



# YEAR IN REVIEW

*presented by*

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**CONFERENCE 2019**



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# COURSE DESCRIPTION

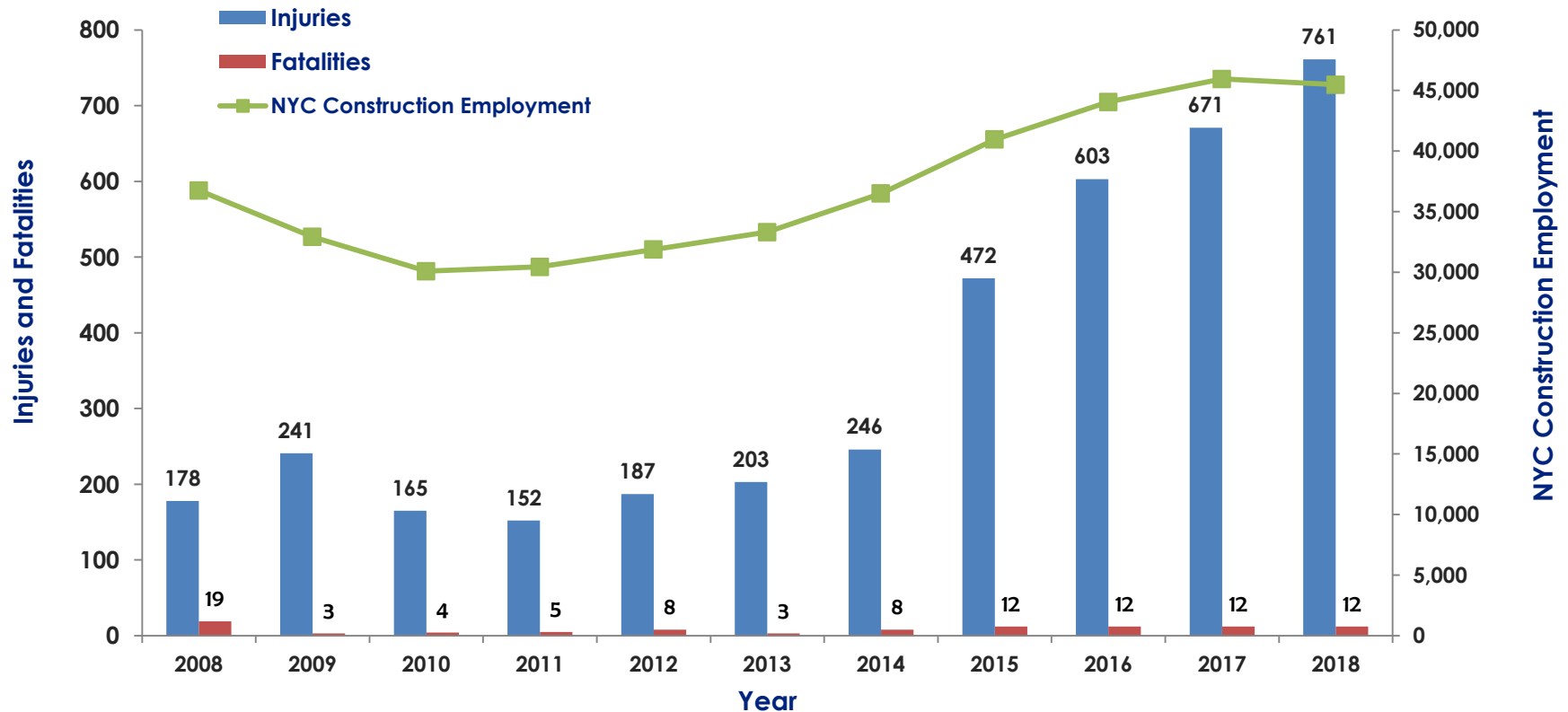
This presentation will review the fatalities and significant near misses that occurred in 2018. The participant will be able to identify the factors that led to each incident and review the appropriate methods to use to avoid future incidents at construction sites.

# LEARNING OBJECTIVES

**At the end of this presentation, participants will be able to:**

1. Identify the causes of construction accidents
2. Recognize dangers that lead to incidents
3. Provide guidance to individual sites on safety issues

