



# PPE Best Practices in Nursing Home Settings

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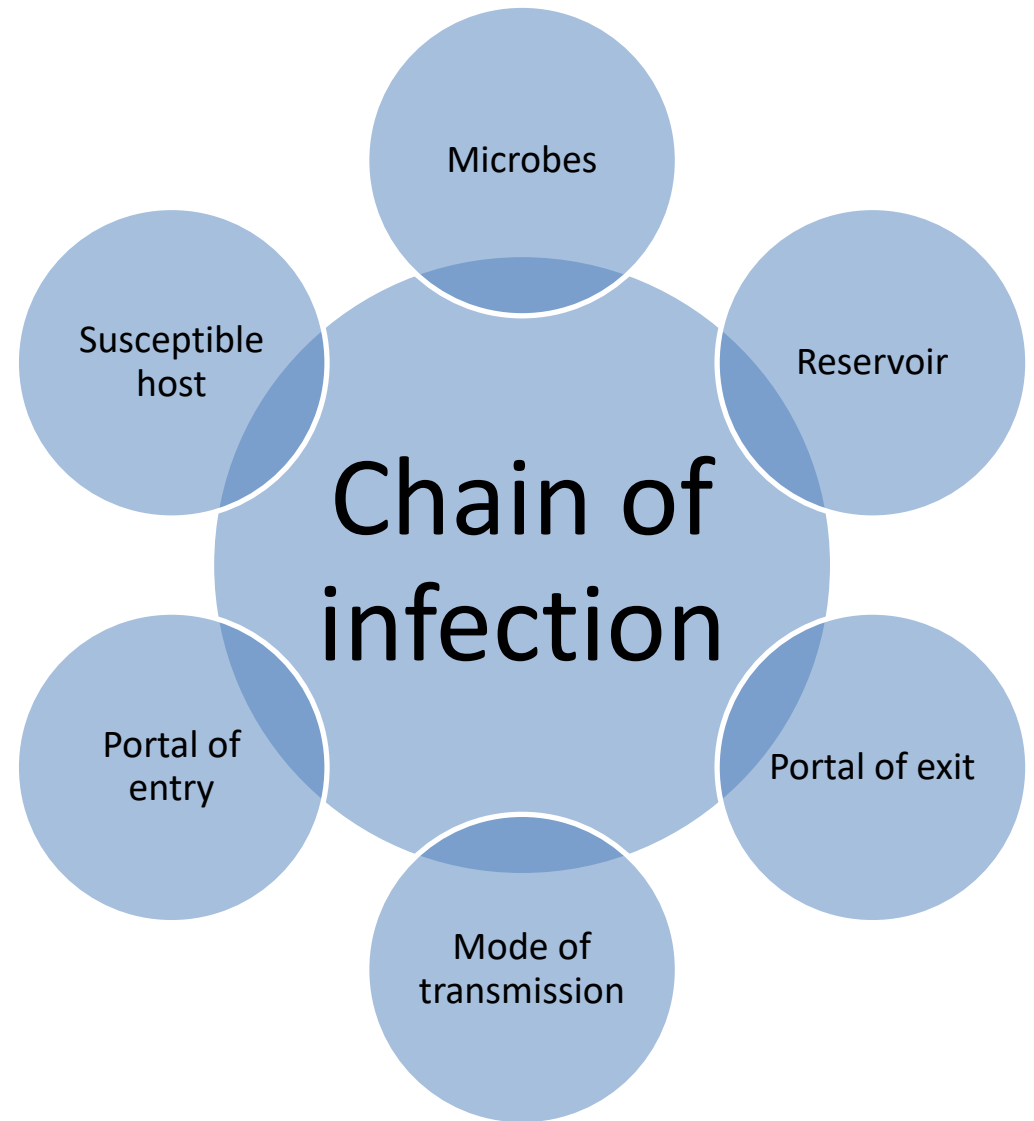
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# Introduction

The importance of personal protective equipment (PPE) in nursing homes



# Introduction

## The importance of PPE in nursing homes

- Protects vulnerable populations who may be more susceptible to infections, such as elderly residents
- Guards healthcare workers from exposure to infectious agents during caregiving activities
- Provides a crucial line of defense in case of unexpected outbreaks or infectious disease emergencies
- Minimizes the risk of cross-contamination between residents, staff, and different areas of the facility

# Current State of PPE Use in Nursing Homes

- Then vs. Now

# Challenges Faced by Nursing Homes

- PPE shortages are mostly resolved
- Staff training and compliance
  - Mask fatigue
  - Donning and doffing

# Impact on Resident and Staff Safety

- Overall infection prevention
- Protecting vulnerable populations
- Reduction of cross-contamination
- Outbreak prevention
- Staff infection prevention

# Types of PPE in Nursing Homes

- Different types of PPE
- Masks
- Gloves
- Gowns
- Face shields

# Standard Precautions

- Standard precautions are general infection prevention practices that apply to all resident care, regardless of a suspected or confirmed infection. This includes:
  - Hand hygiene
  - Use of PPE (masks, gowns, gloves, face shield)
  - Sharps safety
  - Environmental infection control
- All transmission-based precaution recommendations are in addition to standard precautions.



