

COVID-19 Chicago Long Term Care Roundtable

Agenda

- Respiratory Disease Epi & Surveillance
- TB Requirements for Healthcare Facilities
- Alcohol-based Hand Rub Distribution Feedback
- Multidrug Resistant Organisms: Threat, Prevention, and Mitigation
- Facility Spotlight
- Upcoming Events
- Questions & Answers

COVID-19 Variant Proportions

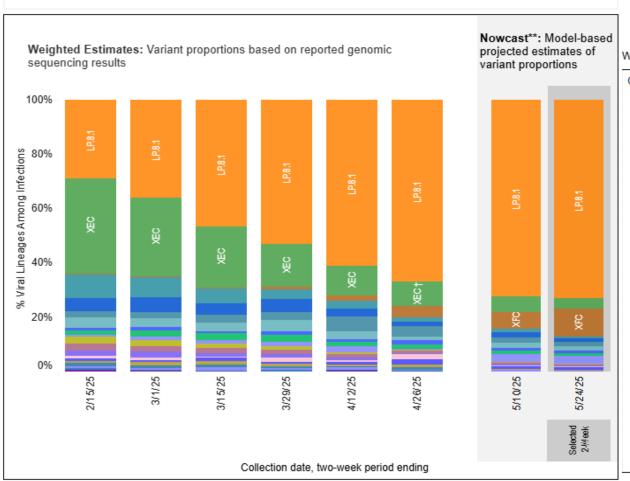


Weighted and Nowcast Estimates in United States for 2-Week Periods in 2/2/2025 - 5/24/2025

Nowcast Estimates in United States for 5/11/2025 - 5/24/2025



Hover over (or tap in mobile) any lineage of interest to see the amount of uncertainty in that lineage's estimate.



USA

WHO label	Lineage # %Total		95%PI	
Omicron	LP.8.1	73%	69–77%	
	XFC	10%	6–17%	
	XEC	4%	3–5%	
	LF.7.7.2	3%	1–9%	
	LF.7	2%	1–3%	
	MC.10.1	1%	1–2%	
	LB.1.3.1	1%	1–2%	
	PA.1	1%	1–2%	
	XEC.4	1%	1–2%	
	LF.7.7.1	1%	0–2%	
	KP.3.1.1	1%	0–1%	
	LF.7.2.1	0%	0–1%	
	KP.3	0%	0–1%	
	XEQ	0%	0–1%	
	XEK	0%	0–1%	
	MC.1	0%	NA	
	JN.1	0%	NA	
	MC.19	0%	NA	



*New COVID-19 Variant: NB.1.8.1

- Omicron variant
- Detected in >20 countries. including U.S.
- No indication that it is more severe than recent variants, but it does seem easier to transmit
- Current vaccine should still provide protection against severe disease



U.S. reports cases of new COVID variant NB.1.8.1 behind surge in China

Hong Kong has confirmed that it is in the midst of a new COVID-19 wave. The percentage of respiratory samples testing positive for the virus has increased dramatically-from 1.7% in March to 11.4%, which is higher than during the August 2024 peak.



WHO TAG-VE Risk Evaluation for SARS-CoV-2 Variant Under Monitoring: NB.1.8.1

New COVID variant NB.1.8.1 found at **US** airports amid global surge

By HT News Desk



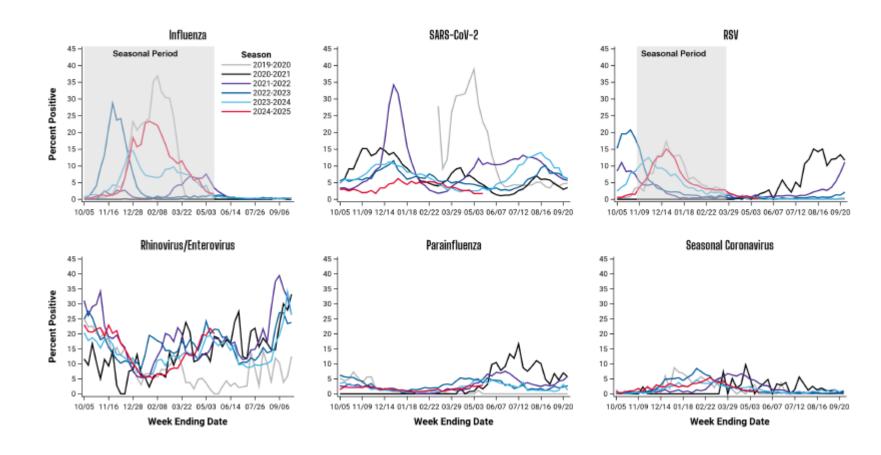
Chicago Respiratory Virus Surveillance Report – Current Week & Cumulative

