1. **Can a hospital bed mattress be patched?** *Brian Moser, North Carolina*
   - No. The mattress should be discarded and replaced.
   - Any textile material that is torn or has compromised structural integrity will be a breeding ground for germs, especially in the presence of body fluids that will likely seep into the mattress.

2. **Would cleanable vinyl curtains suffice to be disinfected?** *Ryan Morton*
   - Regardless of material, curtains should be cleaned and disinfected regularly following the manufacturer’s guidelines and your facility’s policy.
   - Curtains in patient rooms are touched very frequently by healthcare workers over the course of a patient stay, so both cleaning and disinfection are important steps for infection control.

3. **If we have two COVID patients in one room and we have privacy curtains for each patient and only one patient gets discharged and another COVID patient is getting admitted in that side of the room do both privacy curtains need to be exchanged?** *Elizabeth Avalos, California*
   - In this case, both curtains need to be changed.
   - We recognize that may be challenging to apply practically but want to emphasize that curtains are touched frequently by healthcare workers over the course of a patient stay and can carry many germs, not just COVID-19.
   - Something that may help with changing curtains quickly is having disposable curtains that can be removed and a new set re-hung after a patient discharge.

4. **Is there any connection between the goals and working being done through Project Firstline and the CDC’s Six Strategies for Environmental Services in hospitals?** *Patti Costello*
   - **The Six Strategies** for Environmental Services in hospitals are:
     - **Integrate** environmental services into the hospital’s safety culture.
     - **Educate and train** all HCP responsible for cleaning and disinfecting patient care areas.
     - **Select** appropriate cleaning and disinfection technologies and products.
     - **Standardize** setting-specific cleaning and disinfection protocols.
     - **Monitor** effectiveness and adherence to cleaning and disinfection protocols.
     - **Provide feedback** on adequacy and effectiveness of cleaning and disinfection to staff and stakeholders.
   - The development of these strategies was led by staff members in Project Firstline’s home division (Division of Healthcare Quality Promotion, DHQP), which is focused on issues that impact healthcare safety.
   - Project Firstline’s work is primarily connected with the first three strategies:
     - **Integrate**- at Project Firstline we are invested in supporting culture change around infection control so that it’s understood as a team effort, and of course that means involving Environmental Services (EVS) and other healthcare workers into this shared culture of safety.
     - We also want all healthcare workers, regardless of their job, to see environmental services as an important part of preventing and controlling infections.
o **Educate and train** - Project Firstline is committed to ensuring that all healthcare workers, from EVS to nurses to administration and medical technicians have access to education and training they need to confidently apply infection control actions every day. It’s a team effort. We believe all healthcare workers should have a basic education and training in cleaning, disinfection and other EVS topics and are working to develop this material.

o **Select** appropriate cleaning and disinfection products from United State Environmental Protection Agency (EPA) **List N**, which can kill SARS-CoV-2, the virus that causes COVID-19 when used according to the label directions.

5. I have heard different views from IP professionals -- When a patient is in isolation for c-diff, should the floor be mopped with a 10% bleach solution? **Blake Kite, New Mexico**

   - EPA List K provides details on Registered Antimicrobial Products Effective against *Clostridioides difficile* (C. diff) Spores.
   - Many different products can be used and are effective against C. diff, including some bleach solutions, though the concentration does not need to be as high as 10%. Bleach solutions, which must be made fresh daily, can be made with 1 part 5.25% bleach to 9 parts water, and that will provide enough bleach to kill C. diff spores.
   - No matter which product you use, be sure to mix it together and use it as instructed by the manufacturer.

6. Is there a master library or is anyone willing to share IP policies/procedures/algorithms/data collection tools/ideas to engage front line workers/IP champions? I know APIC has a lot but wondering if there is something else. **Andrea Harper, New Hampshire**

   - Project Firstline has resources to support frontline workers and infection control champions understand and implement infection control actions in their facilities
     - This includes Inside Infection Control videos and other resources to help healthcare workers understand infection control concepts and feel confident applying them at work.
     - Project Firstline partners recently received a toolkit to support training facilitators feel confident as they deliver infection control training to others. The toolkit will soon be released on the Project Firstline website.
     - Project Firstline will continue developing additional resources to support healthcare workers gain confidence applying infection control actions to protect themselves, their facility and their community.
   - CDC also has an Infection Control Guidance library: [https://www.cdc.gov/infectioncontrol/guidelines/index.html](https://www.cdc.gov/infectioncontrol/guidelines/index.html)
   - APIC has a number of resources that are designed to support infection preventionists (IPs)
     - This includes forums for IPs to voluntarily share information if asked about their policies/procedures.

