

(M) Motion

Air Circulation /wind & its direction & velocity | People sneezing; coughing; blowing nose | Virus droplets | Working at heights | Dropping objects | Vacuums | Physical interactions | People | Citotaction | Citotaction across a surface

(C) Chemical

Bleach | Antiseptic |
 Alcohol | Water |
 Lotion | Chapstick |
 Ointments |
 Medicines | Hand
 Soap | Cleaning
 Agents

(R) Radiation

• Sunlight | Running Equipment

(E) Electrical

Ionizers | Heaters |
 Coolers | Vacuums |
 Outlets | Cords |
 Breakers | Sparks |
 Purifiers

(G) Gravity

 Virus | Rain | Snow | People | Objects from wind | Sneeze & Cough droplets | Dropped / settling objects or particles

(H/C) Heat / Cold

Virus | Ambient temperature |
Temperature indoors |
Body Temperature |
Equipment temperature | Heat and Cooling systems |
Snow | Ice | Water temperature |
Wearing PPE

(B) Biological

Virus | People | Sweat | Wildlife | Pets | Insects | Plants | Emotional Stress | Psychological Safety | Financial Stress | Personal Health

(P) Pressure

Sneezing | Coughing |
Blowing Nose | Heat
and Cooling Systems |
Vacuums | Work
pressures - deadlines |
Family Pressures |
Walking on surfaces |
Noise

