***Disclaimer: This information does not constitute legal medical advice, but is informational only. Consult a medical professional with specific concerns.***

A brief explanation of the virus responsible for the current pandemic may help you keep your family and workplace safer. Please apply what you learn to the workplace and share it with friends and colleagues. Knowledge is power and a potent antidote to fear.

The SARS coV2 virus which causes COVID-19 is spread by large droplets via coughing and sneezing by a contagious person. This means the air will not infect you since the heavy droplets land quickly, within 6-10 feet from infected individuals. But all the surfaces they land on are infectious for an average of a week, depending on the surface, unless disinfected. The spread of droplets is completely blocked by dry, form-fitting N95 type masks, and spread of contagion is reduced to a shorter distance by other mask types.

The virus only infects you by contact with your eyes, nose and mouth. This can happen if your hand transfers it from infected surfaces to your eyes, nose and mouth; or it can transfer to you if you are directly sneezed or coughed on by a contagious person and it gets in your eyes, mouth or nose.

A person infected with SARS coV2 will be contagious for 3-4 days before they develop cough and fever; so during this time, they can infect others with their saliva via contact spread. Without coughing or sneezing though, they don't spread as much contagion around. This emphasizes the importance of staying home as soon as you are sick. Due to this fact, if there is active community spread of the virus, consideration should be given to frequent temperature checks of employees to detect who should be sent home before additional symptoms spread the infection more. Once symptoms begin, you are only contagious for 3-4 more days, although symptoms may continue for a week or more (5 days average).

Consideration should be given to quarantining those who've had close contact (a distance of less than 6 feet for more than 15 min.) with someone who develops COVID-19. If the close contact lasted less than 2 minutes, the exposed person may avoid quarantine by wearing a mask regularly in public for 14 days and then staying home immediately if symptoms arise. A person with non-close contact (more than six feet away for any length of time) can self-monitor and only quarantine when symptoms arise.

The virus infects you by attaching to endothelium, a type of skin found in the eyes, nose, throat, and lungs. It is very contagious: 2-3x as easily spread as influenza, like a cold virus, but probably 10x deadlier than swine flu (0.28% for COVID-19 in Germany so far vs. 0.025% for Swine flu in America 2008-2009 season), which killed ~12,500 Americans in its first season. Once there is more widespread testing available (rapid tests like we have for strep and Influenza are in development), we will better understand its lethality.

80% of people who develop symptoms will have a mild case, like a cold. You can improve the chance of having a mild case by taking immune boosting supplements like echinacea and zinc lozenges once symptoms start. Preventive supplements which boost overall immunity include vitamin D, Vitamin C, and Fish Oil. A varied diet of 90% plant-based food will include these agents as well. A high sugar diet, sleep deprivation, and sedentary lifestyle suppress the immune system.

Although the total numbers of people infected will decrease over the warmer seasons as we get outside and quit sharing closed infected surface spaces as much, the virus will return in the fall and winter. It behooves us to develop strategies to reduce spread by providing easy access to handwashing and disinfectants. Alcohol handwash is fine for up to 5 washes, but then you must use soap and water to remove the gel residue built-up as it may attract contaminants to your hands if not rinsed off regularly. Clorox or alcohol will disinfect contaminated surfaces.

Hopefully this will be practical information for you and yours. At the end of the day, when mother nature is attacking you, "you can't beat her, you can only hope to contain her." As long as our combined efforts prevent this pandemic from overwhelming our available healthcare infrastructure, the death rate will remain on the lower side of the spectrum. So far so good. Keep up the good work!

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