

CareForum 2022

The WellSky® Conference

How to successfully achieve zero Covid-19 HAI throughout the pandemic

Joi McMillon BSN, MBA HA, CRRN, WCC, CJCP, HACP-CMS, CIC

Regional Director of Hospital Nursing Services

Healthcare Consultant

8/10/2022

CareForum 2022

The WellSky® Conference

Today's speaker



**Joi McMillon BSN, MBA
HA, CRRN, WCC, CJCP,
HACP-CMS, CIC**

Regional Director of Hospital
Nursing Services
Healthcare Consultant

Objectives

The learner will:

State the most important thing you can do to prevent infections.

Identify standard and transmission-based precautions.

Verbalize the components of PPE required to prevent the spread of Covid-19.

Define the importance of disinfection of the environment.

Identify ways you can ensure your disinfection efforts are successful.

The Basics of Infection Control



INFECTION CONTROL BASICS

- We have known for years that clean hands save lives.
- The fact is that hand hygiene compliance has always been an area health care workers have shown to have the greatest opportunity for improvement.
- Though the issue is not new, given the pandemic of Covid-19 non-compliance with proper hand hygiene can have far more deadly results than we have experienced in the past.

This Photo by Unknown Author is licensed under [CC BY](#)



Hand Hygiene Requirements

- Hand hygiene should be performed:
- Before and after contact with a client.
- Immediately after touching blood, body fluids, non-intact skin, mucous membranes, or contaminated items (even when gloves are worn during contact).
- Immediately after removing gloves.
- When moving from contaminated body sites to clean body sites during client care.
- After touching objects and medical equipment in the immediate client-care vicinity.
- Before eating.
- After using the restroom.
- After coughing or sneezing into a tissue as part of respiratory hygiene.

What is the Preferred Method of Hand Hygiene?

- The CDC has stated for many years that the best result for hand hygiene is by using an alcohol-based hand sanitizer.
- Many are confused by this statement, but here is the theory behind it.
- Hand hygiene with hand sanitizer takes approximately 15 seconds and is readily available.
- Hand washing takes at least 20 seconds for the wash alone, and how often is it being done for the allotted time?
- Think about all the opportunities for hand hygiene and how convenient hand washing is compared to hand sanitizer.
- What are some of the barriers you face?



Hand Washing is Still a Necessity!

Washing your hands should be done when it is appropriate.

When your hands are visibly soiled.

When sanitizer has left your hands feeling sticky.

Before eating.

After using the restroom.

At the end of your shift



This Photo by Unknown Author is licensed under [CC BY-SA-NC](#)

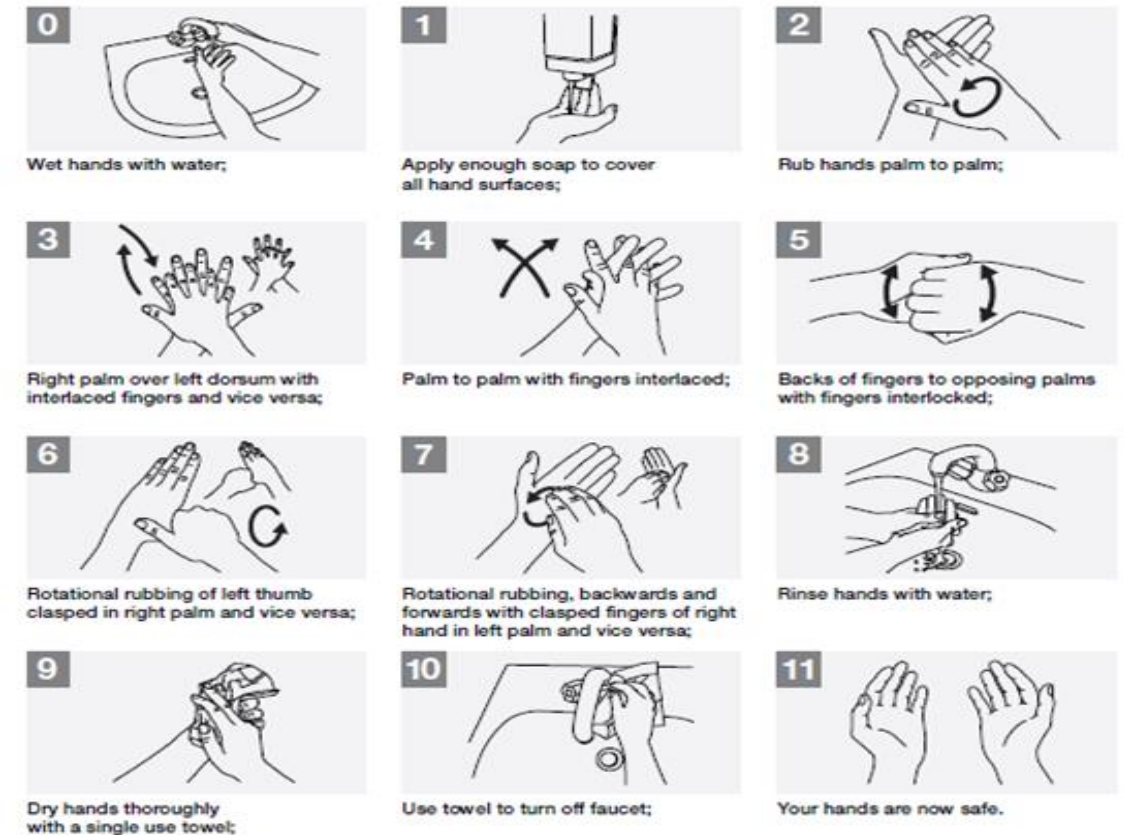
Hand Washing Technique

The time listed to do handwashing correctly is a process that takes time. Therefore, hand sanitizer is a much more reasonable option.

How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

 Duration of the entire procedure: 40-60 seconds



World Health
Organization

Patient Safety
A World Alliance for Better Health Care

SAVE LIVES
Clean Your Hands

Standard Precautions

- Standard precautions are a set of infection control practices used to prevent transmission of diseases that can be acquired by contact with blood, body fluids, non-intact skin (including rashes), and mucous membranes.
- These measures are to be used when providing care to all individuals, whether they appear infectious or symptomatic.