	Week Ending May 17, 2025		Since September 29, 2024	
Respiratory Pathogen	# Tested	% Positive	# Tested	% Positive
Influenza*	2,124	1.7	119,858	10.5
RSV*	1,579	0.5	97,781	5.2
SARS-CoV-2*	1,617	1.7	99,267	3.9
Parainfluenza	1,440	2.9	66,617	1.6
Rhinovirus/Enterovirus	589	20.0	35,758	13.3
Adenovirus	589	1.9	35,887	1.8
Human Metapneumovirus	591	3.6	36,343	1.7
Seasonal Coronaviruses [†]	1,438	0.4	56,843	2.6

^{*}Represents both dualplex and multiplex PCR data. All other data represents only multiplex panels that include the specified pathogens;† Four seasonal coronavirus strains include 229E, NL63, OC43, and HKU1.



Chicago Respiratory Virus Surveillance Report – Seasonal Trends





TB Requirements for Healthcare Facilities

- Risk Assessment
 - Initial and ongoing evaluation of risk for transmission of TB. Must include administrative, environmental, and respiratory-protection controls and be reviewed at least annually
- Written Plans
 - TB infection control plan, which must be updated at least annually, that includes:
 - Protocols for screening and management of latent TB infection among staff and residents
 - Protocols for screening, diagnosis, and management of active TB
 - Data collection and evaluation
 - Reporting of persons with suspected or confirmed active TB
 - Healthcare worker education program
 - Name of person responsible for the TB prevention and control program at your facility
 - Referral mechanism for residents with TB who leave the facility



TB Requirements for Healthcare Facilities

- TB Prevention and Control Program
 - Program that should be executed in accordance with the written plan
- Healthcare Worker Education
 - All HCWs should be trained upon hire and periodically thereafter to ensure that they
 have knowledge relevant to their work and know the level of risk in your facility
- Collaboration
 - Collaborate with public health authorities (e.g., CDPH/IDPH) when applicable
- Records
 - Must maintain records on TB screening test results, TB diagnostic evaluation results, information about persons exposed to TB, and the current written plan
 - Data should be analyzed periodically to identify your facility's risk level
 - Records must be available to public health upon request



**** TB Resources: CDC Guidelines**

- 2005 guidance document on preventing TB transmission in healthcare settings
 - Administrative, environmental, and respiratory-protection controls by setting type, including Long-Term Care settings (Appendix A, page 127)
 - TB risk assessment worksheet (Appendix B, page 128)
 - Risk classifications (Appendix C, page 134)

28		MMWR		December 30, 2005
ppendi	x B. Tul	berculosis (TB) risk assessment worksheet		
nis mode	el worksh	eet should be considered for use in performing TB risk assessments for health-ci than one type of setting will need to apply this table to each setting.	are settings and	I nontraditional facility-based settings.
		Scoring: ✓ or Y = Yes X or N = No NA = Not A	Applicable	
	1. Incide	ence of TB		
		nat is the incidence of TB in your community (county or region served by the heal ting), and how does it compare with the state and national average?	Ith-care	Rate Community
	b. Wh	at its the incidence of TB in your facility and specific settings, and how do those r mpare? (Incidence is the number of TB cases in your community during the previ ate of TB cases per 100,000 persons should be obtained for comparison.)* This i to be obtained from the state or local health department.	ious year.	State National Facility Department 1 Department 2 Department 3
		e patients with suspected or confirmed TB disease encountered in your setting (in patient)?	npatient and	
	1)	If yes, how many are treated in your health-care setting in 1 year? (Review labou data, infection-control records, and databases containing discharge diagnoses fundamation.)		Year No. patients 1 year ago Confirmed 2 years ago
	2)	If no, does your health-care setting have a plan for the triage of patients with succonfirmed TB disease?	spected or	
		rrently, does your health-care setting have a cluster of persons with confirmed TE It might be a result of ongoing transmission of Mycobacterium tuberculosis?	3 disease	
	2. Risk	Classification		
	a. Inp	atient settings		
	1)	How many inpatient beds are in your inpatient setting?		Quantity
	2)	How many patients with TB disease are encountered in the inpatient setting in (Review laboratory data, infection-control records, and databases containing dis diagnoses.)		Previous year5 years ago
	3)	Depending on the number of beds and TB patients encountered in 1 year, what classification for your inpatient setting?	t is the risk	Low risk Medium risk Potential ongoing transmission
	4)	Does your health-care setting have a plan for triaging patients with suspected of TB disease?	or confirmed	
	b. Ou	tpatient settings		
	1)	How many TB patients are evaluated at your outpatient setting in 1 year? (Revial boratory data, infection-control records, and databases containing discharge for this information.)		Previous year5 years ago
	2)	Is your health-care setting a TB clinic? (If yes, a classification of at least mediur recommended.)	m risk is	
		Does evidence exist that a high incidence of TB disease has been observed in community that the health-care setting serves?		
	4)	Does evidence exist of person-to-person transmission of <i>M. tuberculosis</i> in the care setting? (Use information from case reports. Determine if any TST or blood <i>M. tuberculosis</i> [BAMT] conversions have occurred among health-care workers	d assay for	
	5)	Does evidence exist that ongoing or unresolved health-care–associated transmoccurred in the health-care setting (based on case reports)?	nission has	
	6)	Does a high incidence of immunocompromised patients or HCWs in the health-care exist?	setting	
	7)	Have patients with drug-resistant TB disease been encountered in your health-within the previous 5 years?	care setting	Year encountered
	8) 9)	When was the first time a risk classification was done for your health-care setting considering the items above, would your health-care setting need a higher risk classifier the considering the items above.	•	Date of classification



