WELCOME to

Science & Practices to Keep Workers Safe and Businesses Productive

as the COVID-19 Pandemic Changes

Session will start in less than 15 minutes

Please type your name, company, and email into chat box for attendance.
Keeping My Family Safe

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ECHO Session Agenda

• Key Questions to Explore:
  • Does work increase our employees risk of exposure to COVID-19?
  • What should they do to protect their families?
• Understanding COVID-19 Modes of Transmission
• Risk Assessment and Risk Mitigation of COVID-19 Transmission
• Strategies for Interrupting Risk of Workers Exposing Family Due to Work
COVID-19 Modes of Transmission

A. General Transmission

Abiotic environmental factors
- Wind
- Water
  - Inhalation of spores
  - Entry into skin

Animal vectors
- Mosquitoes (malaria, dengue)
- Fleas (bubonic plague)

B. Human to Human Transmission

Direct Contact
- Pathogen survives best inside the body
- Eg: HIV, Herpesviruses, Ebola

Indirect Contact
- Pathogen survives harsh environment
- Pick up pathogen from surface or air
- Eg: Influenza, norovirus

Droplets
- Pathogens are in droplets, but do not survive long this way
- Eg: Ebola, Bordetella pertussis

Airborne
- Pathogens aerosolized and stay infective
- Eg: Influenza, Tuberculosis

Fecal - Oral
- Through contaminated water or food
- Eg: Cholera, Norovirus, Shigella
COVID-19 Risks and Risk Mitigation

- No handshaking, Social distancing 6ft
- High touch surface decontamination, Hand Hygiene
- Masks all the time, Eye Protection
- Respirators (N95, Elastomeric half mask, PAPR)
- Bathroom cleaning, Hand Hygiene
Aerosol Transmission of Infectious Disease

At time = 0, an aerosol is generated by person A. Person B receives droplet spray and intakes particles. Person C has no exposure.

At time = 1, the aerosol is dispersing, and many larger particles are settling. Person B inhales particles. Person C has no exposure.

At time = 2, the aerosol is dispersed, and many larger particles have deposited on the floor. Persons B and C inhale particles.
Balancing Risks and Countermeasures

- How many people?
- Generation level of aerosols
- How small a space?
- Ventilation?
- High touch surfaces?
- Clothes and hair contamination?
- Vulnerability of individual/family?
- Symptoms of COVID infection?

- Fewer people
- Source control—masks
- Larger spaces
- Add ventilation, Outdoors
- Cleaning schedules
- Change clothes, Shower
- Protecting the most vulnerable
- Self monitor, test, quarantine
Going Home... What is Sensible?

- Example exposure levels for discussion:
  - Very high
  - High
  - Moderate
  - Low
  - Very Low
Going Home...What is Sensible?

• We all need to pay attention to the basics of healthy eating, sleep and time off to decompress. This will last months, not just a few days or weeks.

• Adams, “The focus should be on supportive conversations, clear guidance when recommendations exist, attempts to minimize misinformation and efforts to reduce anxiety.”
Questions/Discussion?