Top 5 Ways to Reduce Fall Hazard Risk
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Today’s Presentation

Moderator:
Josh Amos, IFMA Components Liaison

Presentation Title:
Top 5 Ways to Reduce Fall Hazard Risk

Presenter(s): Kevin Wilcox, P.E., C.S.P. – LJB Inc.
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Presentation Logistics

- Polls will be used throughout the webinar
- Q&A at the end of the presentation
- Quick survey at the conclusion of the Webinar
- PowerPoint & Recorded Webinar will be available online via FMCC’s Website (fmcc.ifma.org)
- Your Participation is Greatly Appreciated!
Learning Objectives

1. **LIST** five ways to reduce fall hazard risk
2. **EXPLAIN** five ways to reduce fall hazard risk
3. **DESCRIBE** the differences between a certified and non-certified fall protection system
4. **SUMMARIZE** the critical elements needed for effective fall protection training
Presenter Bio

• Kevin Wilcox, P.E., C.S.P.
• Principal and Project Manager – LJB Inc.
• Specializes in fall protection consultation and design
• B.S. and M.S. in civil engineering
WHY IS THIS IMPORTANT?
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TOP 5 WAYS

1. Apply PtD for new buildings and processes
2. Do a risk assessment the right way
3. Use less personal protective equipment
4. Focus on certified systems, not just equipment
5. Provide general and system-specific training
#1 APPLY PtD
WHEN TO THINK FALL PROTECTION
PREVENTION THROUGH DESIGN

- Implement safety during programming and design
  - Considers safety for:
    - Construction
    - Operations
    - Maintenance
  - Requires team approach
The sooner the better

- Eliminates:
  - Design costs
  - Additional drawings
  - Mobilization of the contractor
  - Field modifications
  - Rework of interferences
  - Use of potentially riskier means of hazard abatement
PtD EXAMPLE

• Before

• After
  • Hazards eliminated or controlled passively
  • Processes and products changed
  • Cost savings
    • Fewer fall protection issues = less equipment, training and management
#2 PERFORM & USE A FALL HAZARD RISK ASSESSMENT
VALUE OF A LIST

Grocery List

- can
cucumber
tomatoes
lettuce
skim milk
fish salmon
flowers
avocado
mushrooms
drug fruit
crackers
WHEN YOU DON’T HAVE A LIST...

- You forget important things
- You waste money
- You’re less efficient
WHEN YOU DON’T HAVE AN ASSESSMENT

- You forget important things
- You waste money
- You’re less efficient
WHEN YOU DON’T HAVE RISK ASSESSMENT…

- You are not aware of all your hazards
- You may not abate the correct hazards
- You don’t have a “roadmap” to systematically abate the hazards on your site
GOOD DATA = GOOD DECISIONS

- How do you measure the amount of risk with each hazard?
  - Probability
  - Severity

- What information do you need to make an informed decision?
  - Relative risk
  - Abatement cost
#3 USE LESS PPE
EQUIPMENT MISUSE
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OSHA STD 1-1.13 – REQUIREMENTS

• FREQUENT TASKS:
  – More than 1x every 2 weeks
  – More than 4 hours over 4 week period
  – Required to use engineering controls (guardrail)

• LESS FREQUENT TASKS:
  – Permitted to use active fall protection which includes personal fall arrest systems (PFAS)
PPE SYSTEMS

- Too many opportunities to fail
  - Equipment misuse
  - Inadequate anchorage
  - Inadequate clearance
  - Incompatible components
  - Improper training
#4 FOCUS ON CERTIFIED SYSTEMS
CERTIFIED?

Equipment
CERTIFIED?

1. Right solution?

2. Procedures & Training

3. Equipment

4. Anchorage & Clearance
WHEN?

- During design and installation
- Formal inspection (equipment)
  - According to manufacturer’s recommendations
  - Typically semi-annual or annual
- Recertification
  - Every 5 years, according to ANSI Z359.6
DOCUMENTATION IS KEY

• Documentation
  – Design
  – Construction
  – Inspection logs
  – Training
  – Operations
CERTIFIED SYSTEM CASE STUDY

• Before

• After
  • Systems designed
  • Documentation provided
#5 PROVIDE QUALITY TRAINING
WHO?

• Authorized person
  – Those working at heights
• Competent person
  – Safety personnel
  – Engineers involved in project planning and execution
  – Supervisors - skilled trades and maintenance groups
CRITICAL ELEMENTS

Content

Logistics

Delivery
CONTENT

• ANSI Z359 guidance
  – 15 duties of a competent person
    • Z359.2 §3.2.4
  – Authorized person training requirements
    • Z359.2 §3.3.6.3
    • General knowledge
  – System Specific training
ACADEMIC BACKGROUND

- Fall protection program requirements
- Fall hazard identification
- Fall hazard abatement
  - Engineering controls
  - Lift equipment and scaffolding
- Personal fall protection
  - Anchorages
  - Fall clearances
HANDS-ON AND INTERACTIVE

- Equipment inspection
- Equipment use and limitations
DELIVERY

- Instructor qualifications
  - Specific expertise in fall protection
  - Understanding of equipment use and limitations
  - Experience training adult learners
DELIVERY

- Medium
  - Classroom
  - Online
  - Video
  - Combination
DELIVERY

- Training methods
  - Lecture
  - Multi-media applications
  - Hands-on exercises
LOGISTICS

- Schedule
- Budget
- Environment
REPI TITION
TOP 5 WAYS

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5. Provide general and system-specific training
Q&A

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