# Contact Precautions

- PPE required:
  - Standard precautions
  - Gloves
  - Gowns
- Healthcare personnel caring for residents on contact precautions wear a gown and gloves for all interactions that may involve direct contact with the resident or potentially contaminated areas in the patient's environment.

# Droplet Precautions

- PPE required:
  - Standard precautions
  - Mask

# Airborne Precautions

- PPE required:
  - N95 respirator
  - or
  - Powered air-purifying respirator (PAPR)
- The preferred placement for residents who require airborne precautions is in an airborne infection isolation room (AIIR).


# COVID-19 Precautions

- PPE required:
  - N95 respirator
  - Gloves
  - Gowns
  - Face shields

# Enhanced Barrier Precautions

- PPE required:
  - Gloves
  - Gowns
  - During high-contact resident care activities, such as:
    - Dressing
    - Bathing/showering
    - Transferring
    - Changing linens
    - Providing hygiene
    - Changing briefs or assisting with toileting
    - Device care or use(urinary catheter, feeding tube, tracheostomy)
    - Wound care (any skin opening requiring a dressing)

# Procedure: Proper Donning of PPE

SEQUENCE FOR DONNING PERSONAL PROTECTIVE EQUIPMENT (PPE)	SECUENCIA PARA PONERSE EL EQUIPO DE PROTECCIÓN PERSONAL (PPE)
<p>The type of PPE used will vary based on the level of precautions required; e.g., Standard and Contact, Droplet or Airborne Infection Isolation.</p> <ol style="list-style-type: none"> <li><b>GOWN</b> <ul style="list-style-type: none"> <li>Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back</li> <li>Fasten in back of neck and waist</li> </ul> </li> <li><b>MASK OR RESPIRATOR</b> <ul style="list-style-type: none"> <li>Secure ties or elastic bands at middle of head and neck</li> <li>Fit flexible band to nose bridge</li> <li>Fit snug to face and below chin</li> <li>Fit-check respirator</li> </ul> </li> <li><b>GOGGLES OR FACE SHIELD</b> <ul style="list-style-type: none"> <li>Place over face and eyes and adjust to fit</li> </ul> </li> <li><b>GLOVES</b> <ul style="list-style-type: none"> <li>Extend to cover wrist of isolation gown</li> </ul> </li> </ol> 	<p>El tipo de PPE que se debe utilizar depende del nivel de precaución que sea necesario; por ejemplo, equipo Estándar y de Contacto o de Aislamiento de infecciones transportadas por gotas o por aire.</p> <ol style="list-style-type: none"> <li><b>BATA</b> <ul style="list-style-type: none"> <li>Cubra con la bata todo el torso desde el cuello hasta las rodillas, los brazos hasta la muñeca y dóblela alrededor de la espalda</li> <li>Átesela por detrás a la altura del cuello y la cintura</li> </ul> </li> <li><b>MÁSCARA O RESPIRADOR</b> <ul style="list-style-type: none"> <li>Asegúrese los cordones o la banda elástica en la mitad de la cabeza y en el cuello</li> <li>Ajústese la banda flexible en el puente de la nariz</li> <li>Acomódesela en la cara y por debajo del mentón</li> <li>Verifique el ajuste del respirador</li> </ul> </li> <li><b>GAFAS PROTECTORAS O CARETAS</b> <ul style="list-style-type: none"> <li>Colóquesela sobre la cara y los ojos y ajústela</li> </ul> </li> <li><b>GUANTES</b> <ul style="list-style-type: none"> <li>Extienda los guantes para que cubran la parte del puño en la bata de aislamiento</li> </ul> </li> </ol>
<p>USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION</p> <ul style="list-style-type: none"> <li>Keep hands away from face</li> <li>Limit surfaces touched</li> <li>Change gloves when torn or heavily contaminated</li> <li>Perform hand hygiene</li> </ul>	<p>UTILICE PRÁCTICAS DE TRABAJO SEGURAS PARA PROTEGERSE USTED MISMO Y LIMITAR LA PROPAGACIÓN DE LA CONTAMINACIÓN</p> <ul style="list-style-type: none"> <li>Mantenga las manos alejadas de la cara</li> <li>Limite el contacto con superficies</li> <li>Cambie los guantes si se rompen o están demasiado contaminados</li> <li>Realice la higiene de las manos</li> </ul>

# Procedure: Proper Doffing of PPE

## SEQUENCE FOR REMOVING PERSONAL PROTECTIVE EQUIPMENT (PPE)

Except for respirator, remove PPE at doorway or in anteroom. Remove respirator after leaving patient room and closing door.

