

**The National Campaign to Prevent Falls in
Construction**

2022 Safety Stand-Down Evaluation Report:

**Lessons Learned from
OSHA's Certificate of Participation Data**



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Background

Falls are the most common cause of workplace deaths for construction workers. In 2020, 353 construction workers lost their lives in falls to lower levels.¹ In 2021, lack of fall protection in construction stayed the most frequently cited violation by the Occupational Safety and Health Administration (OSHA) for the tenth consecutive fiscal year.^{2,3} Moreover, fall deaths in construction are an occupational health equity issue. Hispanic construction workers are more likely to die from falls compared to non-Hispanic construction workers.⁴

Every fall is preventable, and the National Campaign to Prevent Falls in Construction (Falls Campaign) works to end falls in the industry. The Falls Campaign was created in 2012 by the [National Occupational Research Agenda \(NORA\) Construction Sector Council](#), [OSHA](#), the [National Institute for Occupational Safety and Health \(NIOSH\)](#), and [CPWR–The Center for Construction Research and Training \(CPWR\)](#).

In 2014, the National Safety Stand-Down to Prevent Falls in Construction (Stand-Down) was launched as part of the Falls Campaign. Held annually since, the Stand-Down brings together employers, workers, safety associations, labor unions, and others to work together to prevent falls. During the Stand-Down, participants pause work to engage in a range of fall-focused activities such as facilitating fall-focused toolbox talks, hosting demonstrations, sharing stories of fall experiences, training on fall hazards, and more. The event prioritizes outreach to residential construction employers and workers given their elevated risk for fatal falls.⁵

The Stand-Down reaches hundreds of thousands of workers across the United States and its territories, along with many workers who participate internationally. See [Stop Construction Falls: Evaluation Efforts](#) for evaluation reports from previous years.

¹ U.S. Bureau of Labor Statistics. IIF Databases: Census of Fatal and Occupational Injuries (2011 forward). <https://www.bls.gov/iif/data.htm>

² OSHA. (2021). The Top 10 Most Frequently Cited Standards FY 2021. <https://www.osha.gov/top10citedstandards>. (Accessed November 2022).

³ From FY 2012-2020, Fall Protection 1926.501 was the most cited OSHA standard. In 2011, Scaffolding 1926.451 was the most frequently cited OSHA standard. 2011, 2013, 2014, 2015, 2017, 2018, and 2019 were confirmed via the Way Back Machine's internet archives of the OSHA webpage cited above. Archives were not available for FY 2012 and 2016. As such, FY 2012 was confirmed via the following source: Safety and Health Magazine. (2012). OSHA Announces 'Top 10' Violations of 2012. <https://www.safetyandhealthmagazine.com/articles/safety-health-oshaannounce-top-10-violations-of-2012-2>. (Accessed March 2021). FY 2016 was confirmed via the following source: Safety and Health Magazine. (2016). OSHA's Top 10 Most Cited Violations for 2016. <https://www.safetyandhealthmagazine.com/articles/14927-2016-oshas-top-10-mostcited-violations>. (Accessed March 2021).

⁴ Dong, X. S., Fujimoto, A., Ringen, K., & Men, Y. (2009). Fatal falls among Hispanic construction workers. *Accident Analysis and Prevention*, 41(5), 1047–1052. <https://doi.org/10.1016/j.aap.2009.06.012>

⁵ Dong, X. S., Wang, X., Largay, J. A., Platner, J. W., Stafford, E., Cain, C. T., & Choi, S. D. (2014). Fatal falls in the U.S. residential construction industry. *American Journal of Industrial Medicine*. <https://doi.org/10.1002/ajim.22341>

Methods

Data are from the OSHA 2022 Certificate of Participation Database for the National Safety Stand-Down to Prevent Falls in Construction. To receive a certificate, participants were asked to share information about their stand-down event such as their location, how many people attended, what took place, and any suggestions they had for improvement for future stand-downs.

There are a set of limitations to the Certificate of Participation Database. All data are voluntarily reported by participants and thus face selection and recall bias. Moreover, Stand-Down organizers have been informed that some organizations participate without registering for certificates, so the data represent an undercount of total events held. A previously identified limitation – that the Certificate was only available in English – has been addressed this year: the Certificate form was made available in Spanish, and participants were able to fill it out and obtain certificates in Spanish.

To prepare for analysis, duplicates were removed. Entries with organization names that had small variations in spelling or grammar were consolidated. Spanish-language entries were translated into English. Data are reported in aggregate and, when quotes are used by participants who gave permission for OSHA to publish their responses, identifying details have been removed.

This report is a mixed-methods analysis of the Certificate of Participation Database. Quantitative analysis was performed using Excel. Maps were created using Datawrapper. For the qualitative analysis, a codebook with topical and interpretive codes was created and data were coded iteratively and analyzed to identify themes.

CPWR has collaborated with OSHA since the start of the Stand-Down in 2014 to analyze the OSHA Certificate of Participation Database. However, because of variations in data availability and subsequent gaps in analysis, this report addresses trends in participation beginning in 2019. For reports on participation 2014-2016, [Stop Construction Falls: Evaluation Efforts](#).

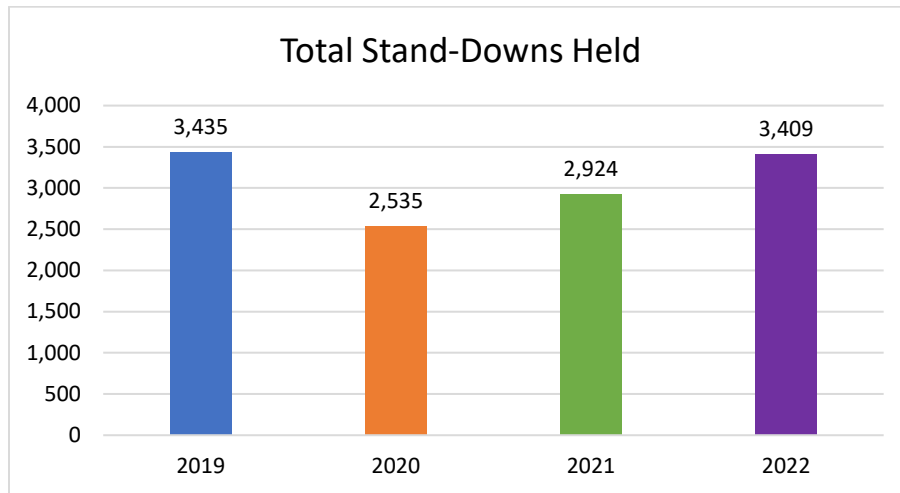
Total Number of Stand-Downs and Workers Reached

In 2022, thousands of Stand-Down events engaged hundreds of thousands of workers to come together to prevent falls in construction. A total of **3,409 stand-downs reached 455,175 workers** across the United States, territories, and internationally.

