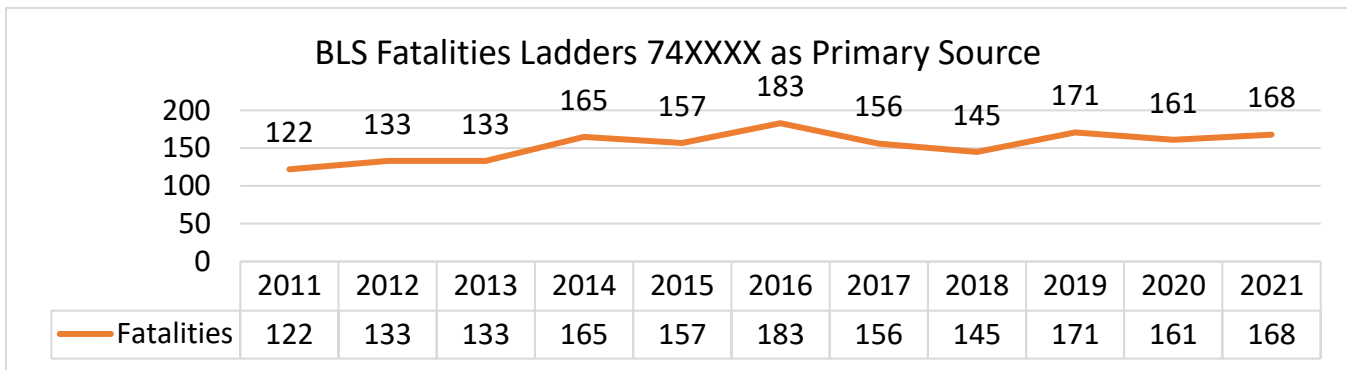


**March is Ladder Safety Month 2023\*** (02/2023)

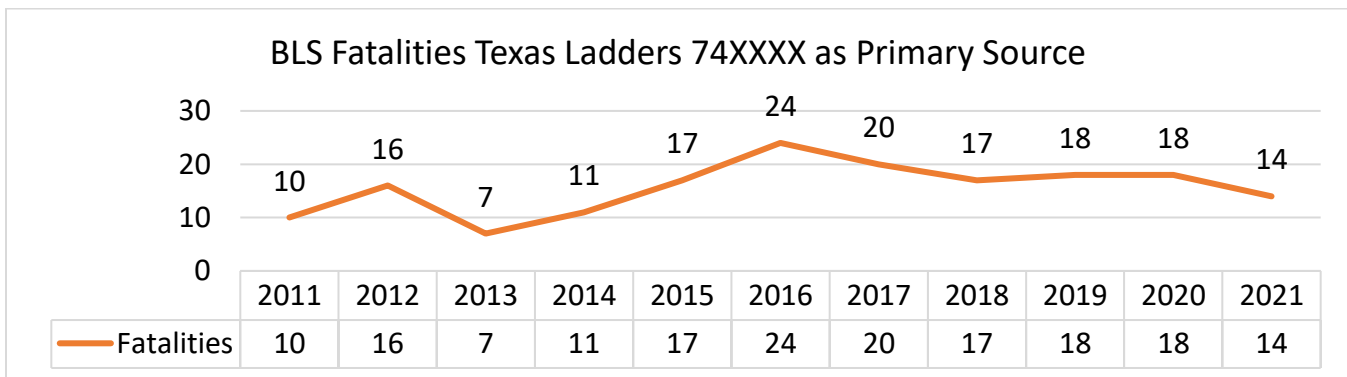
From FY 2009 through FY 2022 there have been approximately 34 ladder related fatalities reported to the Houston OSHA offices. **In FY 2022 we had four ladder related fatalities versus two in FY 2021. There were 27 reported serious incidents in FY 22 versus 21 in FY 2021.** Ladders are important to help workers access elevated heights, however, they present a serious fall hazard when used incorrectly. Ladders also present a danger by having an employee in an elevated work area presenting additional hazards not always found on the ground below. By continuing to focus on ladder safety we can do even better this year and send our employees home safely.



