



Cal/OSHA High Hazard Industry Targeted Enforcement Program Overview and Evaluation



Presentation Outline

- History and overview of Cal/OSHA's program focused on High Hazard Industries
- Variety of methods used to target for enforcement
- Evaluation of approaches using DIR data and enforcement results



1992 Federal Audit Findings

Enforcement Program criticism

- Number of programmed inspections unacceptably low (less than 5%) – currently at around 22-25%
- CA had very low proportion of total cited violations classified as serious (9%) - currently at around 20%

1993 Workers' Compensation Reform Legislation

- Included a funding mechanism for additional staff (AB110)
- Assessment of employers with high ExMods based on payroll
- LC 6314.1 effective July 16, 1993
- Established Targeted Inspection and Consultation Program
- High Hazard Unit conducting inspections in early 1994

California law mandates a high hazard targeting program

“The division shall establish a program for targeting employers in high hazardous industries with the highest incidence of preventable occupational injuries and illnesses and workers’ compensation losses.”

– Labor Code Section 6314.1 (a)



High Hazard Targeting

The division shall establish procedures for ensuring that the highest hazardous employers in the most hazardous industries are inspected on a priority basis. The division may send a letter to the high hazard employers who are identified pursuant to this section informing them of their status and directing them to submit a plan, including the establishment of joint labor-management health and safety committees, within a time determined by the division for reducing their occupational injury and illness rates. Employers who submit plans that meet the requirements of the division may be placed on a secondary inspection schedule.

- Labor Code Section 6314.1 (b)

High Hazard Origins: Targeted Inspection and Consultation Fund

The High Hazard Employer Program was initially designed to:

- Identify employers in hazardous industries with the highest incidence of preventable occupational injuries and illnesses and workers' compensation losses.
- Offer and provide consultative assistance to these employers to eliminate preventable injuries and illnesses and workers' compensation losses.
- Inspect those employers on a random basis to verify that they have made appropriate changes in their health and safety programs.
- Develop appropriate educational materials and model programs to aid employers in maintaining a safe and healthful workplace.

Federal OSHA High Hazard Inspections

OSHA conducts high hazard inspections using a combination of:

- Site Specific Targeting (SST)
- Implementation of both national and local emphasis inspection programs, which include programmed inspections, to target high-risk hazards and industries; OSHA currently has 13 National Emphasis Programs (NEP) that intensify inspections on hazards or industries such as lead, silica, shipbreaking, trenching/excavations and process safety management, and approximately 140 Regional and Local Emphasis Programs (LEP)
- Cal/OSHA adopts NEPs, but is not required to adopt LEPs.

Site Specific Targeting (SST)

Under the Site Specific Targeting 2014 (SST-14--Federal OSHA Directive number 14-01 (CPL 02) effective March 6, 2014), State Plans must choose among three targeting options:

- Use a state developed high hazard inspection targeting system based upon available state data
- Use a high hazard inspection targeting system based on OSHA instruction CPL 02-00-025 *Scheduling System for Programmed Inspections (dated January 4, 1995)*
- Use OSHA's 2014 Site Specific Targeting Plan (https://www.osha.gov/OshDoc/Directive_pdf/CPL_02-14-01.pdf)

Targeting has proven effectiveness

Following high hazard inspections conducted by Cal/OSHA, companies realized:

- 9.4% reduction in the number of injuries
- 26% reduction in the medical expenses and wage replacement paid from those claims.



Source: Levine et al. "Randomized government safety inspections reduce worker injuries with no detectable job loss." *Science* vol. 336, no. 6083 (May 18, 2012): 907–911.

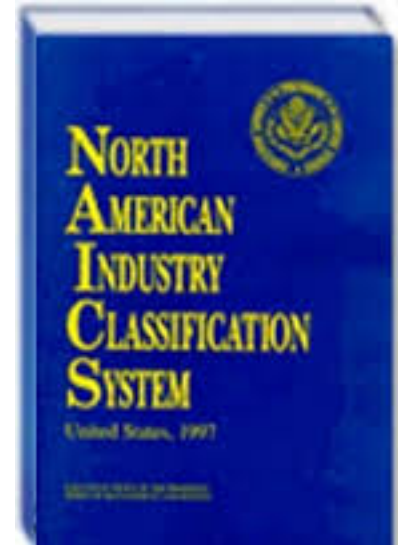
Cal/OSHA has a multi-phased approach to targeting

1. Identify industry groups (by NAICS code) that have DART rates of more than 200% of the California private sector average DART rate.
2. Prioritize Industry Groups based on:
 - DOSH Special Emphasis Programs (SEPs)
 - Federal National Emphasis Programs (NEPs)
 - California has a standard to cover the hazard, or adopts a new Federal Standard
 - The hazard creates a significant number of serious injuries, illnesses or fatalities
 - Evaluation of past and current selections
3. Identify businesses for inspections



Industrial Groups identified for 2015-16

- Agriculture, Forestry, Fishing and Hunting
- Construction
- Manufacturing
- Retail Trade
- Transportation and Warehousing
- Administrative and Support and Waste Management and Remediation Services
- Accommodation



Note: The annual [High Hazard Industry List](https://www.dir.ca.gov/dosh/hhu_list.pdf) (available at https://www.dir.ca.gov/dosh/hhu_list.pdf) is based on "days away, restricted or transferred" (DART) rates for private sector employers. Employers in high hazard industries may be subject to an inspection by High Hazard Unit.