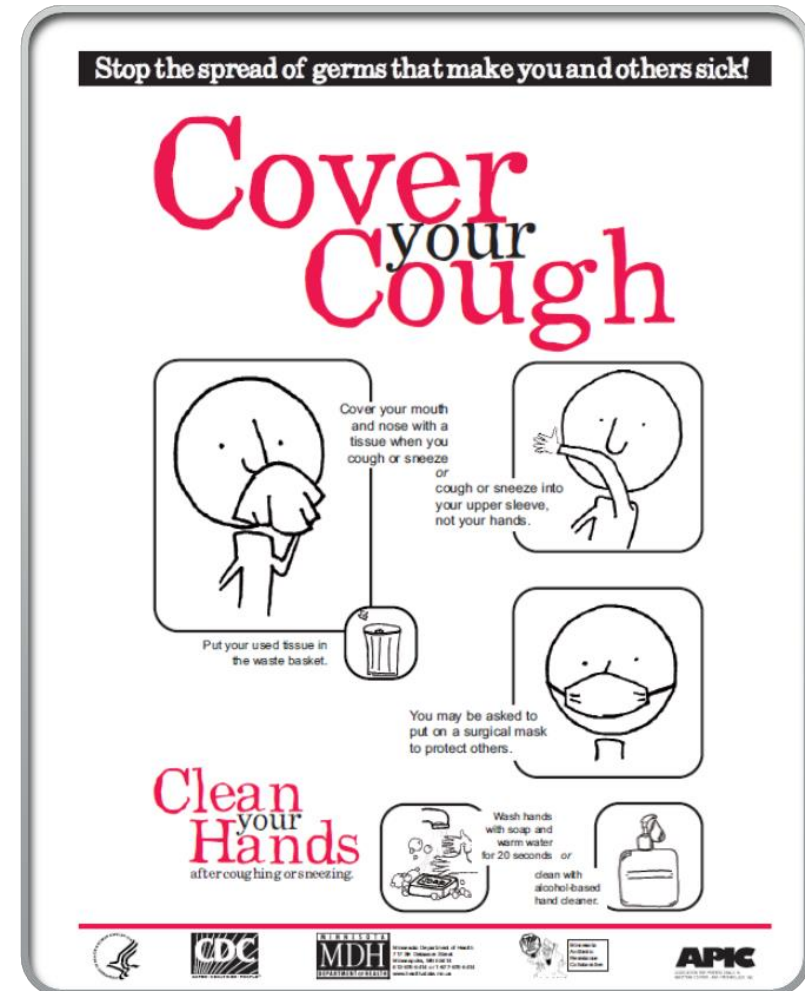
Includes

- Hand hygiene
- Infectious waste management
- Sharp safety devices
- PPE
- Respiratory hygiene/cough etiquette



Respiratory Hygiene/Cough Etiquette

- Cover mouth and nose with a tissue when coughing, sneezing
- Immediately toss the tissue
- Wash hands with soap and water or use alcohol gel
- Have client wear mask if possible
- Keep tissues readily available for staff, visitors, and residents.
- Barriers for front-line staff
- Visual reminders posted to ensure awareness



