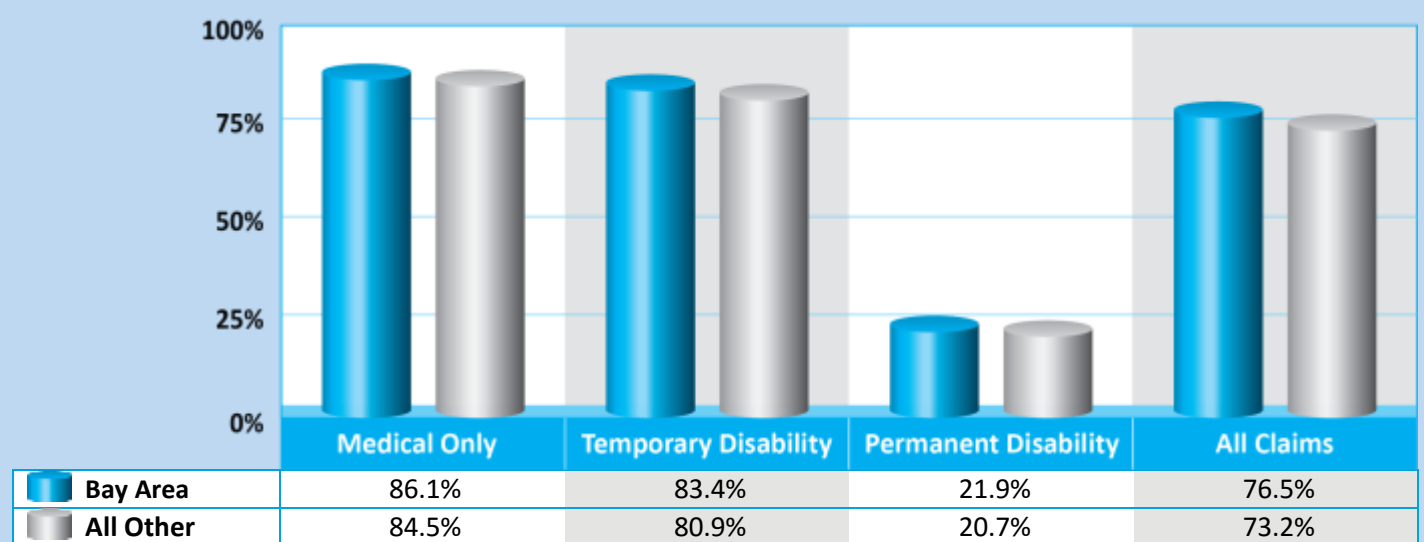
Average Number of Days (AY 2005-2015 Closed & Resolved Claims)



The average claim duration for med-only claims in the Bay Area was 206 days, which matched the average for all other regions of the state, but for all types of claims, the Bay Area claims closed faster than claims from other regions. Overall, AY 2005-2015 claims filed by workers living in the Bay Area took an average of 356 days from the claim filing to the claim closure, 38 days less than the average for other regions and 31 days less than the statewide average. Factors that may be related to these shorter durations on lost time claims include: faster notifications and less time to initial treatment; a high proportion of injured workers from relatively high-paid sectors (health care; retail trade, construction) for whom the maximum weekly TD rate may be well below 2/3 of their average weekly wage; the relatively low attorney involvement rate; a different treatment mix, with less reliance on Medicine Section services, physical therapy and chiropractic care that often continue for extended periods; and a lower percentage of claims resulting in PD.

Claim Closure Rates by Claim Type at 24 Months Post Injury

Bay Area vs. All Other Regions (AY 2005 – AY 2013 Claims)



At 24 months post injury, the overall claim closure rate for Bay Area claims was 76.5%, 3.3 percentage points higher than the rate for all other regions of the state. Higher claim closure rates in the Bay Area were consistent across med-only, TD, and PD claims.



Attorney Involvement Rates for Indemnity (TD & PD) Claims

Bay Area vs. All Other Regions (AY 2005 – AY 2015 Claims)