Novel Coronavirus contagion and the typical tasks we perform

Things we do that could create risk and how we can manage that risk*

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	Common Actions While Working (Q1 - What actions are we likely to do while working?)	Relevant Energy Interaction Concerns (Q3 - Where is the energy going? - Potential for uncontrolled release or unwanted contact)	How to manage these energy interactions in the Workplace (Q4 - How will we Eliminate (EL); Control (CT); or Protect (PT) against these energy interactions to keep safe?)	Triggers that should pause the work (Q5: What will be our specific stop/pause the job triggers?)
	1 M/G/B/P - Sneezing, Coughing, Blowing nose	HOW CONCERNING?: These actions can be involuntary, and all result in pressure release of moist droplets that travel a distance and fall to surfaces WHY THIS CREATES CONCERN: by breathing in the droplets in air, or touching surfaces where droplets fell and touching face or touching other surfaces or people can spread droplets / virus can last outside the body for a few hours or up to several days dependent on surface it's on and heat exposure. ¹	EL - If you feel you have a common cold, stay home EL/CT - Avoid physical contact, hand shakes, hugs etc. CT - Always have a paper towel / tissue readily accessible (i.e., in a pocket) in case you must sneeze - if not easily accessible, contain the release by sneezing / coughing into your elbow, or shirt tail; - immediately throw tissue into trash and wash hands; launder clothing that has been used to contain these actions ² EL/CT/PT - Uncontrolled sneeze or cough - obtain cleaner and wipe down surfaces where release occurred and wash hands EL/CT/PT - Wash hands regularly (for 20 seconds) ³ PT - maintain a distance from other people CT/PT - Limit touching surfaces, and face EL/CT/PT - Wipe down surfaces frequently touched regularly - assign this job and the cleaner to be used	Sneezing; Coughing; Blowing nose - pause to EL/CT/PT
	2 M/R/G/H-C/B/P - Running vehicles or machinery	HOW CONCERNING?: Others ran the machine before you; you have to get in and out of the machine; you may have to adjust the equipment WHY THIS CREATES CONCERN: Unsure how clean the previous operator may have left the machine or their state of health May be materials, trash left in or around the machine	EL/CT - When climbing into equipment or onto machinery - plan access and wipe down touch points and hold onto handles so you don't fall CT/PT - Air filters in equipment should be HEPA filters and be checked when last replaced EL/CT/PT - Equipment should contain wipes/cleaners to use to wipe down surfaces you or your belongings must or may touch during operations EL - remove all trash and place in trash can and wash hands EL/CT - Wipe down the equipment when you are done and remove trash and tools you brought	No wipes / cleaner available to wipe down surfaces you must touch Air filters are clogged, need changing and there are no replacements
	3 M/G/B/P - Face to Face - Company / Crew / Safety Meetings	HOW CONCERNING?: Many people together in a small area; Limited seating; possibly lots of surfaces WHY THIS CREATES CONCERN?: Maintaining a good distance from others to prevent potential spread is difficult; Touching of surfaces/ the habit of hand shaking and hugging is hard to break; Sneezes, coughing happen involuntary	relay? - Mills the addressed it fills it a could hold meetings while standing only - ensure there is a voice amnitier. I	Meetings with no purpose and no actions to take Hanc shaking, hugging, sneezing, coughing - pause to EL/CT/PT No tissues or sanitizers present
	4 M/C/R/G/H-C/B/P - Washing, wiping down surfaces / Spraying cleaners	HOW CONCERNING?: Using unfamiliar chemicals, possibly small spaces; spraying onto equipment WHY THIS CREATES CONCERN?: Some chemicals interact with each other creating harmful substances; Our hands, forearms, nose may be or become sensitive to the chemicals - extended use may cause drying, cracking of fingers allowing another route of entry; Surfaces cleaned may be sensitive to the type of chemical and break down; Spraying onto hot/cold surfaces may cause steam, icing or worse	EL/CT/PT - Ensure all chemicals to be used as disinfectants have been evaluated for safe usage, some products may not be safe to use as planned CT/PT - SDS (Safety Data Sheets) for the recommended and available products, must be readily available and safe usage, and concerns must be relayed to the crew prior to use of product CT/PT - Ventilation concerns regarding the space to be used must be addressed prior to using the product CT/PT - Some products require the use of protective gloves, specify the right glove for the product that they are using and ensure availability CT/PT - Educate employees on hand care - disinfectants and degreasers take away the natural oils in our skin - lotions and barrier creams can protect our skin from cracking EL/CT/PT - Surfaces needing regular cleaning - need to specify which product to use, so the wrong one doesn't cause harm	No SDS available for the product being used Product was purchased for use but not evaluated for safe use The specified glove is not available to use that product When questioning the crew, they cannot answer warning factors for using that product/chemical
	In light of the Pandemic: 5 M/B/P - Employees dealing with time constraints on projects; financial concerns; family pressures - schooling, and family provisions	HOW CONCERNING?: Very uncertain times, and there is a lot on everyone's mind as we are deciding personally what steps we need to take; As a company - may have had to or dealing with a reduction in workforce to minimize contacts, or due to employees dealing with personal issues WHY THIS CREATES CONCERN?: Employees are less focused on the tasks at hand and wonder what the future holds for them in their job, for the company, and a multitude of family concerns, someone they know may have the virus; Reduction of personnel, makes less available to handle the workload, and now using people unfamiliar with the task to perform	Caution: This is a difficult time for all; we can not eliminate the reality of what we are all facing, but we can acknowledge where we are as a whole and what measures the company is currently taking and how employees will be kept informed as the situation changes going forward CT/PT - Hold a meeting or send out a message to all employees CT/PT - Employee Assistance Programs (EAPs) - Emotional stress will be amplified, we must be able to recognize and address this as situation continues to develop - what is the sick leave policy during this crisis? CT/PT - Keeping up with governmental assistance programs - if possible to keep employees informed of help that is coming / or available CT/PT - Regular check in of employees CT/PT - Now more than ever, focus on planning the work to be done is critical, and ensuring the right 'focus' is achieved NOTE: Showing care and concern in a time of social distancing is challenging, anything that can be done to help alleviate employee stress, and /or let them know you understand - that we are all in this together and this is what we are doing to help	Employee becomes emotional New development in pandemic comes out and is causing distraction (may need to address first before proceeding) When asking employee questions on the task they're performing, the can't clearly answer Planning of task has not been done
	6 M/G/H-C/B - Eating, snacking, drinking	HOW CONCERNING?: Possibly small spaces with groups of people, touching surfaces, handling food, and putting in mouth, licking fingers; heating food WHY THIS CREATES CONCERN?: Maintaining a safe distance is difficult; we use our hands more than we are aware, and touch things, placing things into our mouth is direct entry; heating food up - opening packages, contacts surfaces in kitchen areas; common handles and buttons re-touched and can spread virus	EL - Could eliminate use of lunch room, use of microwave, refrigerator - would require employees to pack 'ready to eat' meals EL/CT/PT - Wash hands and lunch pail handles prior to handling the food brought EL/CT - Wipe down surfaces you'll be around before opening lunch and after done eating CT/PT restrict number of employees at a table (be specific and post a sign); stagger lunches and breaks to limit the number gathering EL/CT/PT - Napkins handy for spills, wiping mouth so sleeves and hands aren't used; CAUTION - Use of vending machines, requires someone to stock it - consider gloves to handle food items for stocking; and have wipes ready for employees to wipe down surfaces that must be touched to get food items (buttons, trays, shoots, change slot)	Too many persons at a table Sneezing, Coughing - pause to EL/CT/PT Housekeeping issues - dirty dishes left Dirty appliances no sanitizers or napkins readily available
	7 M/R/G/H-C/B - Wearing, using, maintaining PPE	HOW CONCERNING?: Limited PPE, re-use or sharing of PPE; Washing or sanitizing of PPE; handling uniforms WHY THIS CREATES CONCERN:? Employees can get hot and sweat, they may sneeze, cough, or have a runny nose and others coming into contact would be exposed; Maintaining the PPE - cleaning products, laundry handling all create exposure potentials	CAUTION: The COVID-19 virus can stay alive for a few hours or up to several days on a surface depending on what the surface is ¹ ; it can stay active on clothing for several hours ² - requiring handling PPE with a plan. CT/PT - spent PPE must be thrown into the trash by the employee who used the PPE, place trash receptacles near PPE removal CT/PT - uniforms or PPE to be laundered should be placed directly into containment bins by employee utilizing it - Bins should have a laundry bag inserted so can be pulled out by laundry service or whole bin taken at time of service and new bin set out EL/CT/PT - shared PPE must have a plan developed for sanitizing between usage EL/CT/PT - Removal of PPE should always be followed by a thorough washing of hands ³	Designated PPE for the task is not available, or has not been sanitized PPE left on the floor; Trash can is full Laundry bin is full PPE is not sanitized

*This informative guide provides suggestions to consider when establishing risk management during the pandemic and is not a conclusive risk mitigation of exposure.



Developed by Lindsey Consulting

References

¹How long will the coronavirus live on surfaces outside the body?

https://www.usatoday.com/in-depth/news/2020/03/25/coronavirus-survives-on-metal-plastic-cardboard-common-objects/2866340001/https://www.webmd.com/lung/how-long-covid-19-lives-on-surfaces

²How long does the virus live on clothing?

https://www.huffpost.com/entry/how-long-coronavirus-live-clothing-washing | 5e724927c5b6eab779409e74 https://www.newsweek.com/catch-coronavirus-phone-clothes-other-surfaces-1493432

³The benefits of washing hands and hygiene

https://www.weforum.org/agenda/2020/03/coronavirus-soap-covid-19-virus-hygiene/