Discussion of resources and strategies during COVID-19

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Important notes

- This information is provided for consideration.
- Guidance from external groups shown here and considerations during the COVID19 pandemic are evolving. Where links are provided, check back regularly for updates.

Cleaning

- CDC's Cleaning and Disinfecting Guidance: Everyday Steps, Steps When Someone is Sick, and Considerations for Employers https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html
- CDC's Cleaning and Disinfecting Guidance for Community Locations: https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html
- Coronaviruses on surfaces and objects naturally die within hours to days. Warmer temperatures and exposure to sunlight will reduce the time the virus survives on surfaces and objects.
- Normal routine cleaning with soap and water removes germs and dirt from surfaces. It lowers the risk of spreading COVID-19 infection.
- Do not overuse or stockpile disinfectants or other supplies. This can result in shortages of appropriate products for others to use in critical situations.
- Always wear gloves appropriate for the chemicals being used when you are cleaning and disinfecting. Additional personal protective equipment (PPE) may be needed based on setting and product. For more information, see CDC's website on Cleaning and Disinfection for Community Facilities.
- Practice social distancing, wear facial coverings, and follow proper prevention hygiene, such as washing your hands frequently and using alcohol-based (at least 60% alcohol) hand sanitizer when soap and water are not available.

Cleaning Strategy

- Most surfaces and objects will just need normal routine cleaning.
- Frequently touched surfaces and objects like light switches and doorknobs will need to be cleaned and then disinfected to further reduce the risk of germs on surfaces and objects.
  - First, clean the surface or object with soap and water.
  - Then, disinfect using an EPA-approved disinfectant.
  - If an EPA-approved disinfectant is unavailable, you can use 1/3 cup of bleach added to 1 gallon of water, or 70% alcohol solutions to disinfect. Do not mix bleach or other cleaning and disinfection products together. Find additional information at CDC's website on Cleaning and Disinfecting Your Facility.
- Consider what items can be moved or removed completely to reduce frequent handling or contact from multiple people. Soft and porous materials, such as area rugs and seating, may be removed or stored to reduce the challenges with cleaning and disinfecting them.
- It is critical that your plan includes how to maintain a cleaning and disinfecting strategy both during isolation and after reopening.

https://www.cdc.gov/coronavirus/2019-ncov/community/reopen-guidance.html

Cleaning guidance for reopening

- CDC's Reopening Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools, and Homes https://www.cdc.gov/coronavirus/2019-ncov/community/reopen-guidance.html
  - See Cleaning & Disinfecting Decision Tool
  - Reopening Guidance for Cleaning and Disinfecting

Considerations for supporting people who are COVID+

- Try to keep those who are positive from those who are negative as much as possible.
  - In a separate room, using a separate bathroom if possible. If separate bathroom is not possible, disinfect after each use.
  - Try to stay at least 6 feet away from other people
  - If possible have the person wear a cloth face cover over nose and mouth if then need to be near other people. It is not necessary or advisable for people with I/DD to wear a cloth face covering when they are alone. Don't put on people who are having trouble breathing or who cannot remove it on their own.
- Individuals who are COVID+ need their own dishes, drinking glasses, cups, eating utensils, towels, and bedding.
- Encourage regular handwashing for staff and people with I/DD.
- Consider having a pulse oximeter available to all residential locations. If a person with I/DD tests positive or is symptomatic, take their full vital signs (temperature, blood pressure, pulse, respiratory rate, oxygen saturation - oximeter reading) at least twice a day. Provide clear guidance to staff as to when to call emergency services for abnormal vital signs and other early warning signs of COVID emergencies such as https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html#warning-signs, and when to consult the person's PCP. In non-emergency situations, increase frequency of monitoring vitals if slightly abnormal and communicate with person's PCP for individualized guidance.
- If COVID positive, call the person's PCP early in the process to make sure that everyone understands code status so there aren't mistakes made when someone gets really sick and we can institute preventive measures as early as possible.
- Staffing considerations

https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html

Understand risk factors

- People with the following characteristics can be at higher risk of COVID19 infection and associated adverse effects:
  - People of any age who live in congregate settings such as institutions, nursing homes or long-term care facilities.
  - People over the age 65 years.
  - People with chronic lung disease or moderate-to-severe asthma.
  - People who have serious heart conditions.
  - People with severe obesity (body mass index [BMI] $\geq$40).
  - People with underlying medical conditions, particularly if not well controlled, such as those with diabetes, renal failure, heart disease or liver disease.
  - People who are immunocompromised related to conditions such as cancer treatment, smoking, bone marrow or organ transplantation, and other conditions that affect the immune system, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications.