***** 2024 Tuberculosis Rates

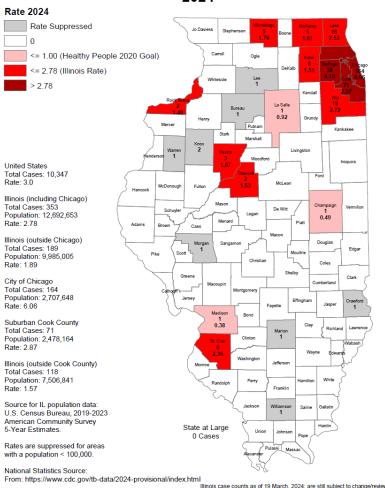
• U.S.: 3.0 TB cases per 100,000 residents

• Illinois: 2.78 TB cases per 100,000 residents

 Chicago: 6.06 cases per 100,000 residents

 Data can be used for your facility's TB risk assessment

Illinois Tuberculosis Case Rates per 100,000 Population 2024





X TB Resources: CDPH LTC HAN Page

Tuberculosis

<u>Tuberculosis</u> (TB) is caused by a bacterium called *Mycobacterium tuberculosis*. Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: latent TB infection (LTBI) and TB disease. For most people with LTBI, M. tuberculosis remains in the inactive state in which the infected person has no symptoms and cannot spread the infection to others. But in other people, especially people who have a weak immune system, the bacteria become active, multiply, and cause TB disease. Progression to TB disease can take weeks to decades after initial infection. People with TB disease have symptoms or other manifestations of illness (e.g., an abnormal chest radiograph). The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidney, spine, and brain.

<u>Precautions</u>: Airborne precautions should be implemented for residents with suspected or confirmed pulmonary TB, discontinue precautions only when resident on effective therapy is improving clinically and has 3 consecutive sputum smears negative for acid-fast bacilli collected on separate days. Airborne + contact precautions should be implemented for residents with extrapulmonary TB who have a draining lesion, discontinue precautions only when resident is improving clinically, and drainage has ceased or there are 3 consecutive negative cultures.

Additional Resources:

- TB Screening and Testing of Health Care Personnel All U.S. health care personnel should be screened for TB upon hire. The TB screening should include a baseline individual TB risk assessment, TB symptom evaluation, a TB test (e.g., TB blood test or TB skin test), and any additional evaluation for TB disease as needed.
- Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019 - Updated recommendations to the 2005 CDC guidelines.
- 2024 Tuberculosis Rate Map This map contains TB rates for Chicago, Illinois, and the U.S. This map should be used to complete your long term care facility's TB risk assessment. Map is provided by IDPH and is updated annually.



Alcohol-based Hand Rub (ABHR) Distribution Feedback

Requesting feedback on if/how your facility used the pocket-sized ABHR that CDPH distributed last year





Multi-Drug Resistant Organisms: Threat, Prevention, and Mitigation

THOMAS C. ROOME MPH | CIC | EMT Infection Prevention Specialist
Bureau of Disease Control | Healthcare Settings
Thomas.Roome@CityofChicago.org
(773)-339-7995



X Learning Objectives

- Discuss Antimicrobial Resistance (AMR), Multi-Drug Resistant Organisms (MDROs), and the threat they pose.
- Discuss the transmission of MDRO in healthcare settings.
- Discuss the importance proper Infection Prevention and Control practices as related to MDROs.



Introduction to MDROs

Definition

• MDROs are "microorganisms (germs), mostly bacteria, that are resistant to one or more classes of antimicrobials used to treat infections"

Causes

 Exposure to antimicrobials kills germs without resistance, creating pressure for resistance to develop.

New Drug Development

 No new classes of antibiotics have been developed in over 30 years.

Infection Prevention and Control

 Critical for maintaining the usefulness of our antimicrobials for as long as possible.

Consequences of Antimicrobial Resistance



In 2019, antimicrobial resistant (AMR) infections caused <u>1.27</u> Million deaths, and contributed to a further <u>4.95 Million</u> deaths.



