Manufacturing Risk: A Regional Analysis of Workplace Compliance in California's Meatpacking and Food Processing Industries

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SUMMARY

California's meatpacking and food processing industries exhibit major regional disparities in inspections per 1,000 workers and violations per inspections. In this brief, we examine US Census Bureau- American Community Survey 2014-2018 data and US Department of Labor- Occupational Safety and Health Administration (OSHA) 2015-2020 data. We find that the Central Valley has the state's highest rates of inspections per 1,000 employees, and two-thirds of the state's unplanned (accident, complaint or whistleblower-based) inspections—but also the second-lowest rate of violations per inspection. We suggest that high unplanned inspections and low violations may indicate a lack of agency enforcement and business compliance, and the region's recent COVID-19 outbreaks in animal slaughter and food processing may be linked to broader trends in lack of workplace health and safety enforcement. We recommend policy reform that sets a standard for workplace health and safety standards across all regions.

FINDINGS

The Central Valley has not only more animal slaughtering and processing industry jobs than any other California region—its higher rates of unplanned (e.g. accident, complaint and referral) investigations and low rates of violations-per-inspection suggest greater health and safety non-compliance.

We examined US Census Bureau- American Community Survey data from 2014-2018. We also examined US Department of Labor- Occupational Safety and Health Administration (OSHA) records from July 11, 2015 to July 10, 2020; we examined "closed" cases from these OSHA records, not currently open, ongoing investigations.

We estimate that the Central Valley region has 45.5% of California's animal slaughtering and processing (AS&P) industry jobs—despite having only about 11% of the state's population (see

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table 1.1).[2] Yet valley animal slaughtering and processing industry firms accounted for an even higher share of the state's industry inspections: 51.1% (see table 1.2). We estimate that the valley's per capita rate of AS&P inspections was highest among the state's ten regions. For every 1,000 employees in the AS&P industry, the valley had 7.9 inspections (see figure 1).

The vast majority of the valley's AS&P inspections were *unplanned*: accident, complaint or whistleblower-related. OSHA categorizes these inspections as those of highest risk and priority, suggesting higher worker health and safety non-compliance in the valley. In 2015-2020, while only one in nine (11%) of the state's *planned* inspections in AS&P were carried out in the valley, nearly two-thirds (64.8%) of the state's unplanned inspections were carried out in valley. The valley had more unplanned inspections than all other regions combined.

Lastly, the valley exhibited some of the lowest rates of industry enforcement in the state. Almost every other California region averaged two or more violations per inspection. However, the Central Valley averaged only 1.3 violations per inspection—second-lowest in the state (with the exception of the Sierra, which only had two inspections and violations) (see table 3.1). The Central Valley's average violations per inspection (1.3) was far lower than that of Los Angeles (4.0) and the Bay Area (2.8), the regions with the next largest numbers of industry employees in the state.

IMPLICATIONS

As state policy-makers devise strategies for mitigating COVID-19 spread, it is important to consider the role of federal and state health and safety standards and enforcement. Recent investigative journalistic reports have indicated that critical, essential industries, such as food production, have been associated with large COVID-19 outbreaks—particularly in rural areas—due to a lack of worker health and safety.

Animal slaughter and food processing exhibits striking regional patterns in worker health and safety. The Central Valley has the largest share of animal slaughtering and processing industry employees in the state, more unplanned inspections than the rest of the state—but nearly the lowest rate of violations-per-inspection.
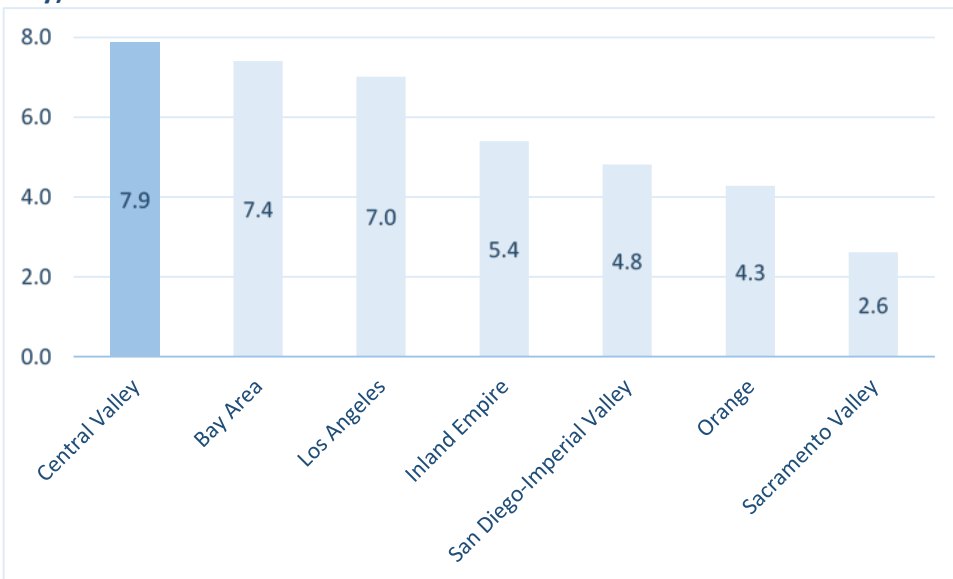
High-risk dynamics—the largest workforce, the highest rates of inspections associated with non-compliance, and the lowest rates of violations—are reflected in journalistic accounts of COVID-19 outbreaks among Central Valley animal slaughter and processing firms as well as in our data, suggesting that a large regional workforce is at high risk of health and safety non-compliance, lack of enforcement, and COVID-19 spread.