7. What strategies can EVS supervisors use to have a seat at the decision-making table in their health care organization? **Nathan Smith**

   - One strategy is to find “champions” for EVS and infection control in your organization.
     - These are respected individuals with strong communication skills who are knowledgeable and enthusiastic about EVS and its importance for the organization.
     - These frontline workers promote and lead EVS initiatives by engaging and educating colleagues, solving problems, and communicating across all levels of leadership.

   - Most organizations also have infection control committees that support efforts to improve infection control throughout the organization.
8. I have had several questions concerning surgery and COVID-19 patients or patients that were previously COVID-19 positive. What are the best practices for these situations? Victoria Wiseman

- Routine cleaning and disinfecting practices and products should continue to be used, including for surgery for patients with COVID-19 or who previously had COVID-19.
- Make sure that the products you are using for disinfection are part of EPA’s List N, which are approved for use against SARS-CoV-2, the virus that causes COVID-19.

9. If you use a UV light after cleaning the room do you still need to wash the cubicle curtain? William Farrell

- Yes, the curtain still needs to be washed.
- There are strong data that show that UV light is not good at destroying germs when the germs are covered by organic material.
- UV light does not replace regular cleaning. It can be used in addition to cleaning, but not instead of.
- So, because you would normally need to clean and disinfect or replace the cubicle curtain, even if you use UV light, this is still necessary.

10. Is there an environmental cleaning assessment tool the CDC has recommended? Linda Wittmayer

- CDC has a Evaluating Environmental Cleaning toolkit, which includes resources like a checklist for monitoring terminal cleaning that may be helpful for healthcare facilities.

11. What type of Isolation category is applied to COVID-19 patients? Kevin Doty

- Patients with suspected or confirmed COVID-19 should be placed in precautions specifically for COVID-19 as outlined in CDC guidance. This guidance includes recommendations from many of our traditional isolation categories and is not limited to a single category. Infection control actions for COVID-19 are focused on stopping the spread of respiratory droplets.
  - SARS-CoV-2 is a germ spread by respiratory droplets that are in the breath of a patient who is coughing, sneezing, or talking. Those droplets can be breathed in by others, who can get sick with the virus.
  - Respiratory droplets can also land on surfaces where they can spread from person to person through touching the nose, mouth or eyes.

12. Is washing the walls in COVID discharges recommended? In the ED and regular patient rooms? Jason Green

- Routine cleaning and disinfecting practices and products should continue to be used for COVID-19, including for ED and regular patient rooms where patients with COVID-19 have stayed.
- It is very important for staff to follow the label instructions for cleaning and disinfecting products to ensure they work effectively. Also make sure that the products you are using for disinfection are part of EPA’s List N, which are approved for use against SARS-CoV-2, the virus that causes COVID-19.
13. If my staff cleaned a discharge for a (contact) room, and the kill time was achieved (room, bed, walls, etc.) room is ready now for Protexus Electrostatic Sprayer, do we have to spray walls as well for second step process? Or only focus on high touch surfaces since initial disinfection was already done? Julie Rea

- The answer to this question likely depends on the product used in the sprayer you mention and the manufacturer’s instructions for the sprayer.
- This step should be completed if it is recommended on the label of the product you’re using for disinfection or in the manufacturer’s instructions for the sprayer.
- It is very important for staff to follow the label instructions for cleaning and disinfecting products and manufacturer’s instructions for any equipment to ensure they work effectively.

14. Is eye protection recommended for people who mainly work in offices as well? Or just direct patient care areas should be wearing eye protection? Kara Jackson

- If you’re in an area with moderate to significant transmission of COVID-19, eye protection is recommended for healthcare workers during all patient encounters.
  a. This is because eye protection can help decrease your risk that droplets carrying virus particles could land on or near your eye. This could happen if you’re in close contact with someone with COVID-19 and is one way you could get sick.
- Remember, eye protection in healthcare means goggles or a face shield. Glasses, contact lenses, trauma or safety glasses are not adequate eye protection for COVID-19.
- Eye protection outside of direct patient encounters is not currently recommended.

15. Is Project Firstline intended for all non-medical workers in healthcare settings? Jenna Scully

- Project Firstline is designed so that—regardless of a healthcare worker’s previous training or educational background—they can understand and confidently apply the infection control principles and protocols necessary to protect themselves, their facility, their families, and their communities.
- Project Firstline’s content and dissemination approaches are designed to reach medical and non-medical workers in healthcare settings.
- To stop the spread of infectious disease threats—including COVID-19—anyone working in a healthcare facility needs a foundational knowledge of infection control and must understand and be ready to implement infection control protocols and procedures throughout their work day, including during every patient care activity and healthcare interaction.