# ANNUAL CONSTRUCTION-RELATED INJURIES AND FATALITIES vs. AVERAGE NYC CONSTRUCTION EMPLOYMENT\*

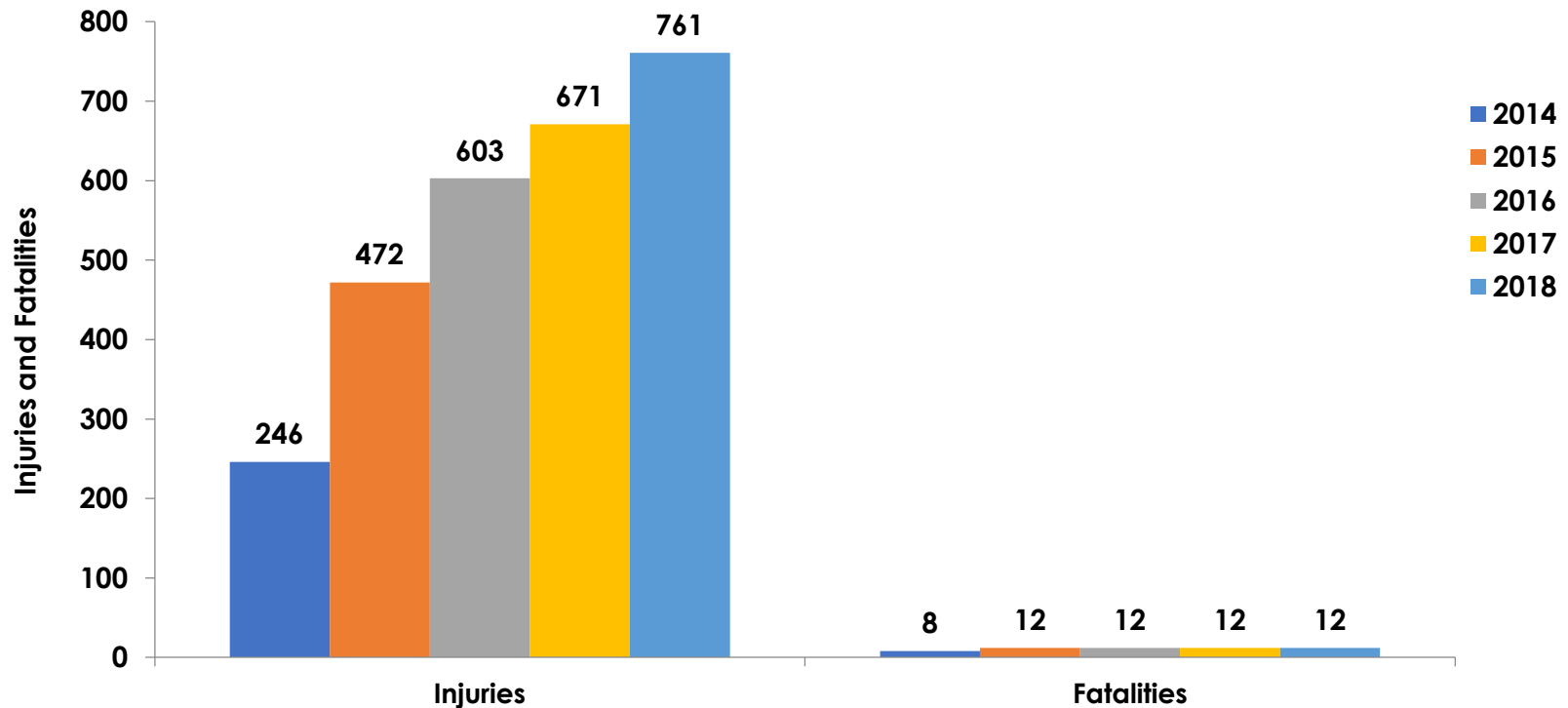


*\* NYC Construction Employment figures are based on Current Employment Statistics (CES) survey of construction-related skilled trades occupations in NYC*

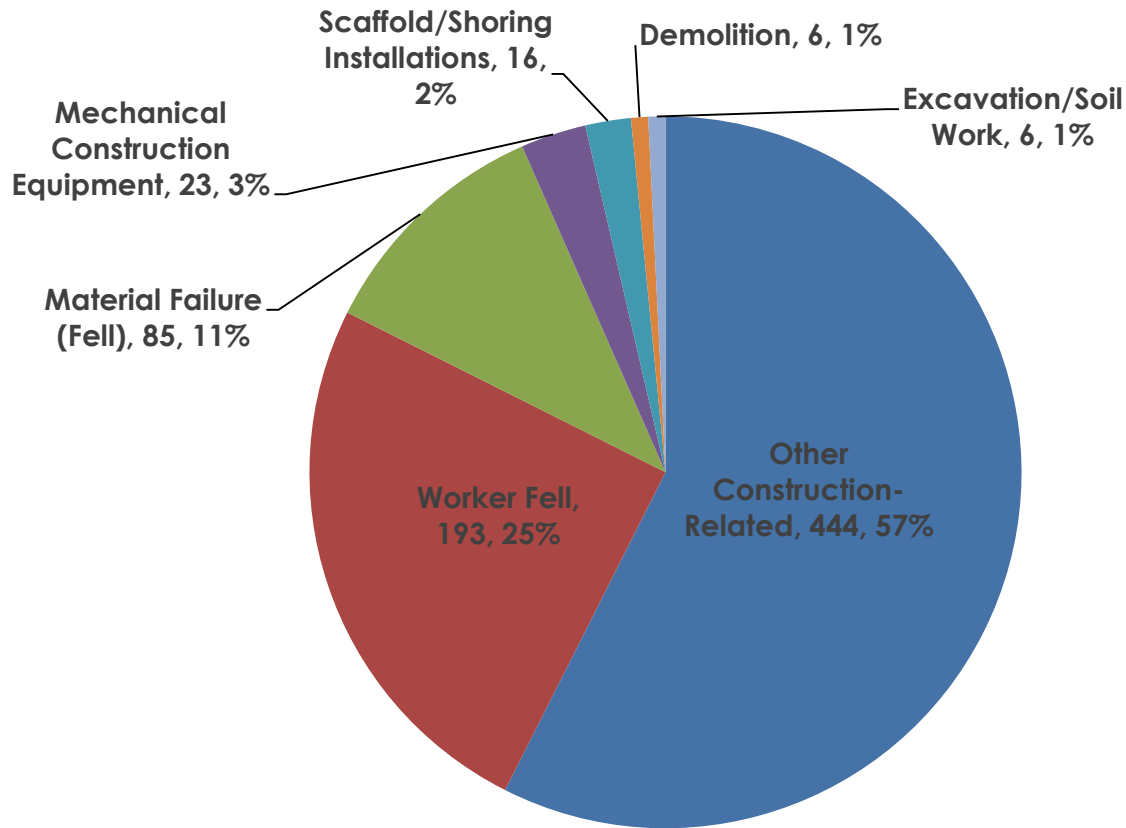
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# ANNUAL CONSTRUCTION-RELATED INJURIES AND FATALITIES



