Take 3 – Practical Practice Pointers© March 16, 2020 Edition

COVID-19 Primer: FAQ, Suspected Cases, Hand Hygiene

From the CDC

1) COVID-19: Clinician's Frequently Asked Questions and Answers

Q: What are the clinical features of COVID-19 (SARs CoV-2)?
A: The clinical spectrum of COVID-19 ranges from mild disease with non-specific signs and symptoms of acute respiratory illness, to severe pneumonia with respiratory failure and septic shock. There have also been reports of asymptomatic infection.

Q: Who is at risk for COVID-19?
A: Currently, those at greatest risk of infection are persons who have had prolonged, unprotected close contact with a patient with symptomatic, confirmed COVID-19 and those who live in or have recently been to areas with sustained transmission.

Q: Who is at risk for severe disease from COVID-19?
The available data are currently insufficient to identify risk factors for severe clinical outcomes. From the limited data that are available for COVID-19 infected patients, and for data from related coronaviruses such as SARS-CoV and MERS-CoV, it is possible that older adults, and persons who have underlying chronic medical conditions, such as immunocompromising conditions, may be at risk for more severe outcomes

Q: When is someone infectious?
A: The onset and duration of viral shedding and period of infectiousness for COVID-19 are not yet known. It is possible that COVID-19 RNA may be detectable in the upper or lower respiratory tract for weeks after illness onset, similar to infection with MERS-CoV and SARS-CoV. However, detection of viral RNA does not necessarily mean that infectious virus is present. Asymptomatic infection with COVID-19 has been reported, but it is not yet known what role asymptomatic infection plays in transmission. Similarly, the role of pre-symptomatic transmission is unknown. Existing literature suggest that the incubation period may range from 2–14 days.

Q: Which body fluids can spread infection?
A: Very limited data are available about detection of SARS-CoV-2 and infectious virus in clinical specimens. COVID-19 has been detected in blood and stool specimens, but whether infectious virus is present in extrapulmonary specimens is currently unknown. The duration of COVID-19 detection in upper and lower respiratory tract specimens and in extrapulmonary specimens is not yet known but may be several weeks or longer, which has been observed in cases of MERS-CoV or SARS-CoV infection. Viable, infectious SARS-CoV has been isolated from respiratory, blood, urine, and stool specimens.

Q: Can people who recover from COVID-19 be infected again?
A: The immune response to COVID-19 is not yet understood. Patients with MERS-CoV infection are unlikely to be re-infected shortly after they recover, but it is not yet known whether similar immune protection will be observed for patients with COVID-19.

Q: What do waste management companies need to know about wastewater and sewage coming from a healthcare facility or community setting with either a known COVID-19 patient or person under investigation (PUI)?
A: Waste generated in the care of PUIs or patients with confirmed COVID-19 does not present additional considerations for wastewater disinfection. Coronaviruses are susceptible to the same disinfection conditions in community and healthcare settings as other viruses, so current disinfection conditions in wastewater treatment facilities are expected to be sufficient.

Q: Should I be concerned about pets or other animals and COVID-19.
A. While this virus seems to have emerged from an animal source, it is now spreading from person-to-person in China. There is no reason to think that any animals including pets might be a source of infection with this new coronavirus. To date, CDC has not received any reports of pets or other animals becoming sick with COVID-19. At this time, there is no evidence that companion animals including pets can spread COVID-19

Mark's Comments:
We're all on a steep learning curve presently regarding COVID-19, including our national experts at the CDC. As noted above, there are many "unknowns," and some of the initial assumptions about this virus are being made based on the behavior of closely related viruses. Since this is a moving target, staying regularly informed of the actual facts from reliable sources will be vital. The CDC, state health departments, and local healthcare systems would all fall into that category.

Reference:
CDC- Coronavirus 2019 (COVID-19) Frequently Asked Questions for Healthcare Professionals. February 21, 2020. Link

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From the CDC

2) Caring for Patients with Confirmed or Possible COVID-19 Infection

Healthcare personnel (HCP) are on the front lines of caring for patients with confirmed or possible infection with coronavirus disease 2019 (COVID-19) and therefore have an increased risk of exposure to this virus. Important information regarding this viral infection include:

How COVID-19 Spreads: There is much to learn about the newly emerged COVID-19, including how and how easily it spreads. Based on what is currently known about COVID-19 and what is known about other coronaviruses, spread is thought to occur mostly from person-to-person via respiratory droplets among close contacts, particularly being within approximately 6 feet of a patient with COVID-19 for a prolonged period of time or having direct contact with infectious secretions from a patient with COVID-19. Infectious secretions may include sputum, serum, blood, and respiratory droplets.