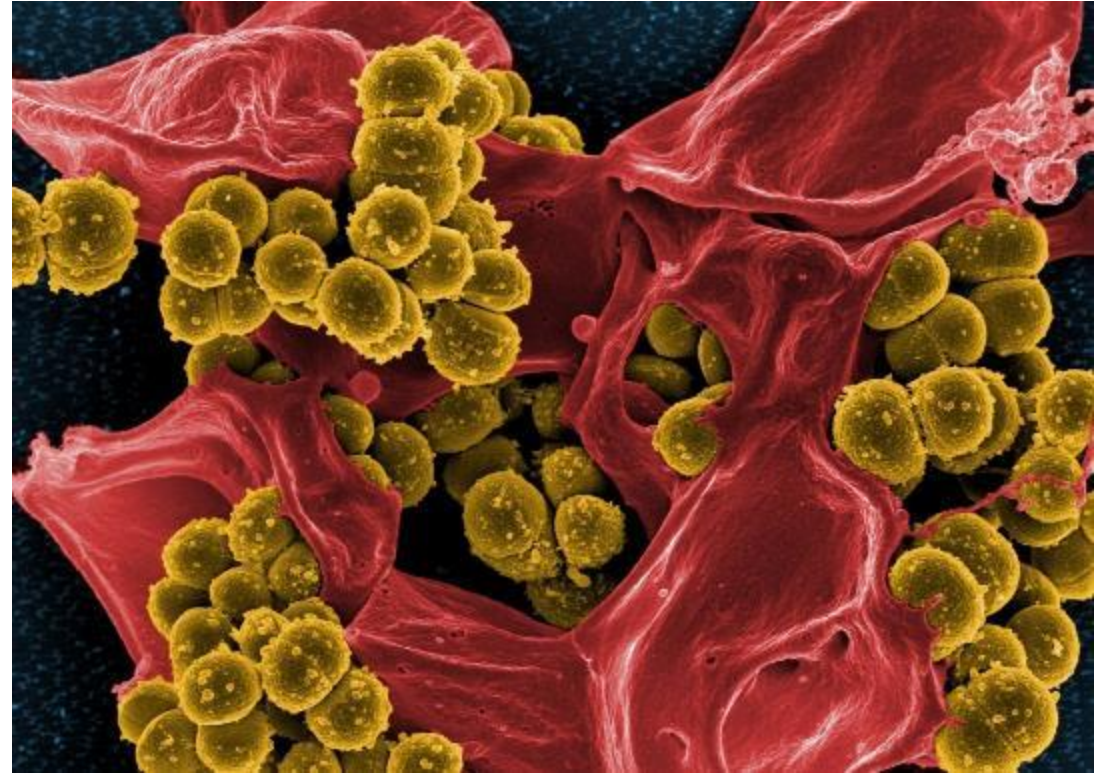
Transmission-Based Precautions

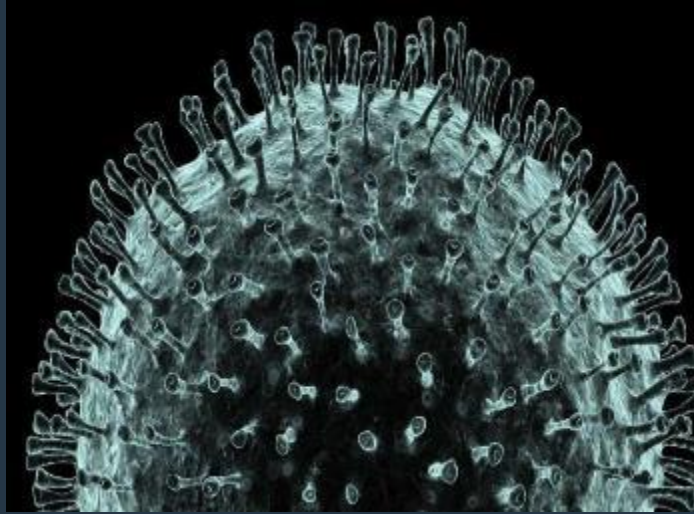
- Measures practiced in addition to standard precautions that are based on the confirmed or suspected presence of a specific communicable disease, and the mode(s) of transmission of that disease.
- contact
- droplet
- airborne
- protective



Our Previous Concerns Prior to Covid-19

- M.R.S.A.
- C.R.E.
- E.S.B.L.
- C.A.U.T.I.
- S.S.I.s
- C.L.A.B.S.I.s

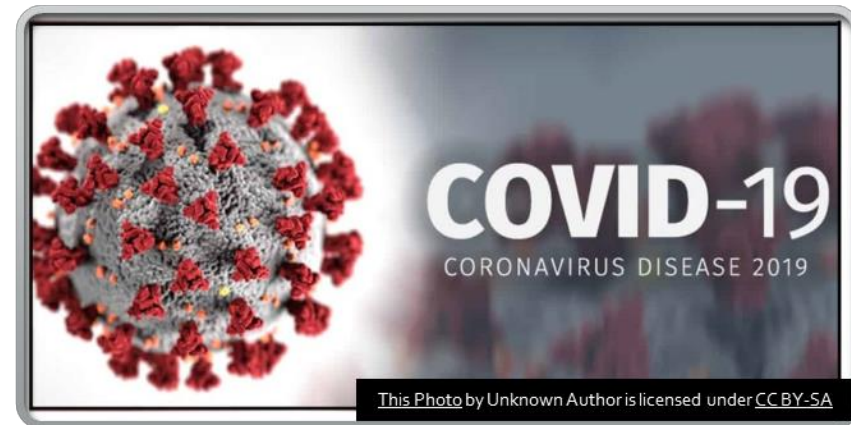




The Beginning Phases of Covid -19

The Beginning of the Unimaginable

- Since the beginning of the pandemic, we have been faced with many questions.
- Everything was new at the time.
- How was it transmitted???
- Airborne vs Droplet
- How can we stop it?
- Death was a scary risk that some took it seriously and others acted irresponsibly.



Planning and Preparing for What we Thought was the Worst

- Proactive approach was taken in late November and early December based on the information coming from China.
- We began to gather P.P.E. in bulk.
- We updated our facility infection control risk assessment.

Risk Event	Probability the Risk Will Occur				Potential Severity if the Risk Occurs				How Well Is the Organization Prepared to Address This Risk?			Risk Priority
	High	Med	Low	None	Life Threatening	Permanent Harm	Temporary Harm	None	Poorly	Fairly Well	Well	
Score	4	3	2	1	4	3	2	1	3	2	1	
Increasing incidence of infections with MDROs												
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)			X				X				X	5
Vancomycin-resistant Enterococci (VRE)			X				X				X	5
<i>Clostridium difficile</i>			X				X				X	5
Multidrug-resistant <i>Pseudomonas</i>			X				X				X	5
Multidrug-resistant <i>Enterobacter</i> ssp			X				X				X	5
Multidrug-resistant <i>Klebsiella</i>			X				X				X	5
Multidrug-resistant <i>Acinetobacter</i>			X				X				X	5
ESBL			X				X				X	5
Increasing Infections												
Catheter-associated bloodstream infections (CABSI)				X			X				X	4
COVID -19	X				X					X		10
Catheter-associated urinary tract infection (CAUTI)				X			X				X	4
Surgical site infection (SSI)				X				X			X	3
Primary joint surgery Infections				X				X			X	3
Facility Acquired Pneumonia			X				X				X	5
Influenza			X				X				X	5
Dialysis Associated Infections				X				X			X	3

Based on the Information Gained from the Risk Assessment

Risk Assessment

- We began instituting a respiratory protection program for N-95.
- We began to gather P.P.E. in bulk.
- No fit testing equipment was available. We searched through other vendors and placed orders for fit testing hoods and the fit test.



Training and Competencies

- All staff and vendors were trained on proper donning and doffing and transmission-based precautions prior to entering the Covid Unit.
- For the 1st month, a watcher was established in the unit to watch for compliance with established infection control requirements and donning and doffing of PPE.

C.H.S. COVID UNIT ORIENTATION PACKAGE

Name: _____ Nsg MD Env. Therapy _____

Before caring for patients with confirmed or suspected COVID-19, you must receive training on when and what PPE is necessary, how to don and doff PPE, limitations of PPE and proper care, maintenance, disposal of PPE, as well as demonstrate competency in performing appropriate infection control practices.

