



Dropped Object Awareness Training

How serious is the problem?

Dropped Objects are among the
Top 10 causes of Fatality and
Serious Injury in the
Construction Industry

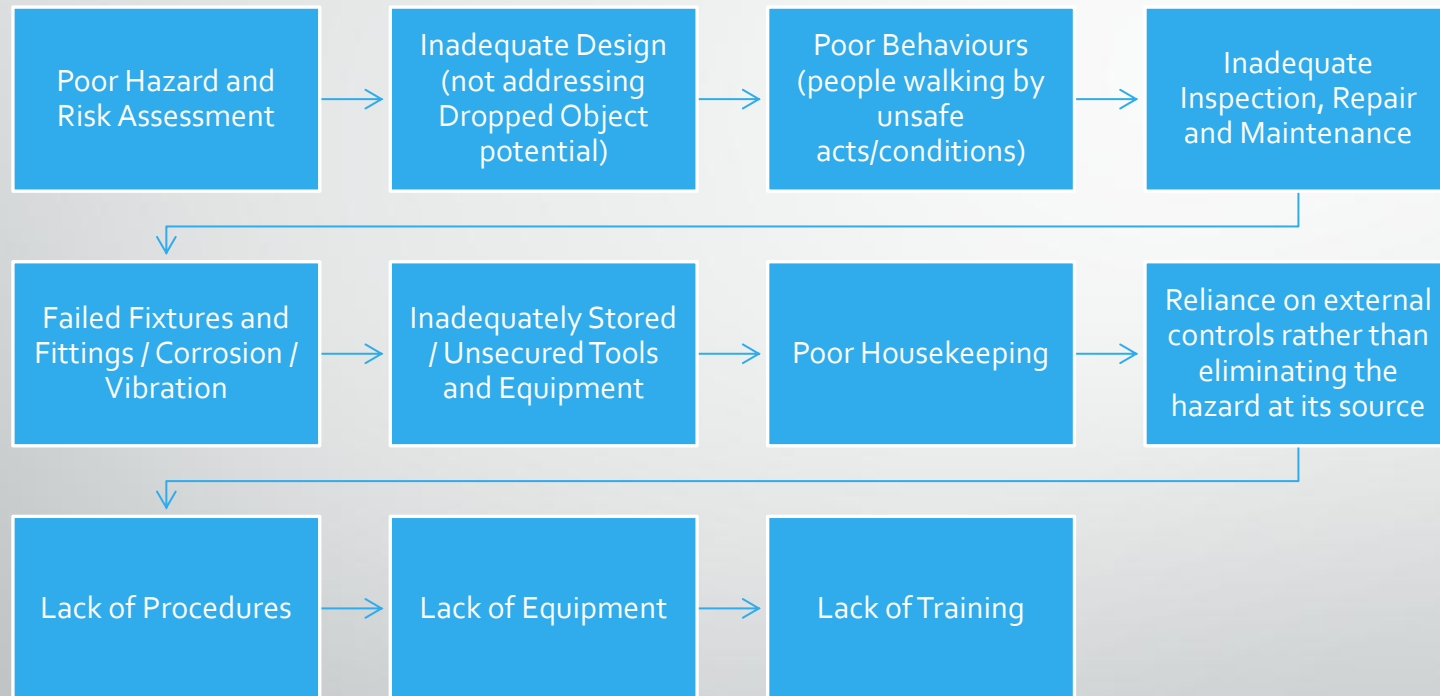


The top three causes of fatal accidents are...

1. Falls from height
 2. Being struck by moving vehicles
 3. Being struck by falling objects
- Every year in Canada, over 26,645 injuries are reported due to falling objects
 - Highly likely that many of these injuries are not reported
 - Planning to prevent dropped objects can help protect workers

STATISTICS

What causes dropped objects?



Work Execution and Planning

- Ineffective control of equipment
- Tools at heights
- Failure to use lanyards
- Failure to use Kuny bags
- Inadequately secured loads and materials
- Materials are struck by another object



Potential dropped
objects may arrive with
equipment



Storage of equipment

- Lack of cleaning
- Lack of proper inspection process
- Redundant and neglected equipment
- Improper storage/storing at heights
- Inadequately secured equipment
- Overloading
- Unstable storage
- Untethered materials



Housekeeping

- Poor housekeeping
- Debris left to accumulate
- Discarded items improperly disposed
- Lack of cleaning
- Lack of proper inspection