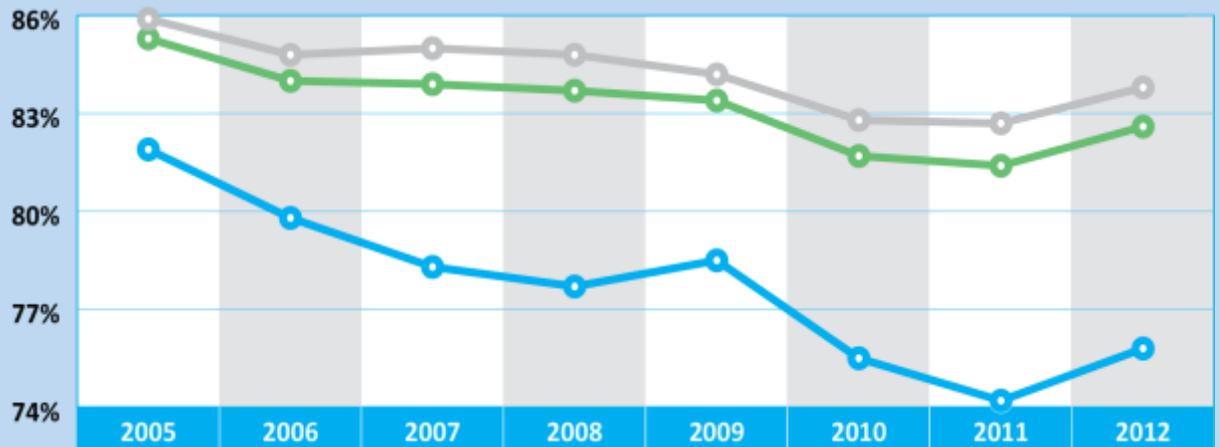


Bay Area	AY 2005 – AY 2015 Average	40.4%
Other Regions	AY 2005 – AY 2015 Average	50.5%
Statewide	AY 2005 – AY 2015 Average	48.8%

Attorney involvement rates on Bay Area indemnity claims were consistently below those for other regions throughout the 11-year period ending in AY 2015, averaging 40.4% for the entire period – more than 10 percentage points below the attorney involvement rate for all other regions. Looking across the 11-year span, attorney involvement rates on Bay Area indemnity claims ranged from 7.4 to 13.2 percentage points less than the attorney involvement rates for indemnity claims from other regions.

Attorney Involvement Rates on PD Claims ≥ 36 Months Old

Bay Area vs. All Other Regions (AY 2005 – AY 2012 Claims)



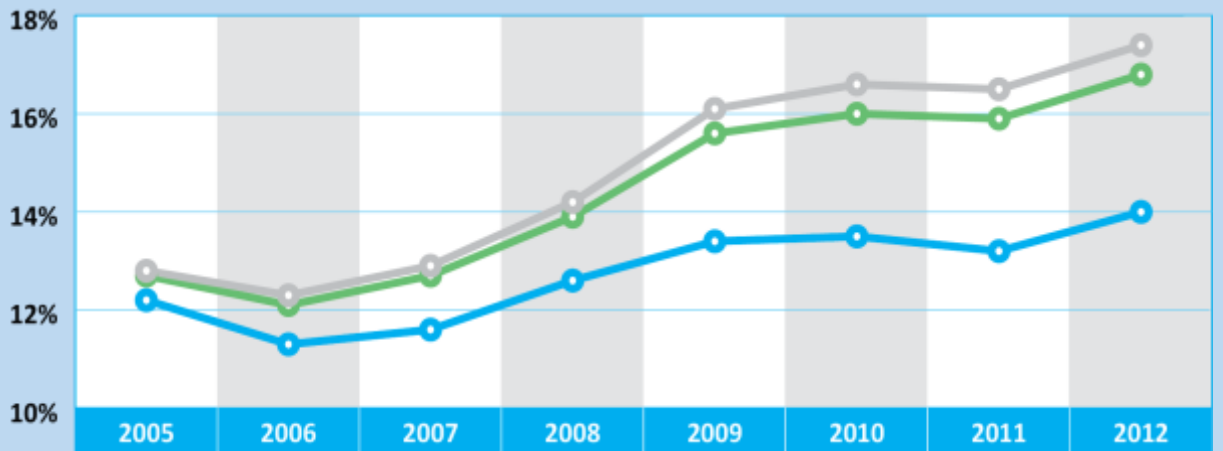
Bay Area	81.9%	79.8%	78.3%	77.7%	78.5%	75.5%	74.2%	75.8%
All Other	85.9%	84.8%	85.0%	84.8%	84.2%	82.8%	82.7%	83.8%
Statewide	85.3%	84.0%	83.9%	83.7%	83.4%	81.7%	81.4%	82.6%

Attorney involvement on permanent disability claims often 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 the AY 2005-AY 2012 PD claims from the Bay Area that were at least 36 months old, attorney involvement rates were consistently less than the rates for the rest of the state, ranging from 4.0 to 8.5 percentage points below the attorney involvement rates for comparable claims from other parts of California.