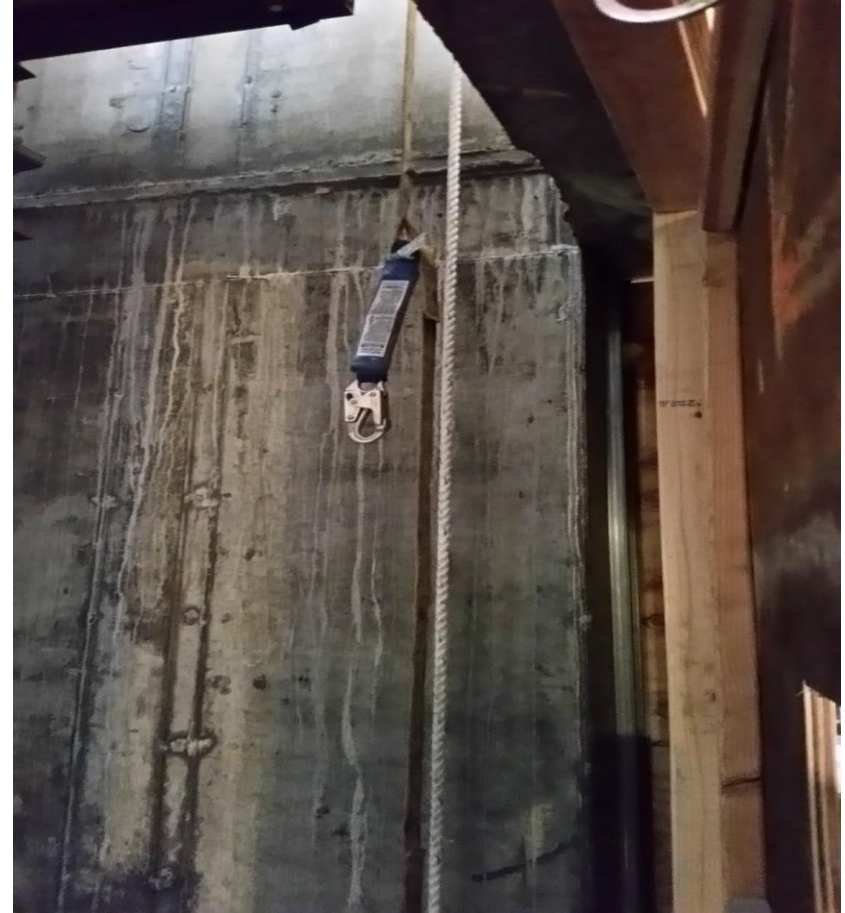
# 2018 CONSTRUCTION RELATED ACCIDENTS BY CAUSE OF ACCIDENT



2018 Other  
Construction-Related  
accidents increased  
by **46%** over 2017



# 1/23/18 WORKER FELL: MOVING ELEVATOR CAB



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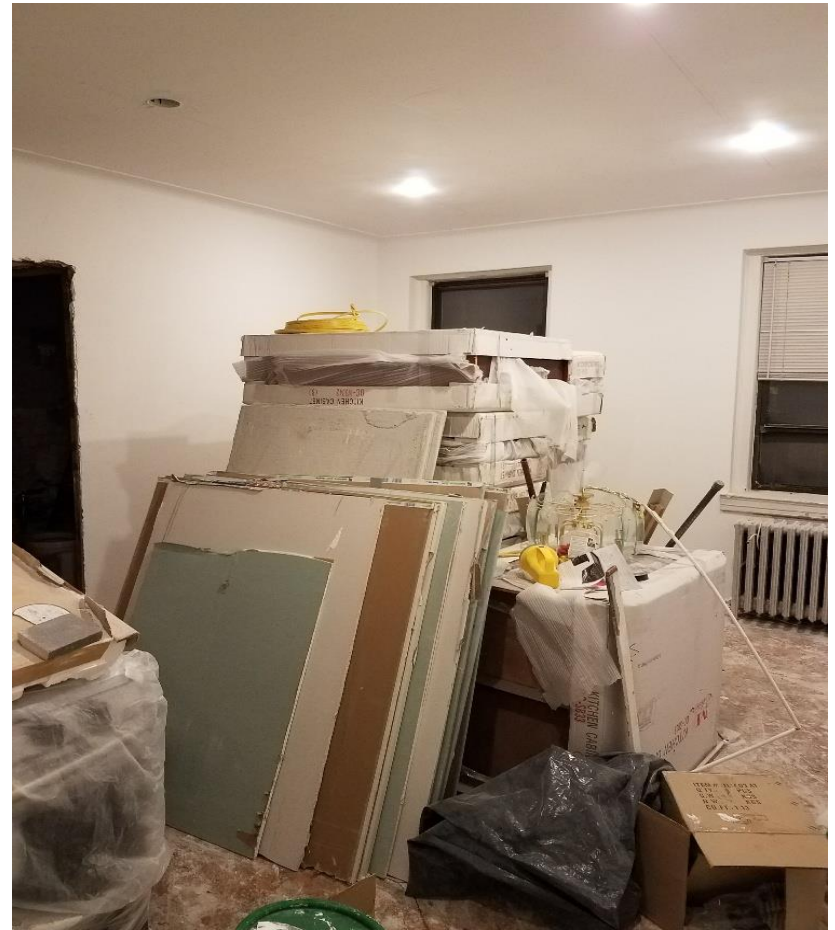
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# 1/23/18 WORKER FELL: MOVING ELEVATOR CAB

Two workers on a moving elevator cab floor were told to tie-off by Site Safety Manager. Shortly thereafter a third worker, the Competent Person/Foreman, got on the cab and did not tie-off. While moving, the platform up the controller for the motor failed. The three workers jumped off the platform before it hit the top. Two workers were saved by harnesses. The third fell 8 stories to his death.

# 1/23/18 WORKER FALL



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# 1/23/18 WORKER FALL

Father and son doing illegal rehab work in an apartment. The father was working on window sill with the window open. He fell out 4 stories to his death.



# 3/01/18 WORKER STRUCK & FELL



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# 3/01/18 **WORKER STRUCK & FELL**

Worker was standing on the scaffold platform accepting a delivery from a knuckle boom of metal studs. The worker cut the bundle ties which restrained the individual cold form steel beams. The beams shifted and knocked him to the ground where he died from his injuries.



# 3/29/18 WORKER CRUSHED



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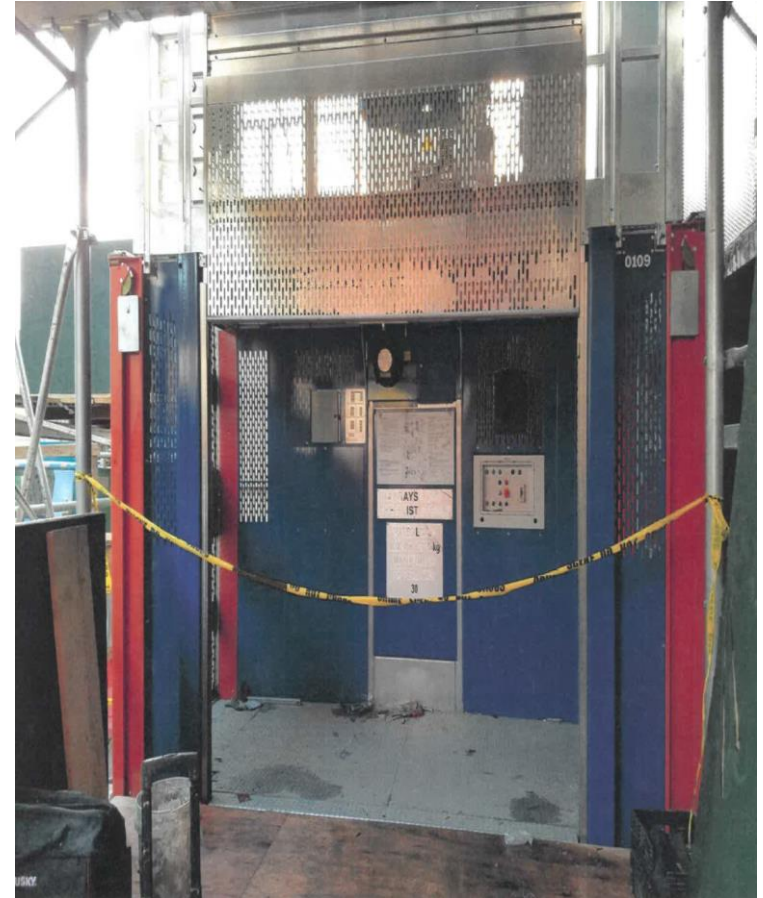
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## 3/29/18 WORKER CRUSHED

Two workers were moving windows to be stored for a site. Forklift driver could not see if the forklift was clearing the garage beam. Second worker climbed onto the rear of the forklift to watch beam clearance. The driver backed up and the second workers head was crushed between forklift cage and the next beam behind the forklift.