Prior to entering the room you will complete a mandatory orientation including:

- Reviewing "What healthcare personnel should know about caring for patient with suspected or confirmed Covid -19"
- Viewing a COVID-19 PPE Donning & Doffing Video
- Return Demonstration for Donning & Doffing PPE
- Reviewing the Procedure for hand hygiene
- Return Demonstration of hand hygiene with AHBR & hand washing with soap and water
- Do's & Don'ts on PPE safety
- When sanitation is required with Cavi-wipes & wet time
- How to properly wear a respirator & how to perform a seal check
- Covid specific supplies checklist (Dedicated pt. items)
- Covid specific bundle (new admit / new Dx.of Covid room set up)
- Respiratory Etiquette
- Preventing cross contamination from Covid -19
- Vendor / Consultant Monitoring
- PPE & Hand Hygiene Compliance Surveillance
- Covid Unit Algorithm of Care
- Family communication via i-pad
- Visitation facilitator (current guidelines on visitation, required PPE, associated risks involved)
- Nasopharyngeal Specimen Collection Competency (Nurse)

The individual named above has completed the orientation successfully and may safely enter the Covid -19 Isolation Unit. All reviewed information is provided in the package upon orientation.

- Able to verbalize & demonstrate competency with the above. Proceed to room entry as assigned.
- Requires additional training prior to being assigned Covid -19 patient. *** **Requires Infection Control & DON notification*****

Reviewer: _____ Date: _____

The Power of The Glow! (Glow Germ)

- A cost-effective tool for facilities to have staff perform return demonstration on hand washing.
- It also can provide valuable insight into the monitoring of high-touch area cleaning as well as terminal cleaning.



Training and Competencies

- Bundles for the Covid-19 Unit were created.
- As with the prevention of CAUTIs, Ventilator-Associated infections, and Catheter Associated Blood Stream Infections, the evidence shows that bundles work.

COVID-19 Isolation Bundle



- Disposable B/P Cuff
- Disposable Stethoscope
- Disposable Thermometer
- Pulse Oximeter
- Patient Mask
- Place Biohazardous & Dirty linen bins in pt room



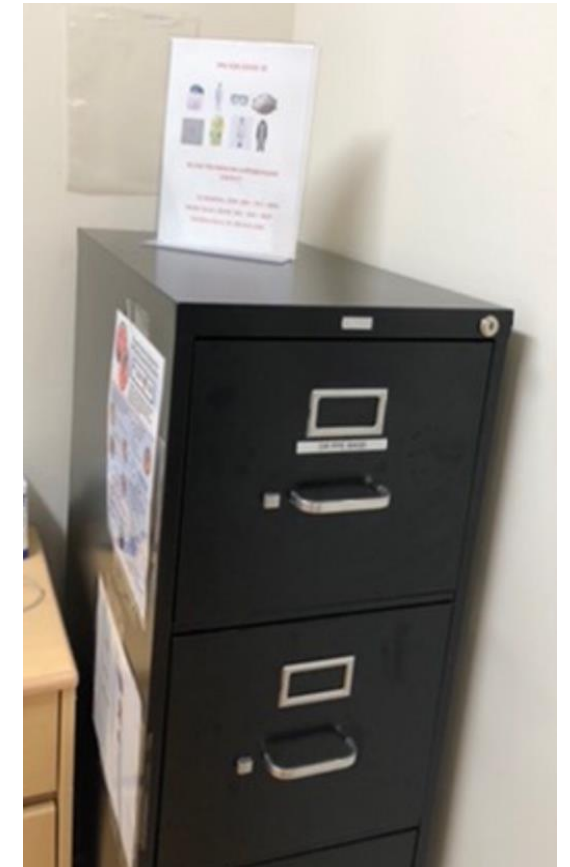
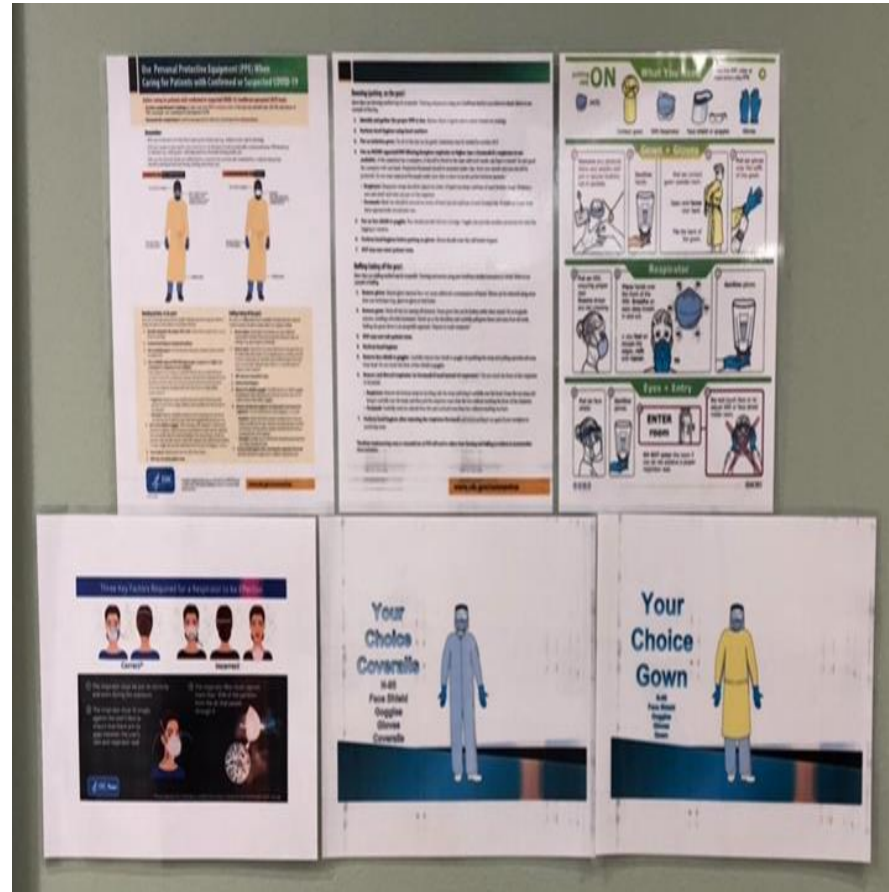
Creation of the Covid Unit

Dedicated Unit with clear delineation of precautions and donning and doffing visual cues



