HEALTHY BUILDINGS WEBINAR SERIES

EMERGENCY RESPONSE PLANS: OSHA GUIDANCE & COVID PREPAREDNESS FOR OPEN DOORS

Peterson Cullimore, Alliance Consultants
AGENDA

1. Major OSHA Regulations affected by COVID-19

2. Response and Preparedness Planning

3. Industrial Hygiene Thoughts
INTRODUCTIONS

Moderator:
Gillian Giem, Program Manager of USGBC West Michigan

Speaker:
Peterson Cullimore, Group Manager, Alliance Consultants
Alliance Consultants

Services include:

1. Facility Support Services
2. Industrial Hygiene
3. Commercial and Residential IAQ Testing
4. EHS Regulatory Compliance
5. Environmental Risk Management and Due Diligence
6. Sustainability Management

All of Michigan and Northern Indiana
General Duty Clause: OSH Act of 1970: 5(a)

Personal Protective Equipment

- 29 CFR 1910.132 General Requirements
- 29 CFR 1910.134 Respiratory Protection Equipment
“Employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees”

- Hazard Assessment
- Reasonable steps to address hazard
- Enforcement Priorities
Last Resort

- CDC recommends cloth masks for General Public
- OSHA expects High/V.High EL to wear N95

General Requirements

- Cloth Masks are not PPE
- Surgical Masks are PPE, but not Respiratory Protection
- Employee supplied or employer supplied
Filtering Facepiece Respirator: N95 Mask “Dust Mask”

- However, you must:
  - Ensure respirator itself does not create a hazard.
  - Provide employee with Appendix D of 1910.134 ("Information for Employees Using Respirators When Not Required Under the Standard").
- No written respiratory protection program needed.

Elastomeric APRs or Powered APRs

- Written Respiratory Protection Program: Limited
  - Administrator; Sections on medical evaluations and Inspection, Care, and Maintenance.
1. Goals
2. Pandemic Response Team
3. Exposure Risk Assessment
4. Engineering Controls
5. Administrative and Work Practice Controls
6. Disinfection
7. Training
8. HR Considerations
9. Engagement & Communication
10. Other: Supplier/Partner Considerations
1. Unifying Company Leadership in Goals

2. PRT (PM, PRC, DPRC, PHSL)
   - Access Control Leadership
   - Virus Prevention & Protocols Leadership
   - PPE & Supplies Leadership
   - Job Hazard Leadership
   - Disinfection Leadership
   - Communication and Training Leadership
   - Monitoring and Audit Leadership
   - Supplier and Inventory Leadership
Very High Exposure Risk: High potential for exposure to known or suspected sources of COVID-19 during specific medical, postmortem, or laboratory procedures.

High Exposure Risk: High potential for exposure to known or suspected sources of COVID-19.

Medium Exposure Risk: Employees frequently less than six (6) feet in distance from other workers, work with public, or travel.

Low Exposure Risk (Caution): Employees that do not require contact with other employees known or suspected to be infected with SARS-CoV-2. Can generally conduct work without being less than six (6) feet in distance from another person.

Determining Exposure Risk
1. Assess job roles
2. Controls where reasonable
3. Assign Exposure Risk Category
Common Engineering Controls

1. HVAC
2. Touch Point Reduction: Automatic Doors and Door Propping
3. Lidless Receptacles
4. Sanitation Stations
5. Physical Barriers
Top Written Supplements

1. Plant Entry/Exit Protocol (Screening)
2. Employee Environmental Disinfection Responsibilities
3. PPE Requirements and Voluntary Use
4. Monitoring and Enforcement
5. Training Matrix
6. Job Exposure Risk Matrix
7. Observed Symptoms Protocols
8. Employees or Employee Cohabitants Testing Positive for COVID-19
9. Case Report Form
10. Employee and Visitor Travel & Health Declaration Form
11. Quarantine and Safe Return to Work Protocol
COVID-19 is a recordable illness: Respiratory Illness on Form 300

Recordable Illness per 29 CFR Part 1904 IF:
1. Confirmed case, as defined by CDC;
2. Case is work-related as defined by 29 CFR § 1904.5; and
3. Case involves one or more of the general recording criteria set forth in 29 CFR § 1904.7
4. Non-exempt industry with >10 employees

Regarding #2 per OSHA Enforcement Memo: Work Related?:
Until further notice, OSHA will not enforce 29 CFR § 1904 to require other employers to make the same work-relatedness determinations, except where:

- Objective evidence that a COVID-19 case may be work-related
- The evidence was reasonably available to the employer e.g. Screening Information
1. Surface Disinfection: EPA Pesticide N-List: Concentration and Wet Contact Time!
   - Sodium Hypochlorite: If diluting, must be fresh
   - Electronics and sensitive surfaces: Alcohol-based

2. Disinfection Plan:
   - Routine/Responsibility: Disinfection Categories
   - Routine/Targeted/Third-Party Protocols
1. Module-based: General, Disinfection Teams, Leadership Action
2. Nature of Hazard
3. Administrative Controls
4. Convey OSHA Exposure Class and Corresponding Requirements
5. Disinfection
6. PPE
Most contentious: Michigan: >40% high risk 18+, 18-65 is 20-25%

- Being 65+ years of age;
- Being on immunosuppressive drug therapy or otherwise being immunosuppressed;
- Having a history of smoking; or
- Having any of the following medical conditions: cardiovascular disease, asthma or other pulmonary disease, renal failure, liver disease, cancer, or diabetes.

How would you solicit such info?

Figure 1

Over 90 million of 246 million U.S. Adults are at Higher Risk of Serious Illness if Infected with Coronavirus

92.6 million adults at higher risk for serious illness if infected with coronavirus

NOTE: Data includes adults ages 18 and older; excludes adults living in nursing homes and other institutional settings. SOURCE: KFF analysis of 2018 Behavioral Risk Factor Surveillance System.
1. Monitoring of pandemic progress and related news
2. All stakeholders
3. Safe Shift Meetings
4. Continuous Improvement Process
5. Process-based notification protocols
6. Signage
7. Multiple Locations
Do your partners have appropriate measures in place?
Breathing, Talking, Coughing, Sneezing

- Mount Vernon, Washington, March 10 Choir Practice
  - 60 singers, 3 weeks later, 45 Diagnosed, >3 hospitalized, 2 fatalities
- Fiegel 2006: Superspreaders: Difference in bioaerosol generation
- Asadi 2019:

Kowalski 1998:
IH: AEROSOL TRANSMISSION

- SARS-CoV-2 Size: 0.12 μm
- Viral load sufficient to cause infection: 1μm

- Morawska 2006: 1 Meter Drop:
  - 1000 μm, 0.3s
  - 100 μm, 3s
  - 10 μm, 300 s
  - 1 μm, 30,000s

- Chen 2010: 0.1-200 μm: ventilation patterns and the initial velocity vs gravity
van Doremalen 2020:

Duguid 1946:

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Xie 2007:
1. **Normal Breathing**: 1 m/sec
2. **Talking**: 5m/sec
3. **Coughing**: 10 m/sec
4. **Sneezing**: 20-50 m/sec
van Doremalen 2020:
QUESTIONS?

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HEALTHY BUILDINGS WEBINAR SERIES

The Workplace: A Plan to Prepare, Restore & Thrive

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