# 4/19/18 WORKER STRUCK: HOIST



# 4/19/18 WORKER STRUCK: HOIST

Worker was making a repair to the hoistway. The worker did not power down the hoist before bypassing the safety on the gate. The hoist was above him. He opened the door and placed his upper body into the shaft to make the repair. The hoist came down and crushed him between the hoist and the deck.



# 5/26/18 SECURITY GUARD CRUSHED



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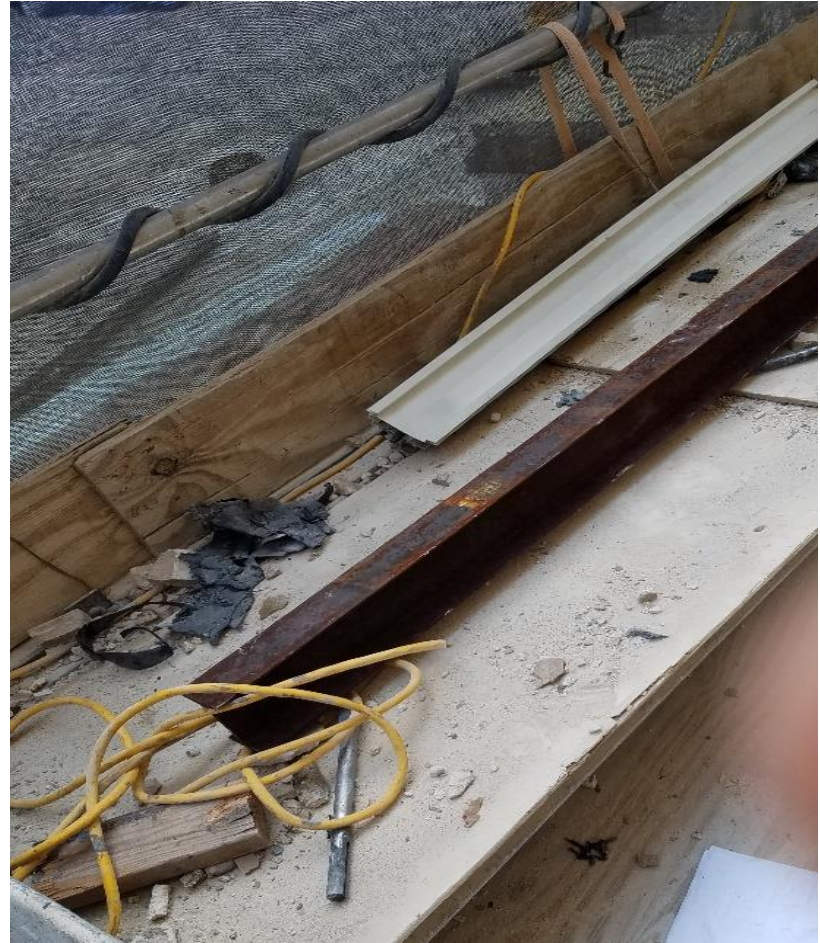
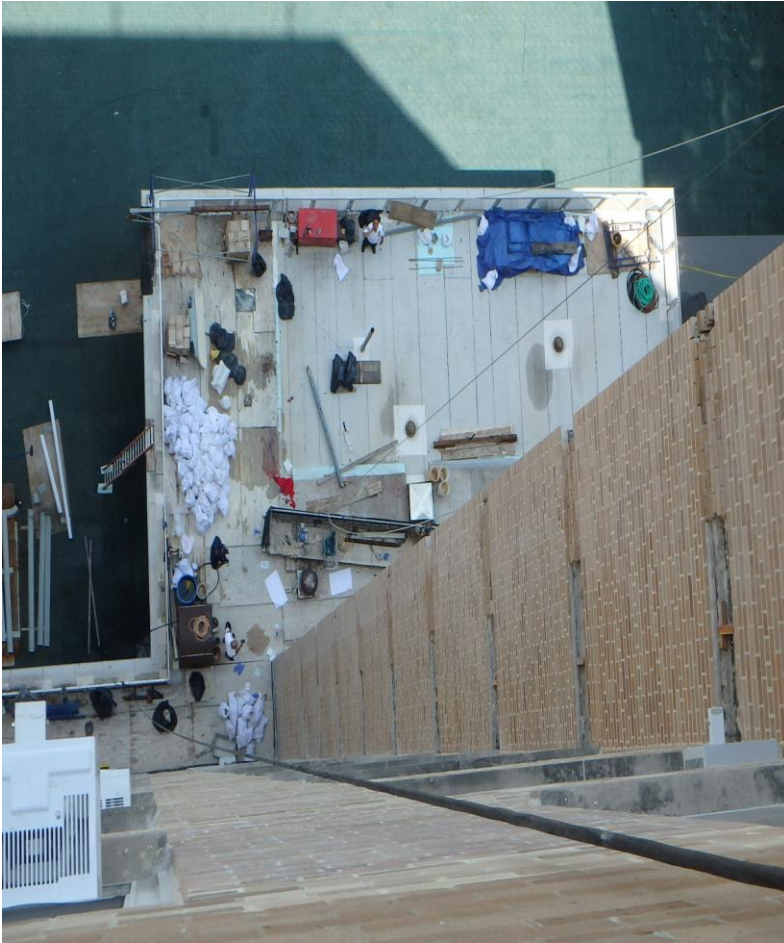
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# 5/26/18 SECURITY GUARD CRUSHED

Worker was moving heavy duct work adjacent to a group of windows stored on the loading dock. The worker backed into a window unit which was improperly stored. The 1,200 lb window fell over and crushed the Security Guard who was patrolling the floor.



