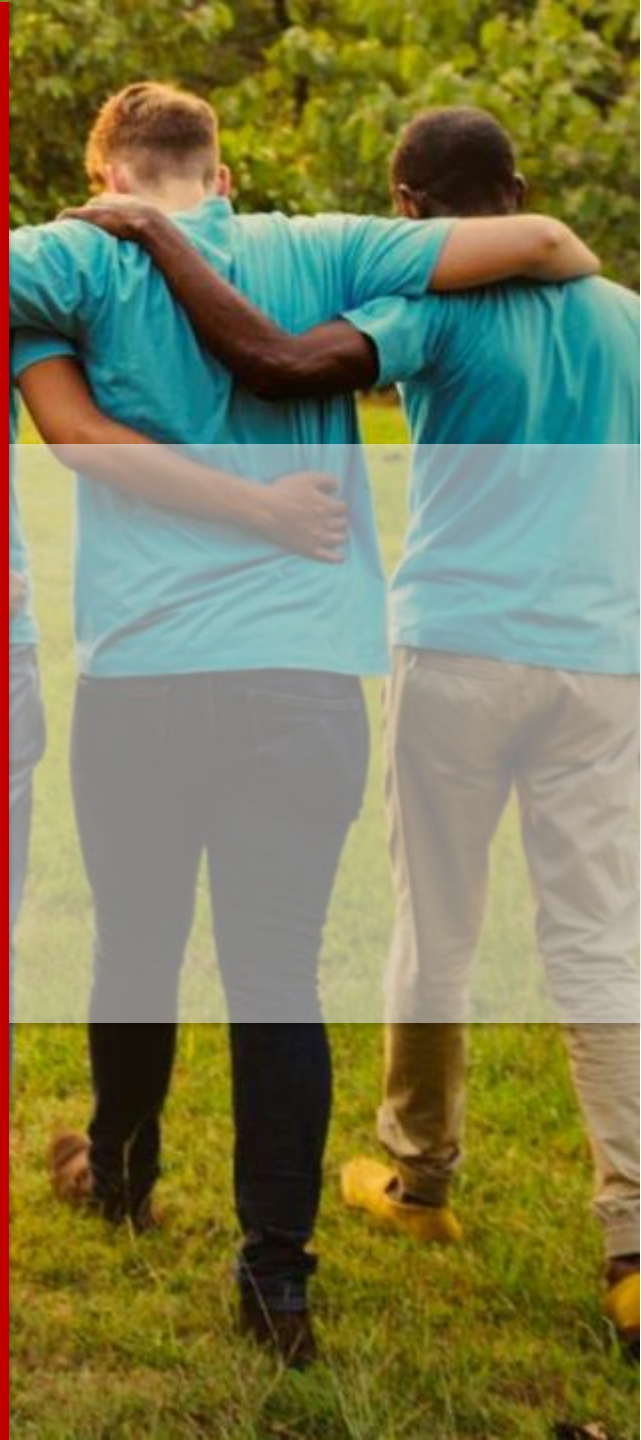
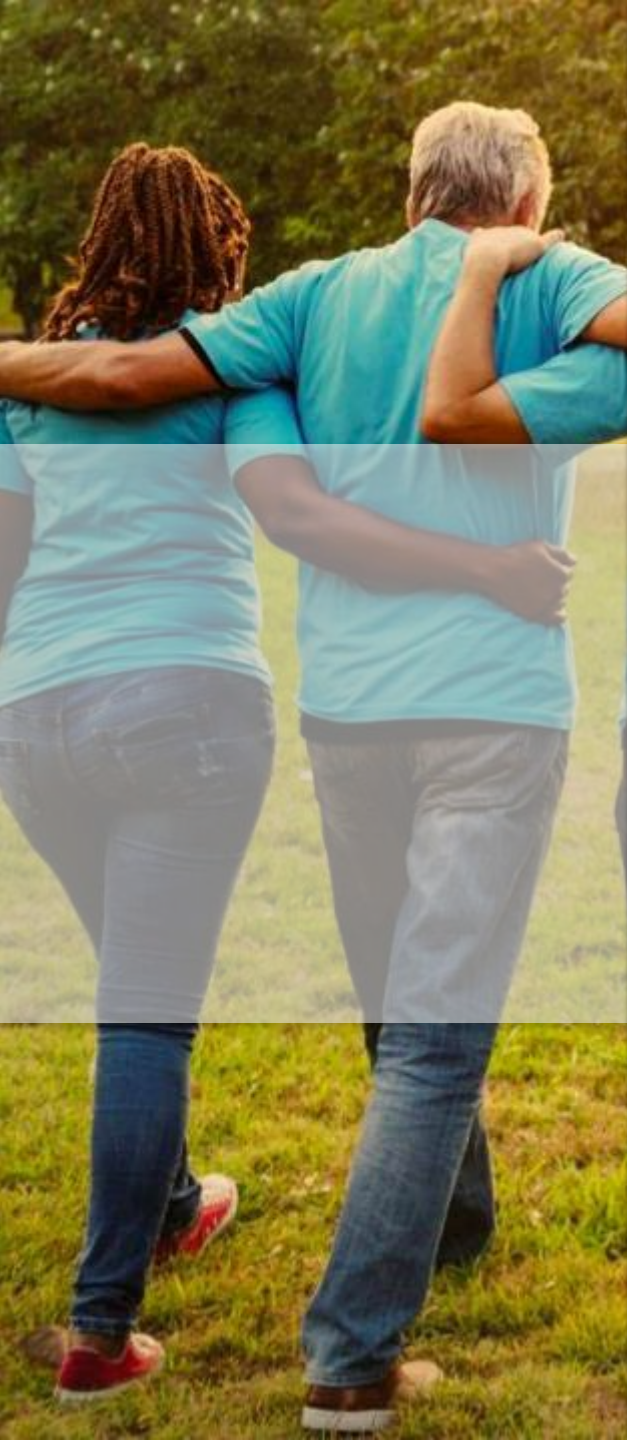




