



COVID-19 and HAI Updates and Q&A Webinars for Long-Term Care and Congregate Residential Settings

August 18th, 2023

Housekeeping

- All attendees in listen-only mode
- Submit questions via Q&A pod to **All Panelists**
- Slides and recording will be made available later
- For continuing education credit, complete evaluation survey upon end of webinar
 - Must be registered individually to receive credit

Agenda

- Upcoming Webinars
- AMS Summit Recordings
- Telligen Update
- Enhancing Respiratory Health in Nursing Homes Real World Approaches
- Open Q & A

Upcoming Infection Prevention and Control Q&A

1:00 pm - 2:00 pm

Date	Infection Control Topic	Registration Link
Friday, August 18 th	Respiratory Protection	https://illinois.webex.com/weblink/register/r0f40c1aff7aad66e31b0c07bb567b898
Friday, September 15 th	Response to an Outbreak of Respiratory Disease	TBA



2023 Illinois Summit on Antimicrobial Stewardship

- Recordings available on [YouTube](#)
 - Infection Control videos also available!
- 2022 and 2023 Summit available on [Hektoen Website](#)



Telligen's Staff Infection Prevention and Control Training

Confirm your staff completion of infection prevention and control training with attestation of these 4 simple questions:

1. Are your frontline clinical staff and management staff trained in infection prevention and control annually?
2. To date, what percentage of staff have completed the infection control training in the past year?
3. What topics are included in your training?
4. Would you be willing to share a list confirming staff completion of the trainings, if requested?

Click here to complete the attestation

INFECTION PREVENTION AND CONTROL TRAINING ATTESTATION

Thank you for completing the Infection Prevention and Control Training Attestation. Please enter your CCN and select "Continue" in order to proceed to the questions.

CMS Certification Number (CCN) [6 characters]: *

Don't know your CCN? [Look it up](#)



Telligen QI Connect™

Partnering to improve health outcomes through relationships and data





Telligen QI Connect™

Partnering to improve health outcomes through relationships and data

Introducing Telligen's Best In Class Program

THE BLUE RIBBON IN COVID-19 VIGILANCE AND THE BEST IN CLASS DISTINCTION ARE AWARDED TO TOP PERFORMING NURSING HOMES WHO ACHIEVE THE FOLLOWING:

		
Complete the COVID-19 Preparedness Assessment	✓	✓
Resident up-to-date vaccination rate is greater than or equal to 80%	✓	✓
Staff up-to-date vaccination rate of at least 25%	✓	✓
Receive the Blue Ribbon in COVID-19 Vigilance for three quarters of 2023		✓
Complete Telligen's Emergency Preparedness Assessment		✓
At least 75% of staff have completed infection prevention and control training		✓
Reduce the number of preventable Emergency Department visits by 5% or fall within the top 25% of Telligen's enrolled nursing homes at time of award		✓





B

BLUE RIBBON RECIPIENT

In 2023, nursing homes must be Blue Ribbon recipients for three quarters. The first eligible quarter is January 1 – March 31, 2023. Recognitions are awarded the following month.

COVID-19 PREPAREDNESS ASSESSMENT



E

EMERGENCY PREPAREDNESS ASSESSMENT

Complete the [15-minute Emergency Preparedness Assessment](#) to ensure readiness and identify possible gaps in the current plan. If any areas need addressing, resources and support are available. Additional documentation may also be needed. The criterion is met with either a completed assessment or, if needed, approved supplemental documentation.



S

SAFE STAFF

Attain a 75% staff completion rate of the Infection Control and Prevention training. In September of 2023, Telligen grants secured access to current completion rates. If it is less than 75% at that time, a mutual date to reach the goal is established.

INFECTION PREVENTION AND CONTROL TRAINING ATTESTATION



T TRANSITIONS

Improve transitions and reduce Emergency Department (ED) visits by 5% from baseline (10/1/21-9/30/22) or fall within the top 25th percentile of Telligen's enrolled nursing homes at time of award.

NURSING HOME UNPLANNED TRANSFER ASSESSMENT



Enhancing Respiratory Health in Nursing Homes Real World Approaches

Deb Patterson Burdsall

The author has no conflicts of interest to declare

August 18, 2023

Learning Objectives

- Identify components of a respiratory protection and facility ventilation program
- Compare and contrast the facility / care community's present respiratory protection program and ventilation with current best practices
- Construct an interdisciplinary team (IDT) to address respiratory protection and ventilation

Enhancing Respiratory Health: The *WHY*

- Multiple respiratory viruses cause disease in humans
- Congregate settings increase the risk of transmission
- Person-centered, least restrictive environment encourages personal interaction (not a bad thing in a biopsychosocial model of care) which can increase spread if viral pathogens are present (need for balancing risk and benefit)
- Nursing home ventilation codes require only 2 air exchanges per hour for resident rooms, 6 air exchanges per hour for physical therapy gyms, and 10 air exchanges per hour for toilet rooms per CDC recommendations (more about this in a bit)

<https://www.cdc.gov/infectioncontrol/projectfirstline/healthcare/respiratory-virus-prevention.html>

<https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb3>

Enhancing Respiratory Health: The *WHY*

- Personal Protective Equipment, including fit tested respirators and source control, **are** evidence-based approaches when properly utilized
- **Yes**, improving ventilation and filtration of air (along with other core principles such as source control, PPE, vaccination, environmental cleaning/disinfection, and hand hygiene) **DO** decrease the risk of transmission of respiratory viruses.

<https://www.cdc.gov/infectioncontrol/projectfirstline/healthcare/respiratory-virus-prevention.html>

Respiratory Illnesses Have Not Gone Away

The Washington Post
Democracy Dies in Darkness

Health Health Care Medical Mysteries Science Well+Being

What to know about EG.5, the most prevalent covid subvariant in the U.S.

By Grace Moon, Niha Masih, Adela Suliman and Fenit Nirappil
Updated August 9, 2023 at 11:55 a.m. EDT | Published August 8, 2023 at 9:24 a.m. EDT



On Oxford Street in London on April 1, 2022. (Dan Kitwood/Getty Images)

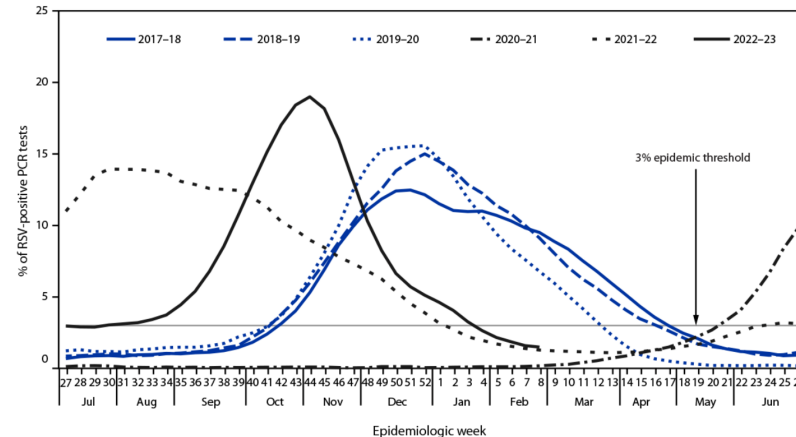
Listen 8 min Share Comment Save

The coronavirus has not disappeared. With the advent of successful vaccinations and better social management, however, it has waned.

