# DYINGat WORK in CALIFORNIA



## the **HIDDEN STORIES** behind the numbers

Workers Memorial Day April 28, 2017

## WORKSAFE

safety, health, and justice for workers seguridad, salud, y justicia para los trabajadores

#### **WORKERS MEMORIAL DAY: APRIL 28, 2017**

This report is released to mark Workers Memorial Day, a day of remembrance for workers killed and injured on the job. The event is observed around the world by surviving family members as well as health and safety activists in workplaces and communities. It coincides with the anniversary of the U.S. Occupational Safety and Health Act, which took effect on April 28, 1971.

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Worksafe is a California-based organization whose mission is to prevent injury, illness, and death by bringing justice to the workplace. We envision a world where workers and their communities are safe and healthy, and we are dedicated to eliminating all types of workplace hazards. We advocate for protective worker health and safety laws and effective remedies for injured workers. We watchdog government agencies to ensure they enforce these laws. We engage in campaigns in coalition with unions, workers, community, environmental and legal organizations, and scientists to eliminate hazards and toxic chemicals from the workplace.

#### **ACKNOWLEDGEMENTS**

This report is dedicated to the workers who died before their time in 2016 and to the countless family and community members who have been affected by preventable workplace tragedies.

Worksafe would like to thank those who made this report possible by contributing information, materials, assistance, and inspiration. Many thanks to:

AFL-CIO

Cal/OSHA

**Employee Rights Center** 

California Fatality Assessment and Control Evaluation (FACE) program

National Council for Occupational Safety and Health (National COSH)

National Day Laborer Organizing Network (NDLON)

Restaurant Opportunities Center—Los Angeles (ROC-LA)

Street Level Health Project

UC Berkeley Labor Occupational Health Program

UCLA Labor Occupational Safety and Health

Warehouse Worker Resource Center

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### INTRODUCTION

### First Mourn. Then Fight Like Hell for the Living!

ying at Work in
California is released
annually in conjunction
with Workers Memorial
Day, an international day of
remembrance for workers killed
and injured on the job. As in past
years, we produce this report:

- To bear witness to the human toll of unsafe work and unscrupulous employers
- ➤ To inform the public about threats to worker health and inspire collective action
- ➤ To exemplify the importance of publically available data on occupational health
- ▶ To celebrate recent advances and victories that have made workers safer

This year, these objectives feel particularly urgent.

Nationwide, 13 people are killed on the job each day and worker fatalities are higher than they have been in nearly a decade. We are facing imminent threats to existing worker protections, bracing for the potential of deep cuts to funding for



occupational health and safety enforcement, and confronting draconian immigration policies that put millions of workers at risk. Even the existence of publically available data is in jeopardy—as is respect for the truth the data reveal.

The progress we have made is clearly in peril, and the stakes have never been higher. Now more than ever, we need to come together to face these challenges

head-on. Our work cannot be separated from contemporary movements for racial, gender, and economic justice.

Worksafe envisions a world where every single worker returns home safe at the end of the day. With this vision in mind, we commit ourselves to another year of struggle: addressing the most pressing health and safety threats while contributing to the broader project of reimagining work itself—the workplace as a setting that promotes the health, dignity, creativity, and empowerment of all workers.

#### A NOTE REGARDING DATA

Dying at Work in California presents an overview of occupational injuries, illness, and fatalities based on the most recent data available from the US Bureau of Labor Statistics (BLS). Fatality data comes from the Census of Fatal Occupational Injuries (CFOI)—a collaborative effort between BLS and state agencies that was established in 1992. The most recent CFOI data was released in December 2016 and covers occupational fatalities that occurred during the 2015 calendar year.

Information about nonfatal occupational injuries and illnesses comes from the BLS Survey of Occupational Injuries and Illnesses (SOII). These numbers are derived from employers' Occupational Safety and Health Administration (OSHA) 300 logs—a document employers are required to keep that tracks incidents of workplace injury and illness. It is important to note, however, that not all employers are required to submit OSHA 300 logs. For example, federal agencies, farms that employ fewer than 11 workers, and households that employ domestic workers are exempt. This means that workers who are injured or made ill in these settings are typically left out of national statistics.

## 2015 DEATHS AND INJURIES IN CALIFORNIA WORKPLACES

In 2015, hundreds of California workers once again died before their time.<sup>1</sup> Each one leaves behind a family, a workplace, and a community forever changed by preventable tragedy. In addition, hundreds of thousands of California workers were injured or made ill because of their jobs.<sup>2</sup> In California in 2015:

- 388 workers were killed at work, up from 344 workers killed in 2014.
- The occupational fatality rate
  (that is, the number of deaths per
  100,000 full-time workers)\* rose
  10 percent from 2014 to 2015, increasing from
  2 0 to 2 2
- ► There were 471,000 reported work injuries, up from 461.000 in 2014.
- ► The occupational injury rate, 3.8 injuries per 100 workers, was unchanged from 2014 to 2015.

The rise in occupational fatalities from 2014 to 2015 is a cause for concern and a reason to redouble efforts to eliminate workplace hazards, as any increase in worker deaths is unacceptable. However, as in past years, California is still below the national fatality rate of 3.38 deaths per 100,000 full-time workers.

These figures significantly undercount the human toll of workplace hazards. Studies indicate that two out of three workplace injuries go unreported. Furthermore, fatality figures exclude virtually all deaths from occupational illness. The AFL-CIO estimates that each year 50,000 people die from occupational disease nationwide, more than twenty times the number of fatal injuries.<sup>3</sup>



#### **NOTABLE TRENDS**

Once again, the data allows us to see how workplace fatalities are distributed among different industries, occupations, and groups of workers.

- Latino/Hispanic workers comprise 36.5 percent of the California labor force but accounted for 46 percent of workplace fatalities in 2015.
- 178 Latino/Hispanic workers were killed on the job—a significant increase from 2014, when 130 Latino/Hispanic workers died.
- 2015 saw a huge spike in the fatality rate among agricultural workers, increasing from 8.2 in 2014 to 171 in 2015.
- 2015 was the deadliest year for construction since 2005. The fatality rate increased from 4.5 in 2014 to 6.8 in 2015.

These increases in Latino/Hispanic, agricultural, and construction worker deaths are all indicators of the disproportionate exposure to deadly workplace hazards faced by immigrant workers. We are deeply concerned that national immigration policy and policing will worsen this trend. A recent survey of injured day laborers by UCLA's Labor Occupational Safety and Health Program found that 62 percent

<sup>\*</sup> The occupational fatality rate reflects the number of deaths per 200 million hours worked, which is the equivalent of 100,000 full-time workers.

had experienced pressure from employers to work despite dangerous conditions.<sup>4</sup>

Worksafe cautions against overly broad conclusions reached by looking at data from the one or two years discussed in this report. However, this report, when combined with our prior reports, provides one primary takeaway: while there have certainly been advances and victories in preventing worker deaths in California in recent years, especially compared to many other states, the sad reality is that workers are dying from the same things they have been dying from for years.

## POLICY IMPACTS WORKER HEALTH AND SAFETY

## State Enforcement of Health and Safety Laws

California has a state-administered occupational health and safety plan, the Department of Industrial Relations, Division of Occupational Safety and Health, or "Cal/OSHA." Cal/OSHA is responsible for inspecting workplaces and enforcing health and safety laws, provides compliance and training assistance to employers, and develops health and safety standards. Cal/OSHA has made strides in increasing the number of inspectors, as Worksafe has recommended in previous reports. However, the ratio of inspectors to workers is still well below levels nationally. The agency also faces bureaucratic barriers to filling vacancies in the hiring process, which creates an ongoing risk that significant inspection capacity could be lost due to attrition.

Cal/OSHA still needs more bilingual inspectors, especially Spanish speakers, to effectively engage with an increasingly diverse California workforce. Spanish-speaking immigrant workers face disproportionate health and safety risks, and Cal/OSHA needs to catch up with this need. Workers would also benefit from increased agency capacity to conduct health inspections to protect workers from exposures that lead to occupational illness.



Cal/OSHA, along with California's Occupational Safety and Health Standards Board, have ambitious but necessary agendas in standards development. It is important that these agencies have the resources to develop standards, as well as the training and procedures needed to implement them, on a timely basis.

The Labor Commissioner's Office, also known as the Division of Labor Enforcement Standards, is responsible for enforcement of the anti-retaliation provisions of California's occupational safety and health laws. The average time required for it to complete an investigation has increased from 363 days in federal fiscal year (FY) 2014 to 422 days in FY 2015. The percentage of cases completed in 90 days fell from 21 percent of cases to just 7 percent. It is critical to worker safety and health that workers are free from retaliation for reporting hazardous

conditions in the workplace. Ensuring this right can be meaningfully exercised requires prompt and effective investigations.

#### Federal Policy Affecting California

Although California's state plan buffers it from some changes in federal policy, the Trump Administration has set off multiple alarms in occupational safety and health by announcing policies that if implemented will endanger workers, including Californians. The Trump Administration has proposed a 21 percent reduction in the budget of the Department of Labor, the complete elimination of OSHA's Susan Harwood Training Grants, and the elimination of the Chemical Safety Board. It has also used the Congressional Review Act to nullify the so-called "Volks" Rule, which would have clarified that the maintenance of accurate injury records is a continuing employer obligation, and delayed implementation of a new beryllium exposure standard and enforcement of the new silica standard in construction.

Harwood Grants have provided health and safety training to over 2 million workers since the program began. Multiple organizations in California receive Harwood funds, including the Garment Worker Center, the Port of San Diego Shop Repair Association, both UC Berkeley's Labor Occupational Health Program and UCLA's Labor Occupational Safety and Health Program, the State Building and Construction Trades Council, Asian Health Services, the National Day Laborer Organizing Network, California Rural Legal Assistance, and Asian Immigrant Women Advocates. Worksafe also receives a sub-grant through the National Council for Occupational Safety and Health. Funding cuts will have a direct impact on California's low-wage and immigrant workers and workers in high-risk industries.

Labor Department cuts could also affect California's federal OSHA grant. California receives about a third of OSHA's \$100 million state grant budget, and would need to find the resources to compensate for any cuts.

California needs to be a counterpoint to any rollback of federal standards. It should adopt all federal standards that protect workers regardless of whether the Administration delays or nullifies them. California's Congressional delegation needs to fight for full funding for both OSHA and the Chemical Safety Board.

#### RECOMMENDATIONS

- Prioritize research on occupational injury and illness among low-wage and immigrant workers, and invest resources to address the needs of these underserved communities.
- Address coverage gaps in occupational safety and health protections and workers' compensation.
- Encourage workers to be active participants in ensuring they have safe and healthful workplaces, and develop a more robust response to employer retaliation.
- Address the ongoing tragedy of needless deaths from slips, trips and falls by updating California's fall protection standard in California.
- Complete updates to health standards so that they catch up with science.
- Complete the standard making process for indoor heat protection and for general industry workplace violence.

#### SOURCES:

[1] Census of Fatal Occupational Injuries (CFOI). California Department of Industrial Relations https://www.dir.ca.gov/oprl/CFOI/index.htm.

[2] Nonfatal Occupational Injuries and Illnesses in California. California Department of Industrial Relations https://www.dir.ca.gov/oprl/nonfatal.htm.

[3] Death on the Job: The Toll of Neglect. AFL-CIO Safety and Health Department; 2016. https://aflcio.org/sites/default/files/2017-03/1647\_DOTJ2016\_0.pdf.

[4] On-the-Job Injuries and Workers' Compensation Eligibility among Day Laborers in Residential Worksites in California. UCLA Labor Occupational Safety and Health Program, National Day Laborer Organizing Network; 2017. <a href="http://losh.ucla.edu/wp-content/uploads/sites/37/2016/01/On-The-Job-Injuries-And-Day-Laborers-April-2017.pdf">http://losh.ucla.edu/wp-content/uploads/sites/37/2016/01/On-The-Job-Injuries-And-Day-Laborers-April-2017.pdf</a>.

## I. Overview of Injuries, Illnesses, and Deaths in California

"Statistics are people with the tears wiped away." -Dr. Irving J. Selikoff

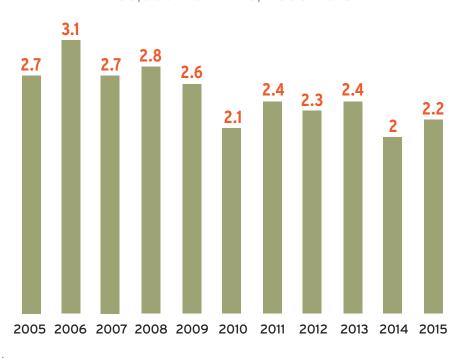
### **Occupational Fatalities**

here were 388 Californians killed on the job in 2015. This is an increase from 2014, when 344 workers died at work. There was also an increase in the rate of fatal injuries, which reflects the number of deaths per 100,000 full-time workers. The California worker fatality rate rose 10 percent from 2014 to 2015, increasing from 2.0 to 2.2.

