Infection Prevention





Infection Prevention Program

Identify plan and resources

• Review and update your CMS "all-hazards emergency preparedness program and plan" which includes emergent infectious diseases.

Coronavirus Disease 2019 (COVID-19) Preparedness

Checklist for Nursing Homes and other Long-Term Care Settings

https://www.cdc.gov/coronavirus/2019-ncov/downloads/novel-coronavirus-2019-Nursing-Homes-Preparedness-Checklist 3 13.pdf

Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus

Disease 2019 (COVID-19) or Persons Under Investigation for COVID-19 in Healthcare Settings:

https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html?CDC AA refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Finfection-control%2Fcontrol-recommendations.html

• Strategies to Prevent the Spread of COVID-19 in Long-Term Care Facilities (LTCF):

https://www.cdc.gov/coronavirus/2019-ncov/hcp/long-term-care.html?CDC AA refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhealthcare-facilities%2Fprevent-spread-in-long-term-care-facilities.html

Infection Prevention and Control Assessment Tool for Nursing Homes Preparing for COVID-19 | CDC

<u>Identify public health and professional resources.</u>





Education

• Educate on potential harm from respiratory illnesses to nursing home residents, and basic prevention and control measures for respiratory infections such as influenza and COVID-19.

Topics in education:

- Hand hygiene: https://www.cdc.gov/handhygiene/providers/index.html
- Respiratory hygiene and cough etiquette: https://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm
- Personal Protective Equipment (PPE): https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html
- Flu season: https://www.cdc.gov/flu/season/index.html
- CDC COVID-19 Print Resources: https://www.cdc.gov/coronavirus/2019-ncov/communication/factsheets.html.
- IPC training: https://www.train.org/cdctrain/training_plan/3814





CMS Requirements

A fundamental requirements of the CMS emergency preparedness rule is the approach to risk assessment. CMS requires that healthcare facilities employ an all-hazards approach. (Risk assessment attached)

- Developing plans that are flexible and scalable enough to adapt to a wide variety of disasters
- Focusing on the continuity of essential services that must remain consistent regardless of the disaster
- Assessing the risks most likely to affect an individual facility and community

Assessing risk means both examining the likelihood of particular scenarios—severe weather disasters as well as pandemics or terrorist attacks—and evaluating the extent to which they will impair a facility's operations and essential services.

Continuity of operations and community collaboration

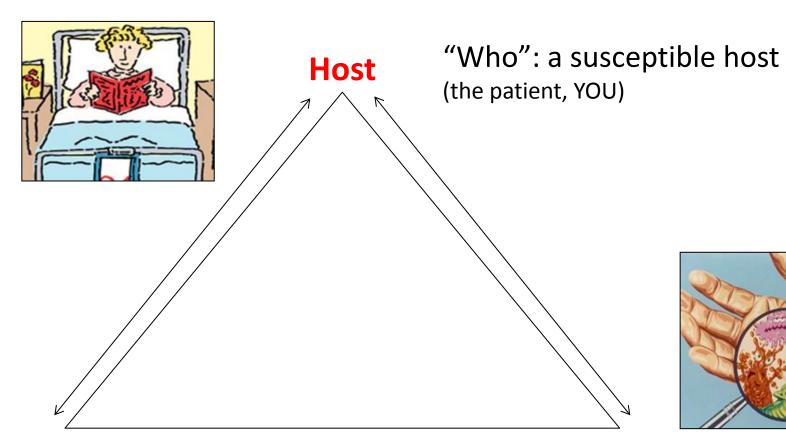
Key criteria include:

- Addressing the essential services that will be provided by the healthcare facility in an emergency in the written plan
- Documenting the chain of command and responsibility, including succession and delegation planning
- Establishing a process for cooperation and collaboration with local, tribal, regional, state and federal emergency preparedness officials, to facilitate integration during large-scale events





Transmission of Infections





"What": a live microorganism (bacteria, virus, fungal spore)

Environment

"Where": mode of transmission (cough, diarrhea, etc.)





Hand hygiene is the most effective way to prevent infections!

WHO 5 Moments of Hand Hygiene

- Before patient contact
- Before a procedure
- After a procedure or body fluid exposure risk
- After patient contact
- After contact with patient surroundings









Alcohol Sanitizer is the preferred method of hand sanitizing in health care settings.

•Application must include all surfaces of hands, including palms, back, between fingers, and finger tips.

If hands are not visibly soiled, an alcohol-based hand rub should be used for routinely decontaminating hands.



Soap and water shall be used whenever hands are visibly soiled OR
When providing care for a patient with known or suspect C. difficile or Norovirus



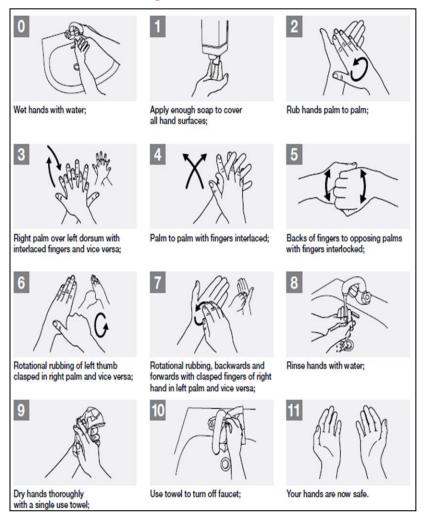


CDC Recommendations for Hand Hygiene

Alcohol Hand Sanitizer



Soap and Water





Fingernail Care and Hygiene

- Natural
- Clean
- Short (< ¼ inch)
- Nail polish must not be chipped
- No artificial nails for hands-on patient care and other high-risk jobs
 - Overlays and gels are also unacceptable







Blood-Borne Pathogens

Blood and Body Fluid Exposures in Health Care

- A penetrating injury with a contaminated sharp
- A splash of potentially infectious material into eyes, nose, mouth, or compromised skin
- Contact with non-intact skin



- HIV
- Hepatitis B
- Hepatitis C







Blood and Body Fluid

First, Take Care of Yourself:

- For percutaneous injuries, wash with soap and water.
- For mucous membrane exposure, rinse copiously with water.

REPORT IMMEDIATELY:

- To your supervisor/charge person.
- Report to Occupational Health (OH) during business hours or Emergency Department (ED)after hours.
- Provide the identity of the source patient to OH/ED, if known.







Tuberculosis (TB)

- Tuberculosis is spread via particles in the air
- All clinical staff must be fitted annually for a N95 Respirator
- CDC recommendations for testing of health care workers has been updated to annual testing for high risk healthcare workers only
- Healthcare facility should have TB exposure control plan









Respiratory Hygiene/Cough Etiquette in Healthcare Settings

To prevent the transmission of all respiratory infections in healthcare settings, including SARS CoV2,influenza, the following infection prevention measures should be implemented at the first point of contact with a potentially infected person. They should be incorporated into infection prevention practices as one component of Standard Precautions.

1. Visual Alerts

Notice to Patients to Report Flu Symptoms (www.cdc.gov/ncidod/dhqp/pdf/Infdis/RespiratoryPoster.pdf)

Emphasizes covering coughs and sneezes and the cleaning of hands

Cover Your Cough (www.cdc.gov/flu/protect/covercough.htm)

Tips to prevent the spread of germs from coughing

Information about Personal Protective Equipment (www.cdc.gov/ncidod/dhqp/ppe.html)

Demonstrates the sequences for donning and removing personal protective equipment

2. Respiratory Hygiene/Cough Etiquette

The following measures to contain respiratory secretions are recommended for all individuals with signs and symptoms of a respiratory infection.

- Cover the nose/mouth when coughing or sneezing;
- Use tissues to contain respiratory secretions and dispose of them in the nearest waste receptacle after use;
- Perform hand hygiene (e.g., hand washing with non-antimicrobial soap and water, alcoholbased hand rub, or antiseptic handwash) after having contact with respiratory secretions

and contaminated objects/materials.

Healthcare facilities should ensure the availability of materials for adhering to Respiratory

Hygiene/Cough Etiquette in waiting areas for patients and visitors.

- Provide tissues and no-touch receptacles for used tissue disposal.
- Provide conveniently located dispensers of alcohol-based hand rub; where sinks are available, ensure that supplies for hand washing (i.e., soap, disposable towels) are consistently available.

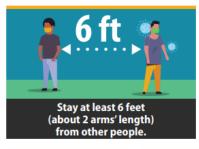




Respiratory Etiquette

Stop the Spread of Germs

Help prevent the spread of respiratory diseases like COVID-19.

















cdc.gov/coronavirus





COVID-19 PPE

COVID-19 Personal Protective Equipment (PPE) for Healthcare Personnel

Preferred PPE – Use N95 or Higher Respirator



CS 315838-C 03/23/2020

Acceptable Alternative PPE – Use Facemask



cdc.gov/COVID19





Donning and Doffing

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- · Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- . Fit flexible band to nose bridge
- · Fit snug to face and below chin
- Fit-check respirator





3. GOGGLES OR FACE SHIELD

· Place over face and eyes and adjust to fit



4. GLOVES

· Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- · Limit surfaces touched
- Change gloves when torn or heavily contaminated
- · Perform hand hygiene

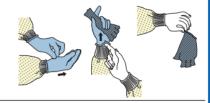


HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GLOVES

- · Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- · Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in a waste container



2. GOGGLES OR FACE SHIELD

- · Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container



3. GOWN

- . Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- . Fold or roll into a bundle and discard in a waste container

4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container





5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE











COVID- 19 (SARS-CoV-2)

Physical Distancing

Healthcare institutions must have precautions in place as part of the ongoing response to the COVID-19 pandemic

Source Control & Universal Masking

- <u>Patients</u> wear a mask covering their mouth and nose, when staff provide care (unless unable to tolerate)
- <u>Visitors</u> must wear a mask covering the mouth and nose
- <u>Staff</u> must wear hospital approved mask at all times Clinical staff must also wear Face Shield or approved goggles

Screening for signs/symptoms & possible exposure

- <u>Patients</u> at triage and throughout stay
- <u>Visitors</u> upon entry to LTAC
- Staff upon start of shift.

Personal Protective Equipment (PPE) Clinical Staff

Along with mask and eye protection, must wear isolation gown and gloves

N95 (hospital approved) respirator for any aerosol generating procedures such as, BiPAP, Vapotherm, intubation, manual bagging, or sputum induction.

*Must be fit tested





Covid Active Infection

- a respiratory disease and the spectrum of infection with this virus can range from people with very mild, nonrespiratory symptoms to severe acute respiratory illness, sepsis with organ dysfunction and death.
- Some people infected have reported no symptoms at all. The symptoms are similar in children and adults but the frequency varies between both groups.
- These symptoms include fever or chills, cough, shortness of breath or difficulty breathing, congestion and runny nose, Headache, fatigue, muscle or body aches, new loss of taste or smell, or sore throat, nausea, vomiting or diarrhea

Incubation Period :14 days

<u>Isolation:</u> Patient with confirmed Covid remain to be infectious for at least 10 days. Patients with severe to critical illness or who are severely immunocompromised may remain infectious up to 20 days.





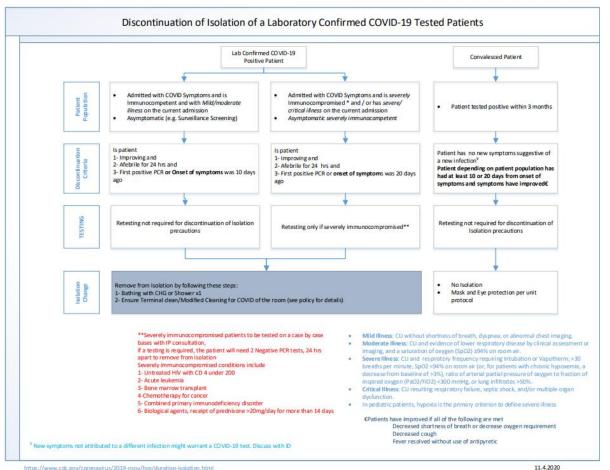
COVID-19 reinfection

- Reinfection is rare with SARS-CoV 2
- CDC consider that natural immunity will last at least 3 months.





Patient considered to be non-infectious (do not spread the disease) at least 10 days and up to 20 days after the first symptoms appeared and at least 24 hours have passed since last fever without the use of fever-reducing medications and Symptoms (e.g., cough, shortness of breath) have improved

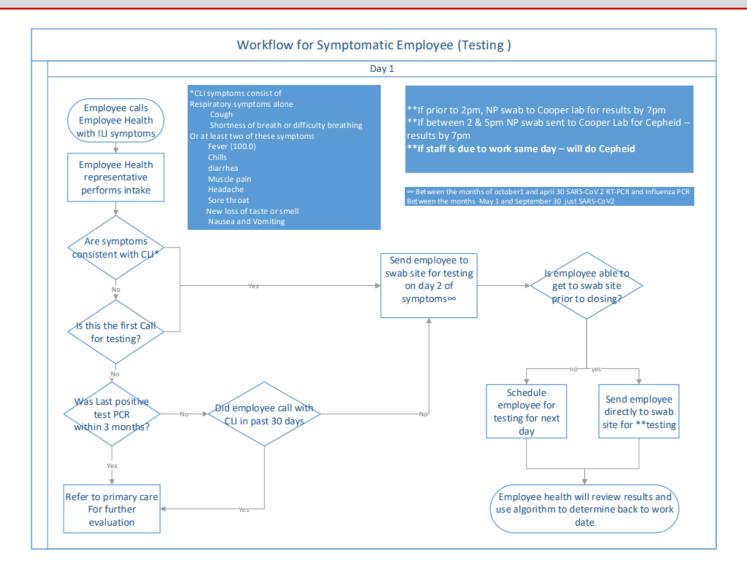


https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html





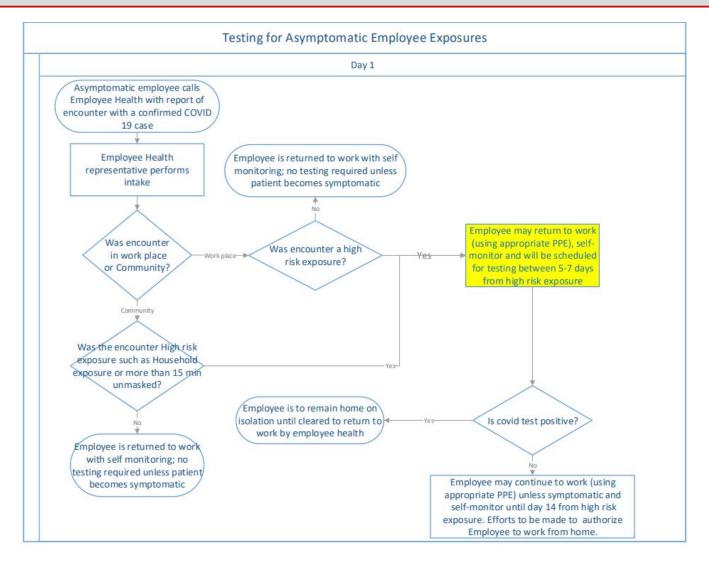
Workflow for Symptomatic Employee







Testing for Asymptomatic Employee Exposure







Breakroom Etiquette for the Pandemic Duration

Breakroom Etiquette for the Pandemic Duration

Social distancing of a minimum 6 feet is required while taking a break and eating or drinking. Consider taking breaks outside of your unit, especially if social distancing is difficult to maintain due to confined places.

- Perform hand hygiene before going to the breakroom
- If there is not enough room to maintain a 6 feet distance, please reconsider the room for your break.
- Do not share food
- Do not take any food that is not individually wrapped
- Before touching food, perform hand hygiene
- Clean up your area when finished eating
- Perform Hand Hygiene after cleaning break area.





Holiday Gathering CMS CDC Recommendations

During the holidays, facilities, residents, and visitors should continue to follow the guidelines for visitation and adhere to the core principles of infection prevention, such as remaining six feet or more apart, wearing a face covering, and limiting the number of visitors in the nursing home at any one time.

We also know that some residents may want to leave the nursing home temporarily to visit family and friends for the holidays or other outings. While CMS supports family engagement and a resident's right to leave the nursing home, everyone needs to work together to take extra precautions to help reduce the spread of COVID19, which can pose an elevated danger to the health of nursing home residents. Therefore, CMS recommends against residents leaving the nursing home during this public health emergency.

Staff should also use extra caution, especially during the holidays. Staff should follow the same recommendations for residents and families regarding gathering with their families and friends outside of work to protect the vulnerable residents they care for.





- Infection Prevention & Control Program
- The Infection Preventionist
- Integrating Infection Prevention and Control into the Quality Assurance Performance Improvement Program
- Infection Surveillance
- Outbreaks
- Principles of Standard Precautions
- Principles of Transmission-Based Precautions
- Hand Hygiene
- Injection Safety
- Respiratory Hygiene and Cough Etiquette
- Indwelling Urinary Catheters
- Central Venous Catheters
- Infection Prevention during Wound Care
- Point-of-Care Blood Testing
- Reprocessing Reusable Resident Care Equipment
- •Environmental Cleaning and Disinfection
- Water Management Program
- Linen Management
- Preventing Respiratory Infection
- Tuberculosis Prevention
- •Occupational Health Considerations for the Infection Prevention and Control Program
- Antibiotic Stewardship in Nursing Homes
- Infection Prevention and Antibiotic Stewardship Considerations During Care Transitions