Recent Overall Participation Trends

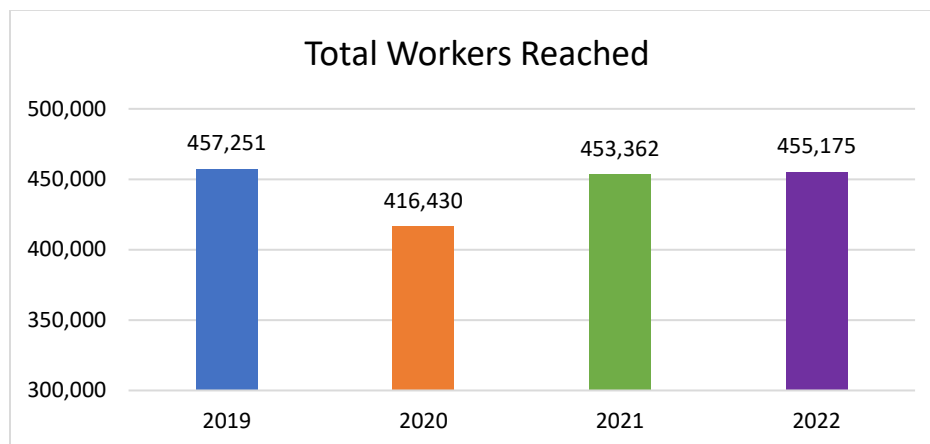
A. Stand-Downs Held Over Time

In 2022, total Stand-Down events continued their recovery from the dip experienced in 2020 with the start of the COVID-19 pandemic. In 2020, all Stand-Downs were held virtually, and in 2021, in-person events returned. As of 2022, total Stand-Down **events held rose to nearly the level of events held in 2019.**



B. Workers Reached Over Time

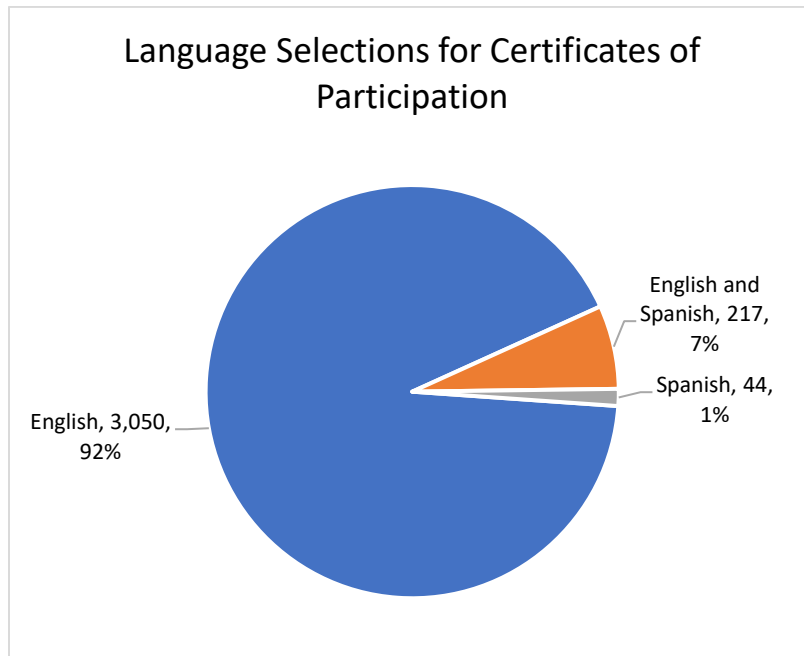
The total number of workers reached stayed stable between 2021 (453,362) and 2022 (455,175). **Participation in terms of workers reached reflects a continued, almost complete recovery to 2019 pre-pandemic levels of participation.**



C. Participation By Language

Spanish-language options were added to the Certificate of Participation process in 2022. Participants could fill out the form in Spanish and obtain their certificate in Spanish. They had the option to receive a certificate in English, Spanish, or both.

Eight percent of respondents (261) used the new option to obtain a certificate in Spanish. Within this group, the majority (217) opted to receive a certificate in both English and Spanish, while a subset (44) only received their certificate in Spanish. The rest of the respondents – 92% – received their certificates only in English.



Extent of Ongoing Participation

A. Multiple Stand-Downs Within Organizations

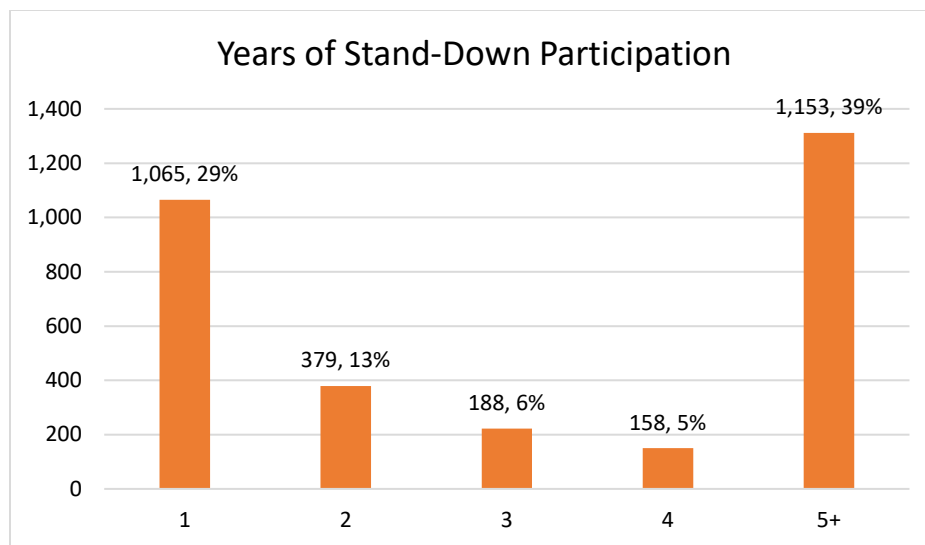
To evaluate how widespread participation was within organizations, we investigated how common it was for organizations to report holding multiple stand-down events. This captures organizations that held stand-downs at different jobsites and organizations that held multiple stand-downs on separate days.