Globally, over 1 million new covid-19 cases and more than 3,100 deaths were reported in the 28 days up to Aug. 3, according to the latest World Health Organization report—bringing the death toll to almost 7 million since the pandemic began.

<https://www.washingtonpost.com/health/2023/08/08/eris-covid-variant-eg-5-omicron/>

FIGURE 1. Percentage* of polymerase chain reaction test results positive for respiratory syncytial virus, by epidemiologic week — National Respiratory and Enteric Virus Surveillance System, United States, July 2017–February 2023

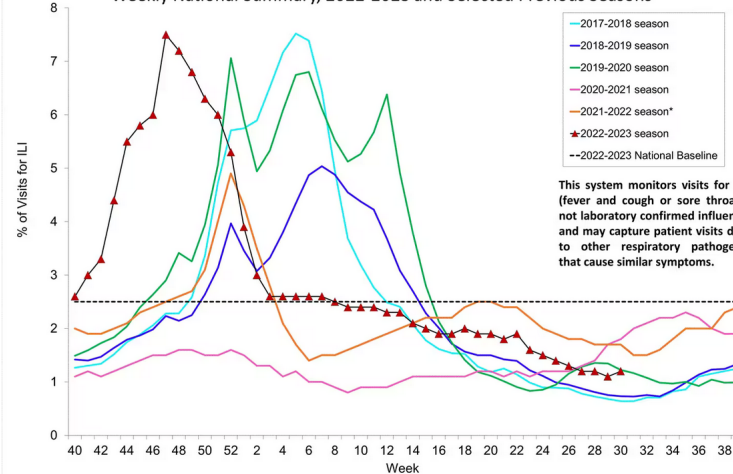


RSV

https://www.cdc.gov/mmwr/volumes/72/wr/mm7214a1.htm#F1_down

Abbreviations: PCR = polymerase chain reaction; RSV = respiratory syncytial virus.

Percentage of Outpatient Visits for Respiratory Illness Reported By The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2022-2023 and Selected Previous Seasons



This system monitors visits for ILI (fever and cough or sore throat), not laboratory confirmed influenza and may capture patient visits due to other respiratory pathogens that cause similar symptoms.

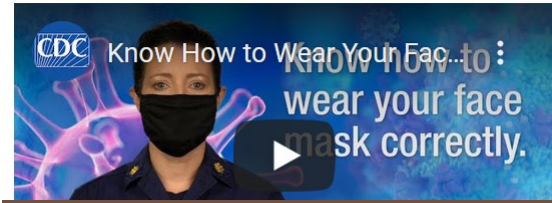
Influenza Like Illness

<https://www.cdc.gov/flu/weekly/index.htm#ILIMap>

* Effective October 3, 2021 (week 40), the ILI definition (fever plus cough or sore throat) no longer includes "without a known cause other than influenza."



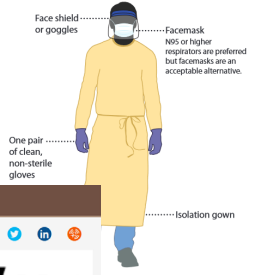
General Vaccine Administration



The National Personal Protective Technology Laboratory (NPPTL)

NIOSH-Approved Particulate Filtering Facepiece Respirators

Acceptable Alternative PPE – Use Facemask



NIOSH-approved N95 Particulate Filtering Facepiece Respirators

Updated July 22, 2021



cdc.gov/COVID19

Source Control / PPE



Detection, Isolation

Screening and Surveillance



Hand Hygiene

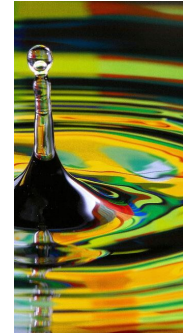


Surface Cleaning / Disinfecting



Image: Harper College

Ventilation/Air Filtration/Water Management



Core Infection Prevention Practices

For Respiratory Fit Test Programs



Establishing a Respiratory Protection Program

Mary Alice Lavin

June 24, 2022

<https://illinois.webex.com/illinois/lsr.php?RCID=ac5677db76b69b5b329ce2de7d6b713a>

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



OSHA is committed to protecting the health and safety of America's workers. This guidance is designed specifically for nursing homes, assisted living, and other long-term care facilities (LTCFs) (e.g., skilled nursing facilities, inpatient hospice, convalescent homes, and group homes with nursing care). LTCFs are different than other healthcare settings because they assist residents and clients with tasks of daily living in addition to providing skilled nursing care.

While this guidance focuses on protecting workers from occupational exposure to SARS-CoV-2 (the virus that causes COVID-19 disease) by the use of respirators, primary reliance on engineering and administrative controls for controlling exposure is consistent with good industrial hygiene practice and with OSHA's traditional adherence to a "hierarchy of controls."¹ Under this hierarchy, engineering and administrative controls are preferred to personal protective equipment (PPE). Therefore, employers should always reassess their engineering controls (e.g., ventilation) and administrative controls (e.g., [hand hygiene](#), physical distancing, cleaning/disinfection of surfaces) to identify any changes they can make to avoid over-reliance on respirators and other PPE (see CDC's COVID-19 webpage on [Nursing Homes and Long-Term Care Facilities](#)). This is especially vital considering the current supply chain demand for N95 filtering facepiece

¹ More information about the hierarchy of controls can be found at: <https://www.osha.gov/shpguidelines/hazard-prevention.html>.

Occupational Safety and Health Administration (OSHA) Applies to All

https://www.osha.gov/bloodborne-pathogens/resources

UNITED STATES DEPARTMENT OF LABOR

Occupational Safety and Health Administration

CONTACT US FAQ A TO Z INDEX ENGLISH ESPAÑOL

OSHA STANDARDS ENFORCEMENT TOPICS HELP AND RESOURCES NEWS

Safety and Health Topics / Bloodborne Pathogens and Needlestick Prevention

Bloodborne Pathogens and Needlestick Prevention

Additional Resources

Related Safety and Health Topics

- Dentistry
- Healthcare

Training Requirements

<https://www.osha.gov/bloodborne-pathogens/resources>

<https://www.osha.gov/sites/default/files/respiratory-protection-covid19-long-term-care.pdf>

Respiratory Protection Program Administrator

The program administrator:

- Must be designated
- Has knowledge and training relevant to the risks
- Develops the written respiratory protection program
- Is responsible for implementation of the program, evaluating the effectiveness, and maintaining the program
- Can delegate components of the program to others
- The Infection Preventionist !