**NATIONAL - Bureau of Labor Statistics (BLS) National Ladder Related Incident Search\*\***



**TEXAS - Bureau of Labor Statistics (BLS) National Ladder Related Incident Search\*\***



The last year published year, 2020, by BLS of Lost Workday Incidents (LWDI) with Ladders 74XXXX, as a Primary Source showed 22,710 incidents in the U.S. and 1,080 incidents in Texas.

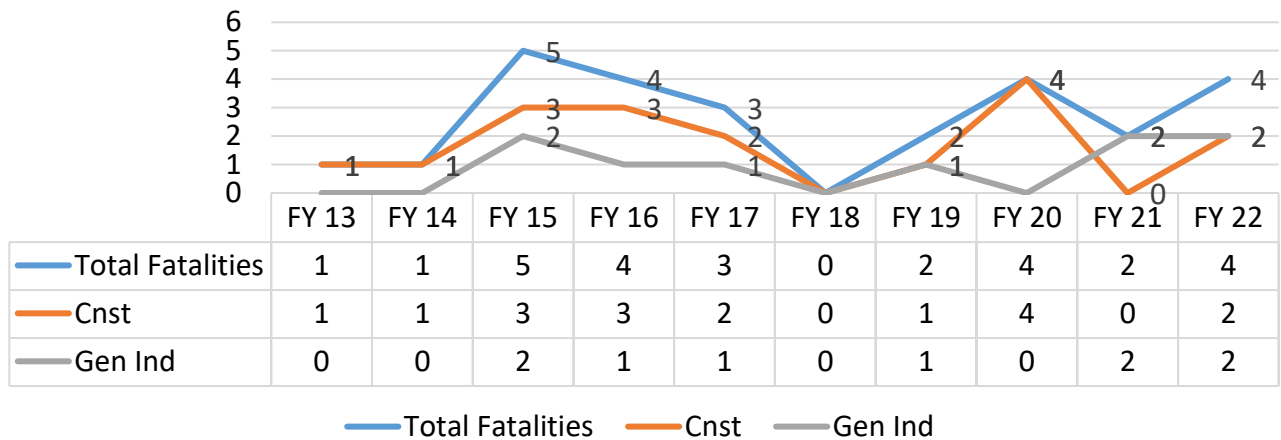
**Texas Department of Insurance - Workers Compensation Ladder Related Claims\*\***

In 2022 there were **1,082** workers compensation lost work-day claims in Texas related to fall or slip from a ladder or scaffold

In 2020 the average medical cost of a lost work-day claim in Texas related to a fall or slip from a ladder or scaffold was **\$17,068**

In 2022, the most lost work-day claims, **42.5%**, were for workers on the job for less than one year