Permanent Disability Rates at 36 Months Post Injury

AY 2005 – AY 2012 Claims



Bay Area	12.2%	11.3%	11.6%	12.6%	13.4%	13.5%	13.2%	14.0%
All Others	12.8%	12.3%	12.9%	14.2%	16.1%	16.6%	16.5%	17.4%
Statewide	12.7%	12.1%	12.7%	13.9%	15.6%	16.0%	15.9%	16.8%

The percentage of claims with PD payments at 3 years post injury was consistently less in the Bay Area than in other parts of California. The percentage of claims with PD declined briefly following the adoption of the 2005 PD rating schedule, but began trend up beginning in AY 2007, increasing to 14% of Bay Area claims and 17.4% of claims from other regions in AY 2012. The increases in PD claims that began in 2007 followed several court rulings (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, Bay Area vs. All Other Regions and Statewide

Visits at 12 Months

Region	E/M	Surgery	Radiology	Medicine	PT	Chiro
Bay Area	8.9	1.0	1.8	0.8	7.9	0.9
All Other	8.7	1.1	2.2	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
Bay Area	\$884	\$1,265	\$362	\$163	\$596	\$35
All Other	\$926	\$1,257	\$486	\$261	\$718	\$36
Grand Total	\$919	\$1,258	\$465	\$244	\$697	\$36

Visits at 24 Months

Region	E/M	Surgery	Radiology	Medicine	PT	Chiro
Bay Area	11.4	1.2	2.1	1.1	9.8	1.2
All Other	11.2	1.4	2.7	1.8	11.2	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
Bay Area	\$1,165	\$1,718	\$449	\$270	\$ 780	\$43
All Other	\$1,203	\$1,736	\$640	\$430	\$ 909	\$46
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.

The table above shows the average number of visits per indemnity claim at 12 and 24 months post injury for various types of medical services and the average amounts paid for those visits. At both the 12- and 24-month benchmarks, Bay Area claims averaged a slightly higher number of Evaluation/Management visits than other regions, but a slightly smaller number of visits for surgery and chiropractic manipulation; and a significantly smaller number of visits for radiology, medicine section services and physical therapy.

Except for marginally higher first-year surgery payments, average amounts paid for medical visits at 12 and 24 months post injury were lower for the Bay Area 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 radiology (\$124 less), physical therapy (\$122 less), and Medicine Section services (\$98 less). These lower medical costs on the Bay Area claims may not only reflect fewer visits, but fewer services per visit, differences in the mix of services provided, or the availability of lower rates negotiated with network providers in the region.

At the 24-month benchmark, average amounts paid in all 6 service categories were lower in the Bay Area than in other regions. The biggest differences were in the average amounts paid for radiology (\$191 less), Medicine Section services (\$160 less), and physical therapy (\$129 less). Average amounts paid at the 24-month benchmark for other types of services were just slightly less in the Bay Area, with Evaluation/Management averaging \$38 less than in the rest of the state; Surgery averaging \$18 less, and chiropractic manipulation averaging \$3 less.

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

Network Utilization by Type of Service – Bay Area vs. All Other

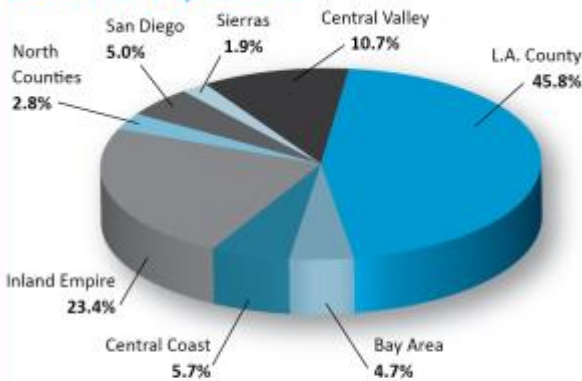
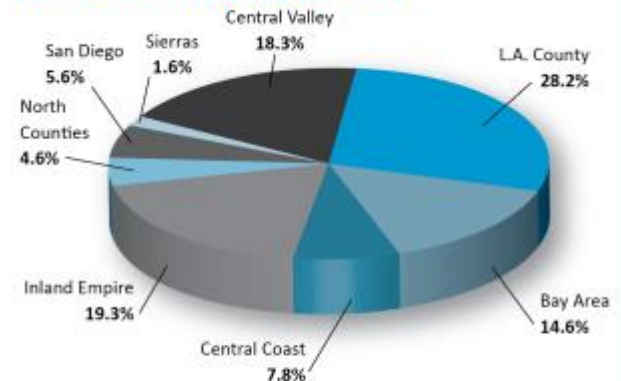
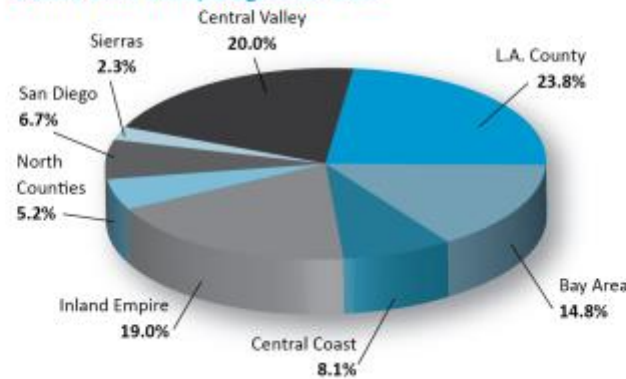
Type of Service		2005 – 2009	2010 – 2015
Evaluation/Management	Bay Area	84.0%	90.4%
	All Other	78.5%	87.6%
Surgery	Bay Area	76.2%	80.7%
	All Other	70.1%	77.7%
Radiology	Bay Area	72.6%	82.8%
	All Other	67.5%	77.9%
Medicine Section	Bay Area	72.4%	82.8%
	All Other	67.4%	75.7%
Physical Therapy	Bay Area	73.4%	84.7%
	All Other	61.1%	76.1%
Chiropractic Manipulation	Bay Area	64.1%	86.0%
	All Other	55.7%	77.9%
Total Visits	Bay Area	77.8%	86.9%
	All Other	69.8%	81.2%