The *OSHA Small Entity Compliance Guide for the Respiratory Protection Standard* was created to assist the program administrator establish and implement the respiratory protection program.

Slide: Mary Alice Lavin

<https://www.osha.gov/Publications/3384small-entity-for-respiratory-protection-standard-rev.pdf>

Evaluating the Effectiveness of the Program

- Both proper implementation of the respiratory protection program and use of the respirator must be evaluated.
- Employees must be included in the evaluation.
- Gaps or problems in implementation must be corrected and may require retraining.
- Role of the IP and the Infection Prevention and Control Team.

The *OSHA Small Entity Compliance Guide for the Respiratory Protection Standard* contains questions you may want to ask employees as part of the program evaluation.

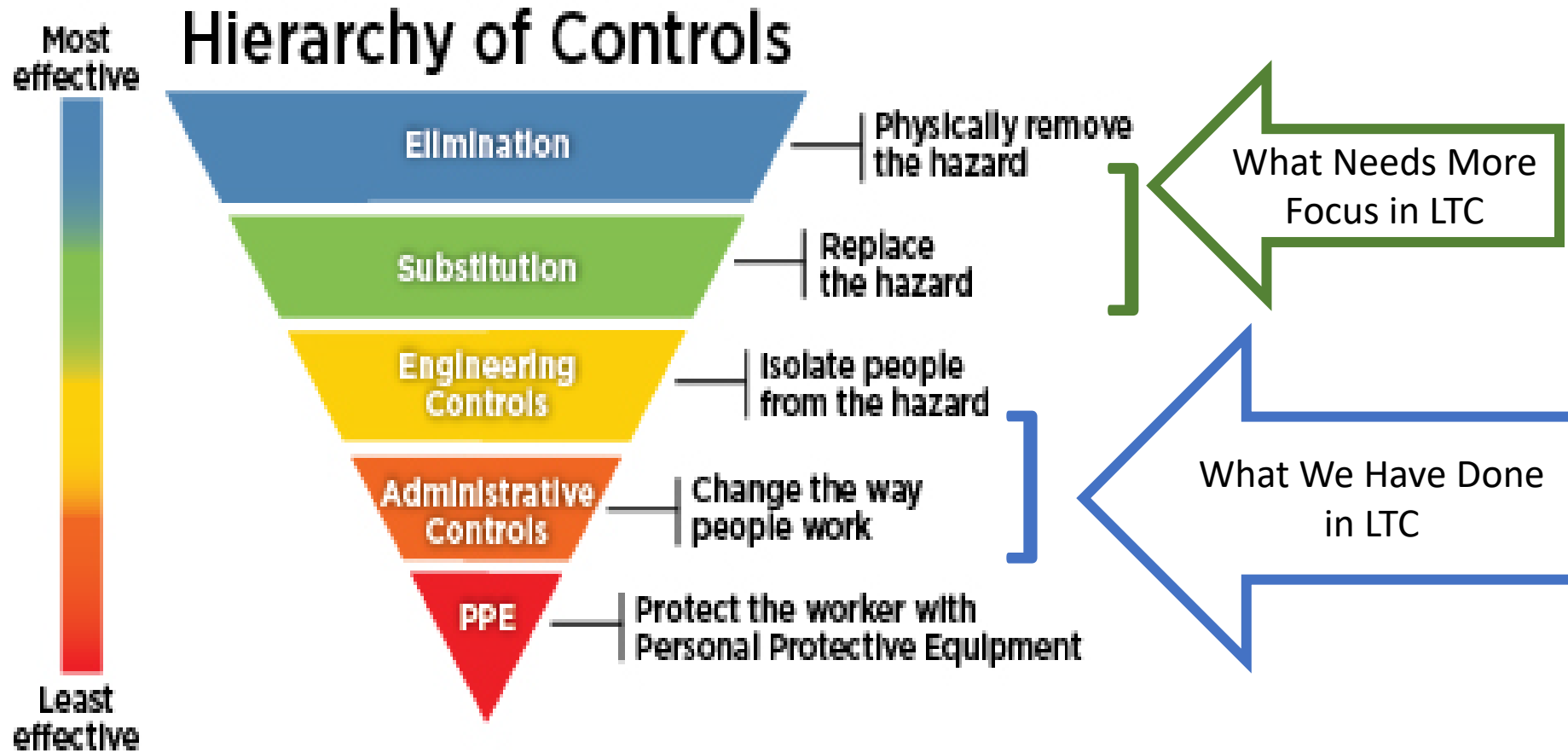
Slide: Mary Alice Lavin

<https://www.osha.gov/Publications/3384small-entity-for-respiratory-protection-standard-rev.pdf>

Define the What of Enhancing Respiratory Health

- **What** are the current CDC recommendations and regulatory requirements for total air exchanges in specific nursing home areas? (these come from a pre-pandemic time)
- **What** are the current recommendations from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)?
- **What** are the current Environmental Protection Agency (EPA) recommendations?
- **What** can be done?
- **What** is the role of the IP and the Infection Prevention and Control Committee?

Respiratory Protection Program



Source: NIOSH



General Vaccine Administration



Source Control / PPE



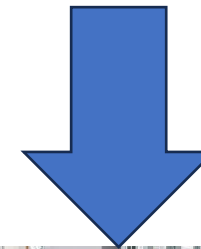
[cdc.gov/COVID19](https://www.cdc.gov/COVID19)



Detection, Isolation



Screening and Surveillance



Hand Hygiene



Surface Cleaning / Disinfecting



Image: Harper College

Ventilation/Air Filtration/Water Management



Core Infection Prevention Practices

Table B.3. Pressure relationships and ventilation of certain areas of nursing facilities¹

Area designation	Air movement relationship to adjacent area ²	Minimum air changes of outdoor air per hour ³	Minimum total air change per hour ⁴	All air exhausted directly to outdoors ⁵	Recirculated by means of room units ⁶	Relative humidity ⁷ (%)	Design temperature ⁸ (degrees F [C])
Resident room	-	2	2	-	-	- ⁹	70-75 (21-24)
Resident unit corridor	-	-	4				
Resident gathering areas	-	4	4				
Toilet room	In	-	10	Ye			
Dining rooms	-	2	4	-			
Activity rooms, if provided	-	4	4	-			
Physical therapy	In	2	6	-			

The screenshot shows the CDC website for Infection Control. The breadcrumb trail is: Infection Control > Environmental Infection Control Guidelines > Part IV. Appendices. The main heading is 'Appendix B. Air'. Below the heading are links for 'Updates' and 'Authors'. The authors are listed as 'Guidelines for Environmental Infection Control in Health-Care Facilities (2003)'. There is a search bar on the right side of the page.