# 7/12/18 WORKER STRUCK: MATERIAL FELL





## **7/12/18 WORKER STRUCK: MATERIAL FELL**

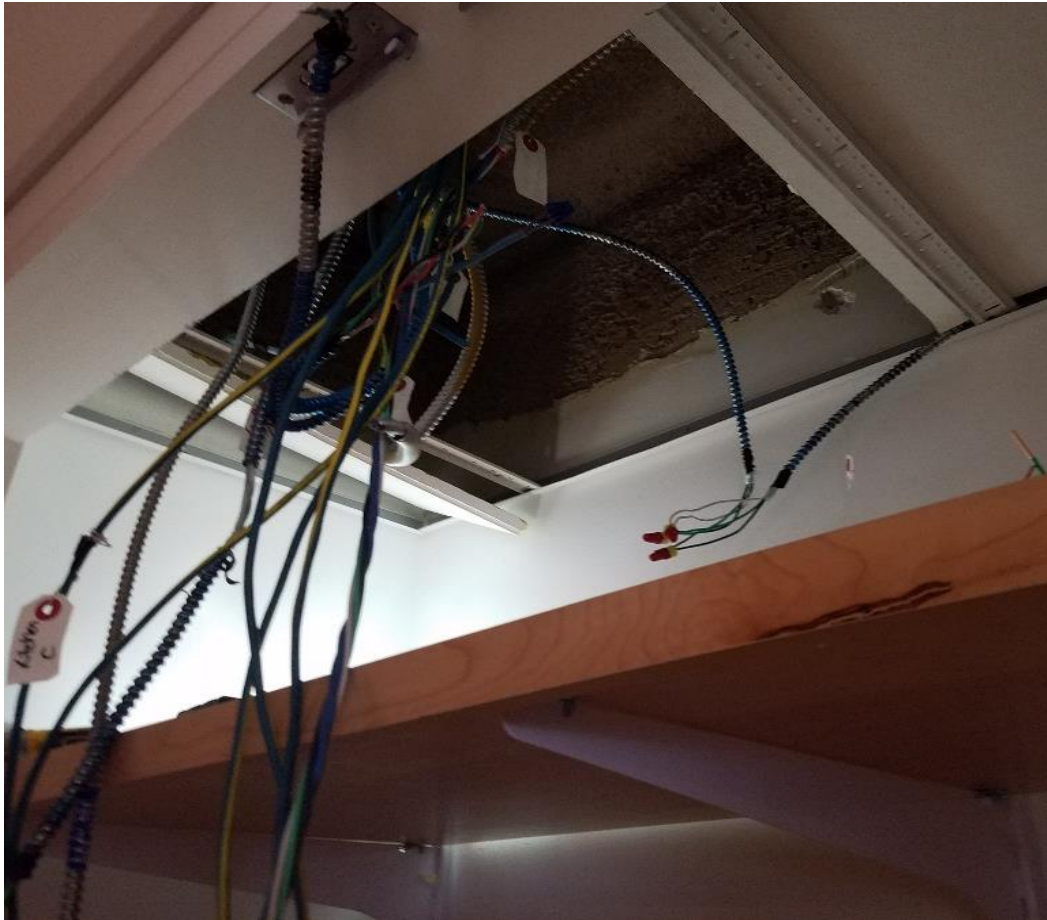
A group of workers were cleaning up on top of the shed at the end of the day while others were dismantling outrigger beams above. A worker lost control of the outrigger beam which fell and struck worker below killing him.

# 7/16/18 ELECTROCUTION



Worker was doing electrical work on a live wire circuit in a bathroom and electrocuted himself.

# 9/01/18 ELECTROCUTION



An electrician wiring an air conditioning unit in a drop ceiling failed to shut off circuit and electrocuted himself.



# 9/12/18 UNDERPINNING FAILURE



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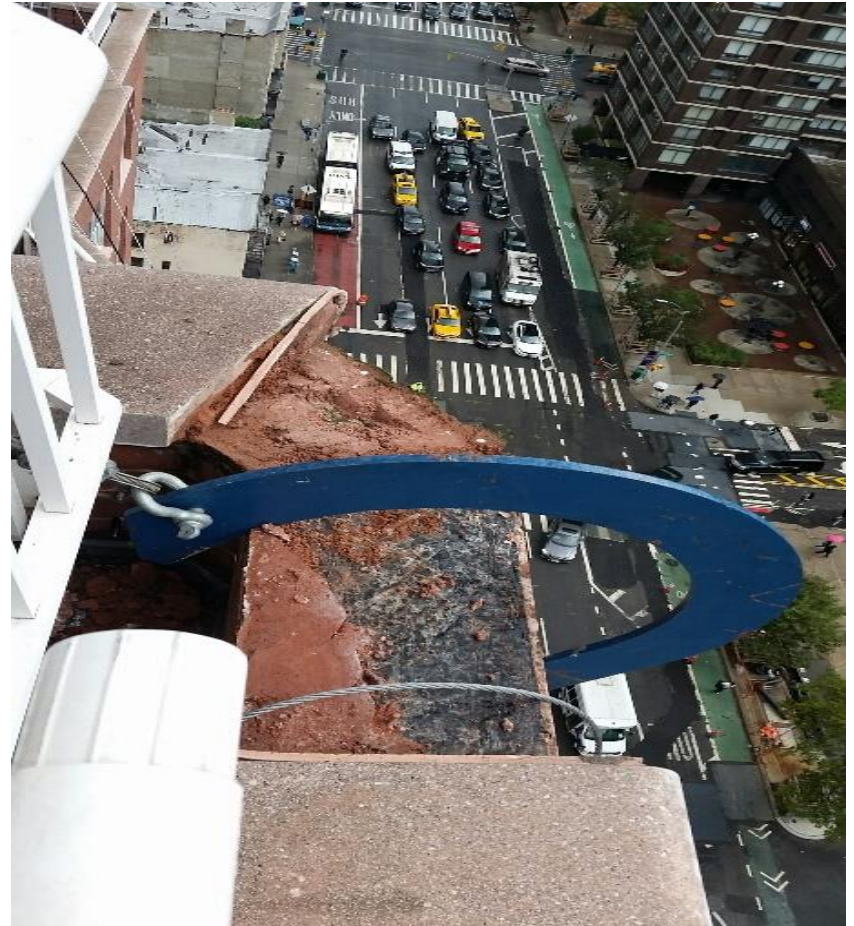
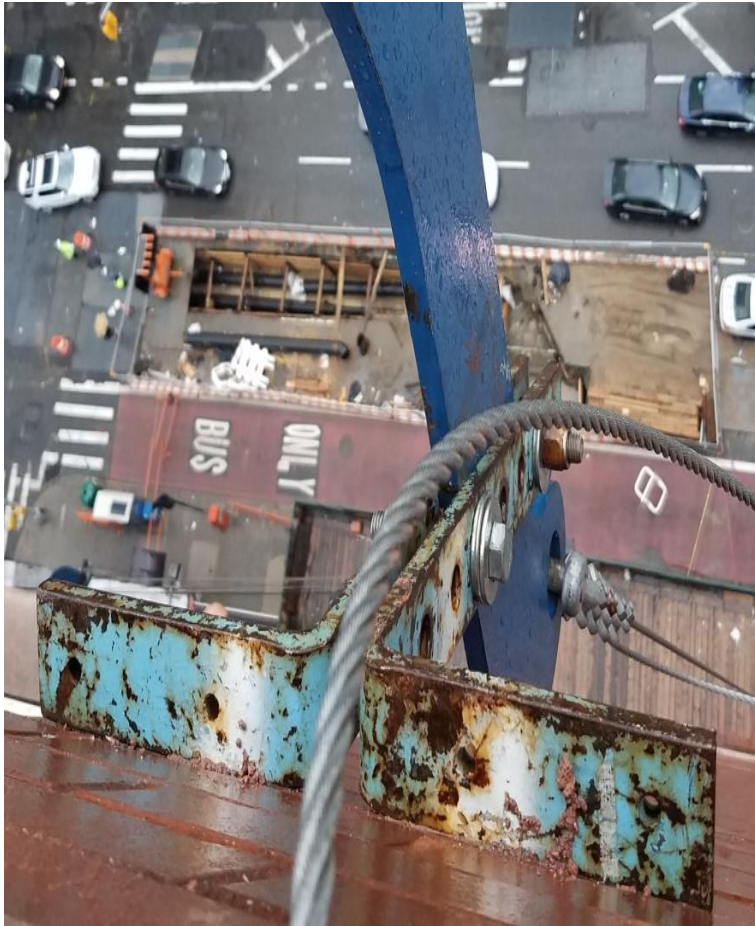
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# 9/12/18 UNDERPINNING FAILURE