Georgia Department of Public Health

Strike & Support Team: Nursing Home Respiratory Protection Program Training

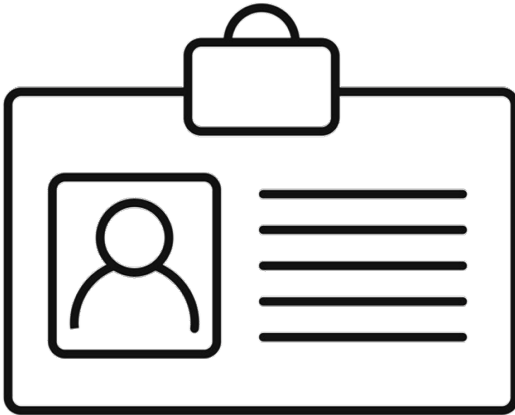
October 12, 2023



Welcome and Introductions



Meet the Team



Presenter:

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Infection Prevention Technical Advisor

Paula is a doctoral student with a diverse background in public health, infection prevention, epidemiology and microbiology. She has always enjoyed public health and identifying ways to improve health outcomes, specifically those related to healthcare-associated infections.

Paula enjoys spending time with her friends and family.

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Thank You to Our Partners

- Georgia Department of Public Health
- University of Georgia

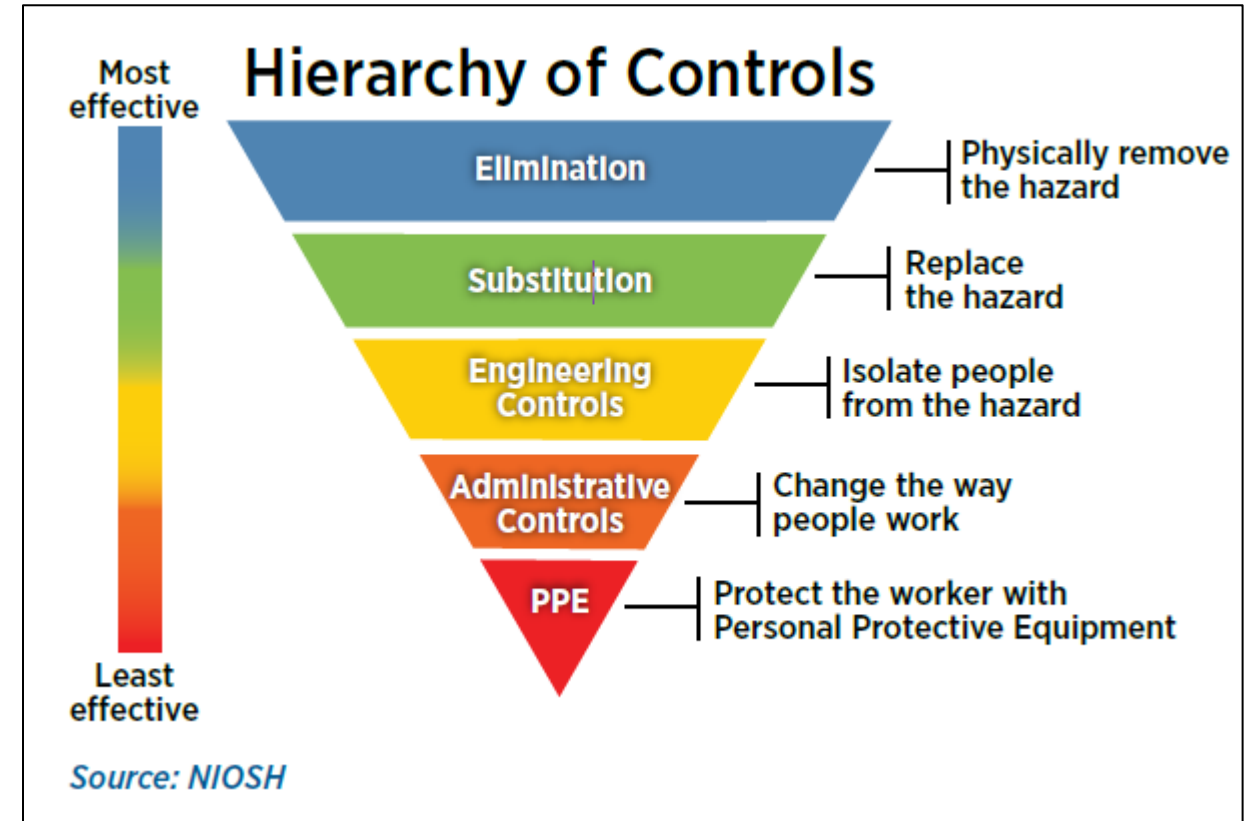


Objectives

- Understand why a respiratory protection program is necessary in the post-acute care setting
- Discuss the required elements of a respiratory protection program
- Describe key elements of a respiratory protection program

Hierarchy of Controls

- Eliminate or control hazard/all serious hazards.
- Use interim controls while you develop and implement long-term solutions.
- Select controls according to a hierarchy that emphasizes engineering solutions first, followed by those that are less effective.
- Avoid controls that could indirectly introduce new hazards, such as exhausting contaminated air near fresh air intakes.



Types of Respiratory Protection

- There are two main types of respiratory protection:
 - 1) Air-purifying respirators (APRs)