Most organizations hosted a single event rather than multiple events. Among the 1,817 organizations that registered for certificates of participation, 78% (1,415) hosted a single stand-down whereas 22% (402) hosted multiple events. This trend was similar for residential construction stand-downs: 75% (100) of participating residential construction organizations held a single event, whereas 25% (33) held multiple events.

B. Multiple Stand-Downs Across Years

The Stand-Down continues to both attract new participants and retain long-time participants. **Twenty-nine percent of organizations reported they were participating for the first time in 2022.**

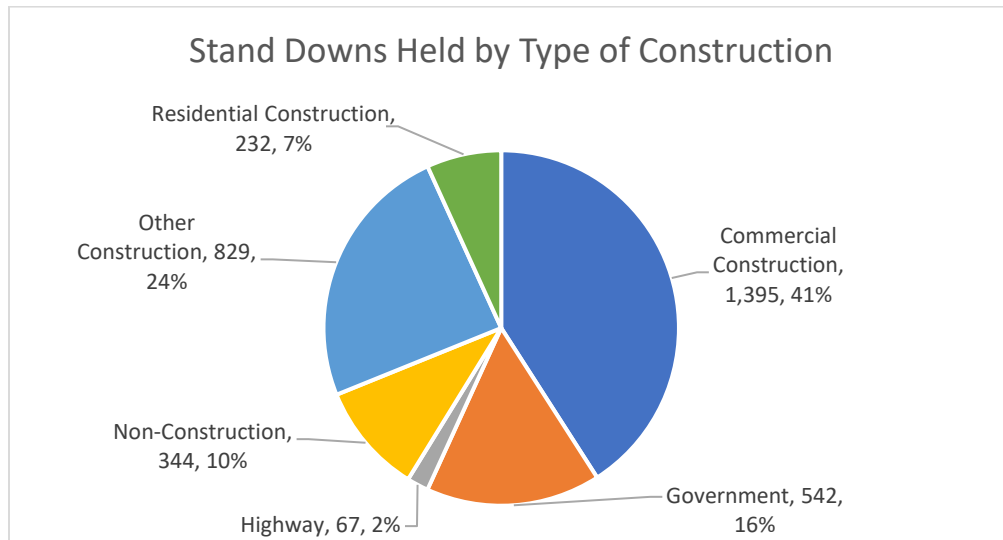
In addition, **more than half (54%) of respondents reported they were returning for their third or more year of participation.** Returning participants expressed satisfaction with their participation. As one participant who held their third stand-down in 2022 said: “These Stand Downs really make a difference. I have noticed over the years that the workers are much more engaged and have more of a ‘buy in’ to safety.”



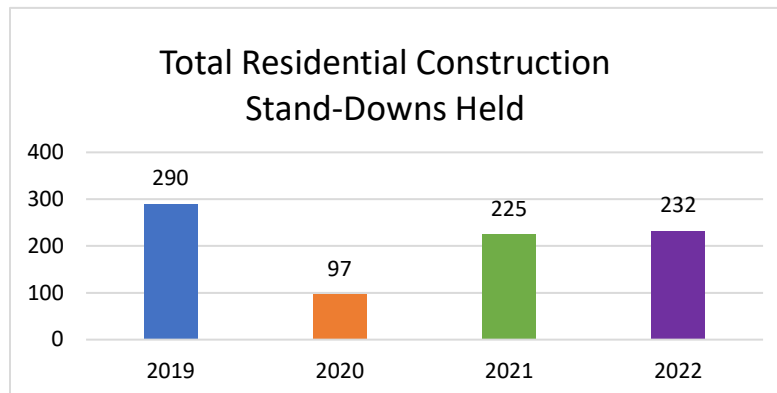
Stand-Down Demographics

A. Stand-Downs by Type of Construction

Respondents were asked to report whether they primarily worked in the commercial construction, residential construction, other construction, non-construction, highway, or government sectors. As in 2019, 2020, and 2021, **commercial construction remained the most selected sector** in 2022, with 41% (1,395) of the total stand-downs. Other construction was the second-most selected category, making up 24% (829) of the stand-downs. Participants who identified their sector as Other Construction described working in areas such as oil and gas projects, warehouse work, utilities-related construction, and demolition.



The Falls Campaign seeks to prioritize residential construction employers and workers due to their higher risks for fatal falls.⁶ In 2022, **residential construction organizations held a total of 232 events, making up 7% of all reported stand-downs.** Although this was a slight increase from 225 events in 2021, the total number of residential construction stand-downs held did not reach its 2019 level of 290 events.