Inspection Targeting Method A: Randomized

Establishments are selected from publicly available lists and government lists of employers in California. Establishments are identified and prioritized using neutral criteria.

To Select Individual Establishments:

1. Identify fixed sites within each of the selected industry groups using a database of California employers
2. Identify establishments with more than 10 employees
3. Randomize and select the first 100 within each industry group
4. Distribute target list to district offices

Inspection Targeting Method B: Experience Modification

Establishments are identified based on workers' compensation claims and losses as reflected in Ex Mods. The criteria include frequency of claims and type of claims.

To Select Individual Establishments:

1. Identify employers with high (greater than 125%) experience modification (Ex-Mod) factors.
2. Identify physical sites in California and prioritize based on ex-mods within a geographical area.
3. Distribute target list to district offices.

Inspection Targeting Method C: Specific Injury

Establishments are identified through specific injury type that could result in serious physical harm and are likely to be caused by violations of Cal/OSHA standards.

To Select Individual Establishments:

1. Identify injury type in WCIS in selected NAICS (SIC/Class Code). Examples include but are not limited to: amputations, electrical shock, and respiratory disease.
2. Identify employer and location of injury using WCIS.
3. Confirm that injury was not already investigated by Cal/OSHA.
4. Distribute target list to district offices.

Inspection Targeting Method D: Workers' Compensation Claims

Establishments are identified using workers' compensation claim data. (Proposed approach for FFY 15-16 based on results of evaluation)

To Select Individual Establishments:

1. Identify employers using WCIS and IMIS/OIS where:
 - a. More than 3 claims were filed in the previous year;
 - b. Claim rate was greater than 6.5 claims per 100 employees; and
 - c. No Cal/OSHA inspection was conducted within last three years.
2. Identify establishment location(s) using WCIS.
3. Distribute target list to district offices.

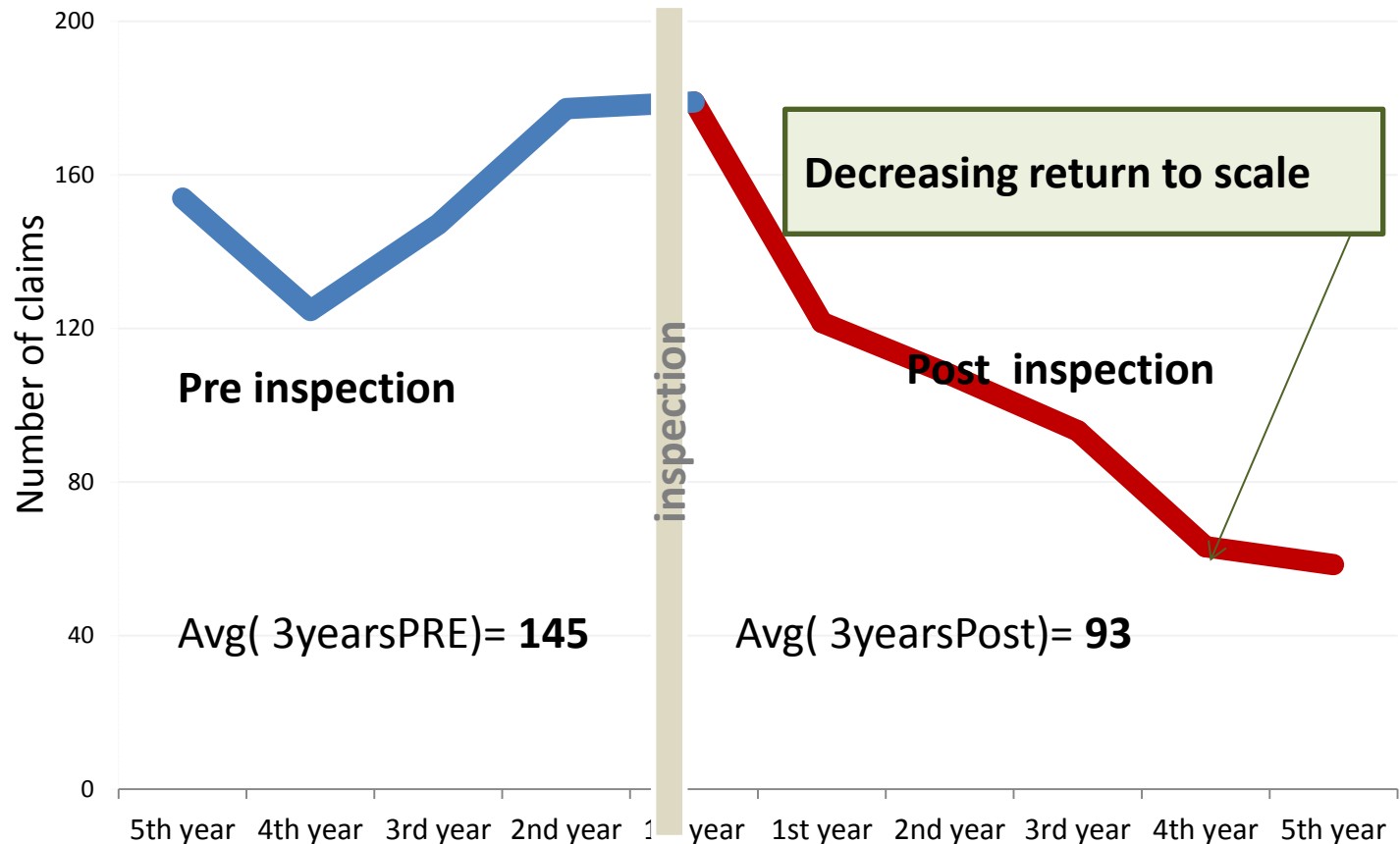
Inspection Targeting Method D: Workers' Compensation Claims (cont.)