4. Ventilation Specifications for Health-Care Facilities

The following tables from the AIA *Guidelines for Design and Construction of Hospitals and Health-Care Facilities, 2001* are reprinted with permission of the American Institute of Architects and the publisher (The Facilities Guidelines Institute).¹²⁰

Note: This table is Table 7.2 in the AIA guidelines, 2001 edition. Superscripts used in this table refer to notes following the table.

The Point?

- **Total Air Exchange Rates in Nursing Homes (NH) vs. Hospital (Hosp)**
- Hosp pt rooms- 6
NH res rooms -2
- Hosp waiting rooms-12
NH gathering areas-4

Infection Control

Infection Control > Environmental Infection Control Guidelines > Part IV. Appendices

Environmental Infection Control Guidelines

Appendix B. Air

[Print](#)

Guidelines for Environmental Infection Control in Health-Care Facilities (2003)

Updates

Authors

1. Airborne Contaminant Removal

Table B.1. Air changes/hour (ACH) and time required for airborne-contaminant removal by efficiency *

ACH § ¶	Time (mins.) required for removal 99% efficiency	Time (mins.) required for removal 99.9% efficiency
2	138	207
4	69	104
6+	46	69
8	35	52
10+	28	41

HOW LONG For Airborne Contaminate Removal?

138 minutes (over 2 hours) to remove 90% airborne contaminants with 2 air exchanges per hour (resident rooms)

28 minutes to remove 90% airborne contaminants with 10 air exchanges per hour (toilet rooms)

Common Terms

- **Air Cleaner Certification Program** Verifide Certification program developed by Association of Home Appliance Manufacturers (AHAM): Developed Clean Air Delivery Rate (CADR).
- **Portable air cleaners, also known as air purifiers or air sanitizers,** are designed to filter the air in a single room or area.
- **Clean Air Delivery Rate (CADR)** “CADR indicates the volume of filtered air an air cleaner delivers, with separate scores for **tobacco smoke**, pollen and dust. The higher the CADR number for each pollutant, the faster the unit filters the air.” (AHAM)
- **The higher the CADR,** the more particles the air cleaner can filter and the larger the area it can serve. Most air cleaner packaging will tell you the largest size area or room it should be used in. Portable air cleaners often achieve a high CADR by using a high-efficiency particulate air (HEPA) filter.
- **High efficiency particulate air (HEPA)** filter means a filter that is at least 99.97% efficient in removing monodisperse particles of 0.3 micrometers in diameter. All filters need regular replacement. If a filter is very dirty and completely overloaded, it won't work well.

<https://www.epa.gov/indoor-air-quality-iaq/guide-air-cleaners-home>

<https://ahamverifide.org/ahams-air-filtration-standards/>

Minimum Efficiency Reporting Value (MERV Rating)

- “Report a filter's ability to capture larger particles between 0.3 and 10 microns (μm)
- MERV rating is helpful in comparing the performance of different filters
- The rating is derived from a test method developed by the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE)
- The higher the MERV rating the better the filter is at trapping specific types of particles.”
- Recommended minimum MERV rating: MERV 13: Consult Heating, Ventilation, and Air Conditioning (HVAC) Professionals
- For Infection Preventionist awareness only. HVAC professionals need to be part of the Infection Prevention and Control Team!



American Society of Heating, Refrigerating and Air-Conditioning Engineers

ASHRAE EPIDEMIC TASK FORCE


Core Recommendations for Reducing Airborne Infectious Aerosol Exposure

The following recommendations are the basis for the detailed guidance issued by ASHRAE Epidemic Task Force. They are based on the concept that within limits ventilation, filtration, and air cleaners can be deployed flexibly to achieve exposure reduction goals subject to constraints that may include comfort, energy use, and costs. This is done by setting targets for equivalent clean air supply rate and expressing the performance of filters, air cleaners, and other removal mechanisms in these terms.

<https://www.ashrae.org/file%20library/technical%20resources/covid-19/core-recommendations-for-reducing-airborne-infectious-aerosol-exposure.pdf>



1. *Public Health Guidance* – Follow all current regulatory and statutory requirements and recommendations, including vaccination, wearing of masks and other personal protective equipment, social distancing, administrative measures, circulation of occupants, hygiene, and sanitation.

2. *Ventilation, Filtration, Air Cleaning*
 - 2.1 Provide and maintain at least required minimum outdoor airflow rates for ventilation as specified by applicable codes and standards.
 - 2.2 Use combinations of filters and air cleaners that achieve MERV 13 or better levels of performance for air recirculated by HVAC systems.
 - 2.3 Only use air cleaners for which evidence of effectiveness and safety is clear. 
 - 2.4 Select control options, including standalone filters and air cleaners, that provide desired exposure reduction while minimizing associated energy penalties.

3. *Air Distribution* - Where directional airflow is not specifically required, or not recommended as the result of a risk assessment, promote mixing of space air without causing strong air currents that increase direct transmission from person-to-person.

Portable Air Cleaner Sizing for Particle Removal

Room area (square feet)	100	200	300	400	500	600
Minimum CADR (cfm)	65	130	195	260	325	390

Note this chart is for estimation purposes. The CADRs are calculated based on an 8-foot ceiling. If you have higher ceilings, you may want to select a portable air cleaner with a higher CADR.

Guide to Air Cleaners in the Home

2nd Edition
Portable Air Cleaners
Furnace and HVAC Filters

“Generally speaking, higher fan speeds and longer run times will increase the amount of air filtered. An air cleaner will filter less air if it is set at a lower speed. More air will pass through the filter at higher fan speeds, so typically filtration will be greater at higher fan speeds. Increasing the amount of time an air cleaner runs will also increase air filtration.”

Efficacy of Portable Air Cleaners and Masking for Reducing Indoor Exposure to Simulated Exhaled SARS-CoV-2 Aerosols — United States, 2021

Weekly / July 9, 2021 / 70(27):972–976

On July 2, 2021, this report was posted online as an MMWR Early Release.

William G. Lindsley, PhD¹; Raymond C. Derk, MS¹; Jayme P. Coyle, PhD¹; Stephen B. Martin Jr., PhD²; Kenneth R. Mead, PhD³; Francoise M. Blac Beezhold, PhD⁴; John T. Brooks, MD⁵; Theresa Boots, MS¹; John D. Noti, PhD¹ (VIEW AUTHOR AFFILIATIONS)

[View correspondence](#)

Summary

What is already known about this topic?

Ventilation systems can be supplemented with portable high efficiency particulate air (HEPA) cleaners to reduce the number of airborne infectious particles.

