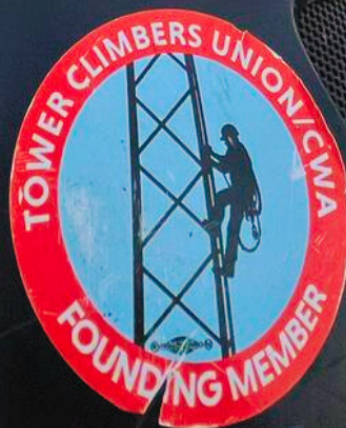


# TOWER TECHNICIANS SPEAK OUT ON SAFETY

SAFETY SURVEY IDENTIFIES HAZARDS BEYOND  
THE CONTROL OF TOWER TECHNICIANS



TOWER CLIMBERS UNION/  
COMMUNICATIONS WORKERS OF AMERICA • MAY 2023

## OVERVIEW

This report presents the initial findings from the first-ever safety survey designed by and for tower technicians. Tower technicians, or “tower climbers”, construct, maintain and decommission America’s wireless infrastructure. A lynchpin of ensuring our wireless telecommunications system functions properly to connect communities, businesses and families, tower technicians install equipment for wireless carriers, law enforcement and emergency responders onto macro cell towers and antennas, as well as maintain the towers for the tower owners.

The labor market for tower technicians is highly fissured, preventing frontline workers from holding the ultimate power holders in their industry accountable for wages and working conditions. Instead of being employed directly by the handful of large and immensely profitable wireless carriers or owners of the cell towers, tower technicians are generally employed by one of hundreds of small subcontractors hired by one of the seven firms that dominate the industry. These firms include four wireless carriers (AT&T, DISH Network, T-Mobile and Verizon) and three tower owners (American Tower, Crown Castle and SBA Communications).

## KEY FINDINGS

- Safety concerns are widespread. Most respondents know someone who has experienced a serious injury on the job; nearly 1 in 5 know someone who has died on the job.
- Many safety incidents are never investigated, and when they are, meaningful changes are infrequently made.
- The pressure to meet deadlines imposed by wireless carriers and tower owners are a key source of ongoing safety concerns.
- While some significant gaps remain in specific areas of safety training, major sources of safety concerns lie outside workers’ control. In other words, improved training alone will not solve the outstanding safety concerns.
- Wireless carriers and tower owners exercise significant influence over safety conditions at firms that employ tower technicians through project deadlines and other work rules that can cause serious safety concerns.

**Majority of tower technicians have known of injuries or fatalities on job sites.** Instead of relying on government statistics, this survey asked tower technicians themselves about safety practices and outcomes in their industry, including whether they have been on a job site where a serious or fatal injury took place, known people injured or killed, or if they have been injured themselves. The results are shocking and reveal that safety hazards are personal and acute for tower technicians. It also suggests that injuries short of death may be unevenly reported at best.



### Have you known someone or been on a job site where someone was seriously or fatally injured?

- 65.3%** have been on a job site where someone was injured
- 59.0%** know someone who has been seriously injured on the job
- 25.0%** have been on 5 or more job sites where someone was injured
- 17.0%** have known someone who was fatally injured on the job
- 4.0%** have been on a job site where someone was fatally injured

**Safety incidents appear to be infrequently investigated.** Survey respondents indicate that there are large gaps in reporting and investigating safety incidents. If 59.6% of respondents state that safety incidents are only investigated, “some of the time,” “rarely,” or “never,” this also raises concerns that some fatalities may go unreported and also elude investigations by OSHA.

### How often are safety incidents investigated?

- 35.4%** Investigated “some of the time”
- 24.2%** Investigated “rarely” or “never”

## IN THEIR OWN WORDS



Rushing to stab a collar, my coworker pulled his shoulder out of socket."

-  
TOWER TECH WITH 4 YEARS OF EXPERIENCE IN INDIANA



Ginpole rigging failed and tower collapsed. 850 feet."

-  
TOWER TECH WITH 37 YEARS OF EXPERIENCE IN NEVADA



A guy fell into his safety climb and his elbow hit a piece of steel causing his shoulder to be dislocated."

-  
TOWER TECH IN FLORIDA



**The root causes of the incidents are infrequently addressed.** When safety incidents are investigated, oftentimes nothing changes to prevent a recurrence. When asked what the most frequent outcome following an investigation of a safety incident, a majority (60.2%) of tower technicians responded that either nothing or very little changed to address the causes of the incident. Only 29% felt that companies make significant or fundamental changes following a safety incident.