In the US alone, AMR infections incur \$55 *Billion* in healthcare costs *each year*.

• That's \$166/year for each American.

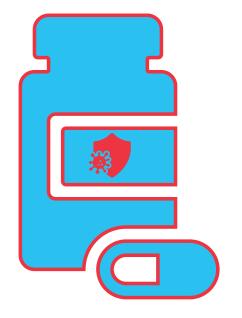


If current trends continue, by 2050 AMR will cause 10 Million deaths/year and economic costs of 1- to 3.4 Trillion USD/year



"Stop referring to a coming post-antibiotic era—it's already here."

CDC, Antimicrobial Resistant Threats Report 2019



"Antimicrobial resistance (AMR) is one of the <u>top</u> global public health and development threats."

-World Health Organization



MDRO Transmission & Prevention



Who is at Risk for MDRO Infections?



Older Adults, and young children



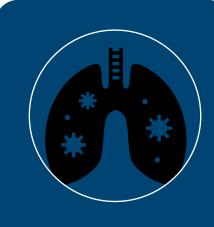
With >1 chronic health condition



Stays in multiple healthcare facilities



Indwelling devices



Mechanical ventilation

LTC Resident Population!



X Prevention and Control of Antimicrobial Resistance

Antimicrobial Stewardship

- Improves antimicrobial use.
- Prevents & slows the development of antimicrobial resistance.



Infection Prevention and Control Practices

- Prevents existing antimicrobial resistance from spreading.
- Reduces risk of infections:
 - Reduces Tx costs,
 - Antimicrobial use,





MDRO Transmission

MDROs spread by **Contact Transmission**

- In contact transmission, germs *hitch a ride* on something to get around.
 - Unwashed Hands
 - Clothing or linens
 - Equipment: stethoscopes, BP cuffs, lifts, wheelchairs
 - Surfaces: tables, toilets, light switches, beds rails,

When the MDRO reaches someone susceptible, they can then become colonized or infected.

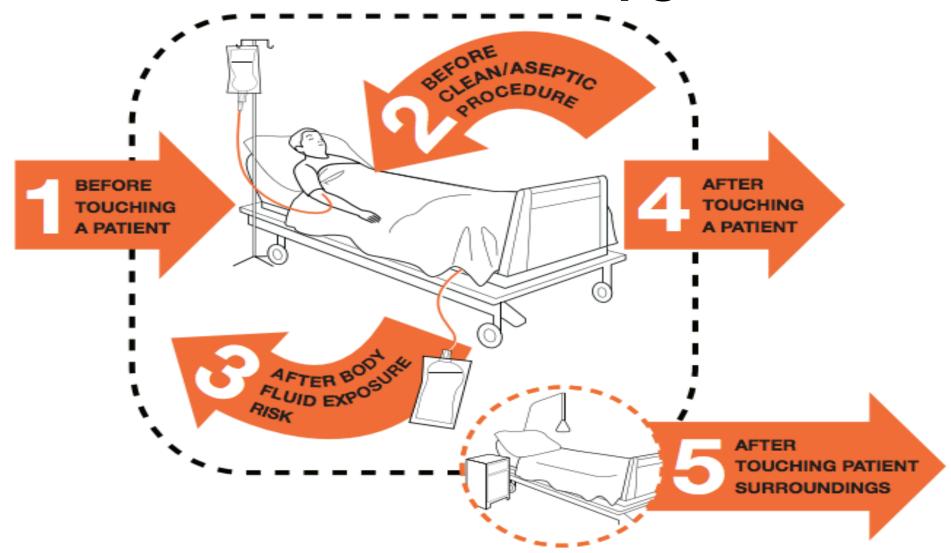
To prevent transmission, we focus on:

- 1.Hand hygiene
- 2. Environmental Cleaning/Disinfecting
- 3. Transmission Based Precautions/PPE Use

X Hand Hygiene

- Is the single most important way to prevent the spread of MDROs.
- We use our hands for nearly everything we do, germs that spread by contact count on that.
- Most MDROs spread by touch (contact)
 - Our hands can become contaminated when providing care or touching equipment or the environment.
 - If we don't wash our hands, we risk contaminating the environment w/ MDROs or bringing that contamination directly to our next care encounter.

X The 5 Moments of Hand Hygiene





The 5 Moments of Hand Hygiene Explained

Before Res/Pt Contact

- So, we don't bring germs **INTO** this encounter from **outside** the room.
 - The last resident
 - Computer
 - Nursing Station

Before a clean/aseptic procedure

- So that we don't introduce germs during the procedure. From
 - Our hands
 - The pt skin
 - Environment

After Res/Pt Contact

- So, we don't bring germs **OUT** of the room to
 - The next resident
 - High touch surfaces
 - nursing station
 - Equipment

After Body fluid exposure

 To prevent contamination of the HCP and healthcare environment by germs.