 - 2) Atmosphere-supplying respirators (ASRs)
- Each respirator type provides a different level of protection based on its design

[https://www.cdc.gov/niosh/nppt/topics/respirators/disp_part/respsourceTypes.html#:~:text=Air%2Dpurifying%20respirators%20\(APRs\),-APRs%20use%20filters&text=FFRs%20are%20disposable%20respirators%20that%20cover%20the%20nose%20and%20mouth.&text=EHMRs%20are%20reusable%20respirators%20and%20cover%20the%20nose%20and%20mouth.&text=Elastomeric%20full%20facepiece%20respirators%20are,nose%2C%20mouth%2C%20and%20eyes.](https://www.cdc.gov/niosh/nppt/topics/respirators/disp_part/respsourceTypes.html#:~:text=Air%2Dpurifying%20respirators%20(APRs),-APRs%20use%20filters&text=FFRs%20are%20disposable%20respirators%20that%20cover%20the%20nose%20and%20mouth.&text=EHMRs%20are%20reusable%20respirators%20and%20cover%20the%20nose%20and%20mouth.&text=Elastomeric%20full%20facepiece%20respirators%20are,nose%2C%20mouth%2C%20and%20eyes.)

Air-Purifying Respirators (APRs)

Filtering facepiece respirator (FFR)



Photo courtesy of Shutterstock

FFRs are disposable respirators that cover the nose and mouth.

Elastomeric half mask respirator (EHMR)



Photo courtesy of Shutterstock

EHMRs are reusable respirators and cover the nose and mouth.

Elastomeric full facepiece respirator



Photo courtesy of Shutterstock

Elastomeric full facepiece respirators are reusable and cover the nose, mouth, and eyes.

Powered air-purifying respirator (PAPR)



Photo courtesy of MaxAir

PAPRs are reusable and often have a hood or helmet that covers the nose, mouth, and eyes. A battery-powered blower pulls air through filters or cartridges.