The use of network providers to render workers' compensation medical care is greater in the Bay Area than in other parts of the state. 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 Bay Area claims and claims from all other regions. Network utilization for all treatment categories increased steadily following the introduction of medical provider networks in 2005. Among Bay Area claims, the overall network utilization rate grew from 77.8% of all treatment visits in 2005-2009 to 86.9% in 2010-2015, while in other regions the network utilization rate grew from 69.8% to 81.2%.

The data on network utilization by type of service for the most recent six-year period (2010-2015) shows that network penetration remains greatest for evaluation/management services, both in the Bay Area (90.4%) and elsewhere (87.6%). Network utilization is slightly lower for other medical service categories, but in the Bay Area it still ranges between about 80.7% for surgery services to 86.0% for chiropractic manipulation. In other parts of the state, network utilization rates range from 2.8 percentage points lower than in the Bay Area for evaluation and management visits to 8.6 percentage points lower for physical therapy.

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.

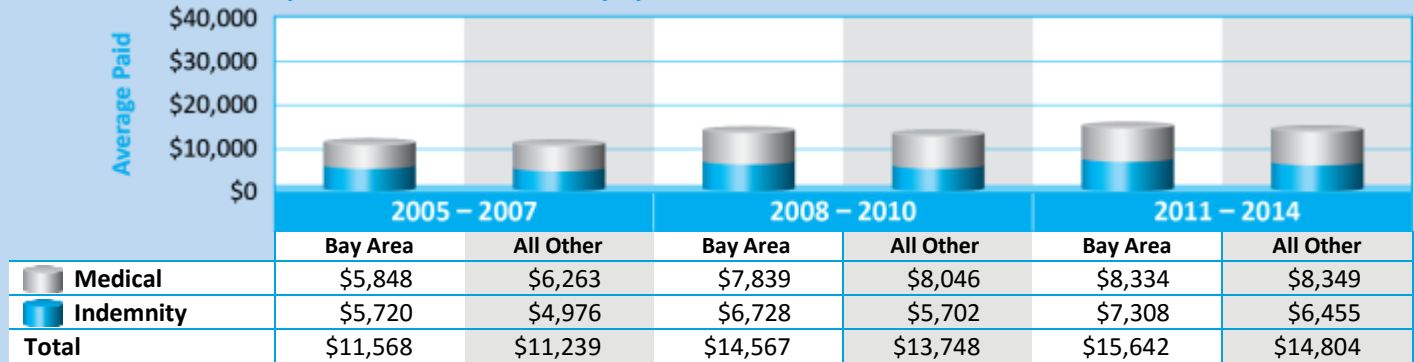
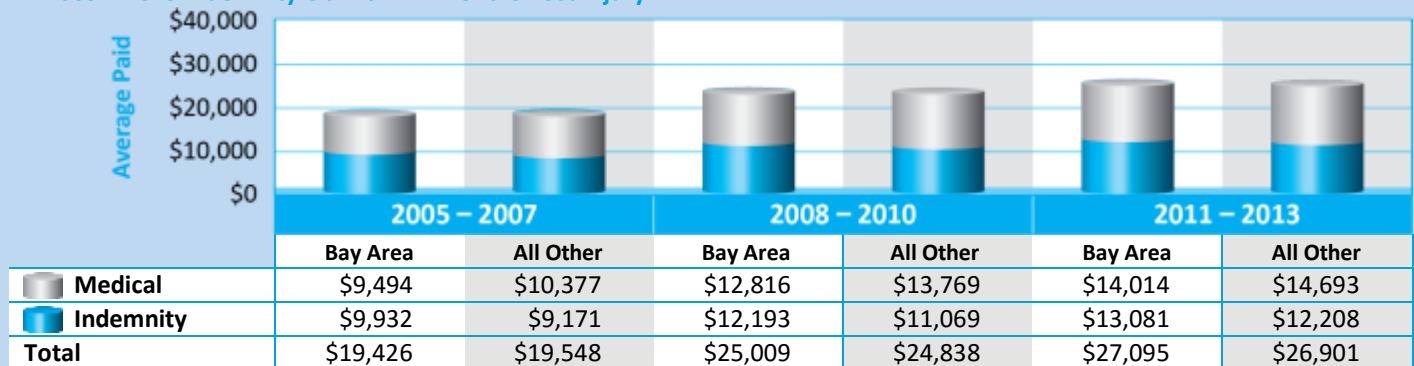
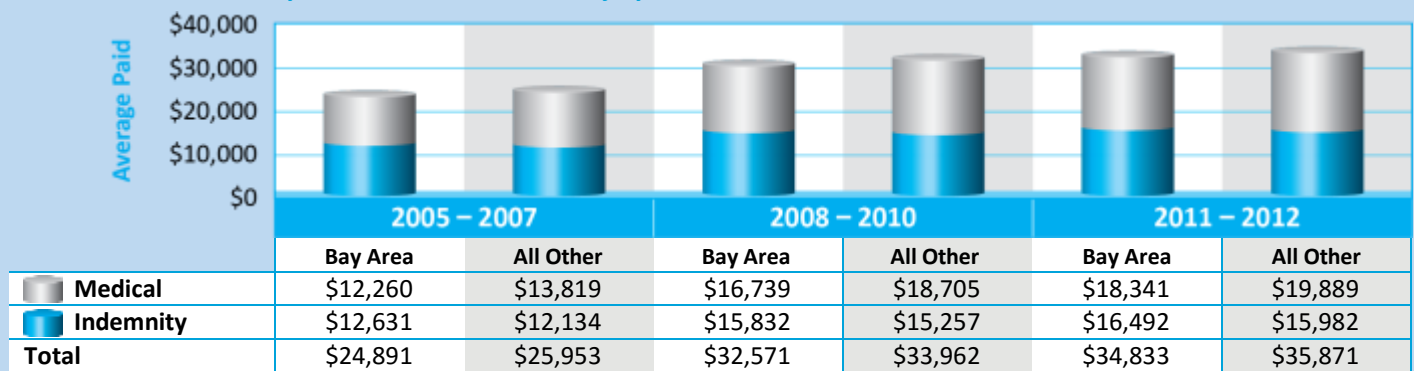
Injured workers in the Bay Area accounted for more than 1 out of every 6 California workers' comp claims during this 3-year period, but the distribution of claims with sleep studies shows the region had a disproportionately low share of the claims with sleep studies, accounting for only 4.7% of these claims, which were much 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 closer to the Bay Area's share of total claim volume, as 14.6% of the claims with nerve conduction studies involved injured workers living in the Bay Area.