**What is the most frequent outcome following an investigation of a safety incident?**

- |              |   |
|--------------|---|
| <b>35.5%</b> | "The company makes some minor changes but it's not enough"                        |
| <b>24.7%</b> | "Nothing happens" following the outcome of an investigation of a safety incident. |

## IN THEIR OWN WORDS



**No changes are made in terms of employee safety. More degrees of separation are applied to reduce company responsibility."**

-  
TOWER TECH IN SEATTLE, WASHINGTON

**Pressure to work unsafely in order to meet deadlines is prevalent.** While most survey participants responded that they personally would refuse to work unsafely, they also acknowledge that there exists widespread pressure to work unsafely in order to meet job deadlines imposed by the carriers and tower owners. Thirty-five (35%) of respondents feel pressure to work unsafely. Only 36.9% of respondents said they are "never" told to work unsafely to get the job done.

**How frequently do you feel pressured to work unsafely "to get the job done"?**

- |              |                    |
|--------------|--------------------|
| <b>8.7%</b>  | "all the time"     |
| <b>4.9%</b>  | "most of the time" |
| <b>21.4%</b> | "some of the time" |



## IN THEIR OWN WORDS



We aren't told in a direct way, but it is strongly insinuated. I can say that I have climbed with broken ribs...."

-  
TOWER TECH WITH 1  
YEAR OF EXPERIENCE



I could write a book about just get it done. Osha requires you to climb down from heights at 30 mph wind gusts, I've worked in 40-50 mph wind gusts. It's not safe and makes you so unfocused."

-  
TOWER TECH WITH 6 YEARS OF  
EXPERIENCE IN WISCONSIN

**Hazardous working conditions are a widespread concern.** Tower technicians climb to great heights, making attention to safety integral to their work and always top of mind. But when asked whether they were concerned about their safety at work, 43.7% responded that they were either "strongly" or "somewhat" concerned about their safety.

**Major sources of concern about hazards lie outside their control.** Tower technicians identify that most of the safety hazards they encounter are outside of their control and, even more troubling, they encounter these hazards on a recurring basis.

### Have you ever encountered safety hazards on a job that are outside of your control?

- 63.4%** encounter safety hazards "outside of their control"
- 54.7%** encounter these safety hazards "some of the time"
- 25.0%** encounter these safety hazards "all" or "most of the time"



## CARRIERS AND TOWER OWNERS ARE SIGNIFICANT SOURCES OF SAFETY CONCERNS

**Tower owners (American Tower, Crown Castle, and SBA Communications)** frequently impose or allow work rules on their tower sites that can cause safety concerns or hazards:

### Tower Owners' Imposed Rules Impact Safety

<b>74.7%</b>	Restricted what tools can be used on a job.
<b>72.5%</b>	Allowed work to be conducted during hazardous weather conditions, such as high winds, accumulation of snow and/or ice.
<b>68.1%</b>	Allowed night work.
<b>60.4%</b>	Tower needed structural modification before my assigned job can be safely done.
<b>56.0%</b>	There was no anchorage point or there was no access to an anchorage point because it was blocked by equipment or for another reason.
<b>51.6%</b>	Safety ladders are not well maintained or inoperable.
<b>47.3%</b>	The weight of the equipment installed on the tower is more than the tower was designed to handle.
<b>41.8%</b>	Multiple crews were forced to work at the same time on a tower.

**Carriers (AT&T, T-Mobile, Verizon, DISH Network)** impose rules and pressure that can also cause safety concerns or hazards:

### Carriers' Imposed Rules Impact Safety

<b>77.5%</b>	Impose unrealistic time deadlines
<b>67.5%</b>	Allowed night work
<b>58.8%</b>	Restrict what tools tower techs can use on a job.
<b>56.3%</b>	Pressure tower technicians to ignore other environmental factors that could delay completing the job
<b>53.8%</b>	Pressure tower technicians to climb during unsafe weather conditions.
<b>48.8%</b>	Do not allow tower technicians to sign off on a site

**Major holes in compliance with insurance programs designed as a safety net for injured workers.** Given the high injury and fatality rates of tower technicians, it is striking that a significant number of companies employing tower technicians do not carry mandatory Workers Compensation Insurance. The significant presence of independent contractors and tower technicians being paid by the job indicate there may be a problem with misclassification in the industry, further weakening the safety net and obstructing union organizing and collective bargaining rights.

