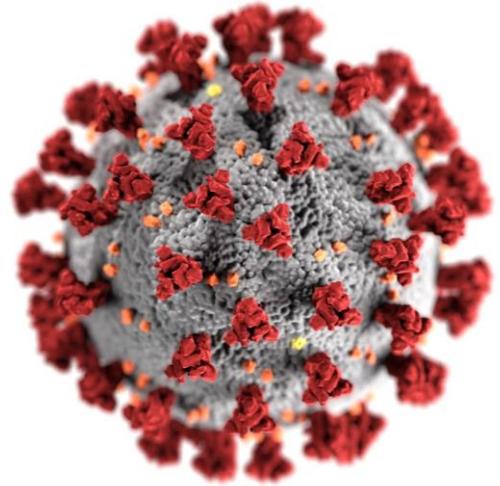


# Preparing Nursing Homes and Assisted Living Facilities for COVID-19

Long-term Care Team, Prevention and Response Branch  
Division of Healthcare Quality Promotion  
Centers for Disease Control and Prevention



For more information: [www.cdc.gov/COVID19](http://www.cdc.gov/COVID19)

## Aggressive Action Needed to Protect Residents

- Given their congregate nature and resident population services, long-term care facilities are at the highest risk of being affected by COVID-19.
- If infected, residents are at very high risk of serious illness.
- Ill and COVID-19 infected visitors and healthcare personnel (HCP) are the most likely sources of introduction of COVID-19 into the facility.
- To protect this vulnerable population, aggressive efforts toward visitor restrictions and enforcement of sick leave policies for ill HCP are recommended, even before COVID-19 is identified in a community or facility.



## Presentation Objectives

- Describe COVID-19, the spread, symptoms, and risk factors
- Discuss the key strategies to prepare long-term care facilities for COVID-19, including:
  - Keep COVID-19 from entering your facility
  - Identify infection early
  - Prevent spread of COVID-19
  - Assess supply of personal protective equipment (PPE) and initiate measures to optimize current supply
  - Identify and manage severe illness



# Coronavirus Disease 2019 (COVID-19)



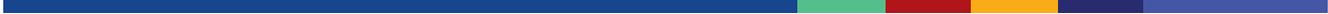
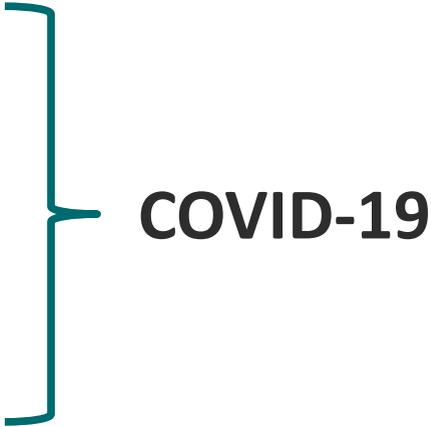
### Coronavirus Disease 2019 Abbreviation

“CO” stands for “corona”

“VI” stands for “virus”

“D” stands for “disease”

“19” refers to 2019



## What is COVID-19?

- COVID-19 is a respiratory illness
- Caused by SARS-CoV-2, a type of virus called a “coronavirus”
  - Related to SARS-CoV and MERS-CoV
- The first person was confirmed to have COVID-19 in the U.S. on January 21, 2020
- On January 31, 2020, Health and Human Services Secretary Alex M. Azar II declared a public health emergency for the United States



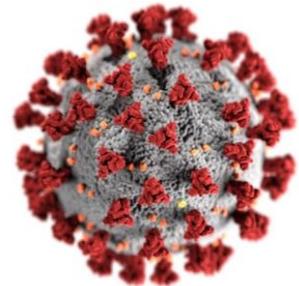
## How it Spreads

- **Person-to-person spread is the primary mode of transmission**
  - Between people in close contact with one another (about six feet)
  - Through respiratory droplets when an infected person coughs or sneezes
- **Contact with infected surfaces or objects**
  - It may be possible to get COVID-19 by touching surfaces or objects that the virus is on and then touching your mouth, nose, or eyes
- **COVID-19 is a new disease and we are still learning how it spreads**



## COVID-19 Spreads Easily in Long-term Care Facilities

- COVID-19 may be spread easily between:
  - Residents
  - Healthcare personnel
  - Visitors
- **Ill and COVID-19 infected HCP or visitors, in particular, are the most likely sources of introduction into the facility**
  - **For this reason, early implementation of visitor restrictions and enforcement of sick leave policies for ill HCP are recommended.**



## COVID-19 Signs and Symptoms

- It takes between 2-14 days for symptoms to start (median is ~4 days).
- Common symptoms include:
  - fever
  - cough
  - sore throat
  - shortness of breath
  - muscle aches
  - fatigue
- Less common symptoms: sputum production, headache, diarrhea.
- In older adults, initial symptoms might be mild and fever might be absent.