Similarly, the third pie chart shows that the proportion of claims with MRIs and diagnostic tests that involved injured workers from the Bay Area also was more in line with the region's percentage of total claim volume, as the Bay Area accounted for 14.8% of the claims with MRIs and diagnostic tests compared to 17.6% of the total claim volume for CY 2013-2015.

**Loss Development at 12, 24 and 36 Months**

Average Paid, AY 05-07, AY 08-10, AY 11-14 Indemnity Claims – Bay Area 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 average paid losses on Bay Area claims and claims from other regions for 3 periods (AY 2005-2007, AY 2008-2010, and AY 2011 through the most recent year available). Average amounts paid for medical and indemnity benefits, and total losses, are noted at 12, 24, and 36 months post injury to show the loss development on claims from each period.

Average medical payments were lower for the Bay Area claims than for claims from other regions at 12-, 24-, and 36-months post injury across all 3 time periods, but average indemnity payments were higher. Claim durations are shorter in the Bay Area than in other regions, and a smaller share of the claims receive permanent disability, so at least to some extent, the higher indemnity payments on Bay Area claims reflect the impact of the region's high wages on both temporary disability and permanent disability payments. Looking at the loss development data shows that in the first year post injury, total paid losses on Bay Area claims have consistently averaged more than in other regions of the state, but as the claims age that situation reverses, and by 36 months post injury, the impact of the Bay Area's higher indemnity payments is more than offset by the lower medical payments, so average total losses on claims from other regions exceed those on Bay Area claims.