- Developed as a result of a DIR study to evaluate the prior approaches used
- Used specific criteria to define inspection “effectiveness” including:
 - Decrease in injuries and illnesses
 - Decrease in workers' compensation cost
 - Observed improvement in direct inspection results, i.e., a higher number of violations or higher amount of penalty assessments
- Followed methodology to assess injury reduction and claim rate changes:
 - DIR measured the frequency in change/type of all establishments by claim frequency grouping from 5 years prior to inspection and 5 years after inspection

Findings of claim frequency reduction

- For employers with higher frequency of claims, greater decrease in the number of claims after an inspection
- No significant effectiveness shown for low claim frequency group (0-3 claims)
- After 3 years, the effectiveness decreases

High Claim group ≥ 50 Claims



Groups:

- Low Claim \downarrow 1.4
- Medium Low \downarrow 4.3
- Medium High \downarrow 52, 36%
- High claim \downarrow 52, 36%




Findings of claim rate reduction

- For employers with a higher claim rate, there is a sizable decrease in the claim rate post inspection
- The decreases for lower claim rate groups (0-6.5 injuries per 100 employees) are not significant
- The effectiveness of injury rate reduction also lasts 3 years

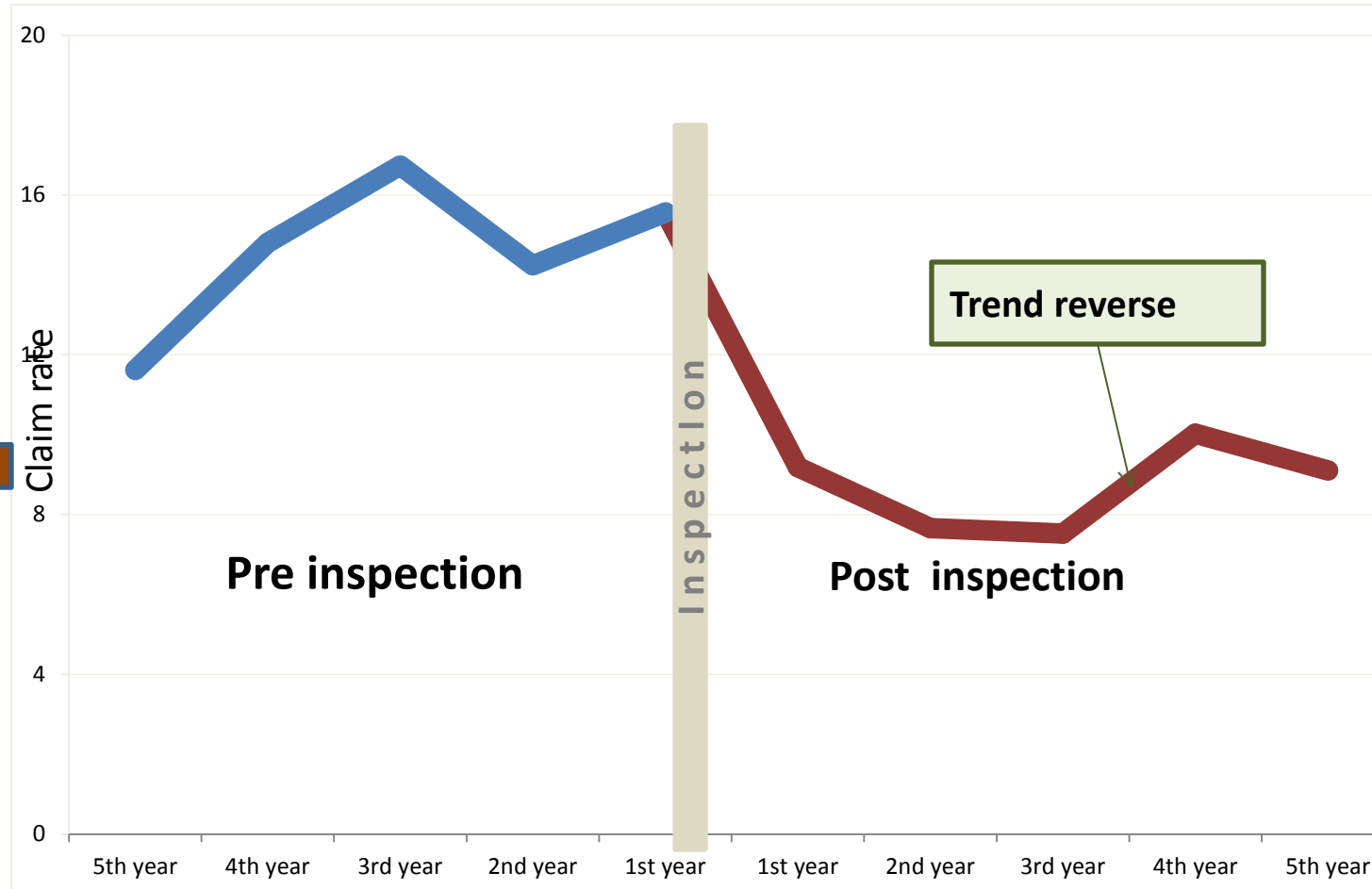
Groups:

- Extreme low
- Low rate
- Medium Low

6.5 per 100 workers

- Medium High  **2.7, 28%**
- High  **7.7, 50%**
- Extreme high  **20.8, 31%**

High Claim rate=10-20 per 100 workers



Findings have revealed trade-offs between the various inspection targeting methods



Appendix 1: DOSH High Hazard Industries 2015-16

Industry Group	NAICS	Industry Activity	DART
Agriculture	1114	Greenhouse and Nursery Production	4.6
	112	Animal Production and Aquaculture	5.2
Construction	23813	Framing Contractors	4.5