Contractor was doing excessive underpinning contrary to plan and did not properly brace the wall. A worker was at the base of wall when it collapsed on top of him burying him alive. It took two days to recover his body from under a 20 ton slab.



# 10/11/18 WORKER STRUCK





# 10/11/18 **WORKER STRUCK**

Worker was using a C-hook to do façade work. The workers failed to assure that the bolts were tight prior to use of the C-hook. The C-hook stand-off bracket bolts were loose and shifted, forcing a coping stone off the parapet wall which fell and struck a worker.

# 11/21/18 WORKER STRUCK



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# 11/21/18 WORKER STRUCK

Workers were installing exterior wall sections when gusting winds exceeded 30 MPH. The crane operator stopped working. The subcontractor wanted to continue and decided to use a forklift to install the next wall section. He selected a machine that was not authorized nor rated to lift the panel. The wind gust pushed machine and panel over crushing the worker.





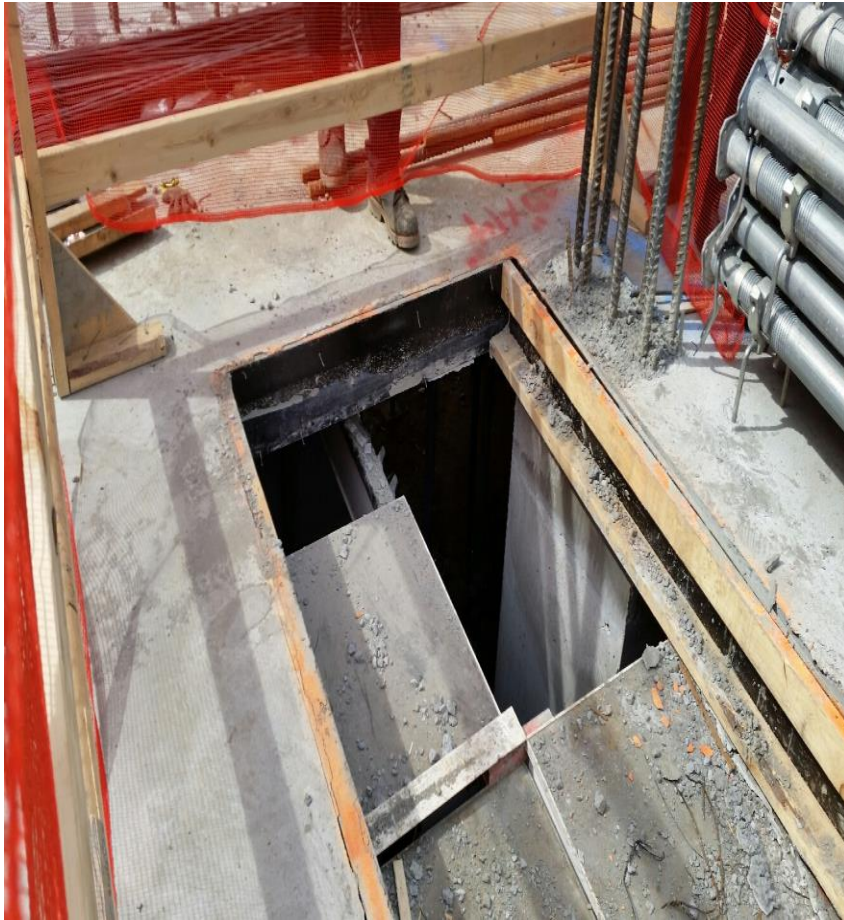
# NEAR MISSES:

*I thought it would be okay if I just...*

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# FAILURE: OPEN HOLE FALL



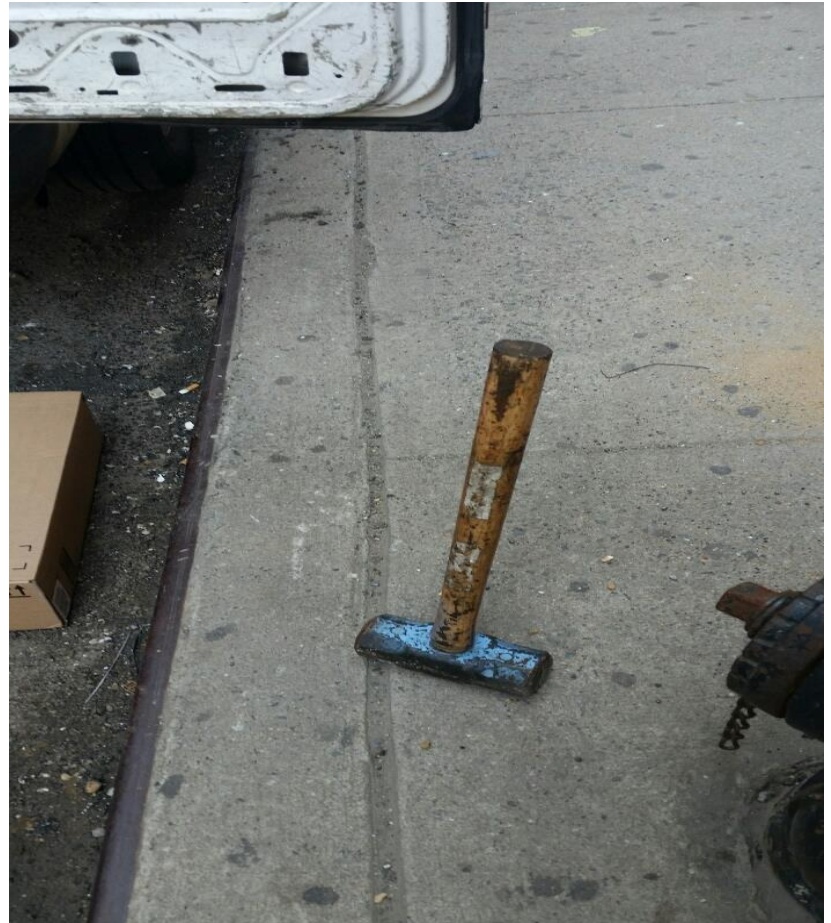


# FAILURE: OPEN HOLE FALL

Worker was conducting stripping operations and was not tied off. He fell through hole landing on rebar caps which saved him from impalement.



# FAILURE: LOSS OF CONTROL



# FAILURE: LOSS OF CONTROL

Worker was jumping a crane and lost control of a sledge hammer which fell 20 stories hitting a van roof. A delivery man was unloading packages from the van. The sledge landed on the sidewalk next to the delivery man.



# FAILURE: SITTING ON A TRUSS

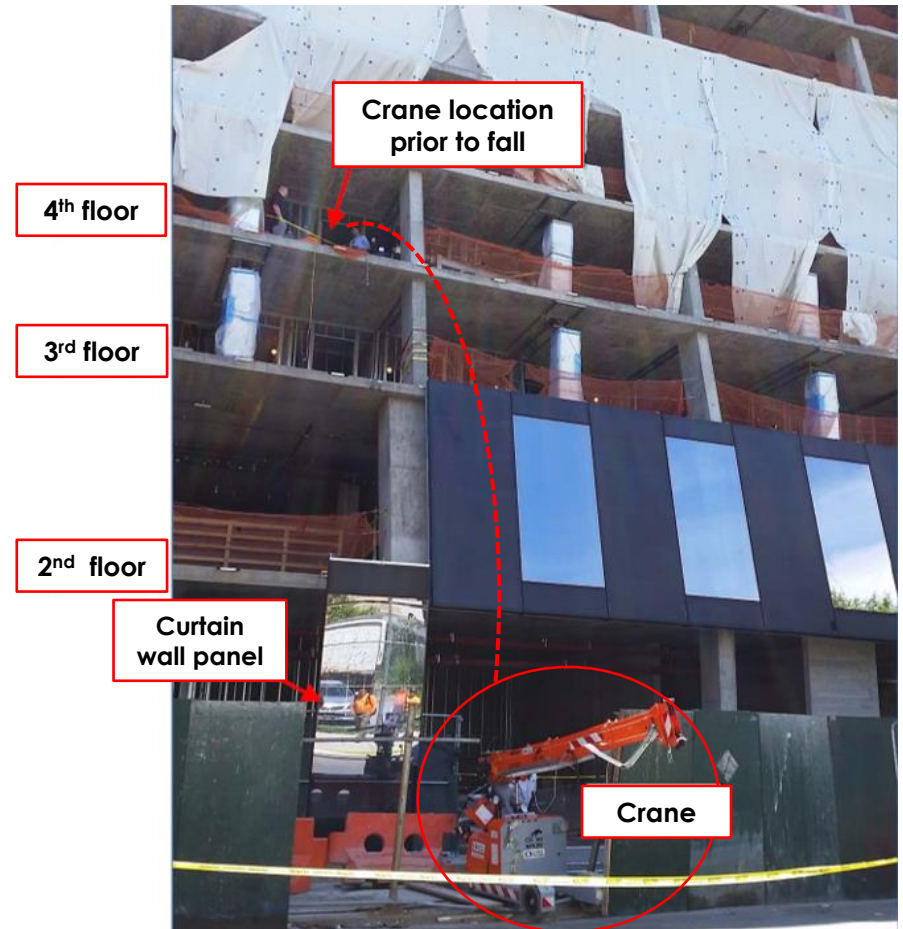




# **FAILURE: SITTING ON A TRUSS**

Worker was setting a truss when the truss moved and the worker fell 30 feet.