SE TX Ladder Related Fatality Incidents\*\*\*



FY 22 SE TX Ladder Related Fatality Narratives\*\*\*

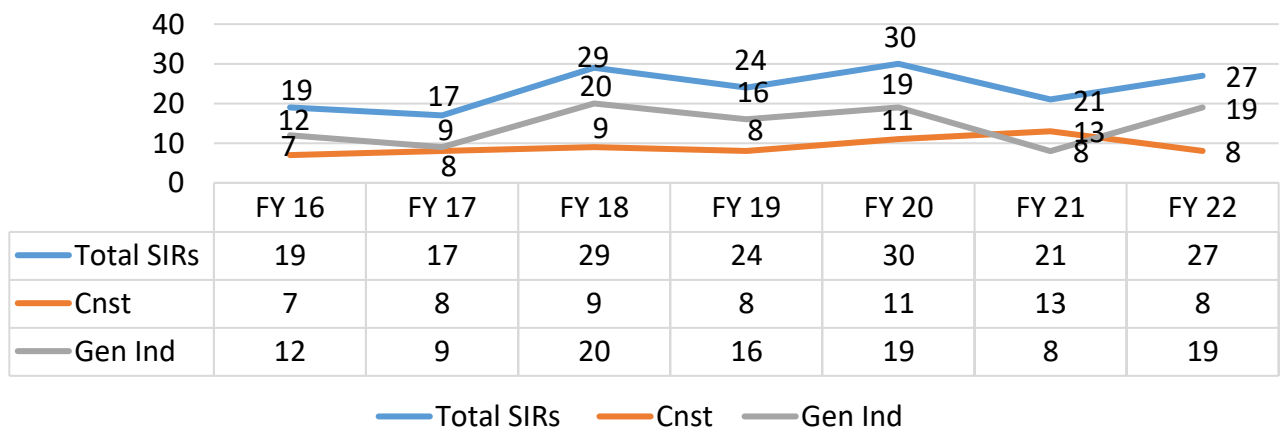
**Construction (2/4)**

- Employee was on a metal ladder replacing old light valances with new LED valances. The electrical wiring was live, and he was electrocuted.
- Employee was working for his father at a residential home installing decorative chandeliers in the driveway. He was on a ladder and had just handed a chandelier to his father, when his father turned back around and saw his son laying on the ground. He was transported to the hospital where he succumbed to his injuries nine days later.

**General Industry (2/4)**

- Employee was climbing a derrick ladder on a work over rig to stack pipes in the rack. Two bolts broke on a dead-man block which fell, striking him.
- Employee was a grinder and got a 6' step ladder to get a piece of plastic that was stuck on the top of the grinder. She did not open the ladder all of the way, and it slipped causing her to fall and break her neck.

SE TX Ladder Related SIR Incidents\*\*\*



## **FY 21 SE TX Ladder Related Serious Incidents Report (SIR) Narratives\*\*\***

### **Construction (8/27)**

#### Fall lower level ladder

- Worker was climbing a ladder and fell approximately 10' from the ladder when it shifted.
- Worker was to paint under a window at height of approximately 10'. They separated an extension ladder and used it for access. Ladder slipped and they fell injuring their lower back, pelvis, and hip.
- Employee was installing a sprinkler drop from a 6' "A" frame ladder on a scissor lift. They lost their balance and fell approximately 35' fracturing their arms, legs, and pelvis.
- Employee was performing electrical work while on a ladder 8' high. The ladder slipped and they fell breaking their left arm, lacerating his head and knuckles.
- Employee was working from a step ladder installing electrical conduit. While coming down the ladder, he missed the last step down and fell twisting his knee and dislocating his knee cap requiring surgery.
- Employee was installing insulation on a duct and fell about 4' off a 10' ladder and hit their head. He was hospitalized with head injuries.
- Employee was climbing a ladder to conduct repairs on top of a refrigeration unit. As he was climbing, the ladder shifted, and he fell to the floor receiving a fractured rib and a hematoma on the right kidney.
- Employee was climbing a ladder to the top of a box culvert and fell.

### **General Industry (19/27)**

#### Electric shock

- Employee was 6' up on a ladder checking for a leak through an air conditioner access inside an apartment. He felt an electric spark from the AC unit and fell off the ladder to the concrete ground.

#### Electrical burns

- Two employees were setting up a 40' ladder to access a building's roof and the top of the ladder accidentally made contact with a live power line. Both employees were shocked, one was hospitalized for electrical burns to his foot.

#### Fall lower level ladder

- Employee was checking a refrigeration unit, because it was making a noise. As they were coming down the ladder, he slipped and fell hitting his head on the concrete and suffered a head Injury and laceration.
- Employee completed tagging a process safety valve and descended down a fixed ladder cage. His foot slip off a rung and he slipped and fell approximately 25' to the next deck. He suffered two fractured ankles and a compression fracture of a vertebrae.
- Employee was working on ladder 2' high when another employee tripped over a piece of concrete and grabbed the ladder that they were working on. The employee fell from the ladder and landed on his back and then hit his head on the concrete floor when his hard hat came off.
- Employee was descending a 30' ladder and slipped and fell about 5' resulting in a fractured vertebrae and a fractured ankle requiring hospitalization.
- Employee was standing on a ladder setting a spider arm. The tac weld on the left arm broke causing the spider arm to fall towards him. He fell backwards off the ladder and the ladder and spider arm landed on top of him. He suffered a broken hip, dislocated femur, and fractured left elbow with possible internal injury.
- Employee was pulling insulation by standing on a 12' ladder. He fell off the ladder and injured his back.
- Employee injured after ladder slid out from underneath him while he was grinding.