- APRs use filters, cartridges, or canisters to remove gases, vapors, aerosols or a combination of contaminants from the air. Tight-fitting APRs require fit testing prior to use.

Atmosphere-Supplying Respirators (ASRs)

Supplied-air respirator (SAR)



Photo courtesy of Honeywell International Inc.

SARs are connected to a separate source that supplies breathing air via a hose. This source is located outside of the work area.

Self-contained breathing apparatus (SCBA)



Photo courtesy of 3M Scott

SCBAs have their own breathing air supply that the user carries. This makes these devices portable. SCBAs are either open circuit or closed circuit.

Combination supplied-air/self-contained breathing apparatus



Photo courtesy of Survivair

This combination unit has a small self-contained air supply. The SCBA provides air if the airline supply fails.

- ASRs provide clean breathing air from a separate source. These respirators protect workers from many types of airborne contaminants (particles, gases, and vapors) and, in certain cases, oxygen-deficient atmospheres. Tight-fitting ASRs require fit testing prior to use.

NIOSH-Approved Particulate Filtering Respirators Classification

Filter Class	Description
N95, N99, N100	Filters at least 95%, 99%, 99.97% of airborne particles. Not resistant to oil.
R95, R99, R100	Filters at least 95%, 99%, 99.97% of airborne particles. Somewhat resistant to oil.
P95, P99, P100	Filters at least 95%, 99%, 99.97% of airborne particles. Strongly resistant to oil.
HE (High Efficiency Particulate Air)	Filters at least 99.97% of airborne particles. For use on PAPRs only. PAPRs use only HE filters.

[https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/respsourceTypes.html#:~:text=Air%2Dpurifying%20respirators%20\(APRs\),-APRs%20use%20filters&text=FFRs%20are%20disposable%20respirators%20that%20cover%20the%20nose%20and%20mouth.&text=EHMRs%20are%20reusable%20respirators%20and%20cover%20the%20nose%20and%20mouth.&text=Elas tomeric%20full%20facepiece%20respirators%20are,nose%2C%20mouth%2C%20and%20eyes.](https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/respsourceTypes.html#:~:text=Air%2Dpurifying%20respirators%20(APRs),-APRs%20use%20filters&text=FFRs%20are%20disposable%20respirators%20that%20cover%20the%20nose%20and%20mouth.&text=EHMRs%20are%20reusable%20respirators%20and%20cover%20the%20nose%20and%20mouth.&text=Elas tomeric%20full%20facepiece%20respirators%20are,nose%2C%20mouth%2C%20and%20eyes.)

Searching for NIOSH-Approved Respirators

- The Certified Equipment List (CEL) is the official list of all NIOSH-approved respirators.
- Alternatively, NIOSH keeps a list of the NIOSH-approved air-purifying respirators organized by filter series type.



Respiratory Protection Program

- OSHA standard to protect workers who are required to wear respirators during the course of their work
- Development of a respiratory protection program (RPP)
 - Assign responsibility
 - Perform and document hazard evaluation
 - Develop policies and procedures

Required Elements in the RPP

- Assign a program administrator who is suitably trained to oversee all elements of the program
- Implement and maintain a written RPP detailing procedures and elements for respirator use, such as medical evaluation, fit testing, training and maintenance
- Complete a risk assessment to identify who is at risk – clinical staff, cleaning or maintenance staff, contract staff, etc.
- Complete a risk assessment to identify what airborne hazards may be present (SARS CoV-2, TB, Legionella, chemical agents, etc.)
- Implement procedures for the selection of the appropriate respirator for the hazard
- Select from NIOSH-approved respirators
- Understand and consider alternatives if the supply chain becomes interrupted
- Eye and face protection considerations when respirators are in use
- Medical evaluation procedures
- OSHA-approved fit testing procedures

RPP Outline

- Table of Contents
 - Purpose and applicability
 - Responsibilities
 - Program administrator
 - Supervisors
 - Employees in the program
 - Respirator selection
 - Hazard assessment
 - NIOSH Certified Equipment
 - Assignment of respirators by task and location
 - Updating the hazard assessment
 - Voluntary use of respirators
 - Medical evaluation
 - Fit Testing
 - Training
 - Respirator use
 - Storage, Reuse, Maintenance and Care of Respirators
 - Storage and Reuse
 - Inspection, maintenance and repairs
 - Cleaning and disinfection
 - Program evaluation
 - Recordkeeping

 - Appendices:
 - Respirator assignments by task or location
 - Information for voluntary users
 - Medical clearance questionnaires
 - Fit testing protocols
 - User seal check procedures
 - Respirator cleaning procedures

1. Purpose and Applicability

- Purpose of the policy - to provide maximum protection afforded by respirators when they must be used and establish procedures necessary to meet regulatory requirements set forth by OSHA.
- Applicability of program - who does it apply to, and who is required to wear respiratory protection throughout their work?
- Describe how the facility will handle respiratory protection for health care workers who are contractors or non-employees.