# FAILURE: MINI CRANE

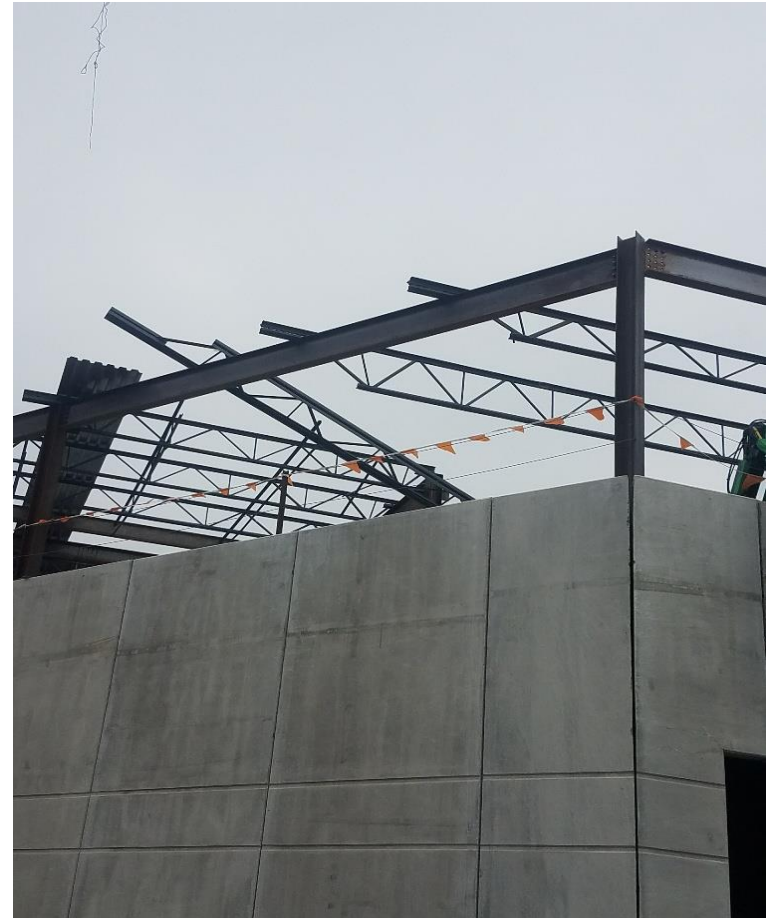


# FAILURE: MINI CRANE

Mini crane was lifting a façade piece from the fourth floor deck. The crane was not properly secured and was overloaded. The crane fell through the façade opening and summersaulted down. The boom penetrated the third floor opening below and the hook caught a worker's harness who was not tied off and catapulted him out the window down three stories and across the site. He lived.



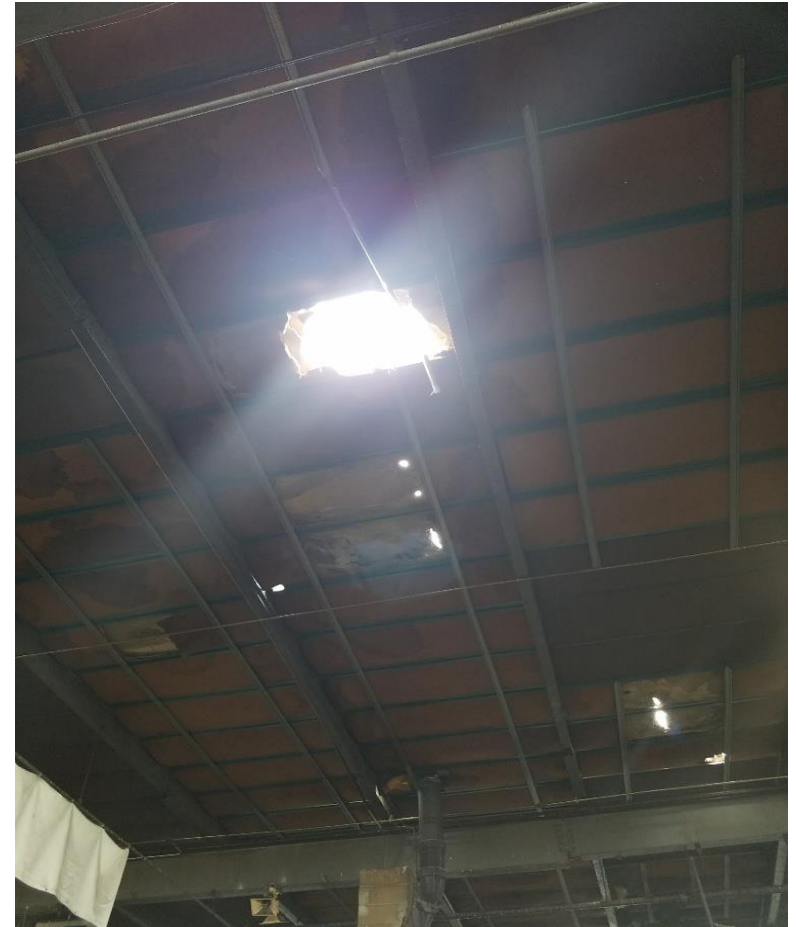
# FAILURE: CRANE CHOKER HANG-UP



# FAILURE: CRANE CHOKER HANG-UP

Crane was setting a truss. The worker unhooked the rope. As it was pulling away the rope caught the truss lifting it and caused the worker to fall.

# FAILURE: ROOF ASBESTOS ABATEMENT





# **FAILURE: ROOF ASBESTOS ABATEMENT**

Worker was doing asbestos abatement on the roof of a two story warehouse. The contractor did not assess the roof condition. The roof gave way under the weight of the worker.

## ***Glad I Tied-Off...***



A worker was installing a railing on a tower crane tie back. He slipped and fell 20 feet and was saved by harness and tie off. The crane was used to rescue him.

# NEW DOB ENFORCEMENT UNIT

## Construction Safety Compliance (CSC)

- Began operations September 2018
- From September 2018 and May 1, 2019
- **10,947** inspections at **7,239** construction sites visited
- **75%** of the sites were in compliance
- **25%** of the sites were issued violations
- **5,023** violations issued and **1,436** Stop Work Orders issued



# ENFORCEMENT: LOCAL LAW 196

- DOB began issuing violations in December 2018
- **Violations issued for:**
  - Not having a training card
  - possessing counterfeit training cards
- **Resulting in:**
  - **\$5,000** (per worker) issued to the owner
  - **\$5,000** (per worker) issued to the permit holder
  - **\$5,000** (per worker) issued to the employer for each person that did not have proper site safety training

# ENFORCEMENT: LOCAL LAW 196

- Employer cannot fire the worker
- To obtain mitigation of the fine the employer must pay for training
- Employer must pay for the workers training
- Employer must provide copies of the training certification to DOB

# ENFORCEMENT: LOCAL LAW 196

## Results as of May 1, 2019

- **211** construction sites issued violations for training card violations
- **28** referrals made to the **Department of Investigation** for counterfeit cards
- **1,328** violations issued that directly related to site safety training issues



# Local Law 78 of 2017

- Owner or owners representative **must** file additional details not collected by DOB at the time of the accident
- Report accidents within **72 hours**
- **\$2,500** penalty
- **\$1,000/day** up to 45 days
- Service notice contains a hyperlink to the reporting web form



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