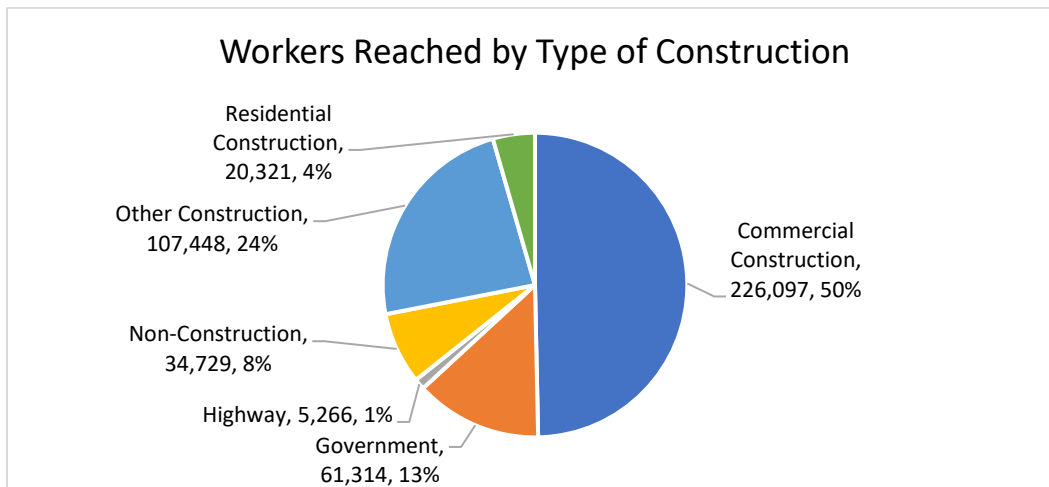


⁶ CPWR – The Center for Construction Research and Training. (2021). New Trends of Fatal Falls in the Construction Industry. <https://www.cpwr.com/wp-content/uploads/DataBulletin-Falls-Special-Issue-2020.pdf>. (Accessed November 2021).

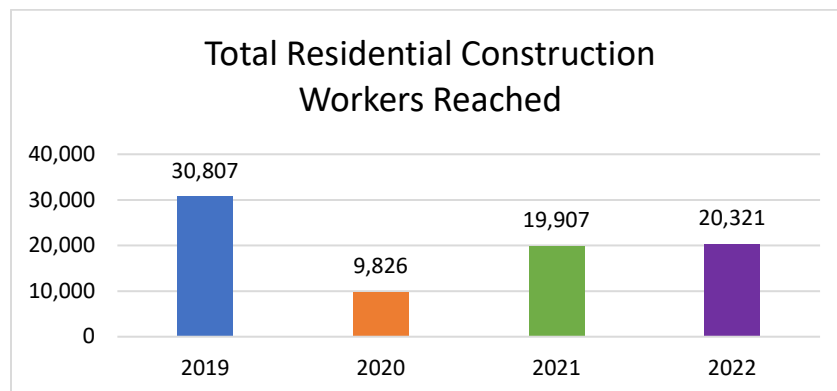
B. Workers Reached by Type of Construction

Respondents were asked what type of construction they perform and how many workers attended the stand-downs they hosted. This data provides an indicator of how many workers were performing that type of construction when the Stand-Down occurred, however we cannot conclude whether the workers attending self-identify as part of that sector. Individuals completing the certificate form can only choose one sector and likely default to the primary sector for their company, which may or may not reflect the primary sector of the workers who attended. For example, a general contractor who selected “commercial construction” as their type of construction may have hosted participating workers who primarily work in a different sector.

Based on the data available, we calculated the numbers of workers reached as part of a stand-down event in a particular sector. **One in two participating workers (50%, 226,097) worked in commercial construction at the time of the Stand-Down.** The next most selected sector was other construction: 24% of workers reached worked in this sector (107,448).



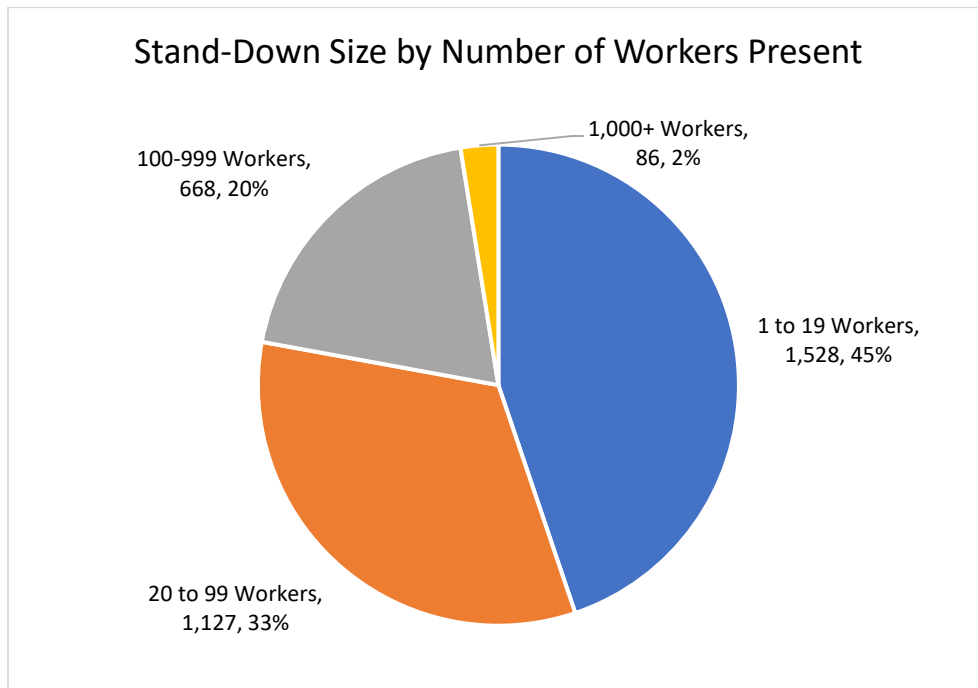
As mentioned above, residential construction workers are a primary target audience of the stand-down. **Four percent of workers reached (20,321) worked in the residential construction sector.** The number of residential construction workers reached has still not recovered to its 2019 level after its dip in 2020 with the start of the pandemic.



C. Stand-Down Size

Many residential contractors are smaller in size and small employers in any sector are at a higher risk for falls. Alongside the goal of reaching those in residential construction, the Stand-Down seeks to prioritize small contractors. The Certificate of Participation database does not ask respondents to state their organization’s total size, but it does ask how many employees were present at the stand-down event. Although responses do not distinguish between different stand-down structures – such as when a large employer split their events into multiple smaller events – the data provides insight into jobsite size where stand-downs take place.

