

Grow and Operate your Manufacturing Business:

Science-based Approaches to Manage COVID-19

Rachael M. Jones, PhD, CIH

Rocky Mountain Center for Occupational and Environmental Health

Department of Family and Preventive Medicine

University of Utah School of Medicine



PART OF THE



Disclaimer



- Please be advised that some or all of the information contained in this COVID-19 Workplace Safety Guidance provides general recommendations that may not be applicable to many businesses. We therefore recommend that before implementing any of these practices, you consult with outside legal counsel as appropriate, on the legality, applicability, and potential efficacy of this information in your company. Also note that this is a “living” document that may be updated at any time by Utah Industry Resource Alliance (UIRA) since the COVID-19 situation changes rapidly.
- UIRA bears no responsibility for any circumstances arising out of or related to the adoption, or decision not to adopt, any of the practices or procedures contained in this presentation. We appreciate the great corporate citizenship of the Lear Corporation for sharing many of their safety practices and making them available to other manufacturers.
- Facilities must always comply with all applicable laws, and if there is a conflict between this guidance document and the applicable law, the facility must follow the law.



The Virus and the Disease

- Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the virus that causes coronavirus disease (COVID-19).
- SARS-CoV-2 is one of 7 coronaviruses that infect humans; likely that bats were the reservoir hosts of the progenitor virus.
- COVID-19 symptoms develop 2-14 days after exposure, and include:

Fever

Cough

Sore Throat

Headache

Shortness of Breath

Loss of Taste or Smell

Chills (Shaking or Not)

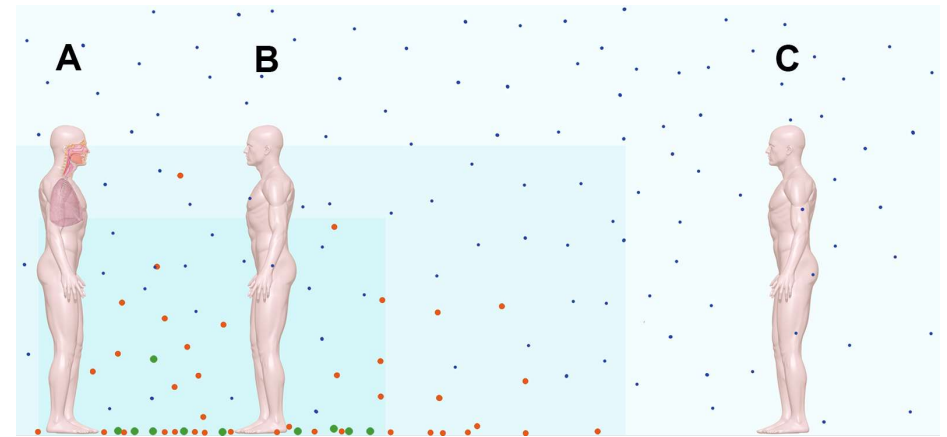
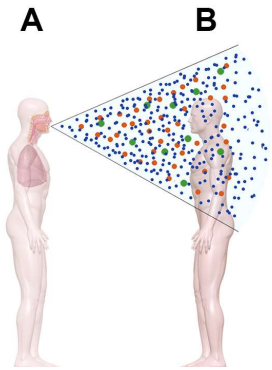
Muscle Pain

How Infection Occurs

- Virus enters the body through:
 - Eyes
 - Mouth/tongue
 - Nose and nasopharynx
 - The lung, including alveoli
- Transmission is via respiratory droplets
 - Spray onto face
 - Inhaled into respiratory tract
 - Deposit onto face via contact with contaminated surface



Spray and Inhalation of Respiratory Droplets



Educate Employees About Symptoms

Symptom	COVID-19	Common Cold	Allergy
Fever	Common	Rarely	Never
Shortness of Breath	Common	Never	Rarely
Sore Throat	Common	Rarely	Rarely
Diarrhea	Sometimes	Never	Never
Congestion or Runny Nose	Never	Common	Common
Sneezing	Never	Common	Common

Coronavirus Can Remain Active for Days

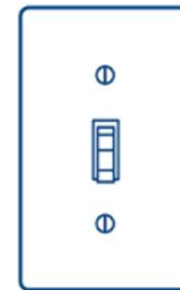


Many Hours as Aerosol

The tiny micro-droplets, smaller than droplets, float in the air long after someone sneezes, coughs, exhales, or even talks.

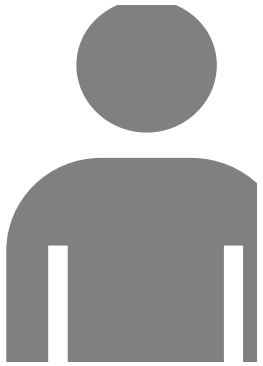


Up to 1 Day on Cardboard
UPS, USPS, the CDC, and the WHO agree that mail and packages are very low risk. There have been no known cases from imported goods.