2. Responsibilities

- a. Respiratory Program Administrator (RPA)
 - Should be listed as individual job title, name or both
 - Discusses the designated RPA has completed training and is knowledgeable about the requirements of the OSHA respiratory protection standard and all elements necessary for RPP implementation
 - The facility's administration is fully responsible for all aspects of the program and has given full authority to the RPA to make necessary decisions for the program's success
 - Authority includes conducting risk assessments, selection of appropriate respiratory protection, purchasing necessary equipment and supplies, and development and implementation of policy and procedures described in RPP

2. Responsibilities

- a. RPA will:
 - Conduct hazard risk assessment and select the appropriate level of respiratory protection for each task or job title with potential exposure and record in the "respirator assignments by task or location" in Appendix A of the RPP
 - Develop and monitor respirator maintenance procedures
 - Coordinate the purchase, maintenance and repair or replacement of respirators
 - Evaluate the effectiveness of the RPP routinely, including employee input and change as needed
 - Provide and arrange for annual training on the use and limitations of respirators
 - Ensure medical evaluations are provided
 - Ensure that annual fit testing is provided
 - Maintain records of training, medical evaluation and fit testing as required
 - Maintain a copy of the RPP and program evaluations and ensure they are available to anyone in the program

2. b. Supervisors

- b. Employee supervisors will:
 - Participate in hazard assessment
 - Identify employees or tasks when respirators may be required and communicate this to the RPA
 - Be responsible for ensuring that staff in their units follow the procedures outlined in the RPP, including:
 - Scheduling employees for medical evaluation
 - Scheduling employees for annual training
 - Scheduling employees for annual fit testing
 - Ensuring that they are allowed to attend these appointments during work hours

2.c. Employees in the Program

- c. Employees who are included in the program because of their jobs/tasks requiring a respirator will:
 - Complete the required medical questionnaire for clearance and participate in the medical examination if necessary
 - Adhere to facility policies on facial hair and respirator seal
 - Attend annual training and respirator fit testing as required in the RPP
 - Use, maintain and dispose of respirators properly in accordance with training and procedures in the RPP

Respirator Selection

- Hazard Assessment
- Purpose is to identify and evaluate potential exposures in the workplace that may require the use of respiratory protection
- Must be completed for all respiratory hazards, including chemical exposures and infectious agents

Respirator Selection

- **Hazard Assessment**
- Considerations may include:
 - Who in the facility might come in contact with patients who may have aerosol-transmissible diseases (ATD), such as Tuberculosis

Respiratory Protection

Hazard Assessment

- Who will greet and triage patients?
- Who will provide care for ATD patients?
- Who will perform aerosol-generating procedures on patients with ATDs, cadavers or in the lab?
- Who will clean the ATD patient rooms?
- Any contractors or temporary workers in the facility who may be exposed?
- Any housekeeping or maintenance personnel who may be exposed to chemicals used in cleaning, repairs of facility?
- Any lab personnel who will need respiratory protection?

Medical Evaluation

- The OSHA Respiratory Protection standard (29 CFR 1910.134) requires that employees be medically evaluated and cleared for respirator use prior to wearing a respirator or being fit tested.
- The employer must provide medical evaluations during work time and at no cost to the employee.

Medical Evaluation

- The employer must provide re-evaluation when recommended by a physician or other licensed health care professional. Examples when re-evaluation may be warranted include:
 - When the employee reports a change in signs or symptoms (i.e., asthma, difficulty breathing) that may affect the ability to use the respirator
 - When the employer becomes aware of a change in employee health status or job role status that may impact respirator use
- Employer may also choose to provide medical re-evaluations on a predetermined basis, such as annually

Medical Evaluation

- Employers must provide the HCP evaluating the employees with the following:
 - Description of the type and weight of respirator to be used
 - Duration and frequency of use
 - Expected physical work effort
 - Additional protective clothing and equipment to be worn
 - Temperature and humidity extremes that may be encountered

Fit Testing

- Assesses the fit of a specific respirator model and size to the face of the user.
- OSHA requires employers to make available enough models and sizes of respirators to employees for use when needed.
- Employees must only use the specific make/model/style and size of respirator for which they are fitted for.