The most fully developed data show average 36-month paid losses on Bay Area indemnity claims increased 39.9% from \$24,891 on AY 2005-2007 claims to \$34,833 on AY 2011-2012 claims, slightly more than the 38.2% growth in average loss payments for claims from other regions, which rose from \$25,953 to \$35,871. Average 36-month medical losses on Bay Area claims rose 49.6%, vs. 38.2% elsewhere, while average 36-month indemnity rose 30.6%, slightly less than the 31.7% growth in indemnity elsewhere.

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

CY 2014 Bay Area v. All Other and Statewide

	Bay Area	All Other Regions	Statewide
Analgesics - Opioid	29.6%	27.1%	27.4%
Analgesics - Anti-Inflammatory	18.5%	18.7%	18.6%
Musculoskeletal Therapy Agents	9.0%	9.4%	9.4%
Anticonvulsants	8.8%	6.6%	6.9%
Antidepressants	7.5%	6.1%	6.3%
Dermatologicals	6.9%	4.7%	5.0%
Ulcer Drugs	5.7%	7.1%	6.9%
All Other	14.0%	20.3%	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 number one prescription drug category for Bay Area claims, though in the Bay Area they accounted for a bigger share of the workers' comp prescriptions (29.6% vs. 27.1% elsewhere and 27.4% statewide). Anti-inflammatory analgesics ranked second, and their share of the Bay Area prescriptions (18.5%) was similar to other regions, while musculoskeletal therapy agents ranked third, representing 9.0% of the Bay Area prescriptions vs. 9.4% in the rest of the state. Among the other major drug categories, the distribution of prescriptions in the Bay Area differed somewhat from other regions, with anticonvulsants, antidepressants and dermatologicals each accounting for a larger share of the Bay Area prescriptions, and ulcer drugs and all other drug categories comprising a smaller share.

Regional Distribution of Prescription Drug Payments by Drug Category

CY 2014 Bay Area v. All Other and Statewide

	Bay Area	All Other Regions	Statewide
Analgesics – Opioid	30.2%	25.1%	25.9%
Dermatologicals	14.7%	10.5%	11.1%
Analgesics - Anti-Inflammatory	11.0%	15.7%	15.0%
Anticonvulsants	9.1%	6.4%	6.8%
Antidepressants	7.8%	5.9%	6.2%
Ulcer Drugs	6.7%	8.8%	8.5%
Musculoskeletal Therapy Agents	4.6%	5.5%	5.4%
All Other	15.9%	22.1%	21.1%

The distribution of prescription drug payments by drug category further confirms the heavy reliance on opioids in the Bay Area, as opioid analgesics represented 30.2% of the CY 2014 total drug spend on Bay Area claims vs. 25.1% in other regions and 25.9% statewide. Dermatologicals, antidepressants, and anticonvulsants also accounted for a higher percentage of the Bay Area prescription dollars compared to other parts of the state. On the other hand, anti-inflammatory analgesics (i.e., Ibuprofen, Naproxen, Celecoxib) accounted for just 11% of the Bay Area's workers' comp prescription drug spend, well below the 15.8% noted in other regions; ulcer drugs represented 6.7% of the prescription payments vs. 8.8% elsewhere; and payments for musculoskeletal therapy agents comprised 4.6% of the Bay Area prescription payments compared to 5.5% in other regions.

**Top 20 Prescription Drugs by Volume**

Bay Area vs. Other Regions (Calendar Year 2014)

Generic Name	Common Name	% of Total Prescriptions		
		Bay Area	Other Regions	Statewide
Hydrocodone-Acetaminophen	Vicodin	15.4%	14.6%	14.7%
Ibuprofen	Advil	6.0%	5.9%	5.9%
Gabapentin	Neurontin	5.6%	3.9%	4.1%
Naprosyn	Aleve	4.7%	5.3%	5.2%
Cyclobenzaprine	Flexeril	4.4%	4.1%	4.1%
Tramadol	Ultram	3.7%	4.7%	4.6%
Omeprazole	Prilosec	3.7%	4.7%	4.6%
Lidocaine	Lidocaine	3.4%	1.6%	1.9%
Diclofenac	Voltaren	2.7%	2.2%	2.3%
Nabumetone	Relafen	2.5%	1.5%	1.7%
Oxycodone	Oxycontin	2.4%	1.4%	1.6%
Oxycodone-Acetaminophen	Endocet/Percocet	2.2%	1.6%	1.7%
Duloxetine	Cymbalta	2.1%	1.5%	1.6%
Pregabalin	Lyrica	2.1%	1.4%	1.5%
Tizanidine	Zanaflex	1.4%	1.3%	1.3%
Zolpidem	Ambien	1.3%	1.6%	1.6%
Pantoprazole	Protonix	1.2%	0.9%	1.0%
Meloxicam	Mobic	1.1%	1.2%	1.2%
Carisprodol	Soma	1.0%	1.4%	1.3%
Tramadol-Acetaminophen	Ultracet	1.0%	1.2%	1.1%
Top 20		67.9%	62.0%	63.0%

