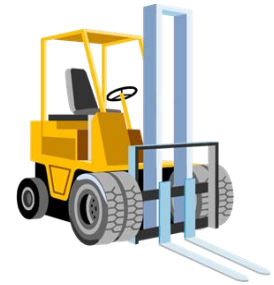
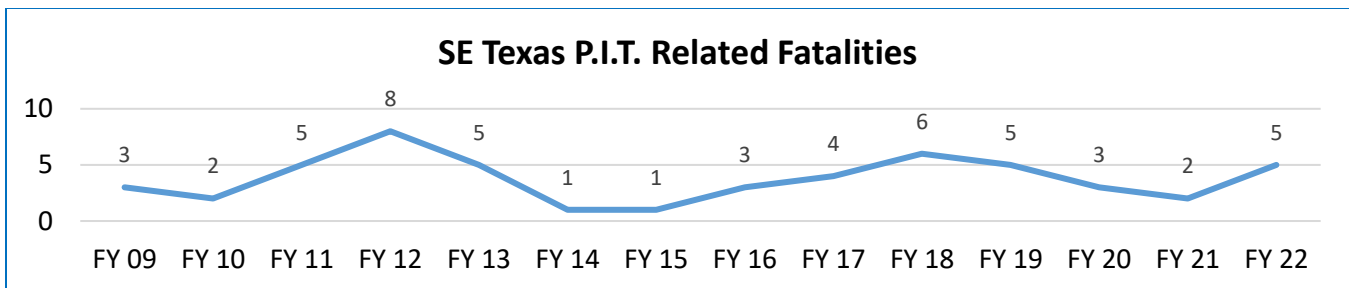


## 2023 SE Texas Powered Industrial Trucks (P.I.T.) Overview\* (v1 May 2023)

June 13th is National Forklift Safety Day, which will be a great opportunity to talk with forklift and other P.I.T. operators, and those who work around them, about safe operations and the hazards that are associated with these types of mobile equipment. Last year P.I.T. related fatality incidents increased from the year before with five fatal incidents in FY 22 versus two the year before. We also had 37 forklift related Serious Incident Reports (SIRs) in FY 22 versus 43 the year before. There's much more work to be done to prevent all P.I.T. related injuries and deaths. Let's start by re-emphasizing the safety message on June 13<sup>th</sup> - National Forklift Safety Day.