Creation of the Covid Unit

Dedicated Rooms for Donning and Doffing.
New scrubs, white suits, and PPE cabinets



Creation of the Covid Unit

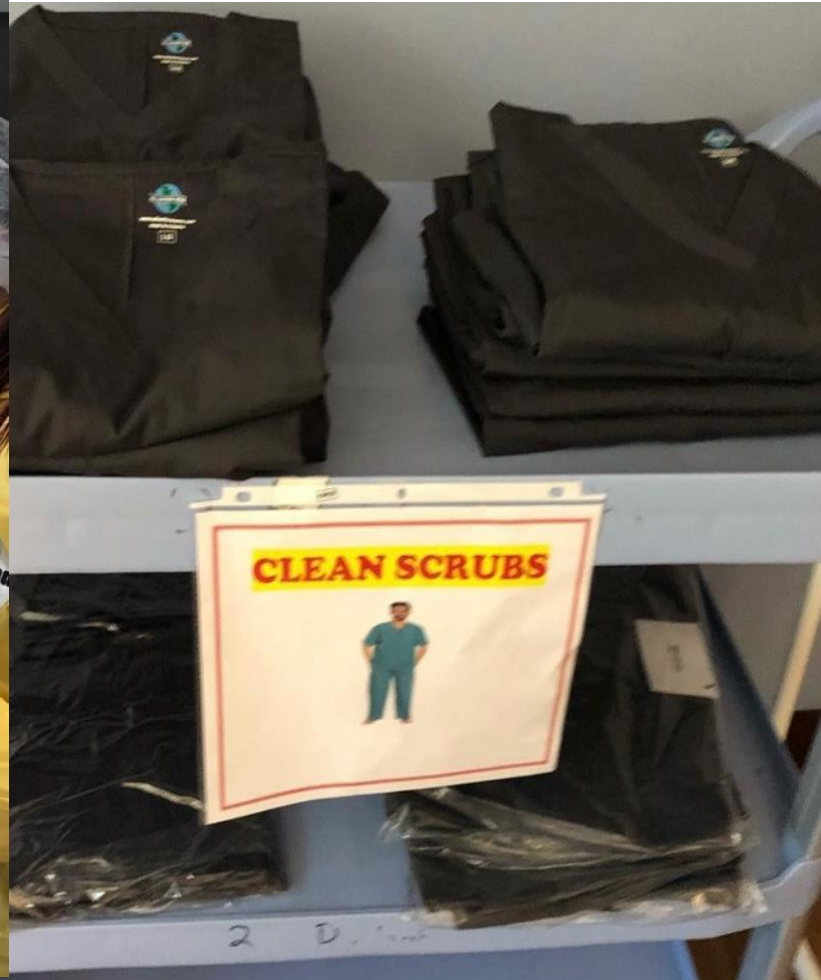
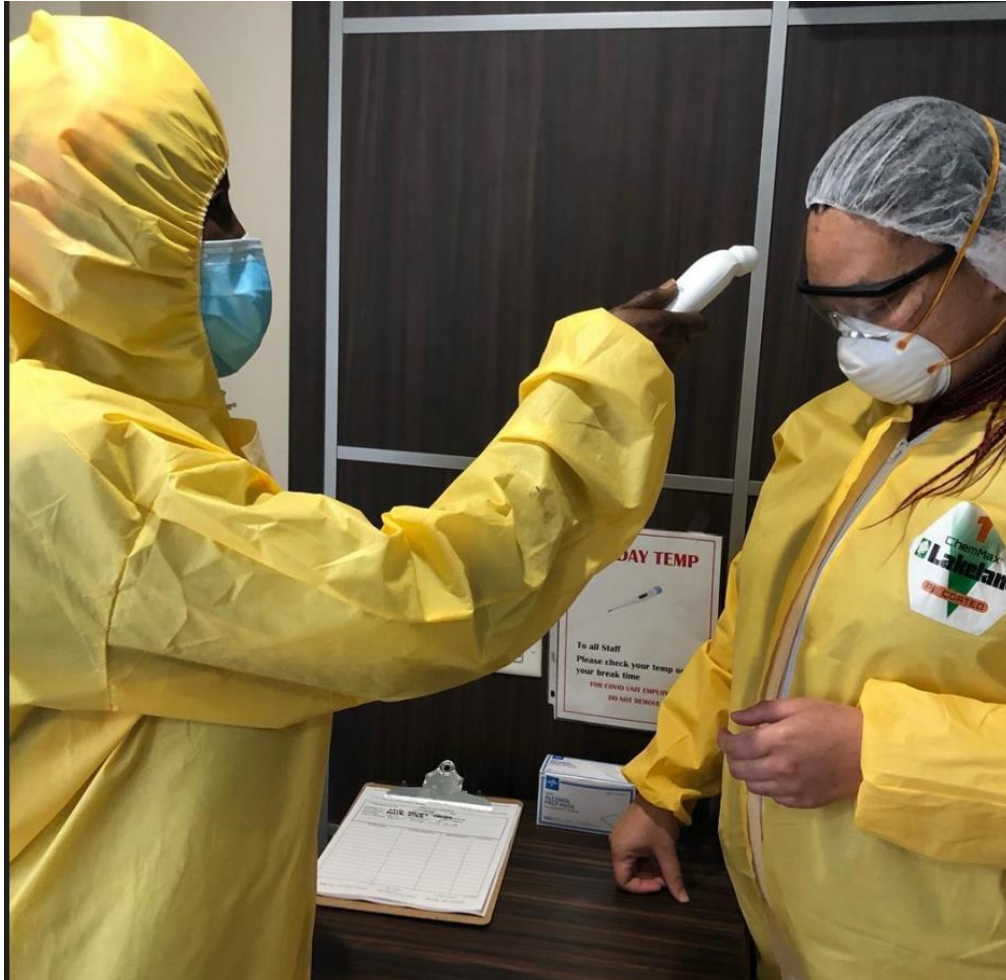
Dedicated Rooms for Donning and Doffing.
New scrubs, white suits, and PPE cabinets