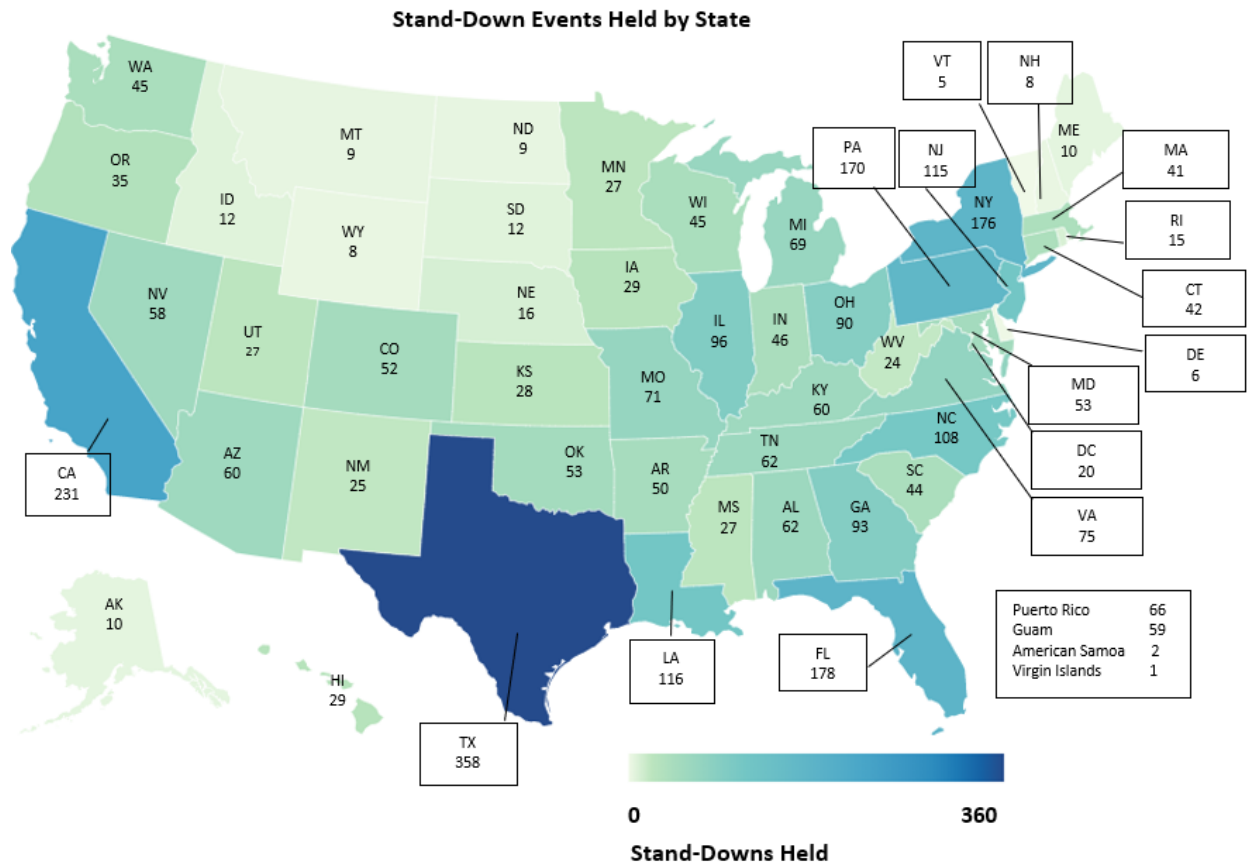
Stand-downs were mostly held with smaller groups of workers: 45% of stand-downs were held at sites with one to 19 workers present (1,528). This trend was similar for residential construction participants: 36% of residential construction stand-downs took place at site with one to 19 workers present (84).



D. Stand-Downs by State

Stand-downs were held in every state in 2022. The states with the highest number of stand-downs were **Texas (358)**, **California, (231)**, **Florida (178)**, **New York (176)**, and **Pennsylvania (170)**. For information on fall fatalities by state, consult [CPWR's Construction Fatality Map Dashboard](#).

Stand-downs were also held in Puerto Rico (66), Guam (59), American Samoa (2), and the Virgin Islands (1). There were 171 Stand-Downs held internationally.⁷ Among these 171 international stand-downs, 35% were commercial construction, 28% were other construction, 19% were non-construction, and 16% were government.