Emergency COVID-19 era workplace health and safety standards reform should thus address working conditions in regions and workers that are among the most vulnerable, such as Central Valley animal slaughter and processing workers.

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[2] The Central Valley consists of the following eight counties: Kern, Kings, Tulare, Fresno, Madera, Merced, Stanislaus and San Joaquin

Figure 1. Inspections per 1,000 Employees, Animal Slaughtering and Processing Industry (California only)

Region	Inspections per 1,000
Central Valley	7.9
Bay Area	7.4
Los Angeles	7.0
Inland Empire	5.4
San Diego-Imperial Valley	4.8
Orange	4.3
Sacramento Valley	2.6

Source: IPUMS-USA American Community Survey 2014-2018 Public Use Microdata Series (PUMS) data

Table 1.1 Animal Slaughtering and Processing Employees, by California Region

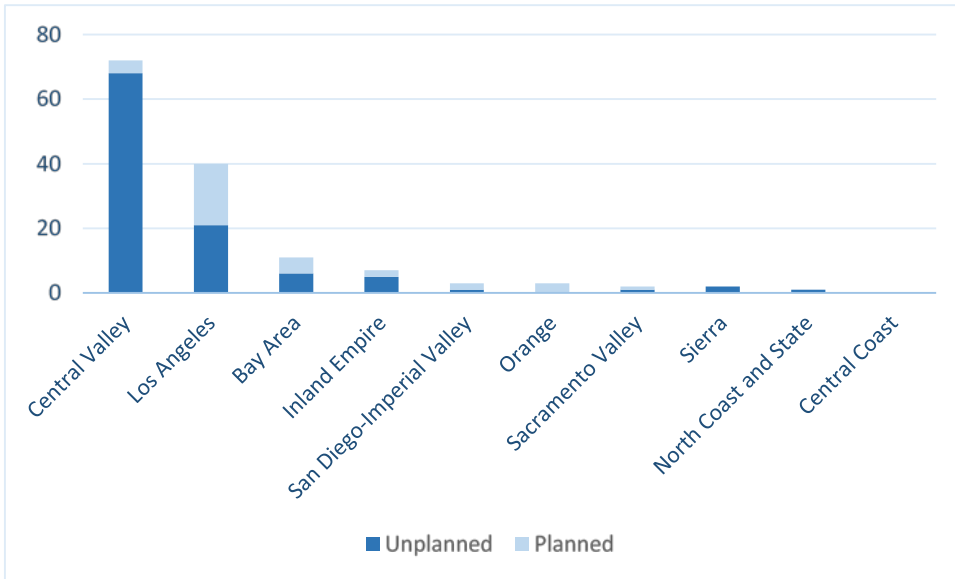|	Employees	
Region	Number	Percent
Central Valley	9,137	45.5%
Los Angeles	5,702	28.4%
Bay Area	1,485	7.4%
Inland Empire	1,297	6.5%
Sacramento Valley	766	3.8%
Orange	702	3.5%
San Diego-Imperial Valley	623	3.1%
Sierra	*	*
North Coast and State	*	*
Central Coast	*	*
Total	20,092	100.0%

*Percent reflected less than 2% of state total
Source: UC Merced Community and Labor Center analysis of IPUMS- USA American Community Survey 2014-2018 data
See:
https://www.osha.gov/pls/imis/industry.html