Creation of the Covid Unit

Temperature Check

Dedicated Break Rooms



Inside the Covid Unit

Dedicated Area for Cleaning and Disinfecting Eye Protection
Additional Area Built for Additional Clean PPE



Inside the Covid Unit

Team Donning & Doffing Watchers



Covid-19 Isolation Precautions

- Contac/Droplet approach with an N-95 fit tested respirator
- Social Distancing
- Dedicated resident equipment
- Hand Hygiene
- Source control masking for all individuals in the building
- Staff, resident, and visitor education
- Environmental Cleaning and disinfecting
- Vaccines

Special Droplet/Contact Precautions
IN ADDITION TO STANDARD PRECAUTIONS


STOP Only essential personnel should enter this room
** Solo el Personal esencial debe ingresar a esta sala **

Everyone MUST:

- Clean hands when entering and leaving room
- Wear facemask at all times (N-95 or higher-level respirator for aerosol generating procedures)
- Wear eye protection
- Gown and glove at door

Todos DEBEN:

- Realizar higiene de manos
- Usar mascarilla en todo momento (Respirador de nivel N-95 o superior para procedimientos que generan aerosoles)
- Use proteccion para los ojos
- Ponerse bata y guantes en la puerta

Keep door closed.  Mantenga la puerta cerrada.

Use patient dedicated or disposable equipment.
Clean and disinfect shared equipment.
** Use equipo dedicado o desechable para el paciente.
Limpiar y desinfectar equipos compartidos. **

Florida HEALTH Contact Infection Control prior to discontinuing precautions. Version 1.01 April 2020

From Shut Down & I-Pads to Open Doors For All

- We remember the day that it was mandated to shut the doors to all visitors.
- Family communication took place through electronic devices.
- So many new challenges, however, the challenges of open doors brought in a whole new concern.
- Now we don't just have to police ourselves and our vendors, but now the visitors.
- How many times have you had to remind someone visiting either put their mask back on or pull it up over the nose?
- The risk the healthcare workers brought into the facilities was one thing, but now it was us who were constantly in testing mode AND visitors who did not have the strict guidelines we had.



Proper PPE Usage – Donning

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

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

1. GLOVES

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



2. GOGGLES OR FACE SHIELD

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



3. GOWN

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



4. MASK OR RESPIRATOR

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



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



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE



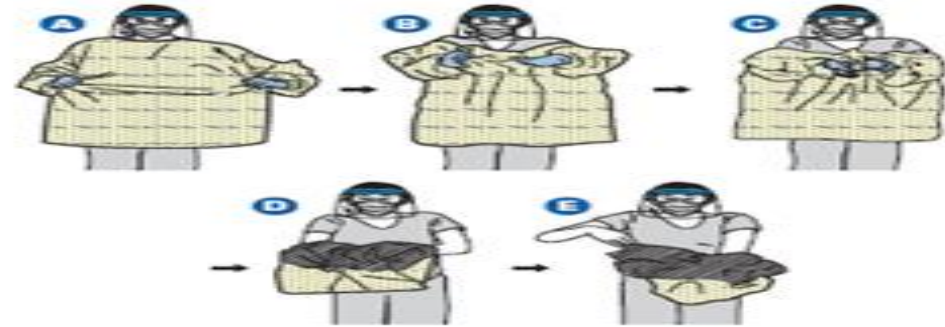
Proper PPE Usage - Doffing

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

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

1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container



3. MASK OR RESPIRATOR

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



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



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE



Environmental Cleaning

- Begin your shift as if the person using you before it had Covid-19, make no assumptions.
- Clean each item taken in and out of the room with EPA-approved disinfectant.
- The most important part is to wait the appropriate time and use enough product for the item to stay wet the entire time required for disinfection.
- Cleaning Covid+ patients' high-touch surfaces should be done with environmental services working together.
- Remember this - who spends the most time in the room?
- Communicate any deviations from proper sanitizing of equipment to your supervisor or infection control nurse.



The Development of Testing



Testing, Testing, Testing

- Initially we put in place the state-mandated Covid-19 PCR tests.
- We identified anyone with signs and symptoms of Covid-19 and tested immediately.
- Until the results came back, we placed them in quarantine.
- All staff were required to test if they had any symptoms prior to reporting to work, it was done curbside in their car.
- When the antigen rapid tests came out, we began testing all patients upon admission.
- Any gatherings in the building required pre-testing at the door to attend and they are still socially distanced.



[This Photo](#) by Unknown Author is licensed under [CCBY](#)

Cleaning Schedules and Modalities

- Environmental Services utilized different cleaning strategies to ensure additional cleaning of the non-Covid hospital areas.
- Team effort using all staff to disinfect their areas on arrival and after usage.



Covid-19 Vaccine Clinics



Covid-19 Vaccines

- When the vaccines were released, everyone had concerns and many still do.
- Our job as health care professionals is to look at the data and use that to effectively communicate with the residents, families, and community about what the data shows.
- The goal is to achieve herd immunity which is when most of the population is vaccinated, and the infection has less potential to devastate the world.
- After the first wave came and left and the vaccines were introduced, and they were studied along the way.
- What we now know is that people do still get Covid-19 when they have been vaccinated and boosted.
- However, it has not become a death sentence for the most vulnerable older population and those with serious comorbidities.
- Don't take it for granted, you should still apply your normal measures in a responsible way such as masking, staying away from indoor crowds, and performing hand hygiene.
- There is something called long-Covid and trust me that is not a journey that targets the elderly, it hits the young and the old in the same debilitating way.



OUTBREAK MODE



You Have identified a Covid+ Patient on admission.

Now what?

LTC Respiratory Surveillance Line List

Date: ___/___/___

This worksheet was created to help nursing homes and other LTC facilities detect, characterize and investigate a possible outbreak of respiratory illness.