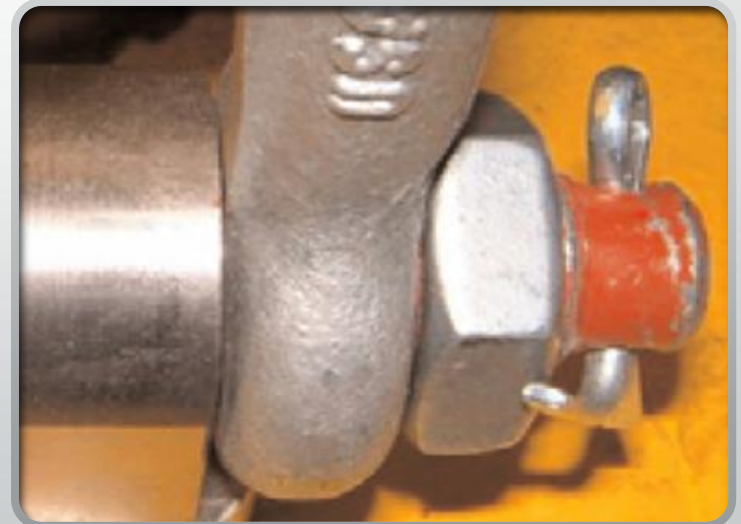
Behaviours

- Complacent behaviors
- Failure to follow procedures
- Unaware of environmental changes
- Inadequate risk awareness and assessment
- Failure to report observations
- Poor prioritization
- Own your work zone



Control Equipment and Tools

- Secondary Retention applied to all items at height
- Tool bags and designated tools for working at height
- Inspection of equipment and tools prior and during use
- Know SWL (Safe Working Load) of Secondary Retention



Control Zones and Drop Zones

- A control zone keeps workers and equipment from a leading edge.
- A control zone is the distance between an unguarded edge of a building or structure of at least 2 meters (6.5 feet).
- Additional distance is increased with the risk of tools or other equipment near the control zone.
- A control zone cannot be used if the level working surface where work is being performed is less than 4 meters (13 feet) wide.
- Drop Zone is described as a defined area below work that is being performed above ground, where there is the potential for suspended loads, tools, equipment, waste or other items to fall and create a risk to workers
- Containment is the next step in preventing objects from falling to the ground in a Drop Zone. Measures such as toe boards and red tape will be put in place. Red tape will be tagged with date, names and hazards present. No personnel will enter the Drop Zone unless part of the task crew and their presence is known.

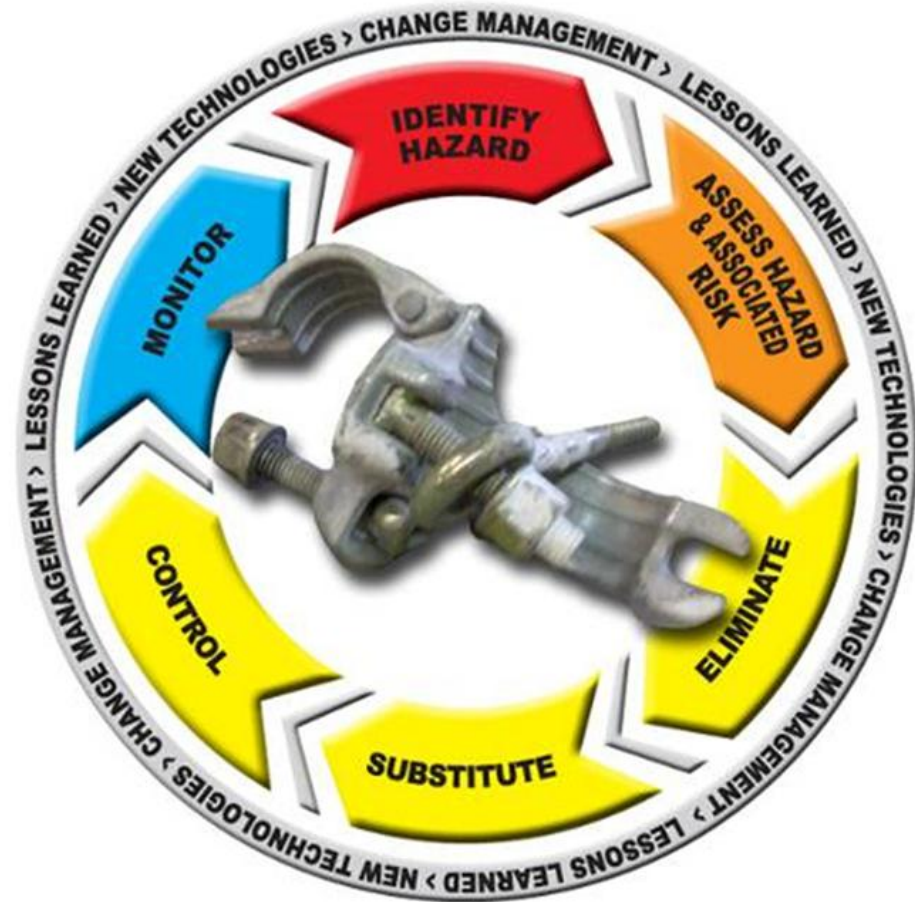
Planning and work execution

- Proper Pre Job Planning – What are we doing? How are we doing it?
- Risk Assessment – What are the hazards on this job? How will we control them?
- Identifying Specific Onsite Drop Zone Hazards
- Risk Assessment
- Lift Plans & Critical Lift – Identify, Communicate & Control
- Daily Stop the Drop Checklists completed on the project by supervisors.