- Employee was conducting a job walk with a customer on an 6'-8' elevated surface when he mentioned that he was feeling dizzy and asked to go down. The customer said he went down the ladder and the feet of the ladder slipped out and he fell to the ground suffering a broken right fibula and tibia.
- Technician on a ladder at a customer's house lost his balance and fell to the ground breaking his ankle.
- Employee was on a ladder in a customer's home trying to bring down a TV from a ceiling mount. He lost his balance on the way down with the TV, and the ladder fell from under him and he fell on top of it. He suffered an injured rib and punctured lung.
- Employee fell off ladder while reaching for a shoe. They landed on their back and head. She had a headache/dizziness and drove home. Their mother took her to the hospital where she was admitted.
- Employee was repairing a light fixture from a ladder and fell, breaking their leg.
- Employee was using a 6' ladder to retrieve plant material. He was standing on the third rung from the top when he fell off the ladder suffering a broken collarbone, fracture rib, and a severe bruise on the lung.
- Employee was on a ladder of the roof of a service building in the boiler room area. They were attempting to reset an alarm on the boiler when she lost footing on the ladder and fell approximately 12' to the floor fracturing the right ankle.

#### Fall lower level structure or equipment

- Employee was in the process of repairing a sight glass on a water holding tank and noticed a leaking pipe and that needed repair. He stepped on and off a step ladder onto a 3" pipe. During the process, his wrench slipped causing him to lose his balance. He fell on a mixer motor (full guarded) and landed on the floor. Fractured left wrist, left clavicle and five fractured ribs on his left side.

#### Fall on same level

- While conducting inventory in the stockroom, an employee tripped and fell. On the way down, he reached out to brace his fall on a nearby rolling ladder and cut his left middle finger, resulting in partial amputation of first index.

#### Struck by falling object or equipment

- Employee was standing in an elevator when a contractors ladder fell on her head resulting in a laceration.

### **FY 22 Most Frequently Cited Federal OSHA Ladders Construction 1926.1053\*\*\*\***

1926 Standard	Cited	Narrative
.1053(b)(1)	1,535	When portable ladders are used for access to an upper landing surface, the ladder side rails shall extend at least 3 feet (.9 m) above the upper landing surface to which the ladder is used to gain access; or, when such an extension is not possible because of the ladder's length, then the ladder shall be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grabrail, shall be provided to assist employees in mounting and dismounting the ladder
.1053(b)(4)	291	Ladders shall be used only for the purpose for which they were designed.
.1053(b)(13)	200	The top or top step of a stepladder shall not be used as a step.
.1053(b)(16)	78	Portable ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components, shall either be immediately marked in a manner that readily identifies them as defective, or be tagged with "Do Not Use" or similar language, and shall be withdrawn from service until repaired.
.1053(b)(5)(i)	63	Non-self-supporting ladders shall be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately one-quarter of the working length of the ladder (the distance along the ladder between the foot and the top support).

.1053(b)(22)	62	An employee shall not carry any object or load that could cause the employee to lose balance and fall.
.1053(b)(6)	51	Ladders shall be used only on stable and level surfaces unless secured to prevent accidental displacement.
.1053(b)(15)	25	Ladders shall be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect their safe use.
.1053(b)(9)	24	The area around the top and bottom of ladders shall be kept clear.
.1053(a)(2)	18	Ladder rungs, cleats, and steps shall be parallel, level, and uniformly spaced when the ladder is in position for use.