## Older Adults at Risk for COVID-19

- The risk for severe illness of the virus may be greatest among:
  - older adults
  - those with co-morbid conditions, including diabetes, hypertension, and heart disease
  - immunocompromised
- Nursing homes, assisted living facilities, other long-term care and residential facilities have vulnerable residents at high risk of COVID-19.



## COVID-19 Clinical Course and Management

- Clinical course varies from asymptomatic to mild to severe or fatal illness.
  - Mortality rate varies by age. Mortality rates among confirmed COVID-19 patients in one report<sup>1</sup>:
    - 0.2% for patients <40 years
    - 8% for patients 70-79 years
    - 14.8% for patients at least 80 years
- Clinical signs and symptoms may worsen with progression to lower respiratory tract disease in the second week of illness. (See [CDC's Clinical Management Guidelines](https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html) [https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html])
  - We are still learning about the development of disease in older adults, but some early reports suggest these individuals can rapidly decompensate.
- No specific treatment for COVID-19 is currently available.
- Clinical management includes prompt infection prevention and control measures and supportive management of complications.



<sup>1</sup>Chinese CDC. CCDC Weekly 2020; 8:113-122.

# Preparing for COVID-19 in Long-term Care Settings



## Key Strategies to Prepare for COVID-19

1. Keep COVID-19 from entering your facility
2. Identify infection early
3. Prevent spread of COVID-19
4. Assess supply of personal protective equipment (PPE) and initiate measures to optimize current supply
5. Identify and manage severe illness



## Restrict Visitors to Keep Residents Safe



**HELP KEEP OUR RESIDENTS SAFE  
FROM COVID-19 and RESPIRATORY INFECTIONS**



## 1. Keep COVID-19 from entering your facility

- Restrict all visitors except for compassionate care situations (e.g., end of life).
- Restrict all volunteers and non-essential healthcare personnel (HCP), including consultant services (e.g., barber).
- Cancel all field trips outside of the facility.
- Have residents who must regularly leave the facility for medically necessary purposes (e.g., residents receiving hemodialysis) wear a facemask whenever they leave their room, including for procedures outside of the facility.



## Communicate with Residents & Families

- Send letters or emails to families advising them that all visitation is being restricted except for certain compassionate care situations, such as end of life situations
- Facilitate remote communication between residents and visitors (e.g., video-call applications on cell phones or tablets)
- Post signs at the entrances to the facility instructing visitors to not enter
- Maintain contact information for resident's family or next-of-kin and continue open communication
- Inform residents and families if an individual in the facility tests positive for COVID-19



### Help Keep our Residents Safe from COVID-19

A message from:

Dear Residents, Families, Friends, Volunteers:

We are committed to keeping our residents safe and we need your help. The virus causing Coronavirus Disease 2019 (abbreviated COVID-19) can cause outbreaks in nursing homes. Many of our residents are elderly and may have medical conditions putting them at a very high risk of becoming sick, or even severely ill, with COVID-19. Visitors and healthcare personnel (HCP) are the most likely sources of introduction of the virus that causes COVID-19 into a facility.

To protect our vulnerable residents, even before COVID-19 is seen in our community, we are immediately taking the following aggressive actions to reduce the risk of COVID-19 in our residents and staff:

1. **Effective immediately:** We are restricting all visitation. All visitation is being restricted except for certain compassionate care situations, such as end of life situations. These visitors will first be screened for fever and respiratory symptoms. We know that your presence is important for your loved one but, per guidance from the Centers for Disease Control and Prevention (CDC), this is a necessary action to protect their health. We are introducing alternative methods of visitation (such as Skype and FaceTime) so that you can continue to communicate with your loved ones. Visitors who are permitted to enter the building will be required to frequently clean their hands, limit their visit to a designated area within the building, and wear a facemask. As the situation with COVID-19 is rapidly changing, we will continue to keep you updated.
2. **We are monitoring healthcare personnel and residents for symptoms of respiratory illness.** Non-essential healthcare personnel and volunteers are now restricted from entering the facility. Healthcare personnel will be actively monitored for fever and symptoms of respiratory infection. All healthcare personnel will be asked to stay home. You may see healthcare personnel wearing facemasks, eye protection, gown, and gloves in order to prevent germs from spreading and help keep residents safe. Healthcare personnel will clean their hands frequently.

