

# Know the Risks. Stay Safe.

Based on research from the NCCCO Foundation & National Safety Council

487

Crane-related deaths recorded between 2011 and 2022

41

The average number of lives lost every year

50%+

Of those fatalities involved a worker being struck by an object or equipment

8%

Of onsite injuries are due to lack of proper training

## TOP 10 CRANE SAFETY HAZARDS

NCCCO FOUNDATION & NATIONAL SAFETY COUNCIL | WORK TO ZERO INITIATIVE



01

### HEAT STRESS

18% of Operators Reported Injury Risk

Potential Hazard Mitigation: Cooling stations and ventilated cabs • Heat illness training and mandatory water breaks • Cooling vests and sun protection



06

### STRUCK BY A FALLING OBJECT

6% of Operators Reported Injury Risk

Potential Hazard Mitigation: Debris nets, barricades, and anti-two block systems • Exclusion zones below lifts, tool tethering, and pre-lift inspections • Hard hat and safety glasses



02

### FATIGUE

18% of Operators Reported Injury Risk

Potential Hazard Mitigation: Fatigue monitoring wearables • Shift length limits, mandatory rest breaks, and fatigue awareness training



07

### JOBSITE AWARENESS

5% of Operators Reported Injury Risk

Potential Hazard Mitigation: Drones for pre-lift site mapping and ground penetrating radar • Site-specific orientations and pre-shift safety walkthroughs • High-visibility vest and proper signage



03

### FALL FROM HEIGHT

9% of Operators Reported Injury Risk

Potential Hazard Mitigation: Guardrails and safety nets • Fall protection training and pre-climb inspections • Full-body harness and personal fall arrest system

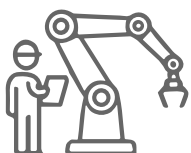


08

### VEHICLE / PEDESTRIAN INTERACTIONS

5% of Operators Reported Injury Risk

Potential Hazard Mitigation: Proximity sensors, geofencing, and physical barriers • Designated pedestrian routes and vehicle movement plans • High-visibility vest and reflective gear



04

### LOADING & UNLOADING MATERIALS

8% of Operators Reported Injury Risk

Potential Hazard Mitigation: Proximity sensors and load moment indicators • Rigging inspections, designated load zones, and spotter protocols • Hard hat, steel-toed boots, and cut-resistant gloves



09

### LIGHTNING STRIKES

4% of Operators Reported Injury Risk

Potential Hazard Mitigation: Lightning detection systems and weather monitoring technology • Weather monitoring protocols, stop-work triggers, and evacuation plans • Rubber-soled boots



05

### LACK OF PROPER TRAINING

7% of Operators Reported Injury Risk

Potential Hazard Mitigation: Virtual and augmented reality simulation training • Certification, pre-task briefings, and hands-on competency checks

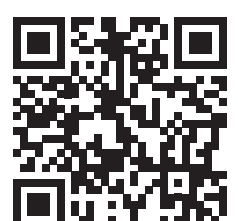


10

### CONTACT WITH OVERHEAD POWER LINES

1% of Operators Reported Injury Risk

Potential Hazard Mitigation: Insulating barriers • Utility locates before every job, 10-foot minimum clearance rule, and spotter for all lifts near lines • Insulated gloves and rubber-soled boots



**IF YOU SEE A HAZARD – SPEAK UP.  
YOUR LIFE AND YOUR CREW'S LIVES DEPEND ON IT.**

Learn more at: [ncccofoundation.org/safety\\_tools/](https://ncccofoundation.org/safety_tools/)

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