As in past years, transportation incidents were the most common cause of death for California workers in 2015, comprising 39 percent of all occupational fatalities. 150 workers died in vehicular-related incidents, and 108 of these deaths were on public roadways.

The second leading cause of death was violence and other injuries by persons or animals, accounting for 20 percent of all fatalities. This category is the leading cause of death for female workers. Of these 77 deaths, 45 were the result of homicides and 28 were suicides. Workplace homicides in 2015 account for 12

CALIFORNIA OCCUPATIONAL FATALITY RATE PER 100.000 WORKERS, 2005-2015



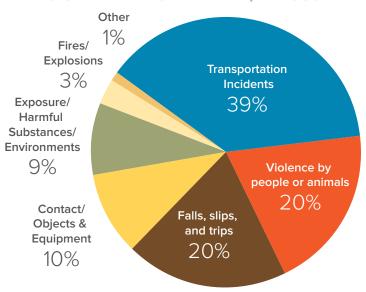
percent of all workplace deaths in the state.

Falls, slips, and trips also killed 77 workers, making up another 20 percent of the total. This category is a leading cause of death in construction, repair and installation, and building and grounds maintenance—jobs often filled by immigrant workers and day laborers.

48 of the 388 Californians who died on the job in 2015 were killed in multi-fatality incidents. There were 13 such incidents in 2015 including four farm vehicle collisions, four small aircraft crashes, and four multi-victim workplace homicides, including the December 2015 mass shooting of public employees in San Bernardino. By contrast, there were six multi-fatality incidents in 2014 that resulted in 17 fatalities.

<sup>\*</sup> While fatality rates can seem to depersonalize the tragedy of worker deaths, rates help normalize for year-to-year changes in economic activity and employment levels, which makes it easier to compare data from different years, see trends, and identify possible explanations for why workers are dying.

#### **2015 FATALITIES BY EVENT/EXPOSURE**



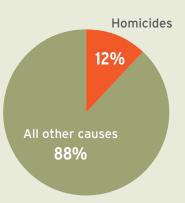
#### **Deaths from Workplace Homicides**



William Klug, 39, was a professor of mechanical and aerospace engineering at the University of California, Los Angeles. On June 1, 2016, William was in his campus office when he was shot and killed by a former graduate student who then took his own life.

was placed on lockdown for two days following the shooting. William had just begun his career in academia and was well regarded by colleagues and students. He leaves behind a wife and two young children.

The campus

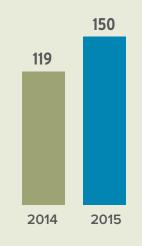


#### Deaths from Workplace Transportation Incidents

Warren Smale, 43, passed away on February 23, 2016, from injuries sustained in a vehicle crash while working as a salesman at CarMax in Ontario, CA. War-



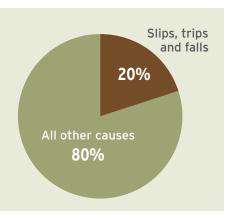
ren was accompanying a customer on a vehicle test-drive when the car crashed into a pole and tree. The customer who was driving the vehicle had a suspended license and was under the influence of multiple prescription medications. Warren is remembered for his generous spirit, philanthropy, and commitment to his family, friends, and coworkers.



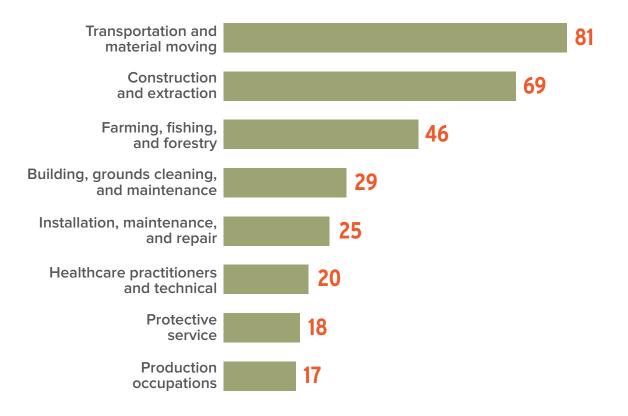
#### Deaths from Workplace Falls, Slips, and Trips



Orlando Segura-Bailon, 50, was killed on July 25, 2016, when he fell off a truck as he was unloading a bundle of wood using a pallet jack. The wood and pallet jack fell on top him and he was pronounced dead at the scene. Orlando migrated to the United States from Mexico in 1986, met his wife and settled in Riverside. Orlando was loved by many and is survived by his wife, four children, any many friends.



#### 2015 OCCUPATIONS WITH THE HIGHEST NUMBER OF FATALITIES



There was a significant increase in construction deaths in 2015. The fatality rate in the construction industry went up by 34 percent, increasing from 4.5 in 2014 to 6.8 in 2015. In fact, 2015 had the highest fatality rate for construction since 2005. The increase is attributable to deaths due to transportation incidents and falls, slips, and trips.

2015 also saw a spike in the fatality rate among agricultural workers (agriculture, forestry, fishing and hunting), increasing from 8.2 in 2014 to 17.1 in 2015. The increase was primarily the result of transportation incidents: in January five male farmworkers were killed while being transported to work by van, and in June three female farmworkers were killed while being transported home from work by van.

There was also some news of improvement in the 2015 California numbers. The fatal work injury rate dropped significantly in the transportation and utilities industry, from 7.9 in 2014 to 4.9 in 2015.

#### Death of a Construction Worker



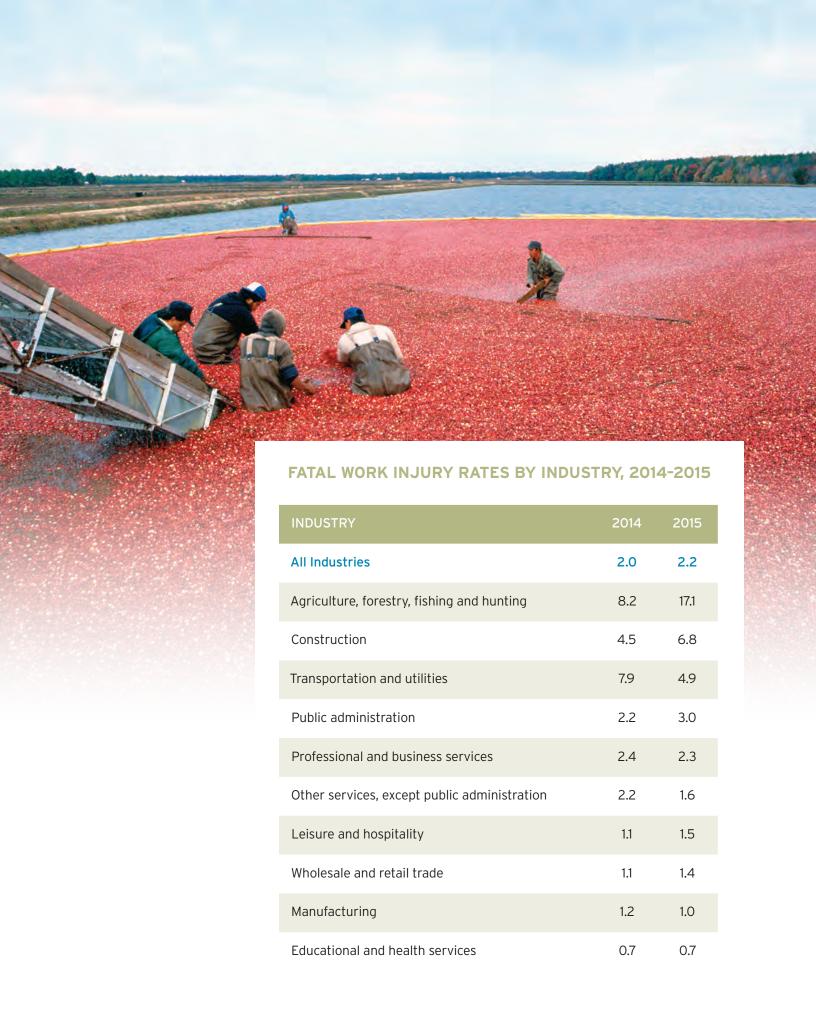
Jose Luis Delgado Lopez, 34, was killed on November 15, 2015, when he fell down six stories while working on a construction site in Sunnyvale. Jose worked in construction for many years in order to support his growing family, and was

working for a subcontractor providing

concrete reinforcement at the time of his death.

Jose was an avid sports fan, a loving husband, and a proud father of three young children.





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#### **DEMOGRAPHICS**

#### Race/Ethnicity

Workers identified as white made up 43 percent of those killed on the job, workers identified as Black constituted 3 percent, and those identified as Asian comprised 7 percent. As in previous years, Latino/Hispanic workers were killed in strikingly disproportionate numbers, making up almost half (46 percent) of total fatalities, despite comprising just 36.5 percent of the total working population. 178 Latino/Hispanic workers were killed on the job in 2015. This is a significant increase from 2014, when 130 Latino/Hispanic workers died on the job.

#### Age

Of the 388 workers who died at work in 2015, 29 (7.5 percent) were young workers—those under the age of 25. By contrast, 46 (11.9 percent) were over the age of 65.

#### Workplace Death of a Young Worker

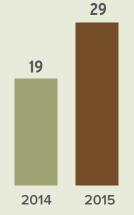
William "Billy" Nguyen, 19, was a San Jose State



sophomore who drowned while working as a student assistant in the university's Outdoor Adventures program. As a freshman he took a year-long training course to become a group leader in the program. On September 17, 2016, while on a university-sponsored trip, he went swimming with a group of student backpackers in Eagle Lake, Sequoia National Park. They were

swimming to a rock outcropping in the lake when at some point the others noticed Nguyen was no longer with the group. His body was recovered by park rangers the next day.

DEATHS OF WORKERS AGE 16-24



#### Workplace Death of an Older Worker

Alfred White, 80, was killed while moving a truck at a



San Diego U-Haul where he worked as a lot attendant. White exited a box truck he was parking when the truck, in reverse gear, backed into him. He was struck by the open cab door, knocked to the ground, and run over by the front left wheel of the truck. In his free time, White, a father and husband,

volunteered teaching kids how to bowl at the Mira Mesa Lanes bowling alley, where he was known as "coach."

> DEATHS OF WORKERS AGE 65 AND OLDER



#### Gender

Of the 388 workers killed in California, 361 (93 percent) are identified as male and 27 (7 percent) are identified as female. Transportation incidents were the leading cause of death among men, while violence was the leading cause of death among women.

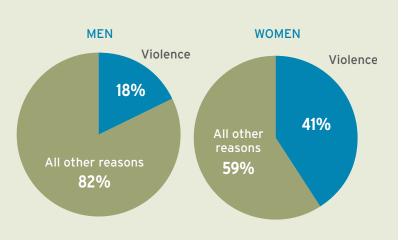
#### Deaths from Workplace Violence, by Gender



**Mitzi Campbell, 58,** passed away on June 10, 2016, after being stabbed by two strangers while flagging traffic at a construction site in San Francisco. The incident occurred after an

altercation over the use of a portable restroom on the worksite. Although coworkers rushed to her aid, Mitzi died on the way

to the hospital. She is remembered as a caring and loving woman, a proud member of Laborers' Local 261, a huge Warriors fan, and a devoted grandmother.



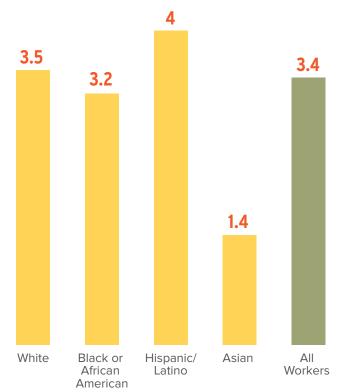
#### NATIONAL SNAPSHOT

2015 saw an increase in workplace fatalities across the nation. 4,836 people lost their lives at work during the year—about 13 deaths per day. This was the highest number of worker fatalities since 2008 when 5,214 workers died in the workplace.

As in previous years, the occupational fatality rate varied considerably between racial/ethnic groups, and the disproportionate number of Latino/ Hispanic deaths continues to be alarming. In 2015, the overall fatality rate was 3.4 deaths per 100,000 full-time workers. Among Latino/Hispanic workers, however, the fatality rate was 4.0 deaths. 903 Latino/Hispanic workers were killed at work in 2015—the most fatalities for this group since 2007.