What is added by this report?

A simulated infected meeting participant who was exhaling aerosols was placed in a room with two simulated uninfected participants and a simulated uninfected speaker. Using two HEPA air cleaners close to the aerosol source reduced the aerosol exposure of the uninfected participants and speaker by up to 65%. A combination of HEPA air cleaners and universal masking reduced exposure by up to 90%.

What are the implications for public health practice?

Portable HEPA air cleaners can reduce exposure to simulated SARS-CoV-2 aerosols in indoor environments, especially when combined with universal masking.

The air cleaners were most effective when they were located in the center of the room close to the aerosol source.

Moreover, the combination of HEPA air cleaners and universal masking was more effective than was either intervention alone. The use of masks without air cleaners reduced the aerosol exposure of the receivers by 72%, and the use of air cleaners without masks reduced the exposure by up to 65%. When used together, the HEPA air cleaners and masks reduced exposure to respiratory aerosols by up to 90% (Lindsley et al., 2021)

<https://www.cdc.gov/mmwr/volumes/70/wr/mm7027e1.htm>



COVID-19

COVID-19

About COVID-19 +

Symptoms

Testing +

Understanding Your Risk +

Prevention -

COVID-19 by County

Masks +

Ventilation -

Home Ventilation Tool

Improving Ventilation in Buildings

Facility Cleaning & Ventilation +

Schools & Child Care +

Homeless Service & Correctional

Congregate Living Settings

Tribal Communities

Vaccines +

If You Were Exposed

Improving Ventilation In Buildings

Updated May 11, 2023 [Español](#) [Print](#)

What You Need to Know

- To improve ventilation in your building, keep your system operating as designed. Aim for at least 5 air changes each hour and upgrade to MERV-13 filters.
- Good ventilation is essential to maintaining a healthy indoor environment and protecting building occupants from respiratory infections.
- Improving [ventilation in buildings](#) can help reduce the number of viral particles in the air and lower occupants' risk of exposure to respiratory viruses.
- Implementing multiple infection prevention and control strategies at the same time can increase the overall effectiveness of ventilation interventions.
- Building owners and operators can participate in the [Clean Air in Building Challenge](#) [↗](#) to improve indoor air quality and protect public health.

Improving Ventilation in Buildings

Improving ventilation (air flow, filtration, and treatment) can help you protect building occupants from respiratory infections. Good ventilation can also help you provide clean air and maintain a healthy indoor environment.

Droplets and small particles that people breathe out can contain viruses. Because people can get respiratory illnesses from breathing in these droplets and viral particles, it is important to use protective ventilation strategies to prevent them from accumulating in indoor air.

Ventilation systems bring fresh, outdoor air into rooms, filter or disinfect the air there, and improve air flow. Making ventilation system upgrades or improvements in your building can increase the delivery of clean air and reduce potential contaminants in indoor spaces. This can help reduce the number of viral particles in the air.

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/improving-ventilation-in-buildings.html>

Indoor Air Quality (IAQ)

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[Indoor Air Quality Home](#)

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[IAQ by Building Type](#)

[Network and Collaborate](#)

[Popular IAQ Topics](#)

[Frequently Asked Questions](#)

[Publications](#)

[Regional and State IAQ Information](#)

[Webinars, Meetings & Updates](#)

Guide to Air Cleaners in the Home

2nd Edition: Portable Air Cleaners, Furnace and HVAC Filters

This short consumer guide covers portable air cleaners and furnace or HVAC filters used in a home. It includes tips for selecting a portable air cleaner, furnace filter, or HVAC filter. This guidance is also available as a [PDF download](#).

On this page:

- [Portable Air Cleaners and Furnace or HVAC Filters in the Home](#)
- [Tips For Selecting a Portable Air Cleaner, Furnace Filter, or HVAC Filter](#)
- [Q&A: Air Cleaning and Filtration](#)
- [Q&A: Portable Air Cleaners](#)
- [Q&A: Heating, Ventilation, and Air-Conditioning \(HVAC\) System Filters and Furnace Filters](#)
- [For More Information](#)

On other pages:

- [Air Cleaners, HVAC Filters, and Coronavirus \(COVID-19\)](#)

Downloads Available



Download the PDF Version of the [Guide Cleaners in the Home](#)



Portable Air Cleaner Sizing for Particle Removal

Room area (square feet)	100	200	300	400	500	600
Minimum CADR (cfm)	65	130	195	260	325	390

Note this chart is for estimation purposes. The CADRs are calculated based on an 8-foot ceiling. If you have higher ceilings, you may want to select a portable air cleaner with a higher CADR.



Use of Engineering Controls and Indoor Air Quality

- *“When indoors, improving ventilation and increasing the number of times fresh or filtered air enters a room can help reduce viral particle concentrations and have been proven to decrease COVID-19 transmission. ‘The lower the concentration, the less likely viral particles can be inhaled into the lungs (potentially lowering the inhaled dose); contact the eyes, nose, and mouth; or fall out of the air to accumulate on surfaces,’ according to the CDC.*
- *Improving ventilation practices and interventions can reduce the airborne concentrations and reduce the risk that residents, visitors, and health care personnel (HCP) come in contact with viral particles.”*

<https://dph.illinois.gov/covid19/community-guidance/long-term-care.html>



Approaches:

- *“Increasing the introduction of outdoor air.*
- *Ensuring ventilation systems are operating properly as defined by ASHRAE Standard 62.1.*
- *Optimizing the use of engineering controls to reduce or to eliminate exposures.*
- *Exploring options to improve ventilation delivery and indoor air quality in all shared spaces. The higher number of air exchanges per hour will result in better results with respect to purging airborne contaminants. Refer to the CDC suggested options for Air Changes per Hour (ACH).*
- *Using portable room air cleaners with a High Efficiency Particulate Air (HEPA) filter to enhance air cleaning. Air cleaners need to have the appropriate CADR (Clean Air Delivery Rate) rating for the room size.”*

Q&A: Portable Air Cleaners

Most portable air cleaners have a CADR rating. What does that mean?

Most portable air cleaners are rated according to their clean air delivery rate (CADR). This number is intended to help consumers select an air cleaner based on the size of the area it will be placed in. The higher the CADR, the more particles the air cleaner will remove and the larger the area it can serve. The rating is typically measured at the air cleaner's highest speed.

How do I choose a portable air cleaner that will remove the small particles of greatest health concern (PM_{2.5}) effectively?

Some air cleaner packaging will indicate CADRs for removing three specific types of pollutants: tobacco smoke, dust, and pollen. These pollutants are used as examples to represent small-, medium-, and large-sized particles, respectively. To remove small particles, choose a portable air cleaner that has a high CADR for tobacco smoke, which represents the smallest particles. The CADR should be large enough for the size of the room or area you will use it in.