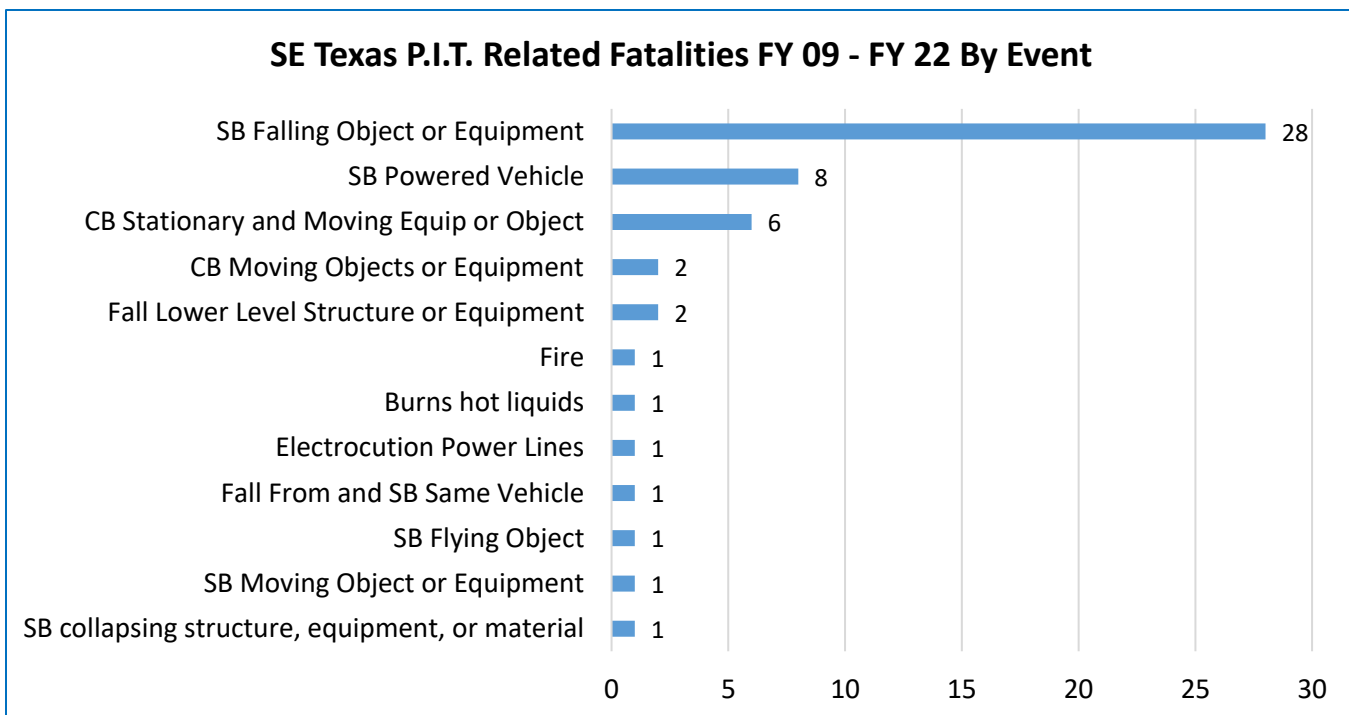


The OSHA Fiscal Year (FY) runs October 1<sup>st</sup> through September 30<sup>th</sup>.



### SE Texas P.I.T. Related Fatalities by Focus Four FY 09 – FY 22

| Struck By (SB) | Caught Between (CB) | Electrical | Falls | Other | Total |
|----------------|---------------------|------------|-------|-------|-------|
| 39             | 8                   | 1          | 3     | 2     | 53    |



## SE Texas P.I.T. Fatalities FY 09 – FY 22 by Major NAICS Sector

| NAICS | Industry  | Fatalities |
|-------|---|------------|
| 48-49 | Transportation and Warehousing (+4 in FY 22)                      | 18         |
| 31-33 | Manufacturing   | 12         |
| 23    | Construction  | 6          |
| 42    | Wholesale Trade (+1 in FY 22)                                     | 6          |
| 44-45 | Retail Trade  | 4          |
| 21    | Mining, Quarrying, and Oil and Gas Extraction                     | 2          |
| 56    | Administrative and Support and Waste Mgt and Remediation Services | 2          |
| 53    | Real Estate and Rental and Leasing                                | 1          |
| 11    | Agriculture, Forestry, Fishing and Hunting                        | 1          |
| 81    | Repair and Maintenance  | 1          |

### FY 22 SE Texas P.I.T. Related Fatalities by Event

Caught between stationary and moving equipment or objects

- Employee was operating a motorized tugger and was traveling through a roll-up door to go outside. As he was traveling through the door, he put his head outside of the machine and was struck by the partially open roll-up door. He was pronounced dead on-scene.

Fire

- Employee was on a forklift unloading a pallet of brass casings from the back of a 53' trailer. The wheels of the forklift ran over gun powder that was on the floor of the trailer and the gunpowder exploded. His clothes caught on fire and he received severe burns to his body and was taken to the hospital and later died.

Struck by powered vehicle

- Employee and a coworker were looking at documents to determine which containers needed to be moved while a forklift operator was staging empty containers to fill with product. The forklift operator thought the two employees were on a different side of the yard. He went to back up and struck the two employees. One employee was crushed and the other sustained fractures and lacerations.

Struck by falling object or equipment

- Employee was in the process of checking a stack of pipe about to be transferred when he had the forklift operator pull out a few crates of pipe that were stacked. At some point during this process the stack of pipe collapsed fatally striking him.
- Employee was walking east to west inside a warehouse along the dock side of the warehouse. Another employee operating a forklift had two bundles of plywood on the forks and was traveling from the south to the north. The employee yelled as the forklift approached him and the forklift operator hit the brakes. When the forklift brakes were applied, the load of plywood slid off the forks and struck the employee in the head and upper body area. They were pronounced dead at the scene.