The number of fatally injured workers born in Mexico rose 22 percent in 2015—increasing from 340 cases in 2014 to 415 cases in 2015. In addition, fatal injuries affecting foreign born workers were at their highest level since 2007 with deceased workers coming from 100 different countries.

#### FATAL WORK INJURY RATES BY RACE/ETHNICITY, 2015



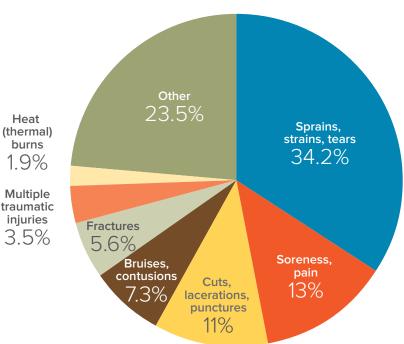
### Occupational Injuries and Illness in California

n 2015 there were 471,000 reported cases of nonfatal work injury and illness, up from 461,000 in 2014. The injury rate, 3.8 injuries per 100 workers (using 200,000 hours worked as the equivalent of 100 full-time employees), was unchanged from 2014 to 2015.

The rate of reported injuries involving lost days from work, job transfer, or restricted duty also remained unchanged at 2.2 per 100 workers, although the number increased from 265,000 to 274,000. National reported injury rates are lower than California's, although significant underreporting of injuries makes comparisons difficult.

There were 30,000 reported cases of nonfatal work-related illness in 2015, with a rate of 24.0 cases per 10,000 full-time workers. The four major categories of illness were skin diseases or disorders (17 percent), respiratory conditions (6 percent), hearing loss (4 percent), and poisonings (2 percent). Together, these four areas account for only a fraction of all reported cases of illnesses, with no information available on the remaining 70 percent of illnesses. This means we do not know why over 20,000 California workers are getting sick on the job each year.

## 2015 DAYS-AWAY INJURY AND ILLNESS CHARACTERISTICS, PRIVATE INDUSTRY



#### THE HIGH COSTS OF UNSAFE WORK

State-level workers' compensation systems were created to keep employers accountable and cover lost wages and medical expenses for injured workers. The 2016 Liberty Mutual Safety Index finds that nationally, injuries cost \$62 billion per year in compensation claims alone. A 2013 study calculates that the total cost of occupational injuries and illness is closer to \$250 billion per year.<sup>3</sup>

In other words, however, workers' compensation payments offset just a fraction of the total cost of worker injury and illness. Nearly two-thirds (63 percent) of all associated costs (e.g. lost wages and medical expenses) are borne by injured workers, their families, and their private health insurance. The remainder is passed along to federal, state, and local governments that provide support through programs like Social Security Disability Insurance. In effect, injured and ill workers, their families, and taxpayers subsidize the costs of work injury and illness while high hazard employers remain largely unaccountable.<sup>2</sup>



## UNDERCOUNTING AND UNDERREPORTING

Occupational injuries, illnesses, and fatalities are chronically undercounted. Incredibly, there is no single data source that provides a complete account of occupational injury. This means that the numbers presented here—as staggering as they are—represent just the tip of the iceberg. There are several reasons for this, for example:

Employers may fail to document injuries. Employers may skirt labor law and fail to report injuries through the proper channels. Furthermore, as mentioned above, some employers are exempt from these reporting mandates in the first place.

Workers may not report injuries or illnesses. A survey of low-wage workers in Los Angeles, New York, and Chicago found that only 8 percent of injured workers filed a workers' compensation claim. There are a variety of reasons for this: workers facing economic insecurity may be less likely to report an injury, employers may respond negatively or retaliate against injured workers, and workers themselves may not always recognize the connection between their symptoms and work. Even if they do, injured workers may not know their rights or the benefits they are owed.

Occupational illness is routinely missed. These data sources tend to reflect acute incidents rather than injuries or illnesses that develop over time. Furthermore, the causal connection between workplace exposures and illness is not always apparent to workers. Diseases and chronic illnesses that are caused by workplace exposures, like cancer, may have long latency periods. This means workers may experience late, missed, or improper diagnoses. In fact, it is estimated that just 3 percent of workers with job-related illness receive workers' compensation benefits.<sup>2</sup>

#### **SOURCES:**

[1] Riley K, Morier D. Patterns of Work-Related Injury and Common Injury Experiences of Workers in the Low-Wage Labor Market. UCLA Labor Occupational Safety and Health Program <a href="http://www.irle.ucla.edu/old/publications/documents/Patterns\_Work\_Related\_Injury.pdf">http://www.irle.ucla.edu/old/publications/documents/Patterns\_Work\_Related\_Injury.pdf</a>.

[2] Michaels D. Adding Inequality to Injury: The Costs of Failing to Protect Workers on the Job. Occupational Safety & Health Administration, US Department of Labor; 2015. <a href="https://www.dol.gov/osha/report/20150304-inequality.pdf">https://www.dol.gov/osha/report/20150304-inequality.pdf</a>.

[3] Leigh JP. Economic Burden of Occupational Injury and Illness in the United States. Milbank Quarterly. 2011;89(4):728-772. doi:10.1111/j.1468-0009.2011.00648.x.

## II. Special Topics in California Worker Health and Safety

## Voiceless Pain: The Effects of Immigration Policy on Working Conditions

By Alor Calderon, Employee Rights Center

aving the privilege of working for the last 15 years at a worker center like the Employee Rights Center (ERC) has given me the opportunity to see some things that remain hidden from the general public. For instance, it is very evident that federal immigration policy has a direct effect on working conditions at the local level. Just yesterday, an injured fast food worker, a woman in her thirties, came to the ERC requesting legal assistance. She has permission to work in the United States, but her coworkers do not. That meant her headache, solid red eyes, and burning skin went unreported until she could not take the pain any longer. Her employer is using a cleaning substance that, in unventilated areas, has those effects on the cleaning crew.

This situation exemplifies a common occurrence at the ERC. Workers with injuries, sometimes with chronic pain, are so certain their employer will take retaliatory action against them and their coworkers that they delay or do not report unsafe working conditions or work injuries. In order words, the fear of retaliation by the employer extends way beyond the injured worker. It reaches everybody who is perceived to be vulnerable at work, and lack of immigration status is the primary reason people include themselves in that category.

In addition, many of our callers and clients feel that employers are exempt from any kind of liability or repercussion. Even in extreme cases, where an injured worker is in severe pain and the employer insists that he or she continue working, people believe employers will not suffer any consequences for those kinds of actions. A common refrain



heard from workers about their employers is: "My employer said, 'What are you going to do to me? I'm the boss. You are nobody here."

The effect of this culture of fear is that workers are not able to voice their concerns about unsafe working conditions. This invariably leads to an increase in preventable work injuries. Unfortunately, apprehension about immigration enforcement and a massive increase in deportations is at an all time high. In addition, the federal government is proposing substantial cuts from Department of Labor's budget and it is easing reporting requirements from employers in relation to work injuries. Unless we take collective action to reverse this trend, too many workers will suffer from injuries that were always preventable.

The Employee Rights Center offers all San Diego area workers, especially disadvantaged workers without union representation, education and advocacy regarding workplace issues. It is the only nonprofit organization in the area that offers legal services regarding employment and labor law.

## Promoting Health Equity for California's Day Laborers

By Jae Maldonado, Street Level Health Project

ay laborers have long been a part of California's economic system, and yet they are among the most vulnerable workers in California, their work is often undervalued, and labor and employment protections for them are scant. Street Level Health Project (SLHP) is one of a handful of Bay Area worker centers that provide much needed services to day laborers in the Fruitvale/Oakland area, which is estimated to be the fourth largest hub for day laborers in the state.

The everyday life of a day laborer is extremely stressful with workers being hired for temporary jobs that can last anywhere from a few hours to a few days. Lack of workplace safety is a critical problem for day laborers who are hired to perform some of the most dangerous jobs at a worksite with weak accompanying enforcement of health and safety laws. They often work with substandard equipment or lack basic safety protections such as gloves and masks. Many lack experience with the dangerous work they undertake, and employers often fail to train them properly, if at all.

Year after year, Worksafe's *Dying at Work* report and the AFL-CIO's *Death on the Job* report have identified low-wage Latino workers as experiencing the highest rate of fatalities and injuries despite the fact that they are a smaller proportion of the Californian workforce. In fact, Oakland has the highest incidence of day labor workplace injury in the state: one out of every three day laborers suffered a workplace injury.

On top of this, day laborers also face a multitude of barriers that limit opportunities for self-sufficiency and expose recently arrived immigrants to exploitative work environments. Because of this great need, SLHP uses a Whole Person Care Model<sup>1</sup> to triage day laborers, 93 percent of whom are foreign-born and nearly half (43 percent) of



whom have lived in the U.S. for less than three years. The Whole Person Care Model coordinates health, behavioral health, and social services to ensure a holistic approach to care.

It has long been understood that a worker's mental health plays a key role in ensuring their resilience to address everyday stress. Understanding this, SLHP leveraged our collaboration project with Worksafe and Centro Legal de la Raza, "Safe and Secure Jobs for Day Laborers," to initiate research through Stanford's Leadership Education for Aspiring Physicians program. This collaborative research explored the mental health needs of day laborers who are impacted by psychological and physical threats associated with extreme poverty, emotional trauma, informal and uncertain labor markets, threats to their immigration status, access to health insurance, workplace training, and language access.

Through this study, we surveyed 100 day laborers in Oakland incorporating the Adverse Childhood Experiences (ACE) tool to identify stressors including childhood trauma and working



conditions that day laborers may face. Survey results revealed:

- ▶ 33 percent of respondents reported an ACE score of higher than 4, which indicates a level of trauma exposure that can have significant physical and emotional health consequences
- ▶ 51 percent cited violence or threat of violence in their home country as primary reasons for their decision to migrate to California.

When asked about dangers in their employment, workers reported wide-scale health and safety problems. For example:

- 55 percent of workers reported lack of drinking water or bathrooms;
- ▶ 53 percent reported issues related to wage theft and long hours, often without a break; and
- ▶ 67 percent reported that they had experienced a range of physical trauma such as working in extreme temperature and noise, slipping, falling, or being burned on the job.

SLHP is currently utilizing the results of this information to develop models that include behavioral and mental health services for day

laborers as well as to inform us of possible reform policy. It is unlikely that any one policy response, ordinance, or community-based organization will resolve the conflicts between day labor markets and corporate interest. But a combination of policies that enhance protective factors in the workplace and create opportunities for workforce development with support from community organizations like SLHP can encourage better working conditions and provide equitable paths to self-sufficiency and overall health equity for day laborers.

Street Level Health Project is an Oakland-based community center dedicated to improving the wellbeing of underinsured, uninsured, and recently arrived immigrants in Alameda County. Street Level Health is supported by caring individuals who believe that occupational health is a human right.

#### SOURCE:

[1] "Services." Whole Person Care Pilots. California Department of Healthcare Services, 13 May 2016. Web. 22 Sept. 2016. http://www.dhcs.ca.gov/services/Pages/WholePersonCarePilots.

### Ensuring Protections for Residential Day Laborers in California

By Kevin Riley, UCLA Labor Occupational Safety and Health (LOSH)

alifornia homeowners often hire day laborers to perform construction, maintenance, moving, and landscaping tasks in and around their private homes. These residential work settings may present a variety of hazards to workers and pose the potential for serious injury. Studies have found that as many as one in five day laborers suffer serious work-related injuries each year.<sup>1</sup>

Twenty-six states have legal provisions that extend workers' compensation coverage to workers such as day laborers employed directly by homeowners. California is the only state with both worktime and earnings thresholds for workers' compensation eligibility for these "residential employees." Specifically, workers are eligible for compensation if they have worked 52 hours or more for the homeowner-employer in the 90 days preceding injury and have earned \$100 or more in wages.

Yet, day laborers face many barriers to accessing these resources. Homeowners and workers may be unaware of these legal requirements, confused by the eligibility thresholds, and/or unclear about the rights of workers with undocumented immigration status. Some employers may also actively deny benefits to injured employees.

Recent research by the UCLA Labor Occupational Safety and Health Program (UCLA-LOSH) and the National Day Laborer Organizing Network (NDLON) has examined the injury experiences of day laborers in residential settings in California and their potential eligibility for workers' compensation. Interviews with 64 day laborers who were injured while working at residential worksites in the past five years show that:

The injuries day laborers sustain at residential worksites can be serious in nature. Respondents most often described musculoskeletal injuries crippling pain in the back, arms, legs, neck, or

- shoulders—followed by cuts/lacerations and broken bones. Three-quarters of respondents missed work as a result of their injuries, and 70 percent sought medical attention.
- Injuries sustained at residential worksites result in substantial costs to workers and their families. One-third of respondents said they had to pay their own medical bills. Half of respondents spent \$55 or more on medical bills; the most a respondent in our sample spent was \$15,000. Many respondents also lost work days as a result of injury, and 82 percent were never paid for lost work time. Half of respondents lost 7 days or more from work; the most time lost was 3 years.
- ▶ Few workers injured in residential settings in California benefit from workers' compensation resources. We estimate that one-third of respondents employed by homeowners at the time of injury were likely eligible for workers' compensation; an additional 26 percent were eligible through contractor-employers. Only 5 percent indicated that workers' compensation paid for medical bills or lost work time.