Table 1.2 Animal Slaughtering and Processing Inspections, by California Region

	Inspections	
Region	Number	Percent
Central Valley	72	51.1%
Los Angeles	40	28.4%
Bay Area	11	7.8%
Inland Empire	7	5.0%
San Diego-Imperial Valley	3	2.1%
Orange	3	2.1%
Sacramento Valley	2	1.4%
Sierra	2	1.4%
North Coast and State	1	0.7%
Central Coast	0	0.0%
Total	141	100.0%

Source: UC Merced Community and Labor Center analysis of US Department of Labor-Occupational Safety and Health Administration July 11, 2015- July 10, 2020 data
See:
https://www.osha.gov/pls/imis/industry.html

Figure 2. Unplanned versus Planned Inspections, Animal Slaughtering and Processing Industry (California only)

Source: UC Merced Community and Labor Center analysis of US Department of Labor- Occupational Safety and Health Administration 2015-2020 data
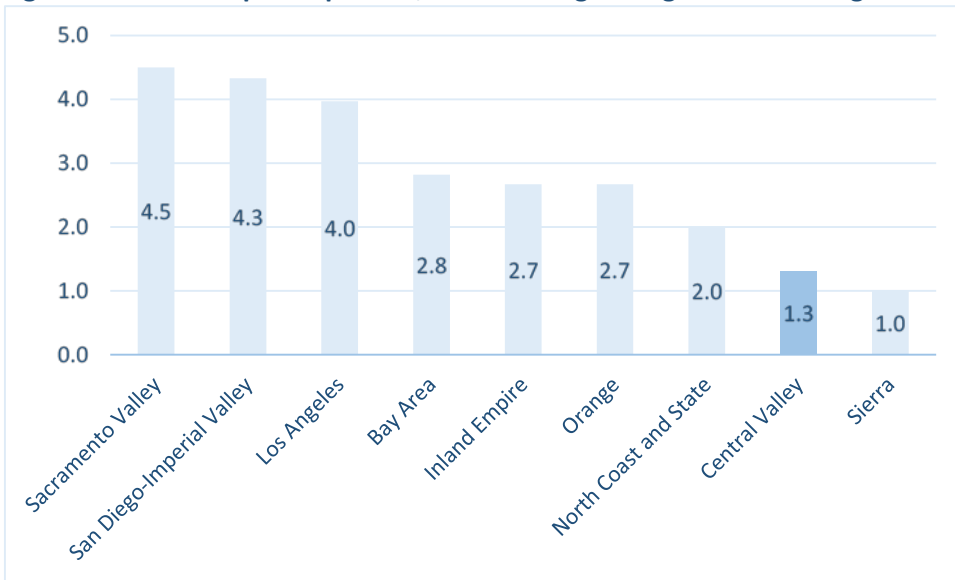
Table 2.1 Animal Slaughtering and Processing Industry Inspections, Planned and Unplanned, by California Region

	Planned		Unplanned	
Region	Number	Percent	Number	Percent
Central Valley	4	11.1%	68	64.8%
Los Angeles	19	52.8%	21	20.0%
Bay Area	5	13.9%	6	5.7%
Inland Empire	2	5.6%	5	4.8%
San Diego-Imperial Valley	2	5.6%	1	1.0%
Orange	3	8.3%	0	0.0%
Sacramento Valley	1	2.8%	1	1.0%
Sierra	0	0.0%	2	1.9%
North Coast and State	0	0.0%	1	1.0%
Central Coast	0	0.0%	0	0.0%
Total	36	100.0%	105	100.0%

Source: UC Merced Community and Labor Center analysis of US Department of Labor- Occupational Safety and Health Administration July 11, 2015- July 10, 2020 data
See: https://www.osha.gov/pls/imis/industry.html

Figure 3. Violations per Inspection, Animal Slaughtering and Processing Industry (California only)

Source: UC Merced Community and Labor Center analysis of US Department of Labor- Occupational Safety and Health Administration 2015-2020 data

Table 3.1 Animal Slaughtering and Processing Industry Violations per Inspection, by California Region

Region	Violations	Inspections	Average
Sacramento Valley	9	2	4.5
San Diego-Imperial Valley	13	3	4.3
Los Angeles	151	38	4.0
Bay Area	31	11	2.8
Inland Empire	16	6	2.7
Orange	8	3	2.7
North Coast and State	2	1	2.0
Central Valley	93	71	1.3
Sierra	2	2	1.0
Central Coast	0	0	0.0
Total	325	137	2.4

Source: UC Merced Community and Labor Center analysis of US Department of Labor- Occupational Safety and Health Administration July 11, 2015- July 10, 2020 data
See: https://www.osha.gov/pls/imis/industry.html