How You Can Protect Yourself: Assess and triage these patients with acute respiratory symptoms and risk factors for COVID-19 to minimize chances of exposure, including placing a facemask on the patient and placing them in an examination room with the door closed. Perform hand hygiene with alcohol-based hand rub before and after all patient contact, contact with potentially infectious material, and before putting on and upon removal of PPE, including gloves. (See Pointer 3).

Environmental Cleaning and Disinfection: Routine cleaning and disinfection procedures are appropriate for COVID-19 in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed. Products with EPA-approved emerging viral pathogens claims are recommended for use. Management of laundry, food service utensils, and medical waste should also be performed in accordance with routine procedures.

Mark's Comments:
It is important to recognize that we are entering some challenging times regarding this pandemic. This will likely include some limitations in supplies in the short-term. Being both rational and wise will be essential.

Reference:
CDC - What Healthcare Personnel Should Know about Caring for Patients with Confirmed or Possible COVID-19 Infection. March 10, 2020. Link

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From the CDC

3) Hand Hygiene in Healthcare Settings – Back to the Fundamentals

Hand Hygiene means cleaning your hands by using soap and water, antiseptic hand wash, antiseptic hand rub (i.e. alcohol-based hand sanitizer including foam or gel), or surgical hand antisepsis. Each of these products have been shown to greatly decrease the spread of many infectious agents. The Healthcare Infection Control Practices Advisory Committee (HICPAC) of the CDC make the following strong recommendations for hand hygiene in healthcare settings.

Use an alcohol-based hand rub or wash with soap and water for the following clinical indications:

- Immediately before touching a patient
- Before performing an aseptic task (e.g., placing an indwelling device) or handling invasive medical devices
- After touching a patient or the patient's immediate environment
- After contact with blood, body fluids, or contaminated surfaces
- Immediately after glove removal
- NOTE: Unless hands are visibly soiled, an alcohol-based hand rub is preferred over soap and water in most clinical situations due to evidence of better compliance compared to soap and water.

When using alcohol-based hand sanitizer:

- Put product on hands and rub hands together
- Cover all surfaces until hands feel dry
- This should take around 20 seconds

When using soap and water:

- Wet your hands first with water, apply the amount of product recommended by the manufacturer to your hands, and rub your hands together vigorously for at least 15 seconds, covering all surfaces of the hands and fingers.
- Rinse your hands with water and use disposable towels to dry. Use towel to turn off the faucet.

- Avoid using hot water, to prevent drying of skin.
- Other entities have recommended that cleaning your hands with soap and water should take around 20 seconds. Either time is acceptable. The focus should be on cleaning your hands at the right times.

Fingernail Care and Jewelry:

- Infectious agents can live under artificial fingernails both before and after using an alcohol-based hand sanitizer and handwashing
- Healthcare providers should not wear artificial fingernails or extensions when having direct contact with patients at high risk (e.g., ICU and OR).
- Keep natural nail tips less than ¼ inch long
- Some studies have shown that skin underneath rings contains more infectious agents than comparable areas of skin on fingers without rings
- Further studies are needed to determine if wearing rings results in an increased spread of potentially deadly infectious agents

Mark's Comments:

As most are well aware, implementing the full practice of hand hygiene is quite challenging in the busy clinical setting. Keeping hands away from the face is also challenging, particularly in the midst of spring allergy season. I found it interesting that the CDC recommends 15 seconds for hand washing with soap and water while acknowledging that other organizations recommend 20 seconds.

And then there is the issue of a potential shortage of hand sanitizer. In such situations, soap and water should be our "go to," but here are some other tips that I found helpful:

- **Do** make sure that if you are able to buy a lesser-known brand of hand sanitizer, it's made of at least 60% alcohol, as recommended by the CDC. That rules out some of the so-called "botanical" options and popular "kid-friendly" options.
- **Do** make sure certain any homemade hand sanitizer contains at least 60% alcohol. The most common recommendation is two parts rubbing alcohol, one-part aloe Vera gel. Keep in mind that some popular recipes call for using liquor (like vodka), which is usually 40 percent alcohol, and will not suffice.
- **Do** dry your hands before applying any hand sanitizer.
- **Don't** rely on DIY recipes that are based solely on essential oils. They won't work.
- **Don't** be conservative with your sanitizer. For it to work, you need to cover every surface of both hands entirely with the sanitizer and rub until dry.
- **Don't** expect baby wipes to work unless you have checked the ingredients on your particular brand.

References:

- CDC Hand Hygiene in Healthcare Settings – January 2020: Link
- Suthivarakom G. Coronavirus Has Caused a Hand Sanitizer Shortage. What Should You Do? The Wirecutter. 6 March 2020: Link

Feel free to forward Take 3 to your colleagues. Glad to add them to the distribution list.

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