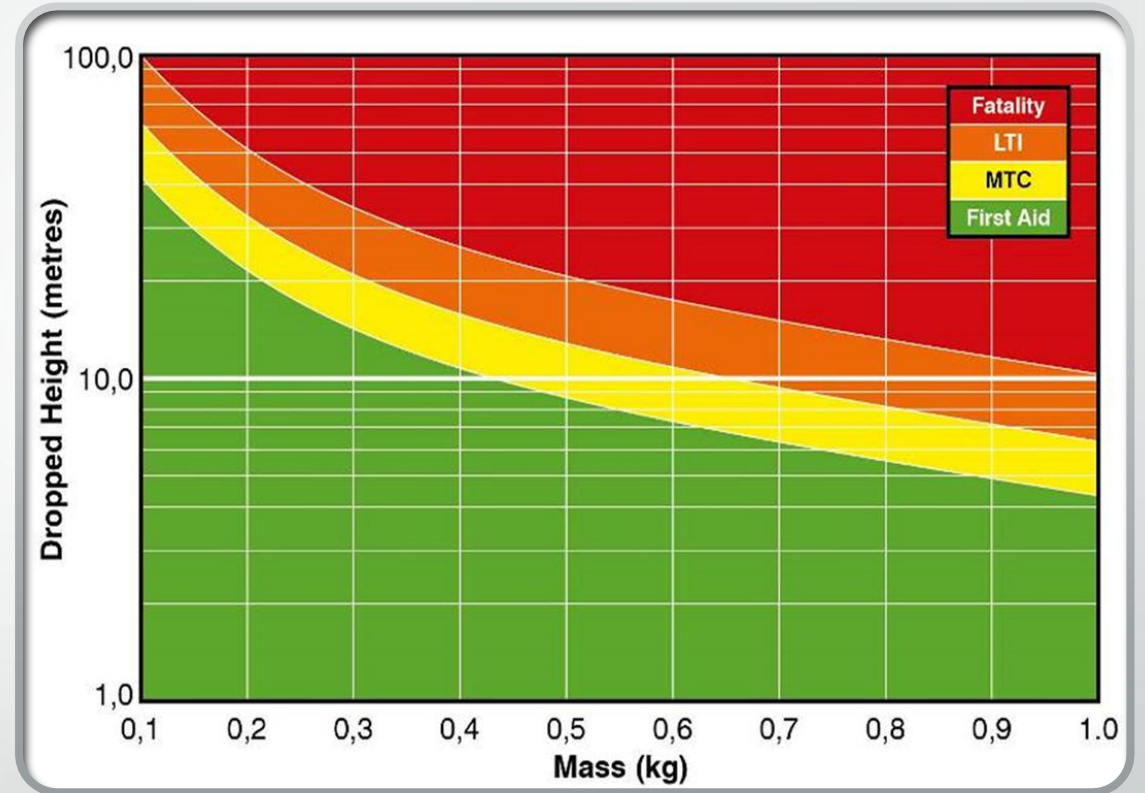


Identify, Assess, Eliminate, Substitute, Control, Monitor

- Engineered Control Procedures
- Training and Awareness
- Safety Signs
- Signalperson Utilized
- Personal Protective Equipment



Dropped Object Impact Calculation



Barricades



- Select the correct barricade type
- Ensure proper signage is used
- Follow the 4:1 ratio at a minimum
- Barricades and signage must be in place for the duration of a Drop Zone
- Barricade must be in working condition
- Ensure the Drop Zone is enclosed fully controlled

Preventive and Mitigating Controls

Preventive Controls

- Site Inspection
- Pre-task Hazard Assessment
- Job Hazard Assessment
- Primary Securing Method
- Secondary Retention Method
- Maintenance and Repair
- Surveys and Inspections
- Dropped Objects Observation Checklist
- Management of distractions
- Stop-Think-Act
- Individual awareness and vigilance
- DROPS Training

Mitigating Controls

- Safety Securing Systems
- Effective Use of Barriers
- Barricades and Signs (Control Zones with Red Tape)
- Approved Drops Tools Kits
- Kuny Bags
- Re-assess all abnormal conditions
- Personal Protective Equipment
- Inspections of all equipment and hazards
- Communications
- Pre-Job Meetings
- Regular review of DROPS Training

[Click here to take the Dropped Object Awareness Training](#)