Our research points to the need for effective policies and programs to both prevent debilitating injuries to residential day laborers and to promote greater access to compensation. Enacting measures such as Assembly Bill 206, which would simplify workers' compensation eligibility for residential employees in California, is an important step in extending a valuable resource to reach more workers in need

<u>UCLA-LOSH</u> works with the most vulnerable workers to promote health and safety in the workplace. LOSH staff train and educate workers, conduct research and promote collaboration among government officials, employers, unions and the community to improve conditions that are unhealthy for all.

#### SOURCE:

[1] Valenzuela A. On the Corner: Day Labor in the United States. UCLA Center for the Study of Urban Poverty, Los Angeles, CA; 2006.

## Temp Workers Need Economic Security and Workplace Safety

By Worksafe Staff

he use of temporary and contingent
workers has skyrocketed in recent decades.
Almost one-fifth of total job growth since
the end of the recession in 2009 is in the
temporary sector, and there are now nearly three
million temp workers the American labor force.¹
Unfortunately, this sector is riddled with unfair and
unsafe labor practices, and temp workers are being
placed at risk while employers skirt responsibility.

Temp workers earn as much as 30 percent less than their permanent counterparts, are far less likely to receive health benefits, and are more likely to live in poverty. Approximately 65 percent of temp workers are non-white and/or Hispanic compared to 56 percent of non-temp workers.<sup>2</sup> Temp workers are being used in a variety of industries—from professional white collar jobs like nursing and accounting to blue collar jobs like manufacturing, warehousing, and transportation.

The temp worker boom reflects the changing nature of employment. It has become increasingly common for companies to keep their employees at arms length—using subcontractors and temporary staffing agencies to supply them with cheap and replaceable labor. Using intermediaries this way obscures the relationship between employer and employee, making it all too easy for companies to pass the buck when accused of labor infractions. The result has stagnated wages, decreased the stability of employment, and shifted the burdens of workplace risk onto workers.

Temp workers are often assigned to the most dangerous jobs but receive insufficient safety training and equipment. A recent report found that the incidence of workplace injuries was between 36 and 72 percent higher for temp workers than for permanent workers.<sup>3</sup> In addition, temp workers may experience heightened job stress and its adverse health consequences as a result of their precarious

employment. This is made worse by the fact that they tend to have less access to health insurance and workers' compensation benefits.

Furthermore, recently released data shows that 17 percent of the workers killed on the job in 2015 had been contracted and were performing work for another business or entity rather than for their direct employer at the time of death.<sup>4</sup> While it is unknown how many of these contracted workers were temporary workers, the statistic is staggering.

Despite being one of the fastest growing sectors in California, temp workers are vastly unrepresented in worker advocacy efforts in the state. The Warehouse Worker Resource Center (WWRC) is currently the only organization primarily focused on education, outreach, and policy advocacy for temp workers. Worksafe has partnered with WWRC to advance the issues of temp workers, and we have launched a new collaborative project: "Economic Security and Workplace Safety for Temporary and Contingent Workers."

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[1] Grabell M. The Expendables: How the Temps Who Power Corporate Giants Are Getting Crushed. ProPublica. http://www.propublica.org/article/the-expendables-how-the-temps-who-power-corporate-giants-are-getting-crushe. Published June 27, 2013.

[2] Dietz M. Temporary Workers in California Are Twice as Likely as Non-Temps to Live in Poverty: Problems with Temporary and Subcontracted Work in California. UC Berkeley Labor Center; 2012. http://laborcenter.berkeley.edu/pdf/2012/temp\_workers.pdf.

[3] Pierce O, Larson J, Grabell M. How We Calculated Injury Rates for Temp and Non-Temp Workers. ProPublica. https://www.propublica.org/nerds/item/how-we-calculated-injury-rates-for-temp-and-non-temp-workers. Published December 18, 2013.

[4] Census of Fatal Occupational Injuries Summary, 2015. US Bureau of Labor Statistics; 2016. <a href="https://www.bls.gov/news.release/cfoi.nr0.htm">https://www.bls.gov/news.release/cfoi.nr0.htm</a>.

### Violent Death and Injury: Unacceptable in Any Job

By Worksafe Staff

n 2016, California became the first state in the nation to pass a regulation aimed to protect health care workers from workplace violence (WPV). During the campaign that led to this groundbreaking new standard, dozens of workers courageously shared personal stories of workplace violence—accounts of being verbally assaulted, threatened, and even physically battered while at work. Many testified that workplace violence can simply no longer be tolerated as a

part of the job. All of them echoed the need for a workplace violence prevention standard that includes interactive training, prevention procedures, and response protocols.

Workplace violence is a huge and unavoidable presence in the lives of many workers, making up a significant fraction of injuries and fatalities. In 2015, WPV accounted for 20 percent of workplace fatalities, and fatalities are just the tip of the iceberg. It is hard to estimate the true impact of the injuries caused by workplace violence because these incidents are known to be underreported. For many workers, the fear of retaliation or losing their job influences their decision not to report a violent incident at work. It is very difficult to overcome the stigma associated with WPV, which in turn creates a disincentive for people to share their experiences. Finally, this does not take into account injuries caused by workplace violence, nor the physical, emotional, and mental trauma that follows any violent incident.

Despite its prevalence, there is no specific standard on workplace violence prevention for industries outside healthcare. Cal/OSHA is currently considering a general workplace violence standard—but the first draft of the standard, under pressure from industry lobbyists, only specifies protections for workers in six industries: medical,



mental health, teaching, law enforcement, retail, and transportation. Workplace violence is prevalent in a number of sectors that pay low wages and mainly employ immigrants and people of color, such as agriculture, food processing, or hotel housekeeping. Sexual assault and harassment, a pernicious and destructive form of workplace violence, is also prevalent in these industries (See "Low wage workers say 'Ya Basta!' to sexual harassment and assault" in this report for a more in-depth discussion of sexual assault on the job.) A standard that doesn't protect workers in these industries would continue to leave people of color, immigrants, women, and other low-wage workers exposed to preventable violence.

Worksafe therefore strongly supports support a general WPV standard with a broad scope.

On January 12, 2017, the California Occupational Safety and Health Standard Board held its first advisory committee to begin the process of developing a general industry standard to protect all workers from workplace violence. This is a uniquely important opportunity to guarantee that people who work in our state and are immigrant, undocumented, and women will receive the same protections as any other worker in our state.

#### SOURCES:

[1] Census of Fatal Occupational Injuries (CFOI). California Department of Industrial Relations <a href="https://www.dir.ca.gov/oprl/CFOI/index.htm">https://www.dir.ca.gov/oprl/CFOI/index.htm</a>.

### Low-Wage Workers Say "Ya Basta" to Sexual Harassment and Assault

By Alejandra Domenzain, UC Berkeley Labor Occupational Health Program (LOHP)

exual harassment at work is not new.
What is new is exciting worker-led organizing and advocacy confronting the issue head-on in low-wage industries.

Take SEIU-USWW's historic victories in California this past year. After identifying sexual violence as a core issue facing members, the union: supported extensive leadership development for workers to become *promotoras*, or peer educators; won union contract language in major cities mandating increased protections; and worked to pass AB 1978, which makes sexual harassment training for all employees a condition for obtaining and renewing a janitorial business license.

As exciting as what they did is how they did it: worker leaders, many of them survivors of assault, were front and center in the activism, which even included a hunger strike in Sacramento.

UC Berkeley Labor Occupational Health Program (LOHP) and Worksafe are proud to support this work as members of Ya Basta (Enough Already), a statewide coalition of anti-violence and worker advocates committed to ending abuse. One



way we are doing this is by developing compelling, multi-media worker-centered training materials. In addition, LOHP conducted groundbreaking research, published in our report *The Perfect*Storm: How Supervisors Get Away with Sexually Harassing Workers Who Work Alone at Night. This report analyzes the conditions that put workers at risk and the circumstances that make it difficult to report abuse, including fear of employer retaliation and concerns about reporting to law enforcement.





## WORKERS AND ADVOCATES HAVE EXPOSED THE SYSTEMIC NATURE OF SEXUAL VIOLENCE IN MANY LOW-WAGE SECTORS

- Human Rights Watch found that supervisors' abuse of farmworkers is so common that it's almost considered part of the job.¹
- A survey by the Restaurant Opportunities
  Center found that 60 percent of women
  and transgender people and 40 percent of
  men are regularly harassed at work.<sup>2</sup>
- A UNITE-HERE survey of hundreds of workers showed that 58 percent of hotel housekeepers and 77 percent of casino workers have been sexually harassed.<sup>3</sup>
- Worker centers report that this kind of abuse is common among domestic and home care workers.

Survivors of abuse in the armed forces, technology companies, and college campuses have started a conversation that is now joined by voices of low-wage and immigrant workers who have been suffering in silence for too long. Now workers are not only speaking up, they are taking action and getting results.

The report outlines a model prevention policy and gives recommendations for employers, policy makers, government agencies, researchers, and service providers. Some of the strategies suggested include: requiring effective sexual harassment policies and actively enforcing those policies; increasing accountability of contractors and subcontractors; and expanding outreach and services for survivors.

The mission of <u>UC Berkeley LOHP</u> is to promote safe, healthy, and just workplaces and build the capacity of workers and worker organizations to take action for improved working conditions.

#### SOURCES:

[1] Cultivating Fear: The Vulnerability of Immigrant Farmworkers in the US to Sexual Violence and Sexual Harassment. Human Rights Watch; 2012. <a href="https://www.hrw.org/report/2012/05/15/cultivating-fear/vulnerability-immigrant-farmworkers-us-sexual-violence-and-sexual.">https://www.hrw.org/report/2012/05/15/cultivating-fear/vulnerability-immigrant-farmworkers-us-sexual-violence-and-sexual.</a>

[2] Behind the Kitchen Door: A Multi-Site Study of the Restaurant Industry. Restaurant Opportunities Center United; 2011. http://rocunited.org/wp-content/ uploads/2013/04/reports\_bkd-multisite.pdf.

[3] Hands Off Pants On: Sexual Harassment in Chicago's Hospitality Industry. UNITE HERE Local 1; 2016. https://www.handsoffpantson.org/wp-content/uploads/HandsOffReportWeb.pdf.

## California Moves Forward on Historic Indoor Heat Standard

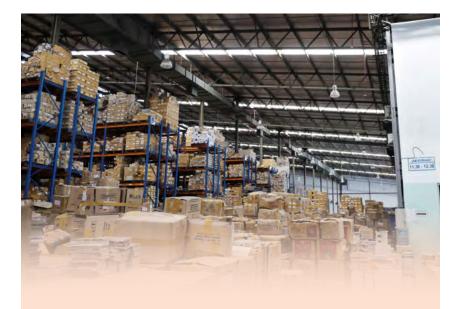
By Worksafe Staff

n 2006, California became the first state to implement a permanent heat illness prevention standard for outdoor workers. This groundbreaking regulation requires that employers provide outdoor workers with

access to rest, water, and shade—along with special procedures for high heat days, emergency response plans, and heat hazard training.<sup>1</sup>

The standard has helped countless California workers avoid illness and death from heat exposure. But workers and advocates did not

stop there, noting that people who work indoors are also in need of heat hazard protection. Thanks to their efforts, Governor Jerry Brown signed SB 1167 in 2016—a bill calling upon Cal/OSHA to put rules in place to protect workers from indoor heat exposure.



#### **HEAT HAZARDS HARM WAREHOUSE WORKERS**

Warehouse Worker Resource Center has heard about heatrelated dangers from warehouse workers across California many of whom are low-wage and immigrant workers hired through temporary agencies.<sup>4</sup> Many warehouses are located in the warmest parts of the state where summer temperatures often surpass 100 degrees Fahrenheit.

Antonio Ramirez\* worked in a warehouse in the Inland Empire. Assigned to clean out a metal freight container, Antonio spent several hours emptying and then sweeping the container, which reached an indoor heat level of over 100 degrees. When Antonio presented with symptoms of heat stroke, his employers failed to help him, and he was forced to call his son to take him to the hospital. He was hospitalized for three days due to heat stroke. Antonio's employers (a warehouse facility and a temporary staffing agency) failed to provide workers with sufficient training about indoor heat. They also failed to take corrective measures within the warehouse to protect employees from heat-related illness.