Fit Testing

- All employees required to wear tight-fitting respirators must be fit tested after receiving medical clearance, prior to respirator use and annually after
- An OSHA-accepted fit test protocol must be followed by the employer, as written in the standard
- Fit testing must only be performed by an individual knowledgeable in respiratory protection and qualified to follow established protocols
 - Must be able to train the employees on how to properly put on and take off the respirator

Fit Testing

Record Keeping

- Records of fit tests and medical evaluations must be kept on file until the next annual test is performed. Records must also be made available to OSHA upon request.
- Respiratory Protection Standard required the following information be kept in fit test record:
 - Name or employee ID of employee that was fit tested
 - Type of fit test performed
 - Specific make, model, style and size of respirator tested
 - Date of test
 - Result of test (pass or fail)

Training

- All employees must be trained on:
 - Facility's policy regarding which situations warrant respirator use
 - Identifying how patient's signs, symptoms and potential diagnoses affect decisions on respirator use and selection
 - Patient with a combination of symptoms such as fever, fatigue, night sweats, and unexplained weight loss could be associated with Tuberculosis
 - When certain diagnostic tests are ordered
 - When aerosol-generating procedures are ordered or performed

OSHA Respirator Fit Testing (Video)

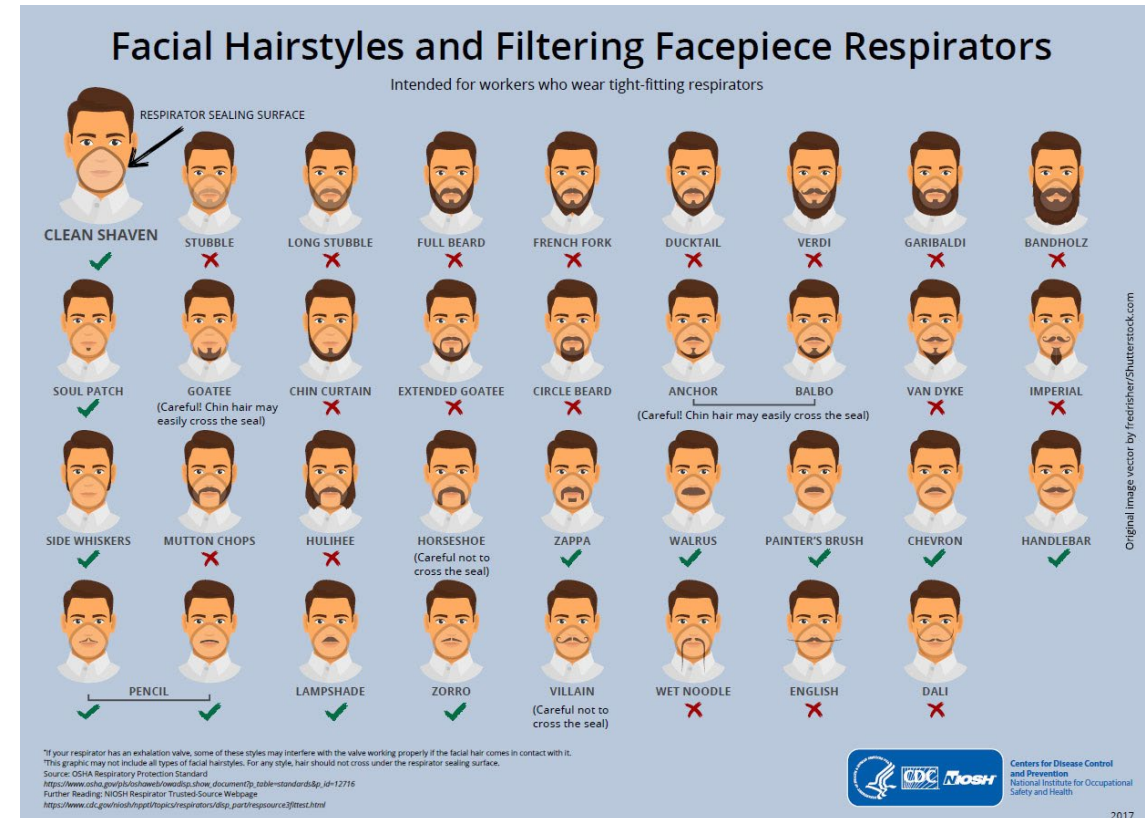


Respirator Use

- A well-written RPP should include:
 - A description of the facility's policies on the use of respirators.
 - Proper procedures for inspecting, putting on (donning) respirators and training users to perform a seal check with donning a tight-fitting respirator.
 - Proper procedures for taking off (doffing) the respiratory and explain the sequence of removal of respirator with other PPE to avoid cross-contamination and proper disposal of respirators if applicable.
 - Employees should be trained to recognize when the respirator is not working correctly.