Transportation

- When possible, use vehicles that have isolated driver and passenger compartments to provide separate ventilation to each area. Close the door/window between these compartments before bringing the passenger on board.
- During transport, vehicle ventilation in both compartments should be on non-recirculated mode to maximize air changes that reduce potentially infectious particles in the vehicle.
- If the vehicle has a rear exhaust fan, use it to draw air away from the cab, toward the passenger area, and out the back end of the vehicle.
- If a vehicle without an isolated driver compartment and ventilation must be used, open the outside air vents in the driver area and turn on the rear exhaust ventilation fans to the highest setting. This will create a negative pressure gradient in the passenger area.
- For transport, the passenger should wear a facemask to contain secretions.
- If transport personnel must prepare the passenger for transport (e.g., transfer them to the wheelchair or into the vehicle), transport personnel should wear all recommended PPE (gloves, a gown, respiratory protection that is at least as protective as a fit-tested NIOSH-certified disposable N95 filtering facepiece respirator or facemask—if a respirator is not available—and eye protection [i.e., goggles or disposable face shield that covers the front and sides of the face]). This recommendation is needed because these interactions typically involve close, often face-to-face, contact with the passenger in an enclosed space (e.g., patient room). Once the participant has been transferred to the wheelchair (and prior to exiting the room), transporters should remove their gown, gloves, and eye protection and perform hand hygiene.

CDC (https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-faq.html):

Transportation (cont.)

- Use of a facemask by the transporter is recommended for anything more than brief encounters with COVID-19 passenger. Additional PPE should not be required unless there is an anticipated need to provide medical assistance during transport (e.g., helping the passenger replace a dislodged facemask).
- After arrival at their destination, receiving personnel and the transporter (if assisting with transfer) should perform hand hygiene and wear all recommended PPE. If still wearing their original respirator or facemask, the transporter should take care to avoid self-contamination when donning the remainder of the recommended PPE.
- After transporting the participant, leave the doors of the transport vehicle open to allow for sufficient air changes to remove potentially infectious particles. Then, clean the vehicle while wearing a disposable gown and gloves. A face shield or facemask and goggles should also be worn if splashes or sprays during cleaning are anticipated. Clean and disinfect the vehicle, including all surfaces that may have come in contact with the person.
  - Cleaning and Disinfection for Non-emergency Transport Vehicles https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/disinfecting-transport-vehicles.html
- Some ambulance companies may transport people in non-emergency situations for a fee.

Personal Protective Equipment (PPE)

- Considering using universal masks protections for staff and people with I/DD when they are in the presence of others.
  - Do not force people with I/DD to wear masks, and do not use masks if people are having trouble breathing, or while sleeping.
- Consider providing gowns, gloves, and surgical mask for all staff regardless of whether they are working with people who have tested positive or not.
- Monitor both staff and people with I/DD for symptoms of COVID19 (https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html). Take temperatures of both staff and people with I/DD at least once daily, twice if possible. Screen staff for symptoms before they enter the building.

Personal Protective Equipment (PPE)

- Importance of properly putting it on and off (Donning/Doffing)
  - Using Personal Protective Equipment (PPE) (See posters and videos too) https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html
  - https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/donningdoffing.html
- Many organizations are using N95's for people who are providing personal care that may results in aerosolizing bodily fluids.
  - If you have people with I/DD in a home who refuse to wear a mask in the presence of others, coughing could aerosolize bodily fluid. Therefore, higher levels of protection for staff may be needed (N95s/face shields/gowns/gloves).
- If N95's are not available, KN95 masks may be the more readily available and offer greater protection than surgical masks.
  - How do n95 and kn95 masks differ? N95 is made in US, KN95 in China. OSHA found KN95s filter less particles than N95s, possibly due to looser fit (ear loops vs. 2 head straps) or counterfeit.
  - *Performance of specific types of KN95 masks* https://www.mass.gov/doc/kn95-respirator-test-results/download?fbclid=IwAR1JsCKjSSLS4aiD-78A0SN1RyD_8Gtk3T_CmvP6Wj7mNpB06qgci-8Qpos

PPE – Guidelines for N95 Use (CDC)

- Minimize the number of individuals who need to use respiratory protection through the preferential use of engineering and administrative controls;
- Use alternatives to N95 respirators (e.g., other classes of filtering facepiece respirators, elastomeric half-mask and full facepiece air purifying respirators, powered air purifying respirators) where feasible;
- Implement practices allowing extended use and/or limited reuse of N95 respirators, when acceptable; and
- Prioritize the use of N95 respirators for those personnel at the highest risk of contracting or experiencing complications of infection.