16. Can you address dwell time compliance? Doug Koester

- Using the dwell times, sometimes called contact times, recommended by manufacturers of each product is essential so that germs are effectively killed and do not spread between patients.
- Product selection should take into account dwell times to be sure that they can be used correctly in specific care setting, i.e., that the setting will allow the required time for correct use.
- It is important for facility leadership to ensure all staff understand the importance of dwell times for safe patient care and how these dwell times impact the amount of time needed for room turnover.

17. What is the best practice for double occupancy discharge terminal cleaning when one patient is discharge and the other still occupies said room? (In a congested Covid + or DAPO unit) Victor Banks

- Routine cleaning and disinfecting practices and products should continue to be used during COVID-19, including for double occupancy patient care spaces.
• **Recommended PPE** for healthcare workers caring for patients with suspected or confirmed COVID-19 should be used during cleaning to protect from exposure to SARS-CoV-2 virus if there is still a patient occupying the room.

• All non-dedicated, non-disposable medical equipment used for patient care should be cleaned and disinfected according to manufacturer’s instructions and facility policies.

18. Is there any evidence to support use of UV Light as part of discharge terminal clean specific to removing bio burden in patient rooms/areas that have had Covid + patients? **Victor Banks**

• There are good data that demonstrate that UV light is not effective at destroying germs when the germs are covered by organic material.

• UV light does not replace regular cleaning. It can be used in addition to cleaning, but not instead of.

• Ultraviolet germicidal irradiation (UVGI), also known as Germicidal Ultraviolet (GUV), uses ultraviolet energy in the UV-C band (wavelengths of 220-280 nanometers), which is effective against SARS-CoV-2 under laboratory conditions.

• UVGI can be used as a supplemental treatment for disinfection of air in heating, ventilation, and air conditioning (HVAC) systems or above people in occupied spaces (upper-room or upper-air systems) and for supplemental disinfection of surfaces following routine cleaning and disinfection.

• Effectiveness of the applied dose (a function of irradiance and time) is highly dependent on many factors, such as the concentration of the virus, inoculum size (in experimental studies), the virus medium, contours and type of material being treated, as well as what the virus is suspended in (e.g., culture media, respiratory droplets, other proteinaceous material).

19. Once a patient receives positive IGG results, should we still perform a cleaning for COVID or treat it as a standard room? **Benjamin Kenyon**

• A positive IgG result alone cannot show whether the patient has been shedding (that is to say, breathing out or otherwise spreading) SARS-CoV-2 virus that can infect others during their time in the healthcare facility. It is the shedding of virus that is important for decisions about cleaning.

• Healthcare facilities should develop policies to identify patient rooms that require cleaning with COVID-19 protocols.

20. Many health care systems have had to expand services to the community for efforts like COVID-19 testing and vaccinations. What kind of practices need to be considered outside of traditional hospital walls for infection control and prevention? **Amanda Logue**

• Healthcare facilities should continue to follow infection control recommendations that apply in traditional healthcare settings when delivering care (including testing and vaccinations) in nontraditional settings.

• Many details related to infection control are setting-dependent and consulting with the health system or facility infection prevention team should be part of the organizational planning process for nontraditional healthcare settings.

• CDC has additional information about mass vaccination planning.

21. Is there any data on the risk of COVID-19 transmission via drinking water fountains? **Trecia Matthews-Hosein**

• COVID-19 mostly spreads by respiratory droplets that come from the nose and mouth of one person and are inhaled by or that land on someone else’s eyes, nose, or mouth.
• There are no reports of transmission via drinking water fountains specifically, but the concern there would be spreading COVID-19 through touch when people press the buttons or bars on water fountains with dirty hands.

• During COVID-19, facilities can consider encouraging staff and patients to bring their own water to minimize use and touching of water fountains or consider installing no-touch activation methods for water fountains.

22. Much attention is paid on sanitizing exam rooms after each patient, but how frequently should waiting areas be cleaned/sanitized to prevent infection? Trecia Matthews-Hosein

• There is no specific frequency of cleaning recommended, but it is important to regularly clean and disinfect all frequently touched surfaces in the healthcare environment.

• This includes high-touch surfaces in waiting rooms such as arm rests, electronic touch screens, electronic or mechanical pens, and door handles.

• Routine cleaning and disinfecting practices and products should continue to be used during COVID-19, including for waiting areas and other communal spaces.

The Project Firstline program is a national training collaborative led by the Centers for Disease Control and Prevention (CDC) in partnership with the American Hospital Association and the Health Research & Educational Trust (HRET), an AHA 501(c)(3) nonprofit subsidiary.

Want to learn more about Project Firstline?
Visit https://www.aha.org/center/project-firstline or contact us at ProjectFirstline@aha.org.