Up to 3 Days on Plastic
Containers and hard surfaces such as countertops, plastics and switch plates provide a 3-day haven.

Preventing COVID-19 Spread at Your Facility

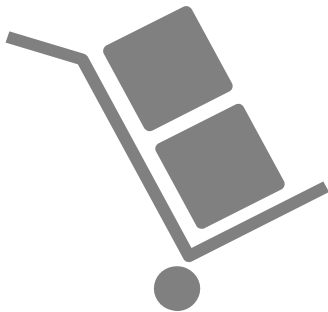
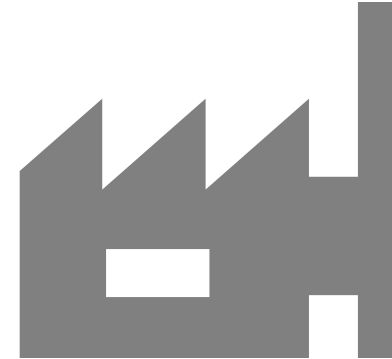


People

- Masks in public
- Social distancing
- Self-monitor symptoms

Upon Entry

- Symptom screening
- Staggered arrivals
- Visitor log



Things

- Supplies & equipment
- Contaminated?



Prevention

- Keep workplace clean
- Keep people apart
- Hand cleaning stations
- Consider PPE

Admin, Legal & HR

- Utah regulations & guidance
- Identify & manage ill workers
- Protect high-risk employees

Screening Employees

Pre-screening is allowed when applied to all employees and those with conditional offers of employment

- Symptom assessment (fever, cough, shortness of breath)
- Require a temperature screening with a non-contact thermometer to enter the facility. Send employees home that exhibit a fever of 100.4+ F.

Blood tests (serology) to measure antibodies show if someone was infected previously, not if they are infected now. Antibodies confer immunity, but it is not known how well or long they confer immunity to SARS-CoV-2.



**All medical information
must remain confidential**

Know Who is Where in Your Facility

- Assist with tracing contacts of COVID-19 cases
- Track who is present:
 - Visitor log, including destination in facility
 - Employee log, including work times and work area/team assignments
- Limit access to facility or to areas of your facility
 - Use card keys to track/limit access
 - Use staggered shift or break times to reduce crowding



Social Distancing should be Maintained

- Problem Areas:
 - Time clock
 - Break & locker rooms
 - Bathroom
 - Team huddles
- Strategy
 - Stagger use times
 - Install “touchless” items
 - Remove seats
 - Re-assign lockers
 - Add microwaves, fridges
 - Smaller groups



Signs, Icons, and Markings: Directing People



Physical Barriers: Separating People

- Effective to prevent sprays and splashes, but virus in air may move around the barriers
- Forces social distancing



Hand Hygiene

- Alcohol-based hand sanitizers:
 - > 60% ethanol
 - > 70% isopropanol
- Wash with soap and water for at least 20 seconds 🕒
- Hands-free soap, sanitizer and paper dispensers
- Place throughout workplace



Keep Surfaces Clean

Clean	Removes dirt	Use soap and water	
Sanitize	Kills <u>some</u> viruses	Use cleaning agent like bleach, alcohol, or EPA-approved product	Short contact time (30 seconds)
Disinfect	Kills <u>most</u> viruses		Long contact time (3-10 minutes depending on cleaning agent)

- Clean frequently touched surfaces multiple times per day; clean other surfaces daily if possible
- Textiles/carpets should be cleaned with hot water and soap
- For electronics, consider a wipeable cover or alcohol (70%) wipe/spray



Special Attention to Bathrooms



Infectious SARS-CoV-2 is shed in fecal material, and shedding may persist after symptoms resolve. Since toilets generate aerosols, the bathroom surfaces and air may become contaminated.

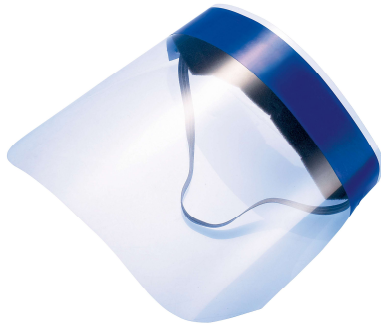
Solutions

- Toilet lids reduce aerosol generation effectively
- Frequent cleaning
- “Touchless” soap and towel dispensers, doors
- Monitored access and limited occupancy

Personal Protective Equipment (PPE)



- Prevent shedding from asymptomatic people and prevent exposure.
- Strongly recommended



- Face shields can prevent spray
- Recommended when employees < 3 feet apart, such as on a production line



- Recommended for those who clean (sanitize and disinfect).
- SARS-CoV-2 does not infect through the skin, but contaminated hands (gloved or not) can transmit the virus.
- Gloves may remind people to not touch their face.