### SE Texas P.I.T. Related Serious Incident Reports by Focus Four

| Struck By | Caught Between | Electrical | Falls | Other | Total FY16 – FY22 |
|-----------|----------------|------------|-------|-------|-------------------|
| 108       | 79             | 2          | 23    | 13    | 225               |

### SE Texas P.I.T. Related SIR Reports FY 16 - FY 22 by Event



### FY 16 – FY 22 SE Texas P.I.T. Related SIRs by Major NAICS Sector

| NAICS | Industry                                    | SIRs |
|-------|---|------|
| 31-33 | Manufacturing (12 in FY 22)                 | 56   |
| 48-49 | Transportation and Warehousing (8 in FY 22) | 50   |
| 42    | Wholesale Trade (3 in FY 22)                | 36   |
| 44-45 | Retail Trade (7 in FY 22)                   | 33   |
| 23    | Construction                                | 17   |

|    |  |    |
|----|--|----|
| 56 | Administrative and Support and Waste Mgt and Remediation Services (1 in FY 22) | 11 |
| 53 | Real Estate and Rental and Leasing (2 in FY 22)                                | 5  |
| 54 | Professional, Scientific, and technical Services (1 in FY 22)                  | 5  |
| 21 | Mining, Quarrying, and Oil and Gas Extraction                                  | 4  |
| 81 | Other Services (except Public Administration) (1 in FY 22)                     | 3  |
| 11 | Agriculture, Forestry, Fishing and Hunting (1 in FY 22)                        | 1  |
| 22 | Utilities  | 1  |
| 51 | Information  | 1  |
| 62 | Health Care and Social Assistance (1 in FY 22)                                 | 1  |
| 92 | Public Administration  | 1  |

## FY 22 SE Texas Area P.I.T. Related SIRs by Event

Caught between moving objects or equipment

- The forklift operator was about to drive away when the driver of a flatbed truck drove forward causing the operators right hand to be caught in between the rear cab and the front end of the flatbed causing ring finger amputation and multi-digit lacerations.

Caught between stationary and falling equipment or objects

- Employee drove a forklift over an area that had a grate. The grate was not metal and was rated for about 350 lbs. The forklift fell into the water capture pit, tipping to the side, and pinching his leg between the grate and the forklift fracturing three bones in their left foot.

Caught between stationary and moving equipment or objects

- Employee was a salesperson working at the back room of grocery store. He was operating a pallet jack in the back room and was attempting to retrieve product. During the process, he lacerated his thumb between two pallet jacks and was admitted to the hospital for surgery for a lacerated thumb.
- Employee was moving product on an electric riding pallet jack and their hand was caught between a stairwell and the steering handle of the pallet jack. He was hospitalized with two fractured fingers and lacerations to the right hand.
- Employee was repositioning a utility vehicle and rammed the utility vehicle into a bollard post while his left leg was positioned outside of the vehicle. As a result, their left leg struck, and was caught in-between, the utility vehicle and bollard post resulting in compound fractures.
- Employee was selecting cases from pick slot using a pallet jack. He lost control causing his right ankle to get caught between the wall and the pallet jack. He suffered a fractured right ankle and was hospitalized.
- Employee was picking orders using a forklift. He had trash to throw away and drove past a dumpster and went to throw the trash out and caught their hand between the forklift and dumpster. They suffered a fractured and lacerated right hand requiring hospitalization.
- Temporary worker was operating a cherry picker forklift. He had one pallet on the forks and another unsecured pallet on top of the secured one. As the forklift was moving backwards, the pallets clipped the rack, and the unsecured pallet was pushed towards the operator and pinned his right foot between the pallet and the rack. The injury resulted in an amputation of his right pinky toe.
- The employee is lift driver and was putting away and replenishing food storage on racks in the grocery distribution center. He lost control of the lift and attempted to stop it and his left ankle got jammed between the lift and a rack. He suffered a laceration to the left ankle and fracture to the heel.