### 1. GLOVES

- Outside of gloves is contaminated!
- Grasp outside of glove with opposite gloved hand; peel off
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist
- Peel glove off over first glove
- Discard gloves in waste container



### 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield is contaminated!
- To remove, handle by head band or ear pieces
- Place in designated receptacle for reprocessing or in waste container



### 3. GOWN

- Gown front and sleeves are contaminated!
- Unfasten ties
- Pull away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard



### 4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- Grasp bottom, then top ties or elastics and remove
- Discard in waste container



PERFORM HAND HYGIENE IMMEDIATELY AFTER REMOVING ALL PPE

## SECUENCIA PARA QUITARSE EL EQUIPO DE PROTECCIÓN PERSONAL (PPE)

Con la excepción del respirador, quítese el PPE en la entrada de la puerta o en la antesala. Quítese el respirador después de salir de la habitación del paciente y de cerrar la puerta.

### 1. GUAANTES

- ¡El exterior de los guantes está contaminado!
- Agarre la parte exterior del guante con la mano opuesta en la que todavía tiene puesto el guante y quíteselo
- Sostenga el guante que se quitó con la mano enguantada
- Deslice los dedos de la mano sin guante por debajo del otro guante que no se ha quitado todavía a la altura de la muñeca
- Quítese el guante de manera que acabe cubriendo el primer guante
- Arroje los guantes en el recipiente de desechos

### 2. GAFAS PROTECTORAS O CARETA

- ¡El exterior de las gafas protectoras o de la careta está contaminado!
- Para quitárselas, tómelas por la parte de la banda de la cabeza o de las piezas de las orejas
- Colóquelas en el recipiente designado para reprocessar materiales o de materiales de deshecho

### 3. BATA

- ¡La parte delantera de la bata y las mangas están contaminadas!
- Desate los cordones
- Tocando solamente el interior de la bata, pásela por encima del cuello y de los hombros
- Voltee la bata al revés
- Dóblela o enróllela y deséchela

### 4. MÁSCARA O RESPIRADOR

- La parte delantera de la máscara o respirador está contaminada — ¡NO LA TOQUE!
- Primero agarre la parte de abajo, luego los cordones o banda elástica de arriba y por último quítese la máscara o respirador
- Arrójela en el recipiente de desechos

EFFECTÚE LA HIGIENE DE LAS MANOS INMEDIATAMENTE DESPUÉS DE QUITARSE CUALQUIER EQUIPO DE PROTECCIÓN PERSONAL

# Recent Updates in Guidelines

- Updates in PPE guidelines since public health emergency (PHE) ended on May 11, 2023
- How to stay informed about changes in guidance
  - Centers for Disease Control and Prevention (CDC) guidance
  - State and local guidance
  - Centers for Medicaid & Medicare Services (CMS) guidance



# Training and Education

- Importance of training staff on proper PPE usage
- Strategies for effective training programs in nursing homes
  - Micro-learning opportunities
  - Hands-on demonstration
- Resources for ongoing education and updates
  - CDC's Project Firstline

# Resources and Educational Campaigns related to PPE

- Quality Insights
  - <https://www.qualityinsights.org/qin/resources>
- Project Firstline
  - <https://www.cdc.gov/infectioncontrol/projectfirstline/resources/PPE-WorkDay.html>
- Centers for Disease Control and Prevention (CDC)
  - <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>
- Occupational Safety and Health Administration (OSHA)
  - <https://www.osha.gov/respiratory-protection>

# Questions?

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# References

- [McCarthy, R., Gino, B., d'Entremont, P., Barari, A., & Renouf, T. S. \(2020\). The Importance of Personal Protective Equipment Design and Donning and Doffing Technique in Mitigating Infectious Disease Spread: A Technical Report. Cureus, 12\(12\), e12084. https://doi.org/10.7759/cureus.12084](https://doi.org/10.7759/cureus.12084)
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- <https://www.cdc.gov/infectioncontrol/basics/standard-precautions.html>
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- <https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>
- <https://www.cdc.gov/infectioncontrol/oai-hcp.html>
- <https://www.cdc.gov/infectioncontrol/pdf/strive/ppe103-508.pdf>

# Thank You for Joining Us!

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