The top 20 drugs dispensed to Bay Area injured workers in calendar year 2014 are listed in the table above, 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 Bay Area and in other regions, though it accounted for a slightly larger share of the Bay Area prescriptions (15.4% vs. 14.6% elsewhere). The anti-inflammatory analgesic ibuprofen ranked second, accounting for 6% of the Bay Area prescriptions, which was in line with the 5.9% share in other regions, though the third most prescribed drug in the Bay Area was the anticonvulsant gabapentin, used to treat nerve pain as well as seizures, which represented 5.6% of the Bay Area prescriptions vs. 3.9% elsewhere. The anti-inflammatory naprosyn (4.7%) and the muscle relaxant cyclobenzaprine (4.4%) rounded out the top 5 drugs used in Bay Area claims. No other drug accounted for more than 4 percent of the Bay Area prescriptions, though among the drugs that represented a significantly larger share of workers' compensation prescriptions in the Bay Area compared to other regions were the numbing agent lidocaine; the non-steroidal anti-inflammatory nabumetone; the anticonvulsant pregabalin (which is often used to treat neuropathic pain); duloxetine (which is used to treat nerve pain and as an antidepressant); and the opioid analgesics oxycodone and oxycodone/acetaminophen. On the flip side, among the drugs that accounted for a smaller share of the Bay Area prescriptions were the opioid tramadol, the antacid omeprazole, the sleep aid zolpidem, and the muscle relaxant carisprodol.

**Top 20 Prescription Drugs by Total Payments**

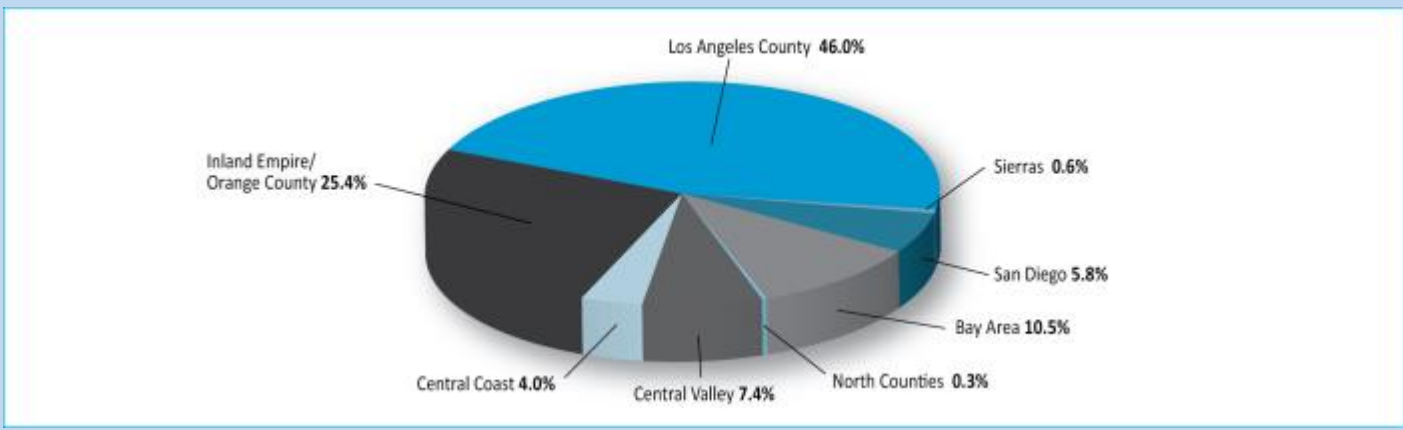
Bay Area vs. Other Regions (Calendar Year 2014)