#### Holes in Employment Rights and Insurance Safety Programs

- 31.4%** Employer does not provide short-term disability insurance
- 11.7%** Employer does not carry Workers' Compensation Insurance
- 11.4%** Are hired as Independent Contractors (1099)
- 9.5%** Are paid by the job (instead of hourly or salary)

**Most feel they are adequately trained and can raise safety concerns.** The overwhelming majority of tower technicians responding to our survey expressed confidence in the safety training they had received and felt it adequately prepared them to work safely. Further, most also felt they could raise safety concerns with their direct management.

#### High overall satisfaction on safety training and ability to raise concerns

- 86.7%** Feel training is adequate to ensure they have the skills, expertise and experience required to work safely
- 91.3%** Feel comfortable asking questions about safety and or safety practices at work
- 88.3%** Feel comfortable reporting an unsafe condition on a tower site





**Major gaps remain in terms of specific types of safety training.** When probed for more detail on specific types of safety-related training, it became clear that several important areas of safety training are not widely available.

**Percentage of respondents who did NOT receive the following types of training:**

<b>22.9%</b>	Use of safety kit/rescue bag
<b>29.5%</b>	Field/On-the-job training
<b>37.1%</b>	Hoists (e.g. material hoists, personnel hoists, elevator hoists, overhead hoists)
<b>41.0%</b>	ANSI 92.24 Aerial Lists
<b>47.6%</b>	Emergency Response/Emergency Action Plans
<b>47.6%</b>	Rope and Rigging Access Technician Training
<b>48.6%</b>	Crane Rigging
<b>52.4%</b>	Ladder Safety Systems
<b>55.2%</b>	Dropped object prevention
<b>55.2%</b>	Tower Inspections
<b>74.3%</b>	Gin Poles

**By the numbers, despite differing estimates of total employment, tower technicians consistently fall among the top ten most dangerous occupations.** Calculating exact occupational injury and fatality rates for tower technicians is challenging because government and industry sources provide a wide range of estimates for total employment in this occupation. The U.S. Occupational Safety and Health Administration (OSHA) began a Communication Tower Safety rule making process in April 2015. In 2018, OSHA estimated total employment ranged from 10,000 to 29,000 tower technicians nationally, resulting in an average fatality rate between 28.6 and 83.0 per 100,000 full-time employees over the last 20 years; or an average fatality rate between 19.3 and 56.0 per 100,000 full-time employees over the last five years. Regardless of whether you use the high or low estimate for total employment of tower technicians, the fatality rate has been among the top 10 most deadly occupations in the country. Tragically, tower technicians have never shown up in official government lists as one of the most dangerous occupations in the country. Further, industry apologists using fuzzy math have spread misinformation about fatality rates. As a result, there is little widespread popular awareness of the safety hazards faced by tower technicians beyond industry stakeholders.

### Annual Reported Fatalities<sup>1</sup>

<b>5-year average</b>	5.6
<b>10-year average</b>	7.1
<b>20-year average</b>	8.3

### Fatality Rate per 100,000 Full-Time Employees

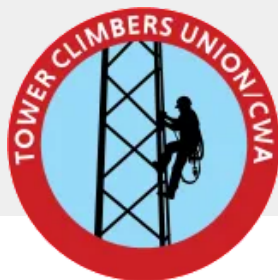
Total Estimate Employment	10,000 FTEs	29,000 FTEs
<b>5-year average</b>	56.0	19.3
<b>10-year average</b>	71.0	24.5
<b>20-year average</b>	83.0	28.6

## ABOUT THE SURVEY

The entire survey questionnaire can be found at [CWA.org/TCUSafetySurvey](https://CWA.org/TCUSafetySurvey). The preliminary findings detailed in this report are based on responses from 103 tower technicians as of April 26, 2023 who reside in over 30 different states and work for more than 70 different cell tower contractor companies. Years of experience working in the industry ranged from 1 year up to 37 years with the most frequent response being 5 years of experience.

## ABOUT THE TOWER CLIMBERS UNION

The Tower Climbers Union is a local union affiliate of the Communications Workers of America, AFL-CIO whose membership consists entirely of the tower technicians, tower climbers, tower hands who keep our networks running.



### Tower Climbers Union/CWA

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<sup>1</sup> Calculations based on data compiled by Wireless Estimator at <https://wirelessestimator.com/content/fatalities>