A. Case Demographics			B. Case Location			C. Signs and Symptoms (s/s)				D. Diagnostics				E. Outcome During Outbreak ^A		
Name	Age	Gender (M/F) Resident (R) or Staff (S) <u>Residents Only:</u> Short stay (S) or Long stay (L) <u>Residents Only:</u> Bldg/Floor <u>Residents Only:</u> Room/Bed <u>Staff Only:</u> Primary floor assignment	Symptom onset date: (mm/dd)	Fever ^B (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 _____	Chest x-ray (Y/N)	Type of specimen collected (select all codes that apply) NP – nasopharyngeal swab, OP – oropharyngeal swab, U – urine, S – sputum, Other: Specify _____	Date of collection: (mm/dd)	Type of test ordered (Select all codes that apply) 0 – No test performed, 1 – Culture, 2 – PCR, 3 – Urine Antigen, 4 – Other: Specify _____	Pathogen Detected (Select all codes that apply) 0 – Negative results Bacterial: 1 – <i>S. pneumoniae</i> , 2 – <i>Legionella</i> , 3 – <i>Mycoplasma</i> Viral: 4 – Influenza, 5 – RSV, 6 – HMPV 7 – Other: Specify _____	Symptom resolution date: (mm/dd)	Hospitalized (Y/N)	Died (Y/N)	Case (C) or Not a case (leave blank)	
1.																
2.																
3.																
4.																
5.																
6.																
7.																
8.																
9.																
10.																

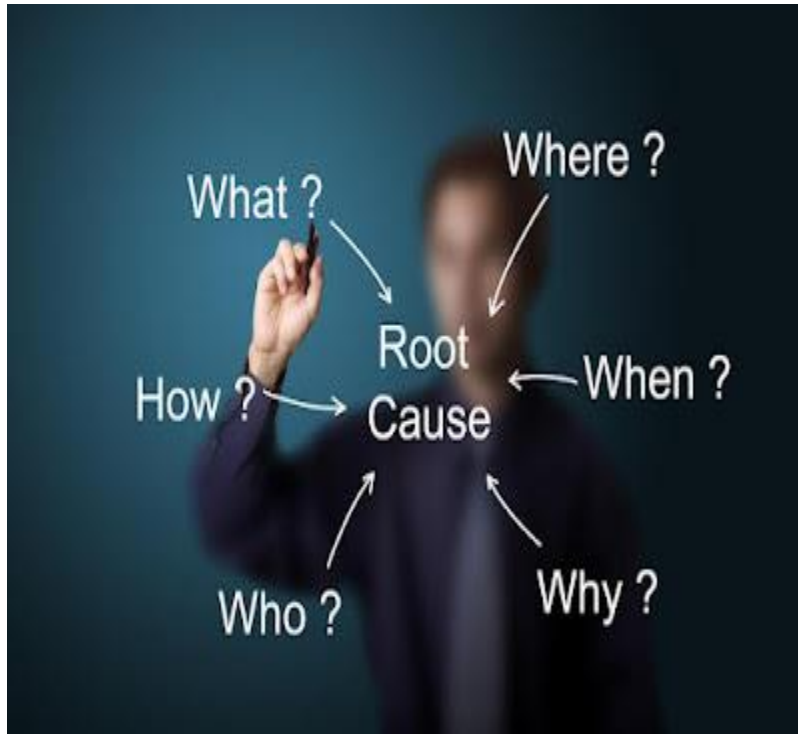
If faxing to your local Public Health Department, please complete the following information:

Facility Name: _____ City, State: _____ County: _____

- Immediately isolate the patient and any person exposed.
- Begin a line list and contract tracing.

An outbreak in hospital #3 now what?

Root Cause Analysis!



#	Analysis Question	Process	Root Cause Analysis Findings	Root cause	Plan of Action
3	What human factors were relevant to the outcome?	<p>Staff-related human performance factors that contributed to the event.</p> <ul style="list-style-type: none"> Failure to follow established policies/procedures. Distraction Lack of communication 	<p>Failure to quarantine the patient and ensure no further contact with other patients.</p> <p>Lack of consistent disinfection of equipment between patients.***</p> <p>Team very busy / and fatigued</p> <p>Timing of the occurrence did not allow for full team collaboration as would normally take place.</p>	<p>Relied on the negative test received.</p> <p>Sanitizing wipes are not as widely available as before.</p> <p>Did not perceive as risk based on the testing.</p>	<p>Re-educate staff on established protocols for PUI quarantine.</p> <p>Post incident admin. huddle.</p>
4	How did the equipment performance affect the outcome?	N/A	N/A	N/A	N/A
5	What controllable environmental factors directly affected this outcome?	<ul style="list-style-type: none"> Double room placement Safety or security risks 	<p>Double room provided to patient upon admission.</p> <p>Sanitizer wipes are not readily available for staff to use consistently. They used to be kept on each med cart / nurses' station / vital machines / gym stations and could be grabbed very easily by anyone needing them.</p>	<p>The census was rising and there were no more private rooms available.</p> <p>Unable to leave the sanitizer in the areas prior to the pandemic.</p> <p>They are currently kept in centralized locations that can be monitored. This is due to the products vanishing once placed in the usual locations.</p>	<p>Utilize transmission precautions and keep curtain closed for all new admissions until the results obtained.</p> <p>Saniwipe packets in Ziploc issued on arrival.</p>

Learn from your mistakes!

Using the team involved in the outbreak we were able to answer honestly and objectively where the failures occurred in our processes, and communication.

These key factors helped us to determine mitigating interventions to ensure that there would be no further outbreaks!

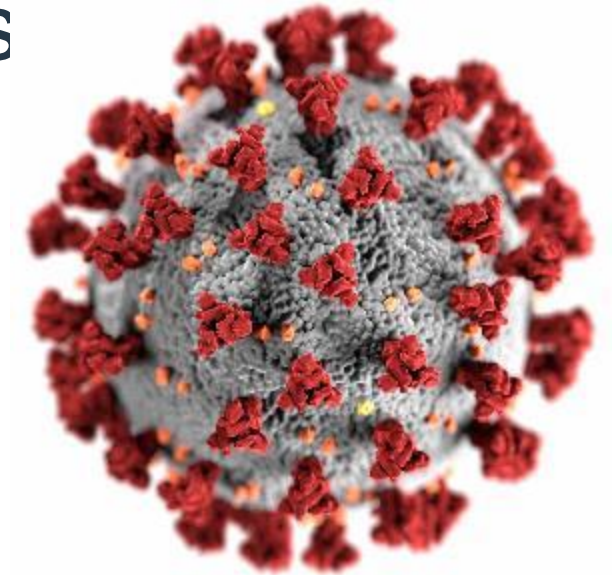
The team was educated on all aspects and the interventions were put in place successfully.