- Uniforms can help keep SARS-CoV-2 from moving into the workplace or from the workplace to employees' homes.
- Provide laundry services

Different Masks For Different Needs



Comfort Mask or Dust Mask

- Protects others from you
- Not designed or tested to meet any performance specification
- Has only 1 head strap
- No ID marking stamps



Facemask or Surgical Mask

- Protects others from you
- Prevents mucous from coughs from entering the environment
- No information marking stamps
- 2-ply or 3-ply

Two straps



N95 Particulate Respirator

- Best for Protecting You!
- Filters particulates from the air but REQUIRES fit testing
- Has 2 head straps & nose clip
- Stamped for Lot # traceability

Policies and Expectations in Utah

Legislation and Utah Leads Together

Liability: Section 78B-4-517 Utah Code Annotated 1953

“... a person is immune from civil liability for damages or an injury resulting from exposure of an individual to COVID-19 on the premises owned or operated by the person, or during an activity managed by the person. Immunity [...] does not apply to:

- (a) willful misconduct;
- (b) reckless infliction of harm;
- (c) intentional infliction of harm.”

This does not modify responsibility under other Utah legislation, such as the Workers' Compensation Act and other occupational health and safety regulations.

When an Employee Develops COVID-19 Symptoms

If symptoms occur at work:

1. Isolate employee and provide employee a surgical mask to prevent virus emission
2. Send employee home or to get healthcare; encourage COVID-19 test (free)
3. Clean and disinfect work area of employee

Utah identifies paying employees while they get a COVID-19 test as a best-practice.

Encourage employees to stay home and self-quarantine until the test result is available, and, if the test is negative, to stay home until symptoms resolve.

When an Employee Develops COVID-19: For the Ill Employee

Identify opportunities for working from home or offer paid leave

- Paid leave required for some employers by Families First Coronavirus Response Act
- Reduce documentation requirements or punitive measures for leave
- Maintain confidentiality, as per Americans with Disabilities Act

Remain away from work, in isolation, until:

1. Fever has resolved without fever reducing medication (for 3 days), and
2. Respiratory symptoms have improved, and
3. Ten days have passed since symptoms first appeared OR two negative nasopharyngeal swab tests are recorded (> 24 hours apart)

OR Ten days after first positive COVID-19 test in the absence of symptoms.

When an Employee Develops COVID-19: For Other Employees

- Clean the work areas occupied by the ill employee
- Notify employees an infection has occurred in the workplace
- Trace close contacts (workers within 6 feet) that may have been exposed.
 - Given the difficulty of maintaining confidentiality, it is strongly recommended to obtain assistance from the Utah Department of Health Worksite Team (covid-19work@Utah.gov) with contact tracing

Utah Definition of High-Risk Employees

ACCOMMODATE YOUR HIGH-RISK EMPLOYEES: Reasonably accommodate employees who request any change in their work duties or environment as a result of the criteria below.	
<input type="checkbox"/>	65 years and older.
<input type="checkbox"/>	People who live in a nursing home or long-term care facility.
<input type="checkbox"/>	People with chronic lung disease or moderate to severe asthma.
<input type="checkbox"/>	People who have serious heart conditions.
<input type="checkbox"/>	People who are immunocompromised including cancer treatment, smoking, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications.
<input type="checkbox"/>	People of any age with severe obesity (body mass index [BMI] ≥ 40) or certain underlying medical conditions, particularly if not well controlled, such as those with diabetes, renal failure, or liver disease.
<input type="checkbox"/>	People who are pregnant should be monitored since they are known to be at risk with severe viral illness, however, to date data on COVID-19 has not shown increased risk.

High-Risk Employees: What to do?

What to do or say

- Educate employees about the high-risk groups, and importance for disease outcomes
- Enable high-risk employees to self-identify in a confidential way
- Anticipate how exposures can be reduced for different job roles
 - Telework
 - Increase social distancing
 - Change job duties

What not to do or say

- Don't make assumptions or jokes about:
 - Weight,
 - Pregnancy,
 - Age,
 - Cause of immunodeficiency, or
 - Based on previous medical issues
- Don't shame or blame employees that might be high-risk or have family members at high-risk

Utah Labor Commission: Guidance About High-Risk Employees

Employers

- Minimize face-to-face contact in workplace
- Assign tasks that allow high-risk employees to maintain a 6-foot distance from other workers or customers
- Allow high-risk employees to telework, and to not ride in elevators
- Consider portable air filtration systems

High-Risk Employees

- Undergo daily symptom monitoring and be tested if symptoms develop
- Take extra precautions to avoid close contact – e.g., limit travel, limit social gatherings, do not visit hospitals, etc.
- Ask household members to wear a mask and wash hands frequently
- Always wear a mask; wear gloves at work when assembling parts or using shared equipment or handling money

Conclusion