We are assessing residents daily for fevers and symptoms of respiratory infection in order to quickly identify ill residents and implement additional infection prevention activities. When ill residents are identified, they will be monitored closely, asked to stay in their rooms or wear a mask.

3. **We are limiting activities within the facility.** We are cancelling all group activities within the building and all community outings. We will be helping residents to practice social distancing, including during meals, and to frequently clean their hands.

We encourage you to review the CDC website for information about COVID-19, including its symptoms, how it spreads, and actions you can take to protect your health: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>.

Thank you very much for everything you are doing to keep our residents and facility staff safe and healthy. We continue to monitor the situation in our community; we will keep you informed about any new precautions we think are necessary to keep your loved one safe.

Please contact us with additional questions at

Sincerely,

<https://www.cdc.gov/coronavirus/2019-ncov/downloads/healthcare-facilities/Long-Term-Care-letter.pdf>

## Exceptions to Visitation Restriction

- All visitation should be restricted except for compassionate care situations (e.g., end of life).
- Visitors during end of life situations must first be screened for fever or symptoms of respiratory infection
  - Visitors during end of life situations that are permitted to enter the facility should frequently perform hand hygiene, wear a facemask, and limit their movement and interactions with others in the facility (e.g., confine themselves to resident's room).



## Educate Residents and Visitors

- Provide information about COVID-19.
- Explain actions the facility is taking to protect them and their loved ones.
- Visitor restrictions
  - Explain how they can serve as a source of infections in the facility
- Share actions they can take to protect themselves in the facility (e.g., perform hand hygiene, practice respiratory hygiene and cough etiquette, limit handshakes and hugs).



## Screen Healthcare Personnel

- **Actively screen all HCP**, including any visiting or consultant HCP (e.g., wound care, podiatry, barber, lab), for fever and respiratory symptoms before starting each shift (HCP should monitor themselves, even when not working)
  - Take temperature
  - Assess and report if HCP have any of the following symptoms:
    - fever
    - shortness of breath
    - new or changed cough
    - sore throat
- If staff become ill while working, they should immediately stop, put on a facemask, notify their facility supervisor, and go home
- Emphasize the importance of not reporting to work when ill
  - Explain how they can serve as a source of infections in the facility
  - Facility should have supportive sick leave policies



\*Fever is either measured temperature  $\geq 100.0^{\circ}\text{F}$ . Respiratory symptoms consistent with COVID-19 are cough, shortness of breath, and sore throat. Medical evaluation may be recommended for lower temperatures ( $< 100.0^{\circ}\text{F}$ ) or other symptoms (e.g., muscle aches, nausea, vomiting, diarrhea, abdominal pain headache, runny nose, fatigue) based on assessment by public health authorities

## Educate Healthcare Personnel

- Provide information about COVID-19
- Provide information on infection prevention and control measures and explain how they protect HCP, residents, and visitors with an emphasis on:
  - Hand hygiene
  - Selection and use of PPE, including donning and doffing PPE, and how to preserve PPE when supply is low
- Education should be provide to direct care, ancillary services (e.g. environmental services) and external providers (e.g., wound care, laboratory services)
- Inform healthcare personnel if an individual in the facility tests positive for COVID-19



## 2. Identify Infection Early

- **Actively screen all residents** at least daily, and at time of admission, for fever and respiratory symptoms
- Take resident's temperature
- Ask residents to report and assess for symptoms:
  - New or change in cough
  - sore throat
  - difficulty breathing
  - feeling feverish
- Older adults may not show typical symptoms, fever may be absent.
- Less common symptoms include: new or worsening malaise, new dizziness, diarrhea.



## Long-Term Care Respiratory Surveillance Line List

	Name	Age	Gender (M/F)	Resident (R) or Staff (S)	Residents Only: Short stay (S) or Long stay (L)	Residents Only: Bldg/Floor	Residents Only: Room/Bed	Staff Only: Primary floor assignment	Symptom onset date: (mm/dd)	Fever <sup>a</sup> (Y/N)	Cough (Y/N)	Myalgia (body ache) (Y/N)	Additional documented s/s (select all codes that apply) H – headache, SB – shortness of breath, LA – loss of appetite, C – chills, ST – sore throat, O – other: Specify _____
1.													
2.													
3.													