This is an example of a label from a portable air cleaner. Used with permission from the Association of Home Appliance Manufacturers (AHAM).

“To remove small particles, choose a portable air cleaner that has a high enough CADR for tobacco smoke, which represents the smallest particles.”

- [CMP Reinvestment Plan](#)
- [How To Apply](#)
- [CMP Application Evaluation](#)
- [Visitation Aids and Fans/Room Air Cleaners](#)
- [Notice of Funding Opportunity](#)

CMP Funds Available for In-Person Visitation Aids and Portable Fans/Room Air Cleaners

The Centers for Medicare & Medicaid Services (CMS) has authorized the use of federal CMP funds so federally certified nursing homes may purchase portable fans and portable room air cleaners with high-efficiency particulate air (HEPA, H-13 or -14) filters to increase or improve air quality. A maximum use of \$3,000 per facility, including shipping costs, may be requested. This is in addition to the \$3,000 that facilities may request for in-person visitation aids, such as tents or other shelters and clear dividers. This opportunity is for facilities certified to participate in the Medicare and/or Medicaid programs. Assisted living facilities are not eligible for this program.

CMS has authorized the use of CMP funds to purchase any of the following for the purposes of in-person visitation and portable fans/room air cleaners:

Contact Us

Illinois Department of Public Health
Office of Health Care Regulation
525 West Jefferson Street
Springfield, Illinois 62761
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<https://dph.illinois.gov/topics-services/health-care-regulation/nursing-homes/cmp-reinvestment-program/in-person-visitation-aids-and-portable-fans-room-air-cleaners.html>



The Role of the Infection Preventionist (IP) Focus on Safety

- YES, the requirement for Respiratory Protection Programs is still in effect. It is an OSHA requirement
- Focus on meaningful QAPI Performance Improvement Projects with the Interdisciplinary Team (IDT), a critical part of long term care
- Consider targeted fit testing
- Ensure supply and variety of respirators or higher respiratory protection
- The IP can work with the IDT to coordinate and focus the respiratory health program
- Work with Maintenance and HVAC professionals to ensure heating, air conditioning, ventilation, and air purification is implemented utilizing manufacturer's instructions for use and best practices

Case Study of Interdisciplinary Infection Prevention Performance Improvement Project (PIP)

Respiratory Outbreaks and Precautions, Oh My! Viral Identification Panels, Electronic Media Tracking, and Implications for Practice in Acute and Long-term Care

Session 3601: 6/9/2014, 2:30-3:30

Deb Patterson Burdsall MSN, RN-BC, CIC
Lance Peterson, MD, FASCP, FIDSA, FAAM, FSHEA
Marc-Oliver Wright, MT(ASCP), MS, CIC

Deb Patterson Burdsall- Nothing to Disclose

Lance R. Peterson – Nothing to Disclose

Marc-Oliver Wright – Nothing to Disclose

Presentation of a collaborative quality assurance and performance improvement (QAPI) Performance Improvement Project (PIP) from 2012-13

Collaboration between acute care and long term care



Burdalls High C's of Infection Prevention and Control

Clean Hands and Gloves

Clean Clothes

Clean Equipment and Environment

Contained Drainage

Covered Wounds

Careful Assessment

Careful Use of Antimicrobials

Collaborative Approach

Communication



What we provided.

- Isolation precautions during influenza season emphasize Droplet Precautions to control influenza-like illness caused by either Influenza A or Influenza B. With the availability of testing using viral panels, evidence is growing that respiratory outbreaks can be caused by multiple respiratory viruses, including respiratory syncytial virus (RSV), human metapneumovirus (hMPV), adenoviruses, and other respiratory viruses. Many of these viruses are transmitted by multiple routes. To avert potential outbreaks or to control existing outbreaks, a comprehensive plan will be discussed based upon prudent viral testing, CDC isolation guidance, and real-time knowledge of circulating respiratory strains. The target audience is Epidemiologists and Infection Preventionists who have program level responsibility for acute care and long-term care.