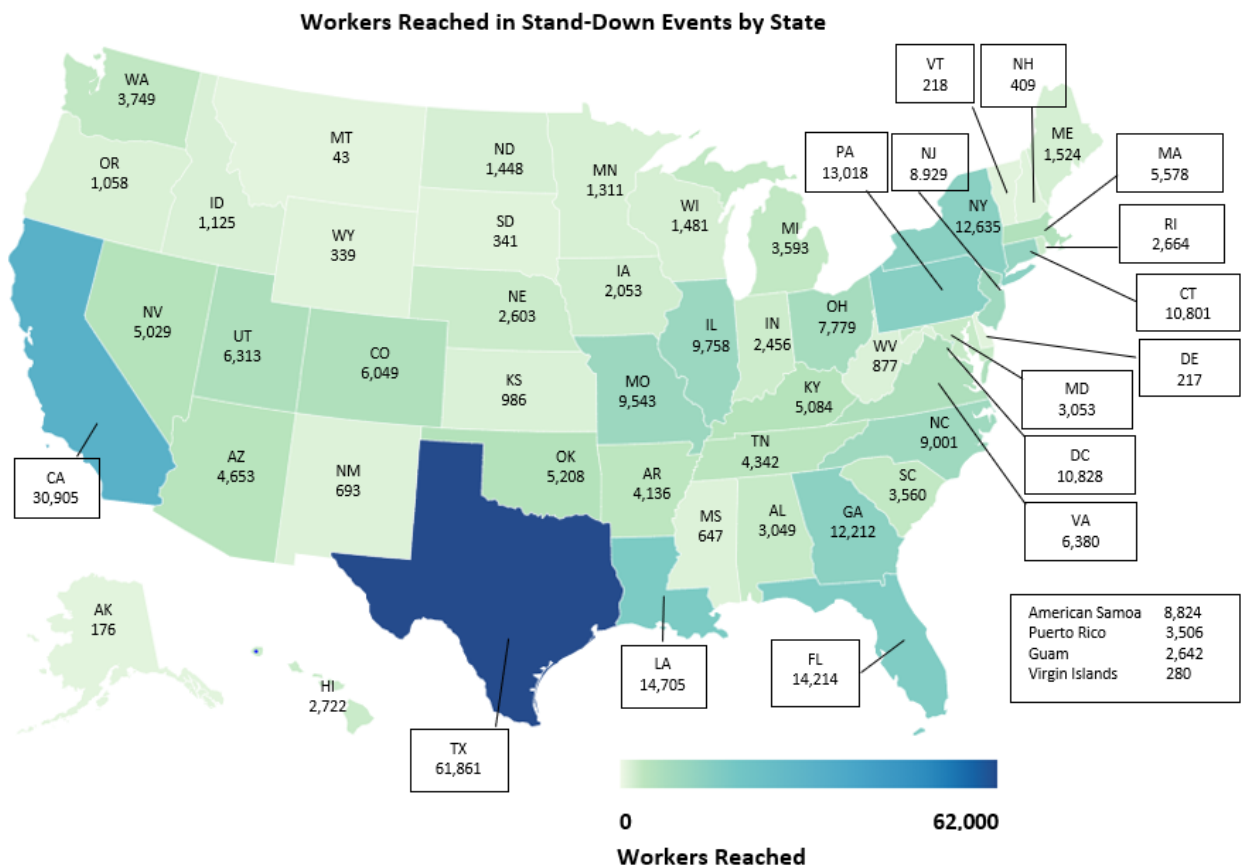


⁷ While international participants were not specifically asked to report which country they were located in, some participants identified their location in their entries. Participants reported holding events in countries such as Mexico, Japan, Kuwait, the Philippines, Saudi Arabia, India, Egypt, the United Arab Emirates, Germany, Morocco, Pakistan, Uganda, Canada, and the United Kingdom.

E. Workers Reached by State

A total of **455,175 workers** were reached in the 2022 Stand-Down. The states where events reached the highest numbers of workers were **Texas (61,861)**, **California (30,905)**, **Louisiana (14,705)**, **Florida (14,214)**, and **Pennsylvania (13,018)**. For information on fall fatalities by state, consult [CPWR's Construction Fatality Map Dashboard](#).

An additional **118,567 workers were reached internationally**.⁸ Substantially more workers were reached internationally in 2022 compared to past years. This was a 71% increase in workers reached compared with the 2021 Stand-Down, when 69,289 workers were reached internationally.



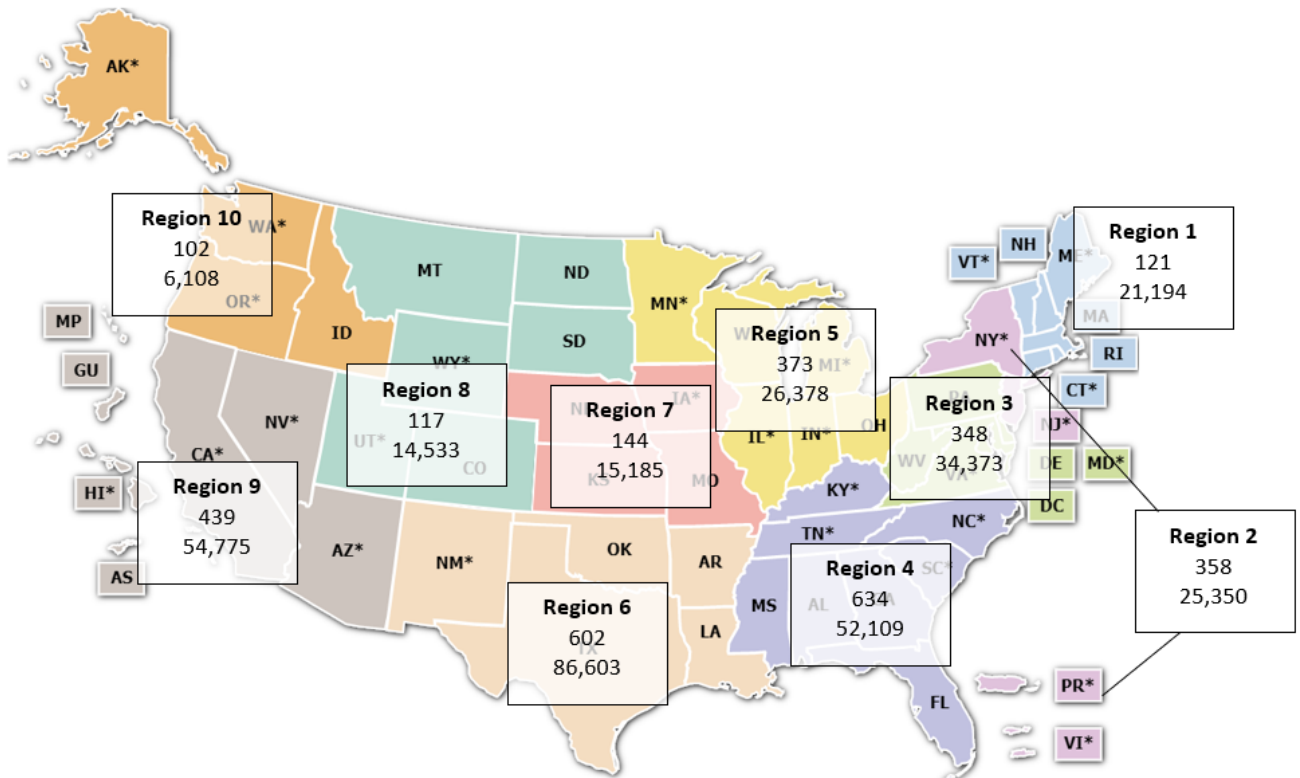
⁸ While international participants were not specifically asked to report which country they were located in, some participants identified their location in their entries. Participants reported holding events in countries such as Mexico, Japan, Kuwait, the Philippines, Saudi Arabia, India, Egypt, the United Arab Emirates, Germany, Morocco, Pakistan, Uganda, Canada, and the United Kingdom.

F. Stand-Downs and Workers Reached by OSHA Region

OSHA [regional offices](#) and training centers promote and facilitate stand-down events nationally and throughout the territories.

