People are antsy after months of quarantine, isolation, work from home, and closed schools. While there have been many discussions about what physical distancing might look like or what a 'pod' or 'quaranteam' may look like, it became apparent that a binary risk matrix had not been developed.

People in the safety industry use risk matrices to evaluate risk in terms of probability of incident with respect to severity of outcome. This is when every aspect of a job, or use of a tool or machine, is evaluated step-by-step and each step is analyzed with respect to risk. The worst possible outcome is determined, and it is plotted against the probability of something bad happening. For items that score highly on this risk matrix, the safety professional, along with the experts who use the tool or do the activity, will determine what causes the high level of risk and utilize the hierarchy of controls in order to mitigate the risk severity or probability.

COVID-19 factors to consider:

Aerosolized transmissions: In a nutshell, the virus can be carried in sputum (spit or mucus) and then inhaled by another individual – for those who are unfamiliar, consider it to be in line with the concerns over second-hand smoke. Outside, standing near a smoker does mean you get less inhalation while inside you get much more, but the risk is still there, however diminished. Aerosol transmissions still contaminate surfaces. Any aerosol transmission written program or policy must have a bloodborne pathogens/surface contamination section.

Bloodborne Pathogens/Surface Contamination: While the CDC stated that surface contamination-related transmission is less likely than an aerosol transmission, the potential worst-case outcome is still the same. Furthermore, the fact that COVID-19 can be transmitted through stool or semen would indicate that this virus falls under protocols for bloodborne pathogen protection. A co-worker of mine sums up bloodborne pathogen training very well – if it is wet, sticky, and not yours, do not touch it. The challenge with a virus, spit, or aerosolized particulate is that we cannot see a contamination as easily as we can see something like blood.

Psychology: Is the virus mutating? Is 6-foot distancing enough? What about viral load? Am I going to have a false negative test due to my blood type? Is a steroid going to cure me? Will my kid be one of the few to get cardiac effects for the rest of their lives because I was not strict enough? Am I fighting with my parents, in-laws, grandparents, friends because I am or am not complying with what they think is appropriate? These are just a few factors to consider that are directly impacted by COVID-19 and obviously do not address current worries around finances, civil unrest, business continuity, family planning, or medical needs/necessities. Fear, panic, paranoia, complacency, and adrenaline from arguing or fighting are all psychological factors to consider.

Social interactions: This technically falls under psychology but does deserve its own section. Parents of children are bowing out of many 'social distance parties' because they cannot control their kids or pets. Children are not seeing their friends, teachers, or families. Employees, business owners, and others are either cutting themselves off from all interactions to protect their businesses and employees, being forced to work and therefore fear for their health as well as for their friends and family's health. Additionally, some people may be more comfortable being social and be angry, concerned, or second-guess themselves when a friend turns them down or is perceptively less careful.

Upon receiving your results from the quaranteam calculator, the number given will say ‘low risk’, ‘medium risk’, or ‘high risk’. It needs to be noted that these ranges are based on a standard management ‘span of control’ which indicates that it is easiest to keep track of and manage no more than 7 individuals. Since each individual counts as 1 point, the low risk cut-off is 12. This may seem too stringent for some and not stringent enough for others – this is where the discussion part comes in. If the quaranteam-mates are two small households all living 2 blocks apart, going to the same grocery stores, and all in phase 4, the risk may seem lower in this case. If two groups are coming from geographical areas in different phases, utilize the lower phase number in your discussion – a phase 4 person is far less likely to infect a phase 1 person. The phase 1 person is walking into a safer scenario than the phase 4 person so the phase 4 person will need to consider themselves in phase 1 after this interaction for 14 days.

Please do reach out with questions, concerns, or comments! This is new for everyone but hopefully this worksheet takes a little bit of the burden away as a conversation starter.

Stay safe!