- Employee was unloading his trailer when he lost control of his electric walkie pallet jack causing him to get his right index finger caught between the jack handle and a stack of pallets. He suffered a partial amputation of right index finger.
- Employee had just mounted a double walkie-rider and was pulling out of its parking spot. He proceeded to make a sharp U-turn to make their way to their department. In order to perform this turn, he had to turn the steering yoke/arm quite far, reducing the area which they could stand on the operator's platform. When they attempted to make that sharp turn, they lost their footing on the operator's platform and began to fall off of the machine. When he fell, they landed in front of their walkie-rider, which was still moving, as it collided with a separate, parked walkie-rider. His right leg was impacted by both of the machines' operator platforms resulting in fractures to their right tibia and fibula.
- Employee was moving a heavy piece of steel and had their left index finger pinched between two pieces of steel when trying to direct it while the steel was on a forklift. He suffered a contusion/amputation on the tip of the left index finger.
- Employee was attempting to move a vendor's electric pallet jack to allow a group of new employees to pass when they lost control of the pallet jack, and crushed her right foot between a wall and an object.

#### Fall lower level moving vehicle

- Employee was loading up bales of banded cardboard into the back of a 53' trailer. He finished loading a bale, tapped his horn, and began to back out of the trailer. The truck driver heard the forklift horn, and thinking the forklift operator was finished, pulled away from the loading dock. The forklift he was operating fell out of the back of a moving trailer. The truck driver stopped right away. The employee suffered a fractured L2.

#### Fall lower level nonmoving vehicle

- Employee fell while dismounting a forklift and suffered hip injury resulting in hospitalization.

#### Fall on same level

- Employee was a spotter for a forklift operator unloading a trailer from the ground when the load shifted and he moved away from trailer. He tripped and fell down and hit his head on the concrete and received a bruised brain injury.

#### Struck by blade/knife/sharp object

- Employee was driving an order picker unit and turned sharply near a shelving/racking unit. They stuck out their arm as reaction and it went through a window, and they suffered a lacerated arm that resulted in hospitalization due to main artery cut.

#### Struck by falling object or equipment

- Employee was using a forklift to unload truck and drove the forklift off the dock and suffered a crushed foot.
- A forklift operator was in the process of picking up a container filled with brass shavings and dumping it into a container. The overflow was being swept up by another employee and put into a cardboard box. As the forklift operator would pick up the container, he would squeeze the container cylinder and push down the shavings. The cylinder rolled out of the forks and flipped over onto the employee sweeping. They suffered a fractured back and possible concussion.
- Employee was spotting for a forklift carrying a load of drywall. The drywall shifted and slid off the forks of the forklift and struck the spotter fracturing his left femur.
- Employee was attempting to dispose of a scrap walkie-rider into an open top dumpster, using a reach truck. They drove the reach truck on an uneven and damaged surface, with an elevated load, which caused the reach truck to overturn. Their head impacted the concrete surface resulting in a contusion to head/brain.

- An employee was operating a reach truck and about to extract a pallet from an overhead rack. Before extracting the pallet, the forks on the forklift fell/collapsed back onto the employee. It was determined that the lift was missing pins. The lift was a rental that the company had just received.
- Employee was standing on the back of a crane truck guiding the forklift operator to load trench shoring plates (16', 720 lb. per plate) to the back of a truck. The plate began to slide off the forks of the forklift and he jumped off the truck to avoid injury. The plate landed on the ground and part of it hit the tip of his steel toe boots. He suffered a fractured right ankle and a torn ACL of the right knee.
- Employee was walking by the side of truck trailer. A wheel loader operator accidentally pushed a bale of cardboard over the side of the truck trailer while offloading. The bale of cardboard weighing approximately 900 pounds struck him resulting in back injuries.

#### Struck by moving object or equipment

- Employee was injured when his order picker was bumped into by another order picker in the same aisle suffering strains.
- Warehouse employee was standing on top of a pex pipe rack helping another employee put pex tubing in a "boat" or pipe rack. The boom that was on a forklift to lower the pipe down smacked into his toe while they were trying to get the pipe unstrapped. He suffered a broken toe and the bottom part of his toe had to be amputated.
- An order picker operator moved the lift prior to the ground assistant's clearance resulting in a guide wheel impacting their left foot in the toe area causing a laceration and dual fracture of the left big toe.
- While on the floor area of the store, an employee lost their balance while operating an electric pallet jack resulting in their foot slipping off the jack and getting run over by the equipment.
- An employee was hospitalized after suffering a left arm fracture while operating a powered industrial truck. The employee was operating a stand-up forklift. They oversteered while turning into an aisle and attempted to prevent the stand-up forklift from contacting a storage rack by placing out her left arm, which struck the storage rack, fracturing it.