The largest numbers of stand-downs were held by **Region 4** (634), **Region 6** (602), and **Region 9** (439). The same regions also reached the highest number of workers, although in a different order: **Region 6** (86,603), **Region 9** (54,775), and **Region 4** (52,109).

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
Stand-Downs	121	358	348	634	373	602	144	117	439	102
Workers Reached	21,194	25,350	34,373	52,109	26,378	86,603	15,185	14,533	54,775	6,108

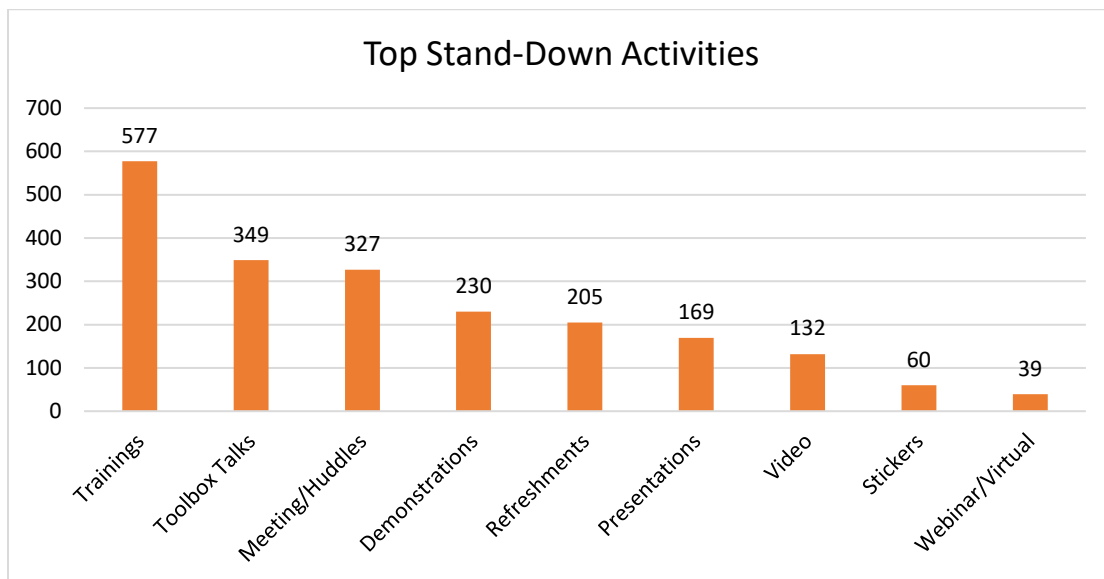


Stand-Down Content

Respondents were asked to describe their stand-down events in an open-ended format. They were asked what they did, what materials they used, how it went, and what they expected to happen because of the event.

A. Popular and Unique Activities

When participants wrote about what they did in their stand-downs, many described specific activities. The activities mentioned most often were **trainings** (577), **toolbox talks** (349), **meeting/huddles** (327), **demonstrations** (230), and **refreshments** (205).



As in past years, it was common for participants to combine multiple activities during each stand-down event and throughout the week. For example, one respondent described hosting events that included a toolbox talk, an activity on how to calculate fall clearance for different fall protection set ups, a training on how to inspect fall protection, a discussion of myths vs. facts on falls, the provision of resources such as the NIOSH Ladder Safety App, and an interactive game with prizes.

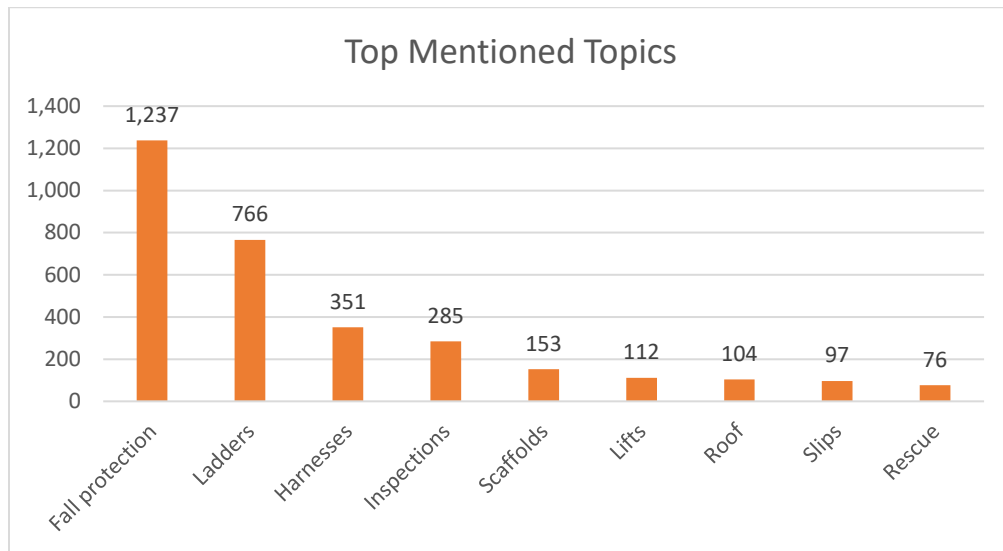
Some respondents described facilitating activities that were unique. These less commonly mentioned ideas for events included:

- A tribute to first responders for their life-saving work assisting with rescue.
- A moment of silence for workers who have died because of falls.
- Asking all employees to bring in a photo that represented their “Why” for working safely.
- Outreach to the local elementary school that children of workers attend. Interactive activities, coloring pages, and other ways to engage children about the importance of fall safety for their families.

- A skit via radio about fall safety.
- A comedy show.

B. Popular and Unique Topics

Many respondents used key fall-related topics in their descriptions of their stand-down activities. The topics mentioned most often were **fall protection** (1,237), **ladders** (766), **harnesses** (351), **inspections** (285), and **scaffolds** (153).



Some respondents also described providing training on non-fall-related topics as part of their stand-down events. They said they trained on topics such as mental health, suicide prevention, Narcan administration, signs of overdoses, heat, sexual harassment, workplace violence, ergonomics, struck-by incidents, safety culture, head injuries, fire prevention, and silica. They used their stand-down events as an opportunity to discuss multiple occupational safety issues.