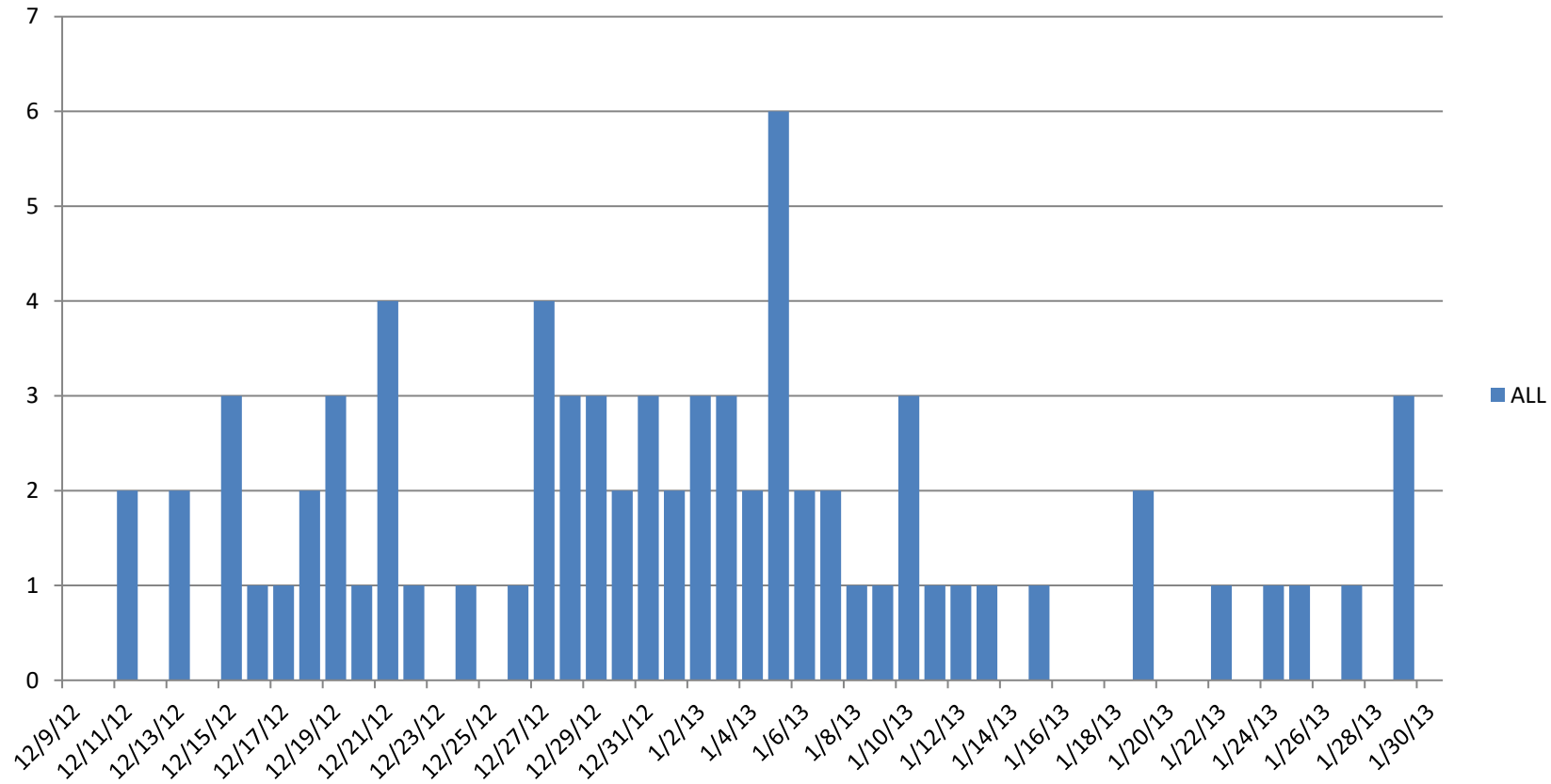
Example Problem

2012/2013 OUTBREAK SEASON!



What does this type of outbreak look like in the middle of Influenza Season?

All Influenza-like illness residents,
families, employees



Don't Assume

Respiratory Pathogen Panel with COVID

FOR SYMPTOMATIC PATIENTS ONLY

Includes: ADENOVIRUS
SARS-COV-2
NON-COVID CORONAVIRUSES
INFLUENZA A/B VIRUSES
METAPNEUMOVIRUS
RHINOVIRUS/ENTEROVIRUS
RESPIRATORY SYNCYTIAL VIRUS (RSV)
PARAINFLUENZA VIRUSES 1-4
*Bordetella parapertussis**
*Bordetella pertussis**
Mycoplasma pneumoniae
Chlamydia pneumoniae
**Bordetella* sp. only tested on NP Swabs

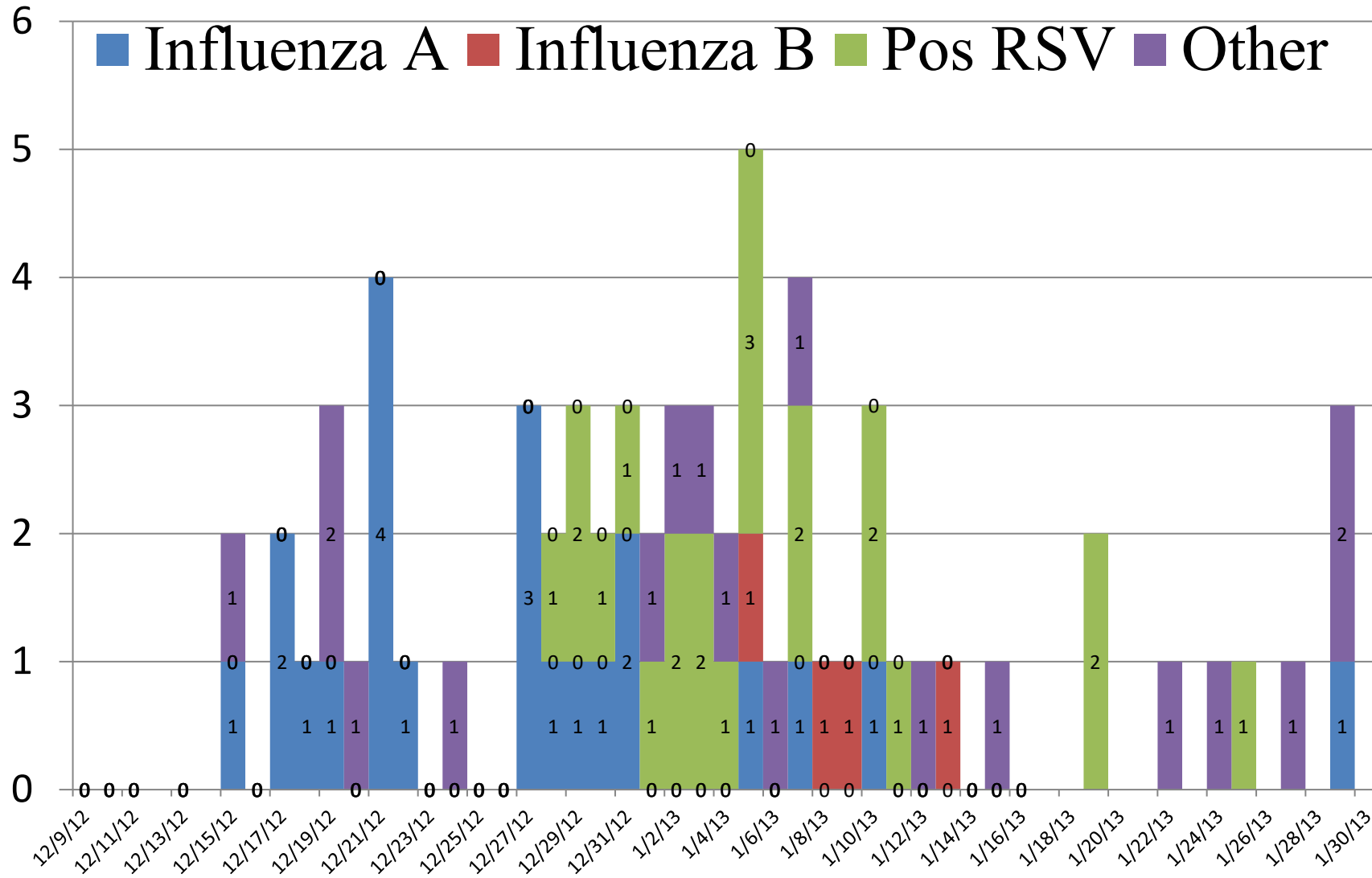
UNC
HEALTH®



Specimen Type

<https://www.uncmedicalcenter.org/mclendon-clinical-laboratories/available-tests/respiratory-virus-group-naat/>

With Viral Identification



Interventions

- Communication, within facility, interfacility and public health
- Twice a day temperatures
- Focus on avoiding presenteeism in staff and visitors
- Mask training and use
- Hand Hygiene
- Cleaning and disinfecting
- Restrictions on group activities, and movement



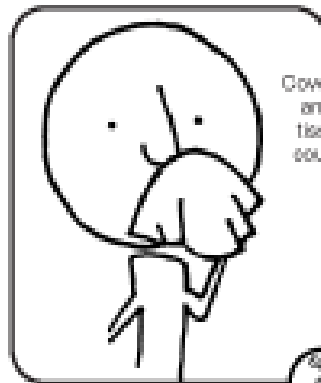
Cleaning/Disinfecting at Point of Care

- Supplies at point of care
- Every department and some residents/families empowered and trained to use low toxicity cleaner/disinfectants
- Concentrate general cleaning every 1-2 hours on high touch/high use areas
- Equipment must be cleaned between each resident/client use

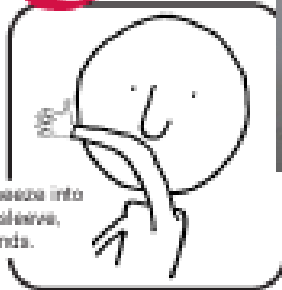


Stop the spread of germs that make you and others sick!