PPE Extended Use Guidelines

Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings (NIOSH/CDC)

https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html

- Written policies and continuous training are critical to ensure safe use of personal protective equipment, especially during extended use and reuse.
- Extended use is favored over reuse because it is expected to involve less touching of the respirator and therefore less risk of contact transmission.
- If extended use or reuse of N95 respirators is permitted:
  - limit potential N95 respirator surface contamination (e.g., use of barriers to prevent droplet spray contamination)
  - Provide training and use training reminders (e.g., posters) for staff to reinforce the need to minimize unnecessary contact with the respirator surface, strict adherence to hand hygiene practices, and proper Personal Protective Equipment (PPE) donning and doffing technique

PPE – When to Discard during Extended Use

- Discard N95 respirators following use during aerosol generating procedures.
- Discard N95 respirators contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients.
- Discard N95 respirators following close contact with, or exit from, the care area of any patient co-infected with an infectious disease requiring contact precautions.
- Consider use of a cleanable face shield (preferred[3]) over an N95 respirator and/or other steps (e.g., masking patients, use of engineering controls) to reduce surface contamination.
- Perform hand hygiene with soap and water or an alcohol-based hand sanitizer before and after touching or adjusting the respirator (if necessary for comfort or to maintain fit).
- Discard any respirator that is obviously damaged or becomes hard to breathe through.

(NIOSH/CDC)

Additional Considerations during Respirator Reuse

- Hang used respirators in a designated storage area or keep them in a clean, breathable container such as a paper bag between uses. To minimize potential cross-contamination, store respirators so that they do not touch each other and the person using the respirator is clearly identified. Storage containers should be disposed of or cleaned regularly.
- Avoid touching the inside of the respirator. If inadvertent contact is made with the inside of the respirator, discard the respirator and perform hand hygiene as described above.
- Use a pair of clean (non-sterile) gloves when donning a used N95 respirator and performing a user seal check. Discard gloves after the N95 respirator is donned and any adjustments are made to ensure the respirator is sitting comfortably on your face with a good seal.
- Train staff on how to inspect the device for physical damage (e.g., Are the straps stretched out so much that they no longer provide enough tension for the respirator to seal to the face?, Is the nosepiece or other fit enhancements broken?, etc.).
- Consult manufacturer guidance for number of times N95 can be reused. If not available, limit use to no more than five uses per device to ensure an adequate safety margin
- DO NOT reuse N95s across users. Label storage containers to prevent accidental sharing.

(NIOSH/CDC)

Testing

- The current tests used have low “sensitivity”, meaning that about 30-40% of the people who have the disease would receive a negative test result if tested. These are “false negatives” and they may offer a dangerous level of false security.
- **If someone has symptoms of COVID19 and a negative test result, take precautions as if they were COVID positive.**
  - "For truly low-risk individuals, negative test results may be sufficiently reassuring," says Dr. West. "For higher-risk individuals, even those without symptoms, the risk of false-negative test results requires additional measures to protect against the spread of disease, such as extended self-isolation.“
  - **“**If the RT-PCR test is negative but chest X-ray or CT scan results are abnormal, or there has been close contact with a person who has confirmed COVID-19, the recommendation is to continue caring for the patient as if he or she has COVID-19.” – Mayo Clinic
- If someone does test positive, there’s very little chance (~4%) that they could be a ‘false positive’ so they almost certainly have the disease.
- Retesting considerations:
  - Are there changes in the person’s risk since their last test – such as development or worsening of symptoms, potential exposure?

Ai T, Yang Z, Hou H, Zhan C, Chen C, Lv W, Tao Q, Sun Z, Xia L. (2020). Correlation of Chest CT and RT-PCR Testing in Coronavirus Disease 2019 (COVID-19) in China: A Report of 1014 Cases. Radiology. https://doi.org/10.1148/radiol.2020200642

West CP, Montori VM, Sampathkumar P. **COVID-19 Testing: The Threat of False-Negative Results**. *Mayo Clinic Proceedings*, 2020; DOI: 10.1016/j.mayocp.2020.04.004

Return-to-home considerations

- If someone is being discharged from the ER, consider requesting the ER physician and ER infection control staff at the hospital to provide guidance.
- For people who are coming back from the ER, use masks and monitor for symptoms.

CDC has guidance for when to end isolation: https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html#warning-signs

Further questions?

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