#### Struck by powered vehicle

- Employee was in the yard directing and coordinating the delivery and unloading of trucks. Another employee was operating a wheel loader and ran over his left leg below the knee which required a medical amputation.
- A forklift operator was in reverse heading towards the production area and at the same time, a pedestrian was coming from the lunchroom towards productions area. Forklift struck the pedestrian resulting in an injury to the right foot.
- A delivery driver was unloading empty pallets out of his trailer with a walkie jack. There was a third party contractor on the forklift stacking pallets on the dock also. While the employee was standing with his back turned on the dock, the forklift operator backed his forklift into the foot of the employee injuring it.
- An employee was struck by a powered industrial truck. The employee was emptying trash from one location to another. While walking to pick up a trash can, they stepped out of a designated pedestrian walking path and was struck by a forklift causing him to be pinned between the forklift and a support pole. They sustained a fractured pelvis and suspected internal organ damage.
- Employee was walking in the warehouse and walked behind a forklift that was backing up. He was struck by the rear counterbalance of the forklift, fell to the ground, and hit his head when he fell. He suffered a fractured right tibia. He was admitted for overnight observation for the head injury.
- Warehouse employee was riding on the back of a forklift. The forklift operator went to back up and they jumped off the back of the forklift. His pant leg got caught on the hook that was on the back of the forklift and their right foot was run over by the forklift.

## Struck by rolling object or equipment

- Employee was staging stainless steel totes on a loading dock ramp in the warehouse/dock area. After they staged the first tote, he backed up and noticed a cone had become wedged under the tote near the outlet valve. They stopped the forklift, placed it in neutral, set the parking brake and turned the forklift off. They got off the forklift and walked in front to retrieve the cone when the forklift rolled forward, pinning them between the forklift and tote. They suffered a collapsed lung.
- Employee was driving a forklift and rolled it over breaking their leg.

## Top 10 Federal Most Frequently Cited 1910.178 Standards in FY 2022\*\*

| Standard        | Cited | Narrative  |
|-----------------|-------|--|
| .178(l)(1)(i)   | 366   | The employer shall ensure that each powered industrial truck operator is competent to operate a powered industrial truck safely, as demonstrated by the successful completion of the training and evaluation specified in this paragraph (l)   |
| .178(l)(6)      | 224   | Certification. The employer shall certify that each operator has been trained and evaluated as required by this paragraph (l). The certification shall include the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation   |
| .178(l)(4)(iii) | 198   | An evaluation of each powered industrial truck operator's performance shall be conducted at least once every three years   |
| .178(p)(1)      | 130   | If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition  |
| .178(l)(1)(ii)  | 123   | Prior to permitting an employee to operate a powered industrial truck (except for training purposes), the employer shall ensure that each operator has successfully completed the training required by this paragraph (l), except as permitted by paragraph (l)(5).  |
| .178(q)(7)      | 116   | Industrial trucks shall be examined before being placed in service, and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examination shall be made at least daily. Where industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected |
| .178(a)(4)      | 94    | Modifications and additions which affect capacity and safe operation shall not be performed by the customer or user without manufacturer's prior written approval. Capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly   |
| .178(l)(2)(ii)  | 84    | Training shall consist of a combination of formal instruction (e.g., lecture, discussion, interactive computer learning, video tape, written material), practical training (demonstrations performed by the trainer and practical exercises performed by the trainee), and evaluation of the operator's performance in the workplace   |
| .178(a)(6)      | 55    | The user shall see that all nameplates and markings are in place and are maintained in a legible condition   |
| .178(q)(1)      | 43    | Any power-operated industrial truck not in safe operating condition shall be removed from service. All repairs shall be made by authorized personnel.  |
| .178(a)(5)      | 43    | If the truck is equipped with front-end attachments other than factory installed attachments, the user shall request that the truck be marked to identify the attachments and show the approximate weight of the truck and attachment combination at maximum elevation with load laterally centered  |