### FY 22 Most Frequently Cited Federal OSHA Ladders General Industry 1910.23\*\*\*\*

1910 Standard	Cited	Narrative
.23(b)(10)	28	Any ladder with structural or other defects is immediately tagged "Dangerous: Do Not Use" or with similar language in accordance with § 1910.145 and removed from service until repaired in accordance with § 1910.22(d), or replaced;
.23(c)(11)	22	Portable ladders used to gain access to an upper landing surface have side rails that extend at least 3 feet (0.9 m) above the upper landing surface...
.23(b)(8)	21	Ladders are used only for the purposes for which they were designed;
.23(b)(9)	19	Ladders are inspected before initial use in each work shift, and more frequently as necessary, to identify any visible defects that could cause employee injury;
.23(c)(8)	8	The cap (if equipped) and top step of a stepladder are not used as steps;
.23(c)(4)	8	Ladders are used only on stable and level surfaces unless they are secured or stabilized to prevent accidental displacement;
.23(b)(13)	7	No employee carries any object or load that could cause the employee to lose balance and fall while climbing up or down the ladder.
.23(d)(2)	5	The minimum perpendicular distance from the centerline of the steps or rungs, or grab bars, or both, to the nearest permanent object in back of the ladder is 7 inches (18 cm), except for elevator pit ladders, which have a minimum perpendicular distance of 4.5 inches.
1910.23(b)(12)	4	Each employee uses at least one hand to grasp the ladder when climbing up and down it; and
1910.23(e)(3)(ii)	4	Mobile ladder stand platforms with a platform height of 4 to 10 feet (1.2 m to 3 m) have, in the platform area, handrails with a vertical height of at least 36 inches (91 cm) and midrails;

### Ladder Safety Resources\*\*\*\*\*

#### OSHA Ladder Related Publications





<https://www.osha.gov/publications/bytopic/ladder-safety>



#### OSHA Ladder Related Alliance Products

<https://www.osha.gov/alliances/products#Ladder>



<b>NIOSH Ladder Safety App</b>	
<a href="https://www.cdc.gov/niosh/topics/falls/mobileapp.html">https://www.cdc.gov/niosh/topics/falls/mobileapp.html</a>	
<b>American Ladder Institute's Ladder Safety Training</b>	
<a href="https://www.laddersafetytraining.org/">https://www.laddersafetytraining.org/</a>	
<b>Washington State Department of Labor and Industries (L&amp;I)</b>	
<ul style="list-style-type: none"> <li>• Ladder Safety Checklist <a href="https://lni.wa.gov/dA/726ab38ee5/F417-266-000.pdf">https://lni.wa.gov/dA/726ab38ee5/F417-266-000.pdf</a></li> <li>• Ladder Safety Guide</li> <li>• <a href="https://lni.wa.gov/dA/b673ea0f42/F417-268-000.pdf">https://lni.wa.gov/dA/b673ea0f42/F417-268-000.pdf</a></li> </ul>	
<b>Oregon OSHA</b>	
<ul style="list-style-type: none"> <li>• Portable ladders: How to use them so they won't let you down  <a href="http://osha.oregon.gov/Pages/topics/ladders.aspx">http://osha.oregon.gov/Pages/topics/ladders.aspx</a></li> </ul>	

\*This information has been developed by an OSHA Compliance Assistance Specialist and is intended to assist employers, workers, and others improve workplace health and safety. While we attempt to thoroughly address specific topics [or hazards], it is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in this presentation. This information is a tool for addressing workplace hazards, and is not an exhaustive statement of an employer's legal obligations, which are defined by statute, regulations, and standards. This document does not have the force and effect of law and is not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies. It does not create (or diminish) legal obligations under the Occupational Safety and Health Act. Finally, OSHA may modify rules and related interpretations in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, you can visit OSHA's website at [www.osha.gov](http://www.osha.gov).

\*\*BLS Data was search using ladders 74XXXX as the primary source of injury. TDI medical costs have about a one year lag time versus claims.

\*\*\*Fatalities, catastrophes, serious incident reports are generated using various sorting criteria. SE TX specific data is edited to determine a count of fatalities/catastrophes or Serious Incident Reports (SIRs) under OSHA jurisdiction and may change over time as records are updated. Narratives are generally based on the first report of the incident and are rewritten and edited for brevity and/or readability and may not reflect the final results of an investigation. The incidents are a snap shot in time and may not be an exact count and are provided for accident prevention and educational purposes and is not intended to be a statistical study or evaluation.

\*\*\*\*Citations issued by Federal OSHA in FY 21 run in Ois February 15, 2022. Citations numbers are updated daily are not finalized and may change.

\*\*\*\*\*Links are not intended to endorse any particular product or service.

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