Cover your Cough



Cover your mouth and nose with a tissue when you cough or sneeze or cough or sneeze into your upper sleeve, not your hands.



Put your used tissue in the waste basket.



You may be asked to put on a surgical mask to protect others.

Clean your Hands

after coughing or sneezing.



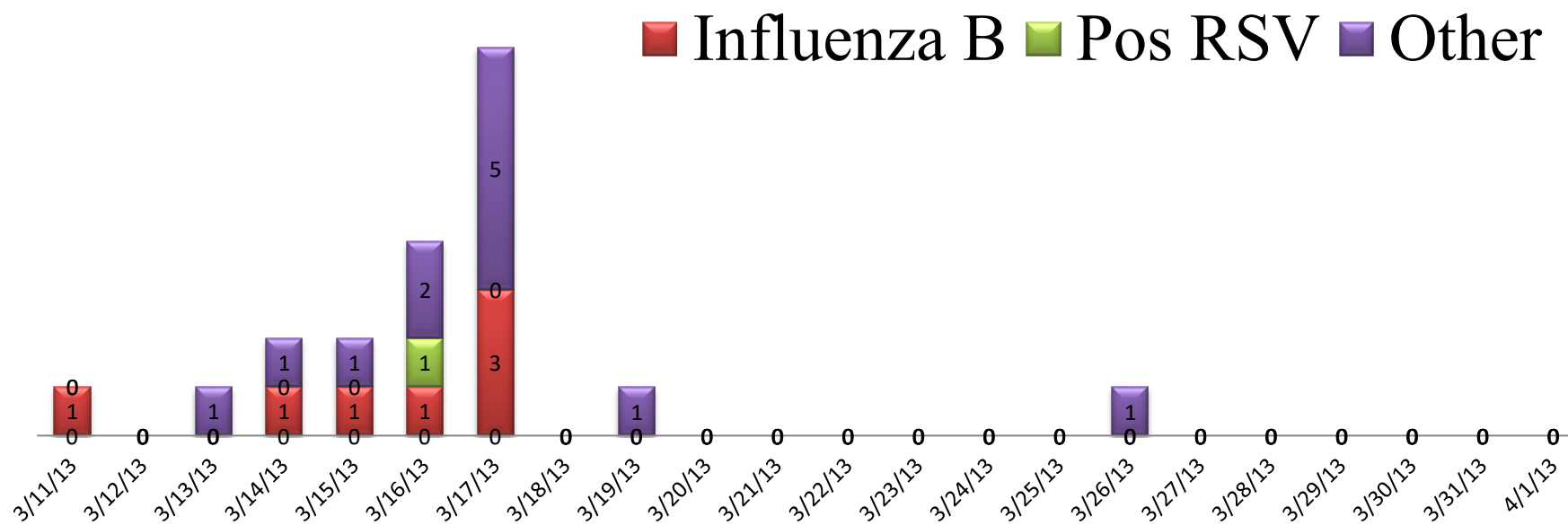
Wash with soap and water or clean with alcohol-based hand cleaner.



Influenza B and RSV Mixed Respiratory March 2013

**7 Influenza B, 1 RSV, and 12 unknown
20 cases**

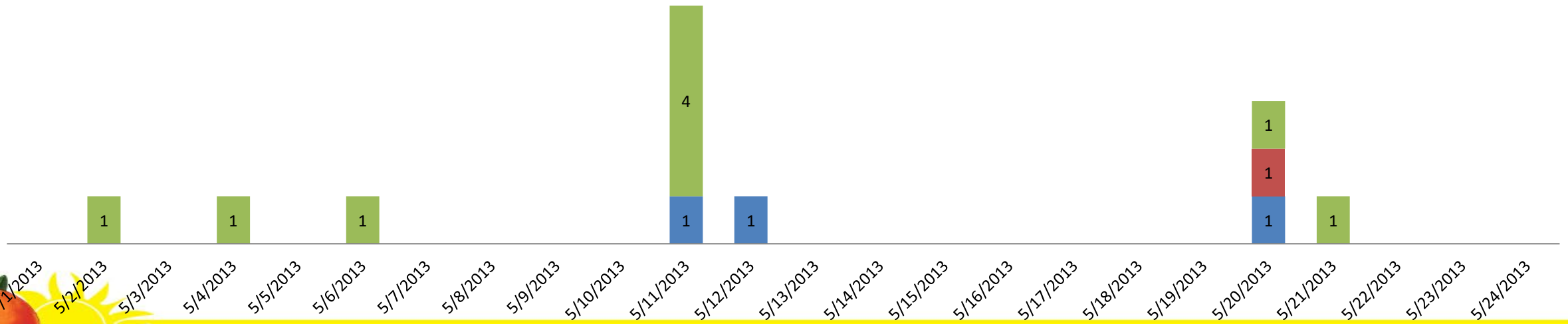
Rate of 6.73 ILI per 1000 person days



Respiratory Complex Definition: Cough, weakness, fever, infiltrate

Attack Rate 27%, Respiratory syncytial (sin-SISH-uhl) virus (RSV), and Human metapneumovirus (HMPV)

- Met Definition of Respiratory Complex: No Testing
- Confirmed Combined HMPV and RSV
- Confirmed HMPV



Importance of Respiratory Health in Nursing Homes

- Impact of poor indoor air quality on vulnerable populations cannot be overstated.
- The Infection Preventionist plays a vital role in managing and coordinating the interdisciplinary Infection Prevention and Control Committee
- The QAPI Performance Improvement Project model can frame the Respiratory Health Program
- Collaborate with healthcare professionals and facility management
- Integrate the respiratory protection program, ventilation, and air filtration to decrease the risk of transmission of respiratory illnesses in your care community.



Thank you!!!

Questions?

Open Q&A

Submit questions via Q&A pod to **All Panelists**

Please do not resubmit a single question multiple times

Slides and recording will be made available after the session.

Reminders

- For continuing education credit, please fill out the evaluation survey upon end of webinar
- SIREN Registration
 - To receive situational awareness from IDPH, please use this link to guide you to the correct registration instructions for your public health related classification: <http://www.dph.illinois.gov/siren>
- NHSN Assistance:
 - Contact Telligen: **nursinghome@telligen.com**