In FY 2022 Federal OSHA issued an estimated 1,889 citations for forklift related hazards with proposed penalties of \$9,573,887\*\*

### Some Resources

|   |   |   |
|---|---|---|
|    | <p><b>OSHA Safety and Health Topic Page Powered Industrial Trucks</b><br/> <a href="https://www.osha.gov/SLTC/powerindustrialtrucks/index.html">https://www.osha.gov/SLTC/powerindustrialtrucks/index.html</a></p>  |    |
|    | <p><b>OSHA eTools Powered Industrial Trucks</b><br/> <a href="https://www.osha.gov/SLTC/etools/pit/index.html">https://www.osha.gov/SLTC/etools/pit/index.html</a></p>  |    |
|  | <p><b>B56 Lift Truck Standards</b><br/> <a href="http://www.itsdf.org/cue/b56-standards.html">http://www.itsdf.org/cue/b56-standards.html</a><br/>         Register and view the ANSI/ITSDF B56 lift truck standards for free</p>   |  |
|  | <p><b>NIOSH Forklift Publication</b><br/> <a href="http://www.cdc.gov/niosh/docs/2001-109/default.html">http://www.cdc.gov/niosh/docs/2001-109/default.html</a></p>   |  |
|  | <p><b>Worksafe BC Fields of Vision Video</b><br/> <a href="https://www.worksafebc.com/en/resources/health-safety/videos/fields-of-vision/introduction-1-of-5?lang=en">https://www.worksafebc.com/en/resources/health-safety/videos/fields-of-vision/introduction-1-of-5?lang=en</a></p> |  |





## Protect Workers Operating and Working Near Forklifts

Forklifts are an essential piece of equipment in many workplaces, especially in warehousing and manufacturing. Although these vehicles make work more efficient, they can pose serious hazards to those operating or working near them. OSHA reminds employers and workers that these hazards can be prevented by following safe practices and ensuring that workers are properly trained.

Taking the following steps can protect workers from forklift hazards.

- **Always** wear seatbelts when operating a forklift.
- **Never** exceed the rated load, and ensure **loads are balanced**.
- **Make** sure you have enough clearance when raising and loading materials.
- **Watch** for **pedestrians** and observe speed limits.
- **Keep** a safe distance from platform and ramp edges.

For more information on ways to keep workers safe while working with or around forklifts, visit OSHA's [Powered Industrial Trucks – Forklifts](#) page.

OSHA's [On-Site Consultation Program](#) offers no-cost and confidential occupational safety and health compliance assistance to small- and medium-sized businesses. Consultation services are separate from enforcement and do not result in penalties or citations. The [OSHA Training Institute Education Centers](#) offer courses for workers, employers, and managers on hazard recognition and abatement at convenient locations nationwide.

\*Fatalities and Catastrophes are logged or recorded in various mediums and reports generated using various criteria. Late reporting, natural causes which may have generated an initial report, fatalities transferred to other jurisdictions, and other factors may affect the overall numbers over time. Houston specific data is edited to determine a count of fatalities/catastrophes under OSHA jurisdiction and may change over time as records are updated. Narratives are rewritten for brevity and edited and may not reflect the final results of an investigation. Data in many cases is used 'as is'. The numbers and information are for accident prevention purposes and trending and is not intended to be a statistical study or evaluation. For questions email Jim Shelton at the HNAO at: [shelton.james@dol.gov](mailto:shelton.james@dol.gov)

\*\* Estimates from Ois search May 11, 2023

This information has been developed by an OSHA Compliance Assistance Specialist and is intended to assist employers, workers, and others as they strive to 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 a presentation of this nature. Thus, this information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer's legal obligations, which are defined by statute, regulations, and standards. Likewise, to the extent that this information references practices or procedures that may enhance health or safety, but which are not required by a statute, regulation, or standard, it cannot, and does not, create additional legal obligations. Finally, over time, OSHA may modify rules and 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).