Respirator Use

- Respirators that require tight facepiece to face seal must not be worn when conditions prevent a good seal, such as:
 - Beard, long mustache, sideburns, scars, facial deformities, piercings
- When respirators with cartridges are used, ensure the cartridges are changed on schedule



Respirator Use

- Employees must leave respirator use area:
 - To make any adjustments to the respirator if it is affecting the ability to work or not fitting correctly
 - To wash their face if the respirator is causing discomfort or a rash
 - To change the respirator, filters, cartridges or canister elements
 - To inspect the respirator if it stops functioning as intended

Respirator Storage and Reuse

- Reusable respirators will be stored in a manner to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals.

Respirator Storage and Reuse

- When caring for infectious patients, the disposable filtering facepiece respirators will be discarded after each use.
 - TB is not transmitted via contact; therefore, reuse by the same wearer in the care of the same patient is acceptable if the filtering facepiece respirator is not damaged or soiled. Store in a designated area labeled with the user's name.

Respirator Storage and Reuse

- Powered air-purifying respirators (PAPR) should be cleaned and stored after use.
 - Individuals who are unable to wear a respirator with a tight-fitting facepiece may be provided with a PAPR instead.

Maintenance and Care of Respirators

- Respirators should be inspected by the user prior to each use. Check should include:
 - Condition of various parts (cartridges, canisters, filters, straps, valves, etc.)
 - Inspect all rubber parts for signs of wear and tear
 - Inspect tubes and hoses, check air flows and batteries
- Remove any defective respirators from service and replace

Maintenance and Care of Respirators

- A designated person should be responsible for:
 - Charging and maintaining the PAPR pumps, filters and batteries when they are stored or not in use
 - Maintaining respirators designated for emergency use
 - Must be accessible to the area where they will be used
 - Store in a manner as to be clearly identifiable for emergency use
 - Inspect at least monthly while also keeping up with manufacturer instructions for use
 - Check for proper function before use
 - Document dates of inspection and any remedial actions taken

Maintenance and Care of Respirators

- Reusable respirators should be cleaned according to manufacturer instructions for use. This could include:
 - Cleaning with mild soap and warm water and air drying
 - Store in a clean bag and area for reuse
- Reusable respirators used in fit testing and training should be cleaned and disinfected after each use

Program Evaluation

- The facility should conduct a periodic evaluation to ensure all aspects of the RPP meet OSHA Respiratory Protection standards.
- Ensure RPP is effectively protecting employees from respiratory hazards.
- Evaluation shall be done at a frequency determined by entity policies.

UGA Respiratory Resource Box



- Kit includes: hood, collar, 2 nebulizers, bitter-tasting sensitivity solution, bitter-tasting fit test solution and laminated user instructions

Infection Control Actions to Take During Respiratory Virus Season

- Check that the air handling in your facility is functioning as it should
- Consider broad source control in healthcare facilities during respiratory virus season
- Use data for local decisions
- Help everyone practice respiratory hygiene and cough etiquette
- Promote hand hygiene with everyone in the facility
- Practice regular environmental cleaning

References

- DHHS NIOSH Publication 2015-1117 Hospital respiratory protection toolkit
- OSHA Respiratory Protection Guidance for the employers of those working in nursing homes, assisted living, and other long-term care facilities during the COVID-19 Pandemic
- [Coronavirus Disease \(COVID-19\) | Occupational Safety and Health Administration \(osha.gov\)](#)

Questions?



Alliant Health Solutions Resources

GA STRIKE & SUPPORT TEAM

Join us for the Georgia Department of Public Health Strike (& Support) Team Office Hours. These sessions will consist of a regularly scheduled monthly webinar for skilled nursing facilities (SNFs) as well as SNF medical directors. Office hours are your opportunity to come and learn, share, vent and more!

Each month we will have updates on infection prevention, clinical protocols and ideas for new tools and resources. This is your chance is to access subject matter experts on infection control and clinical practice in long term care.