Years into the pandemic... What have we achieved?



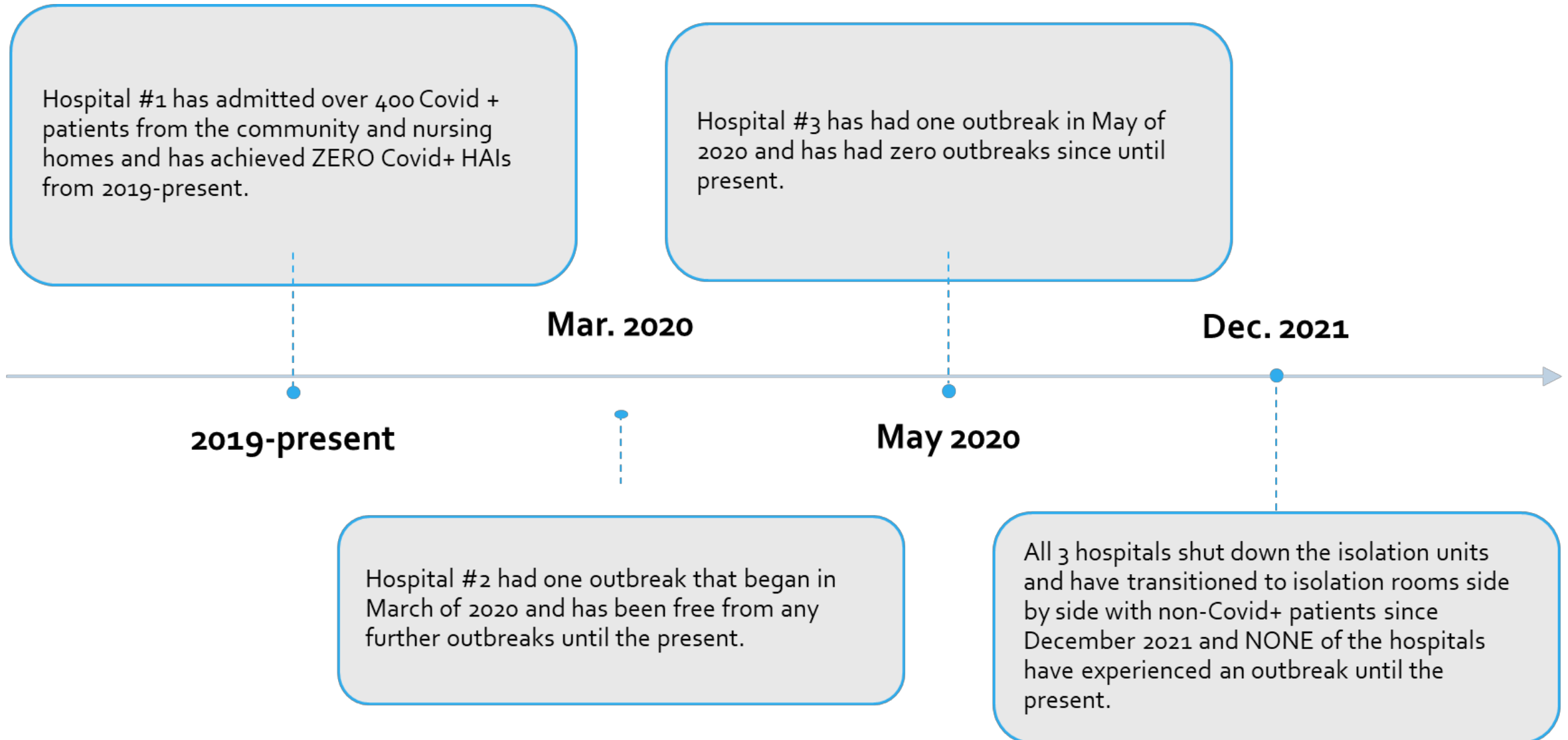
Prevention of Covid-19 in 2022

- The goal is not to be scared; it is to be prepared.
- Now we have seen years of data, studies and evidence that shows us how to protect ourselves, the residents entrusted to our care and those we love.
- Let's talk about how this can be done and done successfully.
- Let's talk about the potential for zero Covid+ residents, how can we get there?



[This Photo](#) by Unknown Author is licensed under [CC BY](#)

Where are we now?



Take Away Points of the Day!

- Sound infection control practices can prevent you from getting Covid-19.
- Planning and education with monitoring for consistency yields results.
- When things go wrong be quick to investigate and take action to correct the failures.
- Used evidence-based practices each step of the way as you enter the field of nursing.
- Promote vaccination to prevent serious complications from Covid-19.
- Your greatest protection against Covid-19 is you.
- The decisions you make.
- How compliant you are with prevention measures, not just at work but in your community.
- Your dedication to doing what is right in the community and at work to ensure the safety and well-being of the patients & residents entrusted in your care, your families, your community, and yourself!
- Thank you!

Questions



References

- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assessment-hcp.html>
- <https://floridahealthcovid19.gov/vaccines/vaccine-locator/>
- <https://floridahealthcovid19.gov/>
- <https://www.cdc.gov/longtermcare/pdfs/LTC-Resp-OutbreakResources-P.pdf>

CareForum 2022

The WellSky® Conference

Thank you.

Contact us:

Joi McMillon BSN, MBA HA, CRRN, WCC, CJCP, HACP-CMS, CIC

Healthcare Consultant

jadhigheerexp.org

consulting.jadhexp@gmail.com



Learn more about **WellSky Specialty Care**

**A scalable and comprehensive
purpose-built solution**



Request a consultation today!