Manufacturing	31161	Animal Slaughtering and Processing	5.1
	31211	Soft Drink and Ice Manufacturing	6.5
	314*	Textile Product Mills	4.4
	316	Leather and Allied Product Manufacturing	6.8
	32111	Sawmills and Wood Preservation	5.0
	3219	Other Wood Product Manufacturing ⁽¹⁾	4.5
	3272	Glass and Glass Product Manufacturing	5.8
	33151	Ferrous Metal Foundries	4.3
	3362	Motor Vehicle Body and Trailer Mfg	4.3
	3379*	Other Furniture Related Product Mfg	5.4
Retail Trade	4412*	Other Motor Vehicle Dealers	4.9
Transportation and Warehousing	481	Air Transportation	5.1
	492	Couriers and Messengers	5.7
	493	Warehousing and Storage	4.3
Waste Management	562*	Waste Management and Remediation Service	4.8
	5622*	Waste Treatment and Disposal	6.6
Accommodation and Food Services	721	Accommodation	4.6

Appendix 2

Summary Table Evaluation of High Hazard Targeting Program Data for FFY 2015 (Note: During FFY 2015 a total of 278 High Hazard Targeted Inspections were conducted.)	
Percentage of these inspections in which no violations are found.	1.8 %
Total number of violations per inspection with violations cited as result of these inspections.	7.21
Number of Serious/Willful/Repeat violations per inspection with violations cited as result of these inspections.	1.64
Number of General/Regulatory violations per inspection with violations cited as result of these inspections.	5.57
Percentage of the inspections with violations with Serious/Willful/Repeat violations.	39.9%
High Hazard Inspections by NAICS	(See Table below)

Appendix 2 (cont.)

	NAICS and Description	Inspections	Percent
11	Agriculture, Forestry, Fishing and Hunting	88	32%
23	Construction	5	2%
31- 33	Manufacturing	180	65%
42	Wholesale Trade	2	1%
44- 45	Retail Trade	2	1%
48- 49	Transportation and Warehousing	0	0%
56	Admin and Support and Waste Management and Remediation	0	0%
71	Arts, Entertainment, and Recreation	1	0%
	Total	278	100

Thank you.
Questions?