Come prepared to pose your questions to subject matter experts and learn from your peers about their best practices and their barriers.

Strike & Support Team Office Hours

Office Hours for SNF and MD's:

- [Click here](#) to register – November 18, 2022 at 11 a.m. ET
- [Click here](#) to register – December 16, 2022 at 11 a.m. ET

Office Hours for Non-SNF:

- [Click here](#) to register – November 18, 2022 at 1 p.m. ET
- [Click here](#) to register – December 16, 2022 at 1 p.m. ET

Bite Sized Learning:

<https://quality.allianthealth.org/topic/georgia-department-of-public-health/>

Infection Control Resources

Sepsis

- [HQIC Sepsis Gap Assessment and Action Steps](#)
- [HQIC Sepsis: Spot the Signs Magnet](#)
- [HQIC Sepsis Provider Engagement](#)
- [AQ Sepsis-ZoneTool](#)
- [Recognition and Management of Severe Sepsis and Septic Shock](#)

Catheter Associated Urinary Tract Infection (CAUTI)

- [CAUTI Gap Assessment Tool](#)
- [Urinary Catheter Quick Observation Tool](#)
- [CDC-HICPAC Guideline for Prevention of CAUTI 2009](#)
- [AHRQ Toolkit for Reducing CAUTI in Hospitals](#)
- [CDC TAP CAUTI Implementation Guide](#)

Hand Hygiene

- [Handwash the FROG Way – Badges – English](#)
- [Handwash the FROG Way – Badges – Spanish](#)
- [Handwash the FROG Way – Poster – English](#)
- [Handwash the FROG Way – Poster – Spanish](#)
- [Frequently Asked Questions – Alcohol Based Hand Rub](#)

NHSN

- [Joining the Alliant Health Solutions NHSN Group](#)
- [Instructions for Submitting C. difficile Data Into NHSN](#)
- [5-Step Enrollment for Long-term Care Facilities](#)
- [CDC's National Healthcare Safety Network \(NHSN\)](#)
- [NHSN Enrollment/ LAN Event Presentation](#)

Clostridioides Difficile Infection (C. difficile)

- [C.difficile Training](#)
- [Nursing Home Training Sessions Introduction](#)
- [Nursing Home C.difficile Infection](#)

Antibiotic Stewardship

- [Antibiotic Stewardship Basics](#)
- [A Field Guide to Antibiotic Stewardship In Outpatient Settings](#)
- [Physician Commitment Letter](#)
- [Be Antibiotics Aware](#)
- [Taking Your Antibiotics](#)

Training

- [Op'lions for Infection Control Training In Nursing Homes Flyer](#)

COVID-19

- [Invest In Trust \(AHRQ Resource for CNA COVID-19 Vaccines\)](#)
- [Nursing Home Staff and Visitor Screening Toolkit – PDF](#)
- [Nursing Home Staff and Visitor Screening Toolkit – Excel](#)

<https://quality.allianthealth.org/topic/infection-control/>

Thank You for Your Time!
Contact the AHS Patient Safety Team
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Thank you!
Consult with the DPH Team! We are here to help!

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Atlanta Metro (Cobb-Douglas, Fulton, Clayton, Lawrenceville, DeKalb, LaGrange) Districts 3-1, 3-2, 3-3, 3-4, 3-5, 4	<u>Teresa.Fox@dph.ga.gov</u> (256-293-9994) <u>Renee.Miller@dph.ga.gov</u> (678-357-4797)
Central (Dublin, Macon, Augusta, & Columbus) Districts 5-1, 5-2, 6, 7	<u>Theresa.Metro-Lewis@dph.ga.gov</u> (404-967-0589) <u>Karen.Williams13@dph.ga.gov</u> (404-596-1732)
Southwest (Albany, Valdosta) Districts 8-1, 8-2	<u>Connie.Stanfill1@dph.ga.gov</u> (404-596-1940)
Southeast (Savannah, Waycross) Districts 9-1, 9-2	<u>Lynn.Reynolds@dph.ga.gov</u> (804-514-8756)
Backup/Nights/Weekends	<u>Joanna.Wagner@dph.ga.gov</u> (404-430-6316)

Save the Date

SNF and Medical Directors Office Hours:

October 20, 2023 | 11 a.m. ET

ALF and PCH

October 27, 2023 | 11 a.m. ET



Thanks Again...

- Georgia Department of Public Health
- University of Georgia



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