Generic Name	Common Name	% of Total Prescription Payments		
		Bay Area	Other Regions	Statewide
Lidocaine	Lidocaine	8.8%	4.8%	5.4%
Oxycodone	Oxycontin	7.5%	4.7%	5.1%
Hydrocodone-Acetaminophen	Vicodin	6.3%	6.5%	6.5%
Pregabalin	Lyrica	5.8%	3.8%	4.1%
Duloxetine	Cymbalta	4.3%	3.2%	3.3%
Omeprazole	Prilosec	4.1%	5.6%	5.4%
Diclofenac	Voltaren	3.5%	2.6%	2.8%
Celecoxib	Celebrex	3.5%	4.0%	3.9%
Gabapentin	Neurontin	3.0%	2.0%	2.2%
Fentanyl	Fentanyl	2.9%	2.2%	2.3%
Oxycodone w/Acetaminophen	Endocet/Percocet	2.7%	2.2%	2.3%
Tramadol	Ultram	2.5%	3.6%	3.4%
Morphine	Morphine	2.3%	1.4%	1.5%
Cyclobenzaprine	Flexeril	2.3%	2.4%	2.4%
Naprosyn	Aleve	2.0%	2.6%	2.5%
Menthol	Menthol	1.8%	1.9%	1.9%
Ibuprofen	Advil	1.6%	1.6%	1.6%
Pantoprazole	Protonix	1.5%	1.3%	1.3%
Capsaicin	Capsaicin	1.2%	1.5%	1.5%
Nabumetone	Relafen	1.1%	0.6%	0.7%
Top 20		68.7%	58.5%	60.1%

The distribution of prescription drug dollars in the Bay Area suggests that drug compounders may have a significant presence in the region, as three of the top 20 drugs based on dollars paid include common compound drug ingredients: the numbing agent lidocaine, which ranks #1 in terms of prescription dollars for the region; menthol, and capsaicin. Together, these three drugs account for nearly 12% of the total workers' comp drug spend in the Bay Area vs. 8.2% of total drug payments in other regions. Opioids also account for a high percentage of the Bay Area prescription drug dollars, with 6 opioid analgesics -- oxycodone, hydrocodone with acetaminophen (Vicodin), fentanyl, oxycodone with acetaminophen, tramadol, and morphine -- all among the top 13 prescription drugs based on total drug spend, together accounting for 24.2% of Bay Area prescription drug payments vs. 20.6% in other parts of the state.

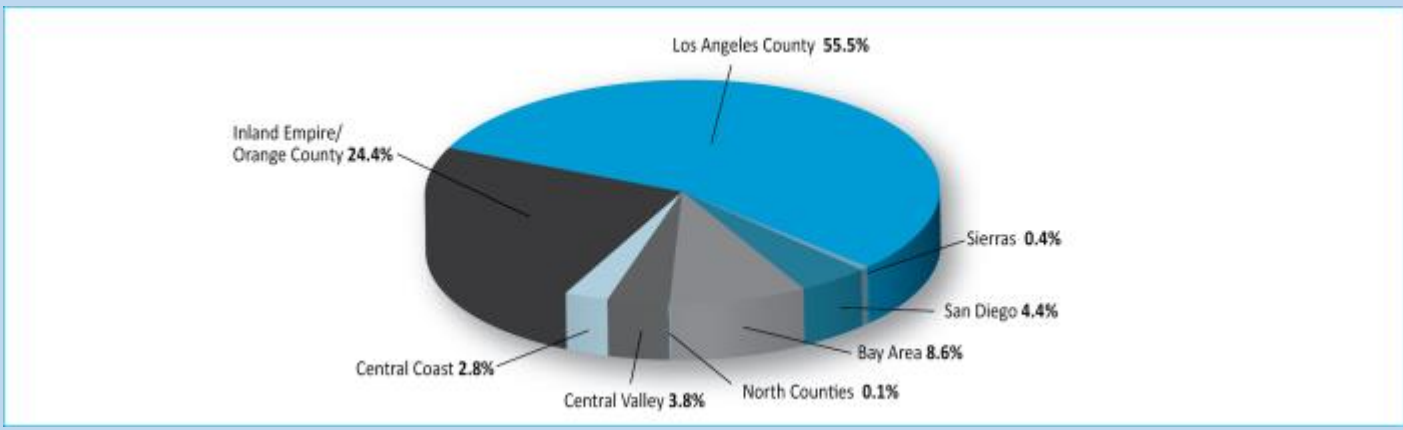
Other drugs that accounted for a higher share of the prescription drug dollars in the Bay Area relative to other regions included the anticonvulsant pregabalin; duloxetine, used as an antidepressant and for nerve pain; and nonsteroidal anti-inflammatories diclofenac and nabumetone. In contrast, drugs that account for a smaller share of the Bay Area's total drug spend relative to the rest of the state include the antacid omeprazole; and the nonsteroidal anti-inflammatories celecoxib and naprosyn.

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 Bay Area accounted for 17.5% of all California workers' compensation claims, but only 10.5% 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 Bay Area, which accounted for 15.4% of total paid losses in California workers' comp, accounted for only 8.6% 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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