## THE THREAT OF INDOOR HEAT

This new standard is necessary because too many California workers are routinely expected to work for hours in very hot indoor environments—sometimes without adequate ventilation, even in the peak of summer. Vulnerable workers include those who work in warehouses, indoor recycling facilities, industrial laundries, restaurants, and bakeries, and factories. Temporary workers and day laborers who are new to a job site or task are also particularly prone because their bodies have not had sufficient time to acclimatize to the heat.2

Apart from causing illness and death that is specifically heat-related (e.g. heat exhaustion or heat stroke), high temperatures are increasingly being recognized as a risk factor for worksite accidents

## HEAT HAZARDS HARM RESTAURANT WORKERS

Restaurant Opportunities Center of Los Angeles has heard from restaurant workers who labored in unsafe conditions for years with limited access to cool areas, rest breaks, or cool water. These workers are often told if they cannot handle the heat they can get out of the kitchen, and many workers feel resigned to these unsafe conditions out of economic necessity.

Ernesto Sanchez\* worked as a cook for over a decade in a high-volume, popular restaurant. He often switched between hot kitchen



temperatures above 85 degrees and extreme cold in the walk-in freezer. The cumulative stress of working at both temperature extremes resulted in chronic joint and back pain. Ernesto's pain worsened until he was effectively disabled, forced to rely on worker's compensation and unable to lift or carry his infant daughter.

that lead to other injuries. A worker experiencing general heat stress may experience fatigue symptoms such as slowed reaction time, reduced visual acuity, and impaired mental capacity. The accident rate among construction workers, for example, is typically higher during warm summer months.<sup>3</sup>

#### **NEXT STEPS**

We are encouraged by the opportunity to implement a new indoor heat prevention standard that is strong, worker-centered, and inclusive of all industries. At the same time, campaigns to educate workers and mechanisms to hold employers accountable to heat-related health and safety standards will be crucial.

California has demonstrated the possibilities of developing and enforcing this type of standard, and Federal OSHA should follow suit. Providing workers with rest, water, and shade can put an end to preventable heat-related fatalities, and employers must be held accountable for this basic workplace right.

\* The names of workers have been changed to protect their identities.

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[1] Riley K, Delp L, Cornelio D, Jacobs S. From Agricultural Fields to Urban Asphalt: The Role of Worker Education to Promote California's Heat Illness Prevention Standard. *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy.* 2012;22(3):297-323. doi:10.2190/NS.22.3.e.

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[3] Rowlinson S, YunyanJia A, Li B, ChuanjingJu C. Management of climatic heat stress risk in construction: A review of practices, methodologies, and future research. *Accident Analysis & Prevention*. 2014;66:187-198. doi:10.1016/j. aap.2013.08.011.

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## Flame Retardants in Insulation: An Emerging Issue for Construction Workers

By Gail Bateson, Former Executive Director of Worksafe

in the blood of 97 percent of Americans, with children and people of color typically having the highest "body burdens" of these chemicals. Californians have higher levels than the general U.S. population, in part because of a state law passed in the mid-1970s that required their use in furniture foam cushions as part of the fire safety code.

The law was finally changed in 2011, after new studies showed that these chemicals weren't particularly effective. And when they burn, they make smoke even more toxic. A 2012 *Chicago Tribune* investigative series documented a deceptive campaign led by the chemical and tobacco companies to bring "toxic flame retardants into our homes and into our bodies," citing California's flammability standard for furniture as a major factor in their expanded use.

Not all flame retardants are toxic, but two chemical groups of concern are the halogenated and organophosphorous FRs. Certain FRs have

## FIREFIGHTERS FIGHT BACK AGAINST UNNECESSARY FLAME RETARDANTS

Firefighters were found to have elevated rates of many types of cancer, linked to their exposure to a chemical soup of burning chemicals that include flame retardants. This led International Association of Fire Fighters (IAFF) to join environmental health scientists and activists in the fight to eliminate unnecessary use of flame retardants, a story recounted in the video <a href="The Toxic Hot Seat">The Toxic Hot Seat</a>. Today it is now possible to buy a flame retardant-free sofa in California.

been linked to cancer, reproductive issues, and developmental impairments. The latest connection published in 2017 linked FR exposure to thoracic cancer. In addition, FRs bioaccumulate in people and other animals, concentrating up the food chain. They are also persistent, which means they do not break down in the environment, and so remain a threat for future generations. FRs confirmed by the Environmental Protection Agency (EPA) and others as toxic to humans are being swapped out for untested "chemical cousins." By the time we learn more about their toxicity, they will have spread throughout the globe, adding to our chemical body burden.



#### FIRST SOFAS, NOW BUILDING INSULATION

Now we are learning about an even more widespread use of flame retardants: they are being added to plastic foam insulation products such as polystyrene boards and spray-polyurethane foam (SPF) insulation. Ironically, this is being done as part of recent efforts to build and retrofit homes and buildings to be more energy efficient.

Worksafe began working with the Green Science Policy Institute in 2014 to find out what was being done to protect workers on construction sites – those who might be installing FR-containing building insulation and others working in the area. Here is what we learned:

- Workers in various construction industry trades are unaware that they may be exposed to toxic FRs;
- NIOSH air monitoring from recent field surveys show that exposure to FRs extends beyond those workers applying spray foam insulation to those in the work area. This means that virtually all trades on a construction site are likely to be exposed, which led NIOSH to recommend ventilation and a high level of eye, skin, and respiratory protection;
- Industry health and safety guidance materials on SPF application and safe handling specifically state that they only discuss acute irritants, not the chronic effects of chemicals. They refer people to Safety Data Sheets (SDSs) for toxicity information, but...
- A review of SDSs show that the specific FRs used are often listed as proprietary information or not listed by chemical name, making it impossible to document one's exposure.
- ➤ There are no recommended exposure limits and no requirement for companies to monitor the air for worker exposure to FRs.

Worksafe shared this information with the health and safety staff of North America's Building Trades Unions in January 2017 as part of its ongoing effort to inform workers in the construction industry and build alliances to work towards eliminating the unnecessary use of flame retardants.

These recent efforts built on Worksafe's 2015–2016 work when we joined with the Green Science Policy Institute to promote the passage of a policy statement by the American Public Health Association (APHA), "Reducing Flame Retardants in Building Insulation to Protect Public Health." We continue to work with Earthjustice as a petitioner to the Consumer Product Safety Commission to prohibit the sale of four categories of consumer products that contain flame retardants: children's products, furniture, mattresses, and electronic equipment such as TV casings. For more information on our work in this area, contact Worksafe.

### III. Recommendations

- ▶ We need a greater understanding of the impact of occupational injury and illness on low-wage and immigrant workers, and we need to invest resources to address the needs of these underserved communities as a public health issue. Workers deserve to receive training, understand the obligation of employers to provide a safe work environment, and have access to clinical care from medical professionals that understand the occupational health issues affecting these communities.
- Address gaps in occupational safety and health protections and the workers' compensation safety net. One is the "domestic services" exemption for Cal/OSHA, which excludes from Cal/OSHA's exercise of jurisdiction hazardous residential work that would be covered in commercial settings. Another is the 52-hour employment requirement for workers' compensation coverage, which effectively eliminates the possibility of coverage for many day laborers.
- We need to encourage workers to be active participants in ensuring they have safe and healthful workplaces. To do that we must first ensure that workers know their rights and are not fearful of exercising them. We need to have a more robust response to employer retaliation against health and safety whistleblowers so worker rights are meaningful. The federal Mine Safety and Health Act of 1977, which provides for temporary reinstatement of workers alleging retaliation while their claims are investigated, is a model. So are a dozen other federal whistleblower statutes that provide for preliminary reinstatement and the many laws which provide for attorneys' fees for workers with successful claims.

- Address the ongoing tragedy of needless deaths from slips, trips, and falls by updating the fall protection standard in California. While California prides itself in leading the nation on health and safety, our fall protection standard is significantly less protective than the federal standard.
- Complete updates to health standards so that they catch up with science. Issue an updated lead standard. Expedite review of permissible exposure limits for the many chemicals we know are causing cancer, reproductive health damage, and debilitating illnesses.
- Complete the standard making process for indoor heat protection and for general industry workplace violence prevention. Workplace violence is a national public health crisis and California should be a model for the country in ensuring that employers take reasonable steps to prevent and mitigate workplace violence.

## Remembering Those We Lost in 2016

he table below lists 191 documented instances of California workers who died on the job from work-related causes in 2016. We gathered these names from federal OSHA, Cal/OSHA, media reports, and community sources such as United Support and Memorial for Workplace Fatalities (USMWF).

As we note each year, comprehensive and accurate workplace fatality data are regrettably difficult to obtain. As such, this list is far from complete. It also does not include workers who died from occupational diseases that develop over time, nor does it include the dozens of individuals whose workplace deaths were attributed to natural causes or underlying medical conditions.

Nevertheless, we present this partial list as a way to bear witness to the workplace tragedies that are too often hidden from the public eye. We mourn the loss of these fallen workers, and we recommit ourselves to the fight for workplace health, safety, and justice for all.

#### **FATALITIES IN 2016**

A PARTIAL LIST

	DATE	NAME	AGE	OCCUPATION/ EMPLOYER	INCIDENT	LOCATION
1	1/1/16	Gurcharn Gill	68	Convenience Store Clerk	Fatally stabbed during robbery attempt	Fresno
2	1/4/16	Dan Saracco	30	Plumber	Struck by load of lumber	Brentwood
3	1/4/16	Gustavo Cabello	56	Irrigation System Inspector	Pinned by tractor	Kingsburg
4	1/6/16	Jeffrey Moon	26	Lineman	Electrocuted while climbing pole	Paramount
5	1/7/16	Kie Matsuda	48	UPS Driver	Struck by an iIndustrial tow vehicle	Sacramento
6	1/9/16	Joseph Mosley	55	Laborer	Fell from scaffold	Carson
7	1/9/16	Jose Antonio Alvarado	52	Carpenter	Fell from ladder	San Pedro
8	1/11/16	Johnny Ray Tolliver	52	Driver	Struck by garbage truck	Berkeley
9	1/12/16	Yong Bin Dong	35	Truck Driver	Crushed between two truck trailers	Wilmington
10	1/14/16	Raymond Martinez	28	Fleet Service Worker	Thrown from cart	Bakersfield
11	1/15/16	Gerbis Gomez	-	Landscaper	Killed in vehicle collision	Sun Valley
12	1/27/16	Alfredo Placencia	57	Laborer	Struck by falling hay bales	Corcoran
13	1/28/16	Maurtito Rojas	-	LC General Employee	Struck by cement roller	San Francisco
14	2/2/16	Paul Nagle	60	Crane Operator	Struck by a moving crane	Irvine
15	2/2/16	Serena Guadarrama	18	CA Conservation Corps Employee	Killed on the way to a job site	Fresno
16	2/2/16	Justin Vanmeter	21	CA Conservation Corps Employee	Killed on the way to a job site	Fresno
17	2/2/16	Rhonda Shackelford	20	CA Conservation Corps Employee	Killed on the way to a job site	Fresno
18	2/5/16	Jose Magana	52	Concrete Laborer	Struck by falling joists	Modesto

	DATE	NAME	AGE	OCCUPATION/ EMPLOYER	INCIDENT	LOCATION
19	2/12/16	Name Unknown	_	Delivery Driver	Crushed by rolling delivery truck	Mission Viejo
20	2/14/16	Name Unknown		Heavy Equipment Operator	Crushed by bulldozer	Salinas
21	2/15/16	Name Unknown		Martin Hydroblasting Employee	Believed to have drowned in deep-water hole	Holtville
22	2/15/16	Kadhim Al-Rubaie	49	Machine Operator	Crushed by machine	Hesperia
23	2/19/16	Able Vasquez	70	Construction Laborer	Fell from roof	
24	2/22/16	Bryan Hurt	54	Truck Driver	Killed in dump truck crash	Cloverdale
25	2/23/16	Joey Perkins	46	Tree Worker	Fell to ground while trimming a tree	Magalia
26	2/23/16	Warren Smale	43	Car Salesman	Killed in vehicle collision	Ontario
27	2/24/16	Mateo Rios	41	Tractor Operator	Caught between a tiller and a tractor	Caruthers
28	2/26/16	Josefina Alcocer	49	In-N-Out Employee	Murdered in parking lot during work shift	La Mirada
29	3/3/16	Victor Rosales	60	Laborer	Fell off 9 foot structure	
30	3/5/16	Francis Wayne Hamilton	52	Driver salesman	Hit by a motorist while adjusting load	Jurupa Valley
31	3/5/16	Fernando Suarez		Recycling Worker	Fell through roof opening	Los Angeles
32	3/7/16	Ji Hoon (Alex) Oh	31	Office Manager	Killed while handling combustible liquids	Santa Fe Springs
33	3/11/16	Kyle Wirthington	22	Laborer	Crushed by 17 feet high building façade	Forest Falls
34	3/12/16	Enesto Hurtado	47	Laborer	Made contact with voltage power lines in an arial basket	Thermal
35	3/12/16	Osvaldo Ceron Sevilla	21	Laborer	Made contact with voltage power lines in an arial basket	Thermal
36	3/13/16	Antonio Paz Gonzalez	43	Taxi Driver	Fatally shot in attempted robbery	El Sereno
37	3/13/16	Nathan Taylor	35	California Highway Patrol Officer	Struck by passing vehicle during crash investigation	Truckee
38	3/17/16	Joseph Sabbatino	36	Electrician	Killed in fall from building	Los Angeles
39	3/19/16	Christopher Briggs	43	Fitter Welder	Struck by unsecured staircase during unloading	Sacramento
40	3/21/16	John Lopez	42	Production Helper	Crushed by steel beam	Stockton
41	3/22/16	Michael Troyer	25	Crane Oiler	Crushed between crane and crane dolly	Long Beach
42	3/25/16	Ralph Woods	63	Yard Supervisor	Crushed between forklift load and wall when emergency forklift brake failed	Vallejo
43	3/25/16	Washi Uddin Ahmed	55	7-Eleven General Manager	Stabbed during confrontation with shoplifter	North Hollywood
44	3/26/16	Romeo Banaag	67	Mechanic	Ran over while working under a car	Van Nuys
45	3/28/16	Clifford Hunter	66	Truck Driver	Fell from the top of a vehicle transporter to the ground	
46	3/30/16	Anthony Harris	71	Laborer	Run over by the 4th and 5th axle on a truck/chassis combination	
47	3/31/16	Alfred White	80	U-Haul Employee	Stepped out of truck and was ran over by front wheel of the driver side	Mira Mesa
48	3/31/16	Thomas Garica Valenzuela	28	Operator	Drowned in deep water hole	

	DATE	NAME	AGE	OCCUPATION/ EMPLOYER	INCIDENT	LOCATION
49	4/4/16	Michael Lane Holder	-	Driver	Lost control while driving tractor trailer with a 53-foot long trailer	Bakersfield
50	4/4/16	Name Unknown	-	Areche Hay Employee	Fell off a stack of hay	Cedarville
51	4/5/16	Name Unknown	-	Roof construction worker	Fell off a single story roof	Encinitas
52	4/6/16	Name Unknown	-	Owner, Tri Service HVAC	Fell 20 feet through a skylight	Placentia
53	4/12/16	Alejandro Cabrera	37	Vineyard Worker	Drowned in reservoir next to vineyard	Saint Helena
54	4/13/16	Jose Chicas	31	Laborer	Struck by a vehicle while hitching a trailer	Chino
55	4/14/16	Dale Thom	32	Choker Setter	Struck by a rolling log	Fort Jones
56	4/15/16	Sipriano Dorame	65	Laborer	Run over by earthmoving equipment at a construction site.	Arcadia
57	4/17/16	Fredy Ramirez- Orellana	32	Laborer	Pinned between vehicle and tree	Chowchilla
58	4/22/16	Mose Bamont	45	Electrician	Electrocuted while performing electrical work in basement	San Francisco
59	4/24/16	Name Unknown	-	construction worker	Fell while being lowered into a 50-foot- deep well by cable	Los Angeles
60	4/25/16	Anthony Pena	-	Lyft Driver	Killed in hit-and-run	Lodi
61	5/3/16	Rick Davis	_	Auto Mechanic	Killed in a fall at auto shop	Rancho Cucamonga
62	5/4/16	Dylan Ivy	26	Tree Worker	Crushed by a felled tree	Bear Valley Springs
63	5/5/16	Chuck Savage	-	Swift Sign Employee	Killed in fall from a cherry picker	Ridgecrest
64	5/9/16	Hijinio Jimenez Gonzalez	22	Retail Worker	Shot outside of workplace during shift	South El Monte
65	5/13/16	Guz Acezedo	61	Truck Driver	Pinned between an overhead ledge and an aerial lift railing while loading aerial lift onto flatbed	San Francisco
66	5/16/16	Doug Porteous	57	Electrician	Fell from second floor to basement floor during manlift mishap	
67	5/31/16	Mateo Zarate	37	Laborer	Struck by an 800 lb aluminum arch of an arial manlift	Napa
68	6/1/16	William Klug	39	Professor	Fatally shot by former graduate student	Los Angeles
69	6/3/16	Carlos Hernandez	-	Roofer	Killed in fall from roof	Walnut
70	6/10/16	Mitzi Campbell	58	Construction Flagger	Stabbed during a confrontation while flagging traffic	San Francisco
71	6/14/16	Michael Katherman	34	Police Officer	Struck by vehicle while riding motorcycle on duty	San Jose
72	6/15/16	David Lee Rafferty	31	Forklift Rechnician	Crushed under a dock plate	Modesto
73	6/20/16	Kirk Hollingsworth	53	Mechanic	Struck by vehicle while changing tire	Stockton
74	6/23/16	Russell Atchinson	59	Surveyor	Employee was performing surveyor work on a public rural road and was hit by passing motorist	Modesto

Dying at Work in California 29

	DATE	NAME	AGE	OCCUPATION/ EMPLOYER	INCIDENT	LOCATION
75	6/24/16	Hyoung Kim	60	Electrician	Electrocuted by volt wire while working on an electric circuit	
76	6/24/16	Mircea Badescu	-	CBM Logistics Employee	Killed in fall from trailer	Los Angeles
77	6/27/16	Michael Arthur Jones	57	Logger	Struck by log that was dislodged from a logging truck	Redding
78	6/29/16	Meliton Lopez	53	Painter	Asphyxiated while preparing to paint	
79	7/5/16	Leonardo Leanos	42	Pallet Repair Man	Fell from elevated work location	Pico Rivera
80	7/7/16	Jose Salinas	39		Struck by truck while re-fueling van on shoulder of highway	Bakersfield
81	7/14/16	Kevin C. Cartela	18	Oak Barrel Stacker	Struck by rolling barrels	Fresno
82	7/14/16	Name Unknown	-	Equipment Operator	Died from multiple bee stings after bulldozer struck bee hive	Irvine
83	7/19/16	Robert Colmenero	58	Roofer	Fell off 9 foot roof	Encinitas
84	7/20/16	Dennis Herman	-	Truck Driver	Killed in vehicle rollover	Lancaster
85	7/21/16	David Spurgeon	52	PG&E Worker	Truck rolled over into canal while checking meters	Marysville
86	7/25/16	Orlando Segura- Bailon	50	Laborer	Crushed by falling pallet while pulling lumber from trailer	Riverside
87	7/26/16	Robert Reagan	35	Bulldozer Operator	Struck by bull dozer	Big Sur
88	7/26/16	Humberto Zarate	54	Field Laborer	Employee was removing netting from nectarine trees when he became ill and started convulsing	
89	7/27/16	John Collison	64	Electrician	Fell from ladder	
90	7/27/16	Name Unknown	-	Big Rig Driver	Died in fiery crash	San Leandro
91	7/28/16	Jonathan De Guzman	43	Police Officer	Shot and killed while making pedestrian stop	San Diego
92	7/29/16	Fernando Hernandez	36	Tree Worker	Fatally injured while trimming a tree with a chain saw	Fair Oaks
93	7/29/16	Larry Mills	-	Pilot	Killed in medical transport plane crash	McKinleyville
94	7/29/16	Deborah Kroon	-	Flight Nurse	Killed in medical transport plane crash	McKinleyville
95	7/29/16	Michelle Tarwater	_	Flight Paramedic	Killed in medical transport plane crash	McKinleyville
96	8/1/16	Alfonso Garay	56	Framer	Fell off of a roof	Los Angeles
97	8/1/16	Travis Jon Cornelison	_	Tree Worker	Crushed by falling tree	Blue Lake
98	8/3/16	Marvin Ponce	37	Traffic Control Worker	Shot while controlling traffic at construction site	Venice
99	8/6/16	Isteevan Ismael	21	Truck Driver	Pinned between two trucks while operating gate	Vista
100	8/6/16	Yong Kwon	-	Skydiving Instructor	Parachute did not deploy during a tandem skydiving jump	Lodi
101	8/8/16	Rofolfo Alvarez- Velasco	32	Painter	Tipped over while operating an arial device, falling 40 feet to the ground	Laguna Woods
102	8/12/16	Kevin Satterfield	46	AT&T Field Contractor	Fell from ladder while installing telecom dish	
103	8/14/16	Henry Wimbley	32	Tugboat Crewmember	Died during onboard fire on vessel	San Diego

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104	8/15/16	Salvador Del Toro Magna	72	Laborer Ranch Hand	Fatally struck by a pick-up truck	Dixon
105	8/15/16	Dale Eric Ramirez	54	Commercial Supervisor	Fell 60 feet off an I-beam	Mojave
106	8/17/16	Silvio Beltran Camtuzano	25	Temp Worker at Bolthouse Farms	Arm caught in machine	Bakersfield
107	8/20/16	Isidro Galis	34	Lead & Clean-off Driver	Fell from wooden debris box that was elevated by a forklift	Fremont
108	8/24/16	Roman Rubio	57	Abatement Worker	Fell from self-propelled scaffold	
109	8/31/16	Jose Avina	43	Wine Cellar Worker	Crushed by stack of barrel racks that tipped and fell out of a container	Yountville
110	9/1/16	Rodrigo Ospina	22	Maintenace Worker	Fell from ladder while cleaning windows	Costa Mesa
111	9/1/16	Stevaughn Matthews	28	Mechanical Engineer	Killed when jack slipped while working under a trailer	Long Beach
112	9/1/16	Jorge Lopez	-	Caltrans Electrician	Struck by passing vehicle during shift	Acton
113	9/3/16	Hector Murrillo	_	Carpenter	Crushed between wall and counter cutting machine	Gardena
114	9/8/16	Elijah Berkley	34	Electrician	Came into contact with live conductor while in a crawl space	Los Angeles
115	9/8/16	Cesar Meza	_	Drywaller	Fell from work bench while installing sheetrock	Los Angeles
116	9/12/16	Hector Cruz	53	Truck Driver	Caught and crushed between two flat bed trailers	Los Angeles
117	9/13/16	Rogelio Ambriz	64	Truck Driver	Fell while moving from truck platform to welded steps after securing a roll of tarp	Somis
118	9/14/16	Omar Vazquez	39	Laborer	Fell from scaffold/ladder	
119	9/17/16	Theodoros Ipsilantis	55	Painter	Killed when aerial tipped over on a curb	
120	9/17/16	William "Billy" Nguyen	19	San Jose State Student Worker	Drowned while swimming in lake while leading an outdoor excursion for students	Three Rivers
121	9/21/16	Roberto Arevaio- Arevelo	-	Francisco Ag Management Employee	Fell from ladder	Yettum
122	9/21/16	Ryan Osler	_	Firefighter	Killed when water truck overturned	Lompoc
123	9/23/16	Jack Baker	49	Laborer	Fell from ladder	
124	9/24/16	Mohammed Kalam	61	Liquor Mart Clerk	Shot and killed during a robbery	North Hollywood
125	9/26/16	David Garcia	-	Owner, Dave's Cabinet	Fell and hit head on a machine	Montebello
126	9/28/16	Marcello Develasco	45	Concrete Finisher	Struck by a falling concrete form	
127	9/30/16	Abraham Garza	26	Goodwill Industries Worker	Crushed between an empty bin and a compactor while checking alignment	Sacramento
128	9/30/16	Gerald Smith	-	Utility Worker	Struck by vehicle while fixing a power box	Lancaster
129	9/30/16	Abel Cruz	49	Mechanic	Fell while unloading pallets from back of trailer	
130	9/30/16	Billy Joe Deoss	61	Mechanic	Ran over by tractor truck	Orange
131	10/1/16	Henry O Reyes	-	Lyft Driver	Killed in hit-and-run	San Diego
132	10/3/16	Arnulfo Mina Pozos	28	Vineyard Worker	Crushed by overturned forklift	Napa

	DATE	NAME	AGE	OCCUPATION/ EMPLOYER	INCIDENT	LOCATION
133	10/5/16	Everett Van Tassel	-	Construction Worker	Crushed by a trailer that rolled off block	Rocklin
134	10/5/16	Steve Owen	-	Sergeant	Shot in line of duty	Lancaster
135	10/6/16	Adan Lopez	40	Cook	Fell approximately 10 feet from an unguarded cooler onto a concrete floor	
136	10/8/16	Young Sik Choi	-	Security Guard	Ran over by semi trailer in yard	San Diego
137	10/8/16	Jose Gilbert Vega	_	Police Officer	Shot in line of duty	Palm Springs
138	10/8/16	Lesley Zerebny	-	Police Officer	Shot in line of duty	Palm Springs
139	10/10/16	Name Unknown	-	RC Power Employee	Possible electrocution	Santa Clara
140	10/11/16	Name Unknown	-	Grape Field Worker	Possible heat-related death	Fowler
141	10/11/16	Name Unknown	-	Massage Parlor Worker	Shot during attempted robbery	Pittsburg
142	10/14/16	Gabriel Oliveira	60	Building Maintenance	Fell through skylight	Livingston
143	10/15/16	Name Unknown	-	Auto Shop Worker	Died in shop fire	Sun Valley
144	10/17/16	Portia Manning	-	Counselor	Died after being struck by resident	Los Gatos
145	10/17/16	Takeshi Watanabe	-	Warehouse Laborer	Struck by driver in hit-and-run robbery	San Leandro
146	10/18/16	Jorge Reyna-Solorio	37	Foreman	Struck in torso by tractor	Salinas
147	10/18/16	Nathan Hubbard	26	Forklift Driver	Forklift rollover	Weed
148	10/19/16	Jack Hopkins	-	Sheriff's Deputy	Shot while responding to call	Alturas
149	10/20/16	Emmanuel Bravo	28	Wilshire Country Club Employee	Stabbed by coworker during a dispute	Los Angeles
150	10/21/16	Gerardo Torres	29	Irrigator	Vehicle collision	Madera
151	10/21/16	Nam <u>e</u> Unknown	-	Jack in the Box Employee	Shot during attempted robbery	El Monte
152	10/21/16	Name Unknown	-	Five Star Harvesting Employee	Shuttle cart struck utility pole	San Luis Obispo
153	10/30/16	Teodulo Elias Vides	-	Tour Bus Driver	Killed when bus collided with tractor trailer	Palm Springs
154	10/31/16	Rod Lucas	46	Sheriff's Sergeant	Inadvertently shot by another deputy	Fresno
155	11/4/16	Carlos Zamorra	46	Laborer, Painter	Fell from building onto concrete	Rancho Mirage
156	11/4/16	Socorro Robles- Pallares	57	Welder	Struck by tank bulkhead	Paramount
157	11/5/16	Chi Shing Sit	68	Warehouse Supervisor	Fell after ladder slipped out from underneath	Los Angeles
158	11/7/16	Name Unknown	-	Irrigator	Found in orange grove with stab wounds	Edison
159	11/7/16	Name Unknown	-	Long-Haul Trucker	Vehicle collision	Hopland
160	11/8/16	Name Unknown	-	AV Thomas Employee	Struck by a bin	Atwater
161	11/8/16	Martin Contreras- Mendoza	45	Laborer or Foreman	Fell from tank	Oakland
162	11/13/16	Dennis Wallace	-	Sheriff's Deputy	Shot during an investigation	Hughson
163	11/15/16	Jose Luis Delgado Lopez	34	Alamillo Rebar Employee	Fell from building under construction	Sunnyvale
164	11/16/16	Jose Arriaga	72	Laborer	Struck by forklift	Downey

165   11/16/16   Jorge Fonseca   53   Laborer   Fell out of forklift and crushed by vehicle   Moorpark     166   11/21/16   Robert Wolters   53   Forklift Operator   Crushed by forklift that rolled over   San Francisco     167   17/21/16   Robert Wolters   53   Forklift Operator   Driving a forklift that rolled over   Fullerton     168   11/28/16   Matthew Vokasovich   38   Electrician   Fell from roof   Chula Visita     169   11/28/16   Name Unknown   - Owner, Ed's Timber   Struck by falling branch   Seidd Valley     170   11/29/16   Olivier Rochette   41   Cirque du Soleil   Crushed by aerial lift   San Francisco     171   11/29/16   Chad Holloway   48   Millwright   Crushed by crane bridge   Santa Fe Springs     172   11/29/16   Robert Khachiklan   56   Truck Driver   Caught between two dump trucks   Los Angeles     173   11/30/16   Jermaine Jackson Jr.   27   San Francisco Public   Works Employee     174   12/1/16   Nash Mayer   40   Arborist   Struck by falling tree   Greely Hill     175   12/2/16   Patrick Caviovich   61   Engineer   Hilt by wheel falling 3 stories from dolly     176   12/2/16   Bosco Tjan   50   USC Professor   Slabbed by a graduate student while in office     177   12/4/16   Guillermo Chavez   53   Machine Operator   Burned by flammable fluid after hydraulic     178   12/4/16   Guillermo Chavez   53   Machine Operator   Burned by flammable fluid after hydraulic     179   12/5/16   Arturo Fernandez   23   Farm Worker   Drowned in canal after vehicle rollover   Victoria Island     180   12/19/16   Nan Montano   38   Owner, Rednawk   Construction   Construction   Crushed by a steel plate during trench     181   12/9/16   Nan Montano   38   Owner, Rednawk   Construction   Crushed by a steel plate during trench     182   12/19/16   Nam Wontano   - Pacific Orchard   Crushed by a steel plate during trench   Capistrano     183   12/10/16   Name Unknown   - Pacific Orchard   Development Employee   Struck by truck at a trailer storage lot   Truckee     186   12/15/16   Name Unknown   - Pacific		DATE	NAME	AGE	OCCUPATION/ EMPLOYER	INCIDENT	LOCATION
167   11/21/16   Robert Wolters   53   Forklift Operator   Driving a forklift that rolled over   Fullerton	165	11/16/16	Jorge Fonseca	53	Laborer	Fell out of forklift and crushed by vehicle	Moorpark
168   11/23/16   Matthew Vokasovich   38   Electrician   Fell from roof   Chula Vista     169   11/28/16   Name Unknown   - Owner, Ed's Timber   Struck by falling branch   Seiad Valley     170   11/29/16   Olivier Rochette   41   Cirque du Soleil   Crushed by aerial lift   San Francisco     171   11/29/16   Chad Holloway   48   Millwright   Crushed by crane bridge   Santa Fe Springs     172   11/29/16   Robert Khachikian   56   Truck Driver   Caught between two dump trucks   Los Angeles     173   11/30/16   Jermaine Jackson Jr.   27   San Francisco Public   Works Employee   Works Employee   More to the product of the product o	166	11/21/16	Qiang Ruan Hua	49	Forklift Operator	Crushed by forklift that rolled over	San Francisco
169   11/28/16   Name Unknown   - Owner, Ed's Timber   Struck by falling branch   Seiad Valley   11/29/16   Olivier Rochette   41   Cirque du Soleil   Crushed by aerial lift   San Francisco   Santa Fe Springs   Santa Fe	167	11/21/16	Robert Wolters	53	Forklift Operator	Driving a forklift that rolled over	Fullerton
170   11/29/16   Olivier Rochette   41   Cirque du Soleil Carpenter   Crushed by aerial lift   San Francisco Carpenter   11/29/16   Chad Holloway   48   Millwright   Crushed by crane bridge   Santa Fe Springs   Tizuk Driver   Caught between two dump trucks   Los Angeles   Caught Detween two dump trucks   Los Angeles   Tizuk Driver   Caught between two dump trucks   Los Angeles   San Francisco Public   Works Employee   Shot while painting over graffiti   San Francisco   Works Employee   Shot while painting over graffiti   San Francisco   Works Employee   Shot while painting over graffiti   San Francisco   Tizuk Driver   Caught between two dump trucks   Los Angeles   San Francisco   Works Employee   Shot while painting over graffiti   San Francisco   Works Employee   Creek Hill   San Francisco   Tizuk Driver   San Francisco   Shot while painting over graffiti   San Francisco   San Driego   San Driego   Struck by falling tree   Creek Hill   San Driego	168	11/23/16	Matthew Vokasovich	38	Electrician	Fell from roof	Chula Vista
Carpenter   Crushed by Crane bridge   Santa Fe Springs	169	11/28/16	Name Unknown	-	Owner, Ed's Timber	Struck by falling branch	Seiad Valley
17211/29/16Robert Khachikian56Truck DriverCaught between two dump trucksLos Angeles17311/30/16Jermaine Jackson Jr.27San Francisco Public Works EmployeeShot while painting over graffitiSan Francisco17412/1/16Nash Mayer40ArboristStruck by falling treeGreely Hill17512/2/16Patrick Cavlovich61EngineerHit by wheel falling 3 stories from dollySan Diego17612/2/16Bosco Tjan50USC ProfessorStabbed by a graduate student while in office17712/4/16Guillermo Chavez53Machine OperatorBurned by flammable fluid after hydraulic seal failure17812/4/16Luis Fernando Rodriguez PerezTree WorkerEngulfed by palm fronds while trimming treesRedlands17912/5/16Arturo Fernandez23Farm WorkerDrowned in canal after vehicle rolloverVictoria Island18012/7/16Robert Dean Jr.33Lab TechnicianLost consciousness inside rice silo & succumbed to oxygen deficiencyRichvale18112/9/16Ivan Montano38Owner, Redhawk ConstructionPinned by collapsing trailerSan Juan Capistrano18212/9/16Seth Steelman33LaborerCrushed by a steel plate during trench collapseSan Juan Capistrano18312/10/16Martin Ortiz21Tree TrimmerFell through skylightMadera18412/15/16Name Unknown-Gold Point Transportation Employee </td <td>170</td> <td>11/29/16</td> <td>Olivier Rochette</td> <td>41</td> <td></td> <td>Crushed by aerial lift</td> <td>San Francisco</td>	170	11/29/16	Olivier Rochette	41		Crushed by aerial lift	San Francisco
173 11/30/16 Jermaine Jackson Jr. 27 San Francisco Public Works Employee 174 12/1/16 Nash Mayer 40 Arborist Struck by falling tree Greely Hill 175 12/2/16 Patrick Cavlovich 61 Engineer Hit by wheel falling 3 stories from dolly San Diego 176 12/2/16 Bosco Tjan 50 USC Professor Stabbed by a graduate student while in office Organization office Sal failure 177 12/4/16 Guillermo Chavez 53 Machine Operator Burned by flammable fluid after hydraulic seal failure 178 12/4/16 Luis Fernando Rodriguez Perez 7 Tree Worker Engulfed by palm fronds while trimming Redlands trees 12/4/16 Arturo Fernandez 23 Farm Worker Drowned in canal after vehicle rollover Victoria Island 12/7/16 Robert Dean Jr. 33 Lab Technician Lost consciousness inside rice silo & succumbed to oxygen deficiency 181 12/9/16 Ivan Montano 38 Owner, Redhawk Construction Pinned by collapsing trailer San Juan Capistrano 182 12/9/16 Seth Steelman 33 Laborer Crushed by a steel plate during trench collapse 183 12/10/16 Martin Ortiz 21 Tree Trimmer Fell through skylight Madera 184 12/11/16 Dennis Baltimore 35 Ski Instructor Skiing collision Truckee 185 12/15/16 Name Unknown Pacific Orchard Development Employee Vehicle accident City of Stratford Development Employee Struck and killed by falling containers Oakland 188 12/19/16 Ravikesh Kumar Fedex Driver Killed when truck overturned Danville 189 12/20/16 Timothy Pult 49 Owner, Pawn Advantage Shot and killed during a robbery Vallejo 190 12/2/16 David Wicks 54 Gas Station Clerk Set on fire by a masked assailant Burney	171	11/29/16	Chad Holloway	48	Millwright	Crushed by crane bridge	Santa Fe Springs
Works Employee    174   12/1/16   Nash Mayer   40   Arborist   Struck by falling tree   Greely Hill     175   12/2/16   Patrick Cavlovich   61   Engineer   Hit by wheel falling 3 stories from dolly   San Diego     176   12/2/16   Bosco Tjan   50   USC Professor   Stabbed by a graduate student while in office     177   12/4/16   Guillermo Chavez   53   Machine Operator   Burned by flammable fluid after hydraulic seal failure     178   12/4/16   Luis Fernando   Rodriguez Perez   - Tree Worker   Engulfed by palm fronds while trimming   Redlands     179   12/5/16   Arturo Fernandez   23   Farm Worker   Drowned in canal after vehicle rollover   Victoria Island     180   12/7/16   Robert Dean Jr.   33   Lab Technician   Lost consciousness inside rice silo & succumbed to oxygen deficiency     181   12/9/16   Ivan Montano   38   Owner, Redhawk   Construction   Pinned by collapsing trailer   San Juan   Capistrano     182   12/9/16   Seth Steelman   33   Laborer   Crushed by a steel plate during trench   Collapse     183   12/10/16   Martin Ortiz   21   Tree Trimmer   Fell through skylight   Madera     184   12/11/16   Dennis Baltimore   35   Ski Instructor   Skiing collision   Truckee     185   12/15/16   Name Unknown   - Pacific Orchard   Development Employee   Struck by truck at a trailer storage lot   San Diego     186   12/15/16   Name Unknown   - Pacific Orchard   Development Employee   Struck and killed by falling containers   Oakland     188   12/19/16   Ravikesh Kumar   - FedEx Driver   Killed when truck overturned   Danville     189   12/20/16   Timothy Pult   49   Owner, Pawn   Advantage   Shot and killed during a robbery   Vallejo	172	11/29/16	Robert Khachikian	56	Truck Driver	Caught between two dump trucks	Los Angeles
175   12/2/16   Patrick Cavlovich   61   Engineer   Hit by wheel falling 3 stories from dolly   San Diego     176   12/2/16   Bosco Tjan   50   USC Professor   Stabbed by a graduate student while in office     177   12/4/16   Guillermo Chavez   53   Machine Operator   Burned by flammable fluid after hydraulic seal failure     178   12/4/16   Luis Fernando   Rodriguez Perez   - Tree Worker   Engulfed by palm fronds while trimming   Redlands     179   12/5/16   Arturo Fernandez   23   Farm Worker   Drowned in canal after vehicle rollover   Victoria Island     180   12/7/16   Robert Dean Jr.   33   Lab Technician   Lost consciousness inside rice silo & succumbed to oxygen deficiency     181   12/9/16   Ivan Montano   38   Owner, Redhawk   Construction   Pinned by collapsing trailer   San Juan     182   12/9/16   Seth Steelman   33   Laborer   Crushed by a steel plate during trench   Collapse     183   12/10/16   Martin Ortiz   21   Tree Trimmer   Fell through skylight   Madera     184   12/11/16   Dennis Baltimore   35   Ski Instructor   Skiing collision   Truckee     185   12/15/16   Name Unknown   - Gold Point   Transportation   Employee   Struck by truck at a trailer storage lot   San Diego     186   12/15/16   Name Unknown   - SSA Marine Employee   Struck and killed by falling containers   Oakland     187   12/18/16   Steve Carson   - SSA Marine Employee   Struck and killed by falling containers   Oakland     188   12/19/16   Ravikesh Kumar   - FedEx Driver   Killed when truck overturned   Danville     189   12/20/16   David Wicks   54   Gas Station Clerk   Set on fire by a masked assailant   Burney	173	11/30/16	Jermaine Jackson Jr.	27		Shot while painting over graffiti	San Francisco
176   12/2/16   Bosco Tjan   50   USC Professor   Stabbed by a graduate student while in office   12/4/16   Guillermo Chavez   53   Machine Operator   Burned by flammable fluid after hydraulic seal failure   178   12/4/16   Luis Fernando   Rodriguez Perez   - Tree Worker   Engulfed by palm fronds while trimming   Redlands   12/5/16   Arturo Fernandez   23   Farm Worker   Drowned in canal after vehicle rollover   Victoria Island   180   12/7/16   Robert Dean Jr.   33   Lab Technician   Lost consciousness inside rice silo & succumbed to oxygen deficiency   Richvale   12/9/16   Ivan Montano   38   Owner, Redhawk   Pinned by collapsing trailer   San Juan   Capistrano   Seth Steelman   33   Laborer   Crushed by a steel plate during trench   Collapse   12/10/16   Martin Ortiz   21   Tree Trimmer   Fell through skylight   Madera   184   12/11/16   Dennis Baltimore   35   Ski Instructor   Skiing collision   Truckee   185   12/15/16   Name Unknown   - Gold Point   Transportation   Employee   Struck by truck at a trailer storage lot   San Diego   12/15/16   Name Unknown   - SSA Marine Employee   Struck and killed by falling containers   Oakland   188   12/19/16   Ravikesh Kumar   - FedEx Driver   Killed when truck overturned   Danville   189   12/20/16   Timothy Pult   49   Owner, Pawn   Advantage   Shot and killed during a robbery   Vallejo   190   12/21/16   David Wicks   54   Gas Station Clerk   Set on fire by a masked assailant   Burney   190   12/21/16   David Wicks   54   Gas Station Clerk   Set on fire by a masked assailant   Burney   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   12/21/16   190   190   12/21/16   190   190   12/21/16   190   12/21/16   190   190   12/21/16   190   190   12/21/16   190   190   190   190   190   190   190   190   190   190   190   190	174	12/1/16	Nash Mayer	40	Arborist	Struck by falling tree	Greely Hill
office  177 12/4/16 Guillermo Chavez 53 Machine Operator Burned by flammable fluid after hydraulic seal failure  178 12/4/16 Luis Fernando Rodriguez Perez - Tree Worker Engulfed by palm fronds while trimming Redlands trees  179 12/5/16 Arturo Fernandez 23 Farm Worker Drowned in canal after vehicle rollover Victoria Island  180 12/7/16 Robert Dean Jr. 33 Lab Technician Lost consciousness inside rice silo & succumbed to oxygen deficiency  181 12/9/16 Ivan Montano 38 Owner, Redhawk Construction Pinned by collapsing trailer San Juan Capistrano  182 12/9/16 Seth Steelman 33 Laborer Crushed by a steel plate during trench collapse  183 12/10/16 Martin Ortiz 21 Tree Trimmer Fell through skylight Madera  184 12/11/16 Dennis Baltimore 35 Ski Instructor Skiing collision Truckee  185 12/15/16 Name Unknown - Gold Point Transportation Employee  186 12/15/16 Name Unknown - Pacific Orchard Development Employee  187 12/18/16 Steve Carson - SSA Marine Employee  188 12/19/16 Ravikesh Kumar - FedEx Driver Killed when truck overturned Danville  189 12/20/16 David Wicks 54 Gas Station Clerk Set on fire by a masked assailant Burney	175	12/2/16	Patrick Cavlovich	61	Engineer	Hit by wheel falling 3 stories from dolly	San Diego
Seal failure   Seal	176	12/2/16	Bosco Tjan	50	USC Professor		Los Angeles
Rodriguez Perez   trees   trees	177	12/4/16	Guillermo Chavez	53	Machine Operator		
18012/7/16Robert Dean Jr.33Lab TechnicianLost consciousness inside rice silo & succumbed to oxygen deficiencyRichvale18112/9/16Ivan Montano38Owner, Redhawk ConstructionPinned by collapsing trailerSan Juan Capistrano18212/9/16Seth Steelman33LaborerCrushed by a steel plate during trench collapse18312/10/16Martin Ortiz21Tree TrimmerFell through skylightMadera18412/11/16Dennis Baltimore35Ski InstructorSkiing collisionTruckee18512/15/16Name Unknown-Gold Point Transportation EmployeeStruck by truck at a trailer storage lot Transportation EmployeeSan Diego18612/15/16Name Unknown-Pacific Orchard Development EmployeeVehicle accidentCity of Stratford18712/18/16Steve Carson-SSA Marine EmployeeStruck and killed by falling containersOakland18812/19/16Ravikesh Kumar-FedEx DriverKilled when truck overturnedDanville18912/20/16Timothy Pult49Owner, Pawn AdvantageShot and killed during a robberyVallejo19012/21/16David Wicks54Gas Station ClerkSet on fire by a masked assailantBurney	178	12/4/16		-	Tree Worker	•	Redlands
18112/9/16Ivan Montano38Owner, Redhawk ConstructionPinned by collapsing trailerSan Juan Capistrano18212/9/16Seth Steelman33LaborerCrushed by a steel plate during trench collapse18312/10/16Martin Ortiz21Tree TrimmerFell through skylightMadera18412/11/16Dennis Baltimore35Ski InstructorSkiing collisionTruckee18512/15/16Name Unknown- Gold Point Transportation EmployeeStruck by truck at a trailer storage lot EmployeeSan Diego18612/15/16Name Unknown- Pacific Orchard Development EmployeeVehicle accidentCity of Stratford18712/18/16Steve Carson- SSA Marine EmployeeStruck and killed by falling containersOakland18812/19/16Ravikesh Kumar- FedEx DriverKilled when truck overturnedDanville18912/20/16Timothy Pult49Owner, Pawn AdvantageShot and killed during a robberyVallejo19012/21/16David Wicks54Gas Station ClerkSet on fire by a masked assailantBurney	179	12/5/16	Arturo Fernandez	23	Farm Worker	Drowned in canal after vehicle rollover	Victoria Island
Construction  Capistrano  Capistrano  Capistrano  Capistrano  182 12/9/16 Seth Steelman  33 Laborer  Crushed by a steel plate during trench collapse  Fell through skylight  Madera  184 12/11/16 Dennis Baltimore  35 Ski Instructor  Skiing collision  Truckee  185 12/15/16 Name Unknown  Gold Point Transportation Employee  Struck by truck at a trailer storage lot  Employee  Vehicle accident  City of Stratford  Struck and killed by falling containers  Oakland  188 12/19/16 Ravikesh Kumar  FedEx Driver  Killed when truck overturned  Danville  189 12/20/16 Timothy Pult  49 Owner, Pawn Advantage  Set on fire by a masked assailant  Burney	180	12/7/16	Robert Dean Jr.	33	Lab Technician		Richvale
183   12/10/16   Martin Ortiz   21   Tree Trimmer   Fell through skylight   Madera	181	12/9/16	Ivan Montano	38	'	Pinned by collapsing trailer	
18412/11/16Dennis Baltimore35Ski InstructorSkiing collisionTruckee18512/15/16Name Unknown-Gold Point Transportation EmployeeStruck by truck at a trailer storage lotSan Diego18612/15/16Name Unknown-Pacific Orchard Development EmployeeVehicle accidentCity of Stratford18712/18/16Steve Carson-SSA Marine EmployeeStruck and killed by falling containersOakland18812/19/16Ravikesh Kumar-FedEx DriverKilled when truck overturnedDanville18912/20/16Timothy Pult49Owner, Pawn AdvantageShot and killed during a robberyVallejo19012/21/16David Wicks54Gas Station ClerkSet on fire by a masked assailantBurney	182	12/9/16	Seth Steelman	33	Laborer		
185 12/15/16 Name Unknown - Gold Point Transportation Employee Struck by truck at a trailer storage lot San Diego  186 12/15/16 Name Unknown - Pacific Orchard Development Employee Vehicle accident City of Stratford  187 12/18/16 Steve Carson - SSA Marine Employee Struck and killed by falling containers Oakland  188 12/19/16 Ravikesh Kumar - FedEx Driver Killed when truck overturned Danville  189 12/20/16 Timothy Pult 49 Owner, Pawn Advantage Shot and killed during a robbery Vallejo  190 12/21/16 David Wicks 54 Gas Station Clerk Set on fire by a masked assailant Burney	183	12/10/16	Martin Ortiz	21	Tree Trimmer	Fell through skylight	Madera
Transportation Employee  186	184	12/11/16	Dennis Baltimore	35	Ski Instructor	Skiing collision	Truckee
Development Employee  187	185	12/15/16	Name Unknown	-	Transportation	Struck by truck at a trailer storage lot	San Diego
188       12/19/16       Ravikesh Kumar       -       FedEx Driver       Killed when truck overturned       Danville         189       12/20/16       Timothy Pult       49       Owner, Pawn Advantage       Shot and killed during a robbery       Vallejo         190       12/21/16       David Wicks       54       Gas Station Clerk       Set on fire by a masked assailant       Burney	186	12/15/16	Name Unknown	-		Vehicle accident	City of Stratford
189 12/20/16 Timothy Pult 49 Owner, Pawn Advantage Shot and killed during a robbery Vallejo 190 12/21/16 David Wicks 54 Gas Station Clerk Set on fire by a masked assailant Burney	187	12/18/16	Steve Carson	-	SSA Marine Employee	Struck and killed by falling containers	Oakland
Advantage  190 12/21/16 David Wicks 54 Gas Station Clerk Set on fire by a masked assailant Burney	188	12/19/16	Ravikesh Kumar	-	FedEx Driver	Killed when truck overturned	Danville
	189	12/20/16	Timothy Pult	49		Shot and killed during a robbery	Vallejo
191   12/21/16   Armando Munguia   -   Truck Driver   Truck rollover   Bakersfield	190	12/21/16	David Wicks	54	Gas Station Clerk	Set on fire by a masked assailant	Burney
	191	12/21/16	Armando Munguia	-	Truck Driver	Truck rollover	Bakersfield

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