C. Strategies for Successful Stand-Downs

Some participants discussed why they felt the stand-downs they hosted were effective. Their strategies for successful stand-downs focused on two key themes: making events **interactive** and **personalized**.

Participants said that making events **interactive** was important for success. By engaging workers in active participation, they were able to “[drive] the point home” of their stand-downs. Participants made their events interactive by facilitating discussions, making time for question-and-answer sessions, creating breakout groups, prioritizing individual conversations, promoting interaction between co-workers, and asking for feedback and ideas from employees about how to improve fall protection. For example, as one participant described: “We used various didactic and pedagogical resources for our event, including a discussion and

demonstration of our principal resources for employees in each activity. The activity permitted an exchange of knowledge and experiences between co-workers. We hope that with these activities, we can elevate the level of knowledge and awareness about what we are exposed to among all workers who work at heights.”

Participants also described how making events **personalized** increased their success. One way they made events more personal was focusing on sharing stories because, as one participant said: “Story-telling is the best form of education.” As another participant described: “Our company...made our Stand Down more personal [by] more than half of the [s]taff sharing their personal experiences and stories.” Another way participants personalized their events was by tailoring content to the jobsite and positions of specific workers present. Instead of providing general fall protection training, they focused on specific plans, hazards, and strategies for the work that participants were performing. In addition, rather than using general case studies of falls, they discussed real events that had happened on their jobsite.

Recommendations for Future Stand-Downs

Respondents were asked if they had recommendations for how to improve the Stand-Down. Although participants expressed enthusiastic satisfaction, they also had ideas about how to improve future events.

A. Increase Spanish-Language Accessibility

Participants expressed gratitude for resources in Spanish. Many described successfully using Spanish-language training materials. As one participant said: “Keep up the good work on bilingual posters. I use them all the time.” Another participant specifically complimented the translation quality for the Spanish-language materials.

Participants asked for **more Spanish-language materials**. They encouraged the Falls Campaign to ensure that all distributed written materials were available in Spanish and made recommendations for specific types of Spanish-language resources such as videos, webinars, and printed hazard alert cards.

B. Create New Materials

Although participants reported satisfaction with available materials, they offered suggestions for additional resources they would find helpful for their stand-downs. Short videos, real-life examples, and customizable merchandise were popular requests. When it comes to merchandise, respondents indicated that while larger contractors may be able to produce their own Stand-Down specific merchandise, smaller companies often cannot afford to do so. Having merchandise available to purchase would be useful to facilitate their participation. Another participant recommended: “Offer Tee shirts for this event that [have] unique art/graphics every year. You could provide the art/graphics to the end-user, and they can use it to make shirts for their events.”

Respondents also suggested **updating material design and prioritizing accessibility for users with visual or other impairments**. Further recommendations included to help increase engagement and finding **ways to amplify successful stand-downs**. Respondents requested new Stand-Down Success Stories and also suggested creating YouTube or social media content “to highlight activities [by] companies or work crews [and] showcase their ability to work safely.”

C. Offer Additional Creative Ways to Participate

A small group of participants provided ideas about how the Falls Campaign could add additional ways to participate in the event. They recommended the following contests:

- A contest and award for creativity on how to engage employees in the Stand-Down and how to “continue the safety after the week.”
- A contest for workers to produce “short story-telling videos about falls and how they affect the families [and] how fall protection has worked to save lives.”

D. Increase Opportunities for Engagement with OSHA

Participants provided recommendations for ways to **increase opportunities for worker and employer engagement with OSHA** during participation in the Stand-Down. As one participant explained: “[Too] many times, the only interaction workers have with OSHA is during an investigation or inspection.”

They had a range of ideas for how this greater engagement could be achieved, such as randomly identifying companies and offering them the chance for OSHA personnel to attend their events. Similarly, another participant recommended expanding how OSHA Consultation programs relate to the Stand-Down and encouraging OSHA Consultation programs to attend local stand-downs and provide resources in-person. Another participant recommended providing live, region-based virtual training where workers could ask OSHA questions in real-time.

E. Change Event Timing

Some participants recommended **changing the event timing to eliminate overlap between the Stand-Down and Construction Safety Week**. As one participant explained: “There seems to be confusion with Construction Safety Week and the National Stand-Down taking place at the same time. Some vendors had different ideas of what should be represented due to this.”

These participants recommended staggering these events to promote full participation in each. They said to “separate National Fall Prevention Stand-Downs from Construction Safety Week as these are usually different subjects and trying to participate in both is difficult without losing impact.”

F. Improve Advertising

Participants recommended **expanding advertising for the Stand-Down** to ensure that participants knew about the event and had sufficient time to prepare. One individual explained that they “only found out about this two weeks ago.” As such, they recommended adding additional advertising methods such as a national countdown, monthly reminders, email notifications, billboards, national media venues, additional social media channels, and school-based outreach.

Participants also recommended **starting advertising the Stand-Down as early as possible**. One participant said to announce the Stand-Down date 11 months in advance of the event so that participants could plan. Another agreed, saying that organizers should “start promoting the next Stand-Down as soon as this [week] is over.”

G. Host More Events

Participants **recommended that the Falls Campaign add more events outside of the week of the Stand-Down**. Participants recommended having additional events broadly, monthly events, and/or quarterly events. As one participant explained: “Quarterly initiatives would create greater awareness to our inherently dangerous industry.”

Note: Find ideas [here](#) for how to keep your fall protection program going year-round.

Falls Campaign organizers also hold regular webinars, which can be viewed on-demand [here](#).

Are you interested in participating in the Falls Campaign and Stand-Down?

*National Safety Stand-Down to Prevent Falls in Construction 2023:
May 1 - 5, 2023*

For resources on how to hold your event,
visit: [One-Stop Stand-Down Shop | Stop Construction Falls](#)



**Safety Pays
Falls Cost**

**For more information on the National Campaign to Prevent Falls in
Construction and the National Safety Stand-Down,
visit the OSHA-NIOSH-CPWR campaign site:**

www.stopconstructionfalls.com