Slide 1

SAFETY

Slide 2

Presenters

Robert Jurgiel, CIH, CSP, PE

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Disclaimer

This presentation is not intended to be a comprehensive program covering all aspects of this topic. All technicians are encouraged to read and follow all applicable standards, codes and regulations related to this topic.

- ✓ It is the responsibility of each individual contractor to follow local building codes and licensing requirements and to work safely in accordance with OSHA guidelines.
- ✓ It is the contractor's responsibility to take proper precautions on each project to prevent cross contamination. Always take the health and safety of the building occupants into consideration before you conduct any cleaning procedures.
- ✓ All of the following tips are only general tips. They do not cover every situation and it is your responsibility to adapt these tips to the individual system you are working on.
- ✓ The Instructor is not responsible in any way for the work you perform after viewing this slide show. You are responsible for your own work.
- ✓ The views and opinions following are the instructors opinions and not necessarily the official position of the National Air Duct Cleaners Association.

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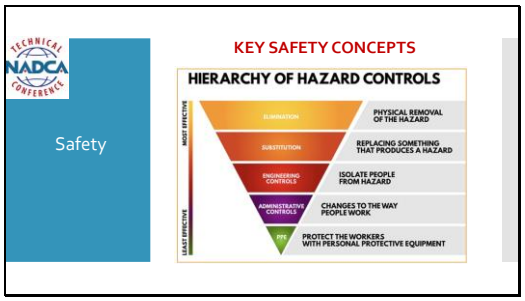

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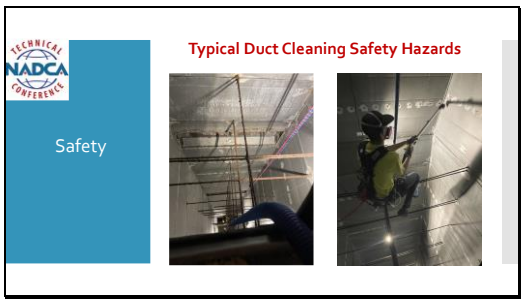

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Safety

Typical Duct Cleaning Safety Hazards

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Safety

Typical Duct Cleaning Safety Hazards

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Safety

Typical Duct Cleaning Safety Hazards

- Sharp Edges
- Falls
- Lockout / Tagout Issues
- Eye Hazards
- Respiratory Hazards
- Chemical Hazards
- Slip, Trips & Falls
- Sprains & Strains
- Traffic Accidents
- Others?

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Safety

SHARP EDGES

Examples
- HVAC Openings, Patches
- Knives, Tools

Control Discussion
- Cut Resistant Gloves (PPE)
- Cut Resistant Sleeves (PPE)
- Tool Guards (Engineering)

- Other Engineering Controls?

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Safety

FALLS

Examples
- Ladders, Roofs, Vertical Shafts, Lifts

Control Discussion
- Ladders: 3-Points of contact
  Training
  Hoist equipment
- Roofs: Maintain 6' from edge
  Restraints & fall protection
  Avoid sky lights

https://www.youtube.com/watch?v=dhpqmzietO8

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Safety

FALLS

Examples
- Ladders, Roofs, Vertical Shafts, Lifts

Control Discussion
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Safety

FALLS

Platform Ladders

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Safety

FALLS

Scaffolding

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Safety

LOCKOUT / TAGOUT ISSUES

Examples
- HVAC units, electric heaters, fan pulleys, fan blades

Controls
- Training
- Knowledge of equipment
- De-energize electrical hazards and mechanical hazards
- Remove potential or stored energy
- Verify de-energized stated

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Safety

LOCKOUT / TAGOUT ISSUES

Importance of Lockout / Tagout

- Minimize potential startups
  - New personnel or shift change
  - Computer controls and overrides
  - Mistakes or errors
- Redundancy

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Safety

EYE HAZARDS

Examples
- Metal shavings, blowing dust or fiberglass

Controls
- Negative pressure system
- Safety glasses or goggles
- Minimize and awareness of activities, especially those that generate high amounts of particles

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Safety

RESPIRATORY HAZARDS

Examples
- Airborne dust / mold / chemicals

Controls
- Negative pressure system
- Mold awareness
- Minimize and awareness of activities, especially those that generate airborne dust
- Respirators

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Safety

RESPIRATORY HAZARDS

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Safety

CHEMICAL HAZARDS

Examples
- Coil cleaners, degreasers, antimicrobials, disinfectants

Controls
- SDS review
- Use in accordance with manufacturer recommendations
- Adequate ventilation
- Appropriate gloves
- Respiratory protection

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Safety

CHEMICAL HAZARDS

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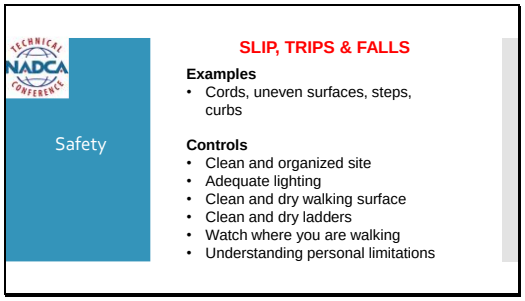

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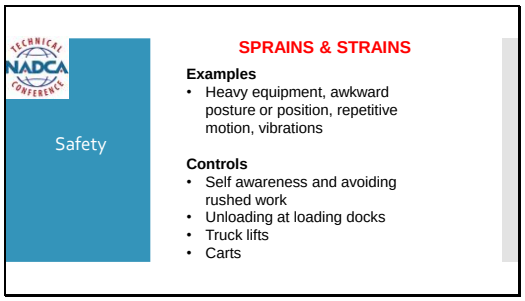

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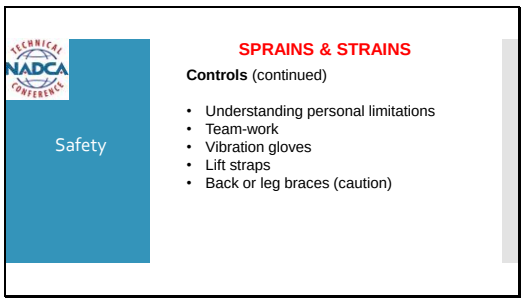

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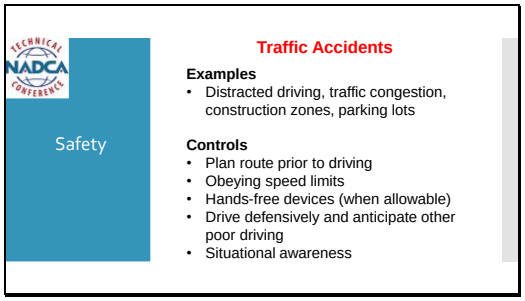

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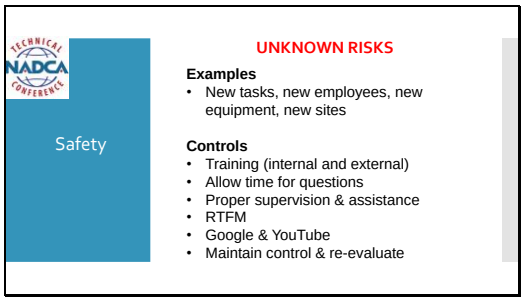

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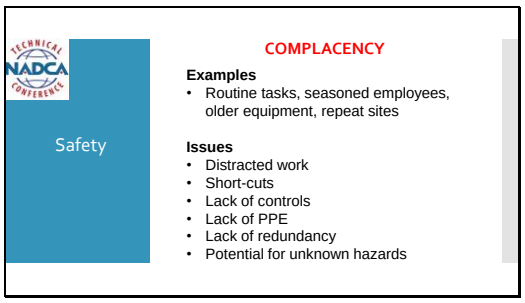

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Safety

COMPLACENCY

Controls

- Self and team awareness
- Self reflection

- Site walkthroughs
- Tool & equipment inspections
- Tool & equipment maintenance
- Redundancy

- Company culture
- Team discussions

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Safety

MANAGEMENT TOOLS

- Safety Manuals
- Job Safety Analysis (JSA)
- Training (internal & external)
- Site reviews
- Accident & near misses reviews
- Injury & illness logs reviews

- Assess, change, repeat
- Create a safe company culture with open discussion

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Safety

MANAGEMENT TOOLS

- Implement redundancy
- Avoid the OSHA Cowboy example!

Cowboy after O.S.H.A. Inspection

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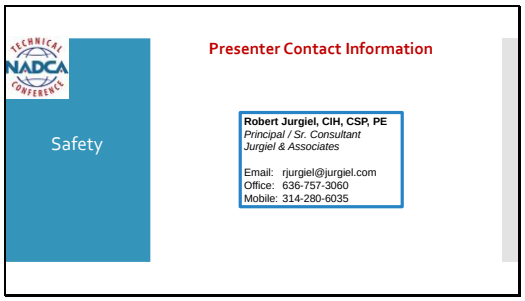

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