CDC resource for performing respiratory infection surveillance in long-term care facilities:  
<https://www.cdc.gov/longtermcare/pdfs/LTC-Resp-OutbreakResources-P.pdf>

## Notify the Health Department

- **Notify the health department about residents with severe respiratory infection and clusters (per local protocol or 3 or more residents or HCP with symptoms within 72 hours) of respiratory infection.**
  
- **Notify the health department if, based on evaluation of the resident or prevalence in the community, COVID-19 is suspected.**
  
- **Know your local and state health department point of contacts:**
  - Contact information for the healthcare-associated infections program in each state health department is available here: <https://www.cdc.gov/hai/state-based/index.html>



### 3. Prevent Spread of COVID-19

- Enforce social distancing among residents (stay 6 feet apart)
- Cancel all group activities and communal dining
- When COVID-19 is reported in the community:
  - Begin universal facemask use by all HCP when they enter the facility
  - If facemasks are in short supply, they should be prioritized for direct care personnel
  - All HCP should be reminded to practice social distancing when in break rooms or common areas.



## Prevent the Spread of COVID-19

- If COVID-19 is identified in the facility:
  - Immediately restrict all residents to their rooms
  - Have HCP wear all recommended PPE for all resident care, regardless of the presence of symptoms\*
  - Notify staff, residents and families that an individual in the facility tested positive for COVID-19.
  
- Notify public health to help inform decisions about testing additional staff or residents on the unit and in the facility.



\*Implement PPE preserving strategies

## Respiratory infection, suspect or confirmed COVID-19

### What PPE to use:

- Restrict resident to their room; resident should wear facemask if leaving room for medically necessary purposes
- PPE for HCP:
  - Facemask (respirator, if facility has respiratory protection program, fit-tested HCP)
  - Isolation gown
  - Gloves
  - Eye protection (i.e., goggles or a disposable face shield that covers the front and sides of the face)
    - Personal eyeglasses and contact lenses are **not** considered adequate eye protection.



\*Airborne Infection Isolation Rooms (AIIRs) are not required

## Provide PPE and Cleaning Products



### ▪ Personal Protective Equipment (PPE):

- Make PPE accessible outside of the resident room and in other resident care areas
- Put a trash can near the room exit for ease of discarding PPE, prior to exiting, or before providing care for another resident in the same room.

### ▪ Environmental cleaning and disinfection:

- Make sure HCPs have access to EPA-registered, hospital-grade disinfectants\* to allow for frequent cleaning of high-touch surfaces and shared resident care equipment.

\*Refer to the EPA-website for a list of Disinfectants for Use Against SARS-CoV-2: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

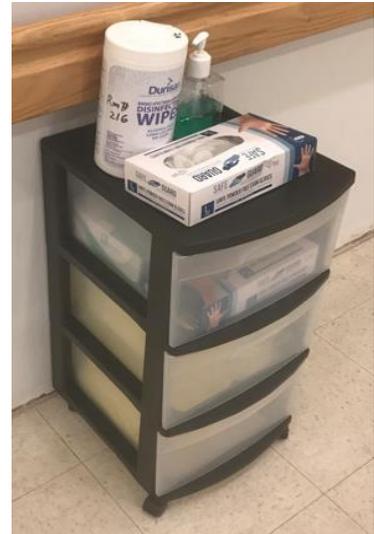


## Provide Supplies for Infection Control

- **Hand hygiene supplies:**
  - Put alcohol-based hand sanitizer (ABHS) with 60-95% alcohol inside and outside every resident room.
  - Put ABHS in other resident care and common areas (e.g., outside dining hall, in therapy gym).
  - Make sure that sinks are well-stocked with soap and paper towels for handwashing.
- **Respiratory hygiene and cough etiquette:**
  - Make tissues and facemasks available
- **Consider designating HCP to steward PPE supplies and encourage appropriate use**



## Transmission-Based Precautions Signage and Setup



Transmission-Based Precautions (<https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>)

## Additional Measures to Prevent Spread

- Develop criteria for closing units or the entire facility to new admissions.
- Create a plan for cohorting residents with symptoms of respiratory infection, including dedicating HCP to work only on affected units.



## 4. Assess Supply of Personal Protective Equipment (PPE) and optimize supply

- **How many days supply does the facility have of the following PPE and alcohol-based hand sanitizer (ABHS)?**
  - Facemasks:
  - N-95 or higher-level respirators:
  - Isolation gowns:
  - Eye protection:
  - Gloves:
  - Alcohol-based hand sanitizer:



## Reporting PPE Shortages

- If your facility is concerned about a potential or imminent shortage of PPE, alert your state/local health department who can engage your local healthcare coalition, as they are best positioned to help facilities troubleshoot through temporary shortages.
- Link to identifying your state HAI coordinator: <https://www.cdc.gov/hai/state-based/index.html>
- Link to healthcare coalition/preparedness: <https://www.phe.gov/Preparedness/planning/hpp/Pages/find-hc-coalition.aspx>



## Preserving PPE Supply in Times of Shortages: Gowns

- Prioritize gowns for aerosol-generating procedures, care activities where splashes and sprays are anticipated, and high-contact resident care activities
  - Dressing
  - Bathing/showering
  - Transferring
  - Providing hygiene
  - Changing linens
  - Changing briefs or assisting with toileting
  - Device care or use
  - Wound care



Extended use of facemasks and eye protection or prioritization of gowns for certain resident care activities: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>

## Preserving PPE Supply in Times of Shortage: Eye and Face protection

- Start extended use of eye and face protection (respirator or facemask).
  - HCP removes only gloves and gown (if used) and performs hand hygiene between patients while continuing to wear the same eye protection and respirator or facemask.
  - HCP must not touch their eye protection and respirator or facemask.
  - Remove eye protection and the respirator or facemask and perform hand hygiene if they become damaged or soiled, and when leaving the unit.



For example, extended use of facemasks and eye protection or prioritization of gowns for certain resident care activities: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>

## 5. Identify and Manage Severe Illness

- Maintain a list of all ill residents
- Facility performs appropriate monitoring of ill residents (including documentation of oxygen saturation via pulse oximetry) at least 3 times daily to quickly identify residents who require a higher level of care.
- Should a resident require a higher level of care, the receiving facility, EMS and transport service personnel, and the health department should be notified.



## Key Strategies to Prepare for COVID-19

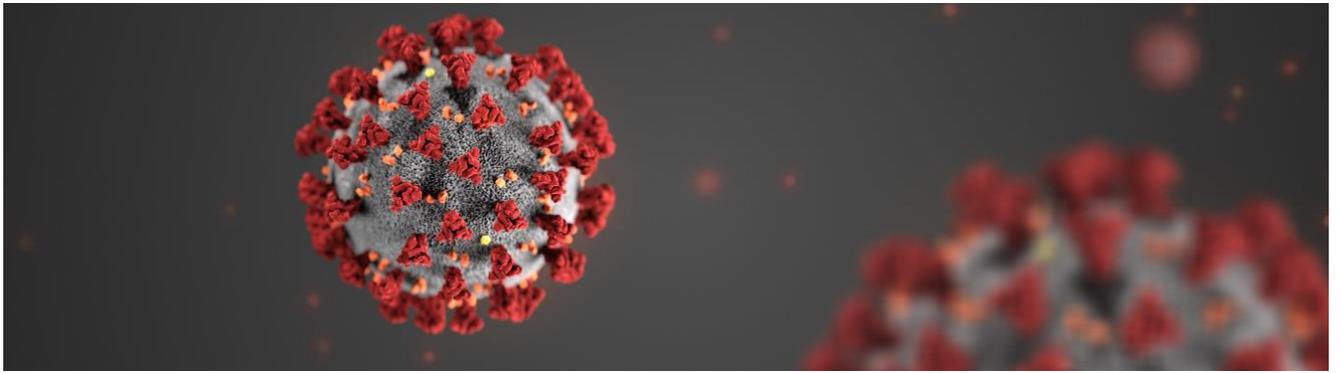
1. Keep COVID-19 from entering your facility
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## Resources

- Information about clinical presentation: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>
- Guidance for evaluating and reporting PUI: <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html>
- For detailed infection prevention and control recommendations: [https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Finfection-control.html](https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Finfection-control.html)
- For guidance on risk assessment and potential work restrictions for HCP with potential exposure to patients with COVID-19, refer to the [Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 \(COVID-19\)](#)
- For additional long-term care infection prevention guidance: <https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/prevent-spread-in-long-term-care-facilities.html>
- Long-term Care COVID-19 Preparedness Checklist: <https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/prevent-spread-in-long-term-care-facilities.html#checklist>
- Long-term Care template letter for residents and families: <https://www.cdc.gov/coronavirus/2019-ncov/downloads/healthcare-facilities/Long-Term-Care-letter.pdf>
- Surveillance tool for respiratory infections: <https://www.cdc.gov/longtermcare/pdfs/LTC-Resp-OutbreakResources-P.pdf>
- What healthcare personnel should know: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-for-patients.html>
- For example, extended use of facemasks and eye protection or prioritization of gowns for certain resident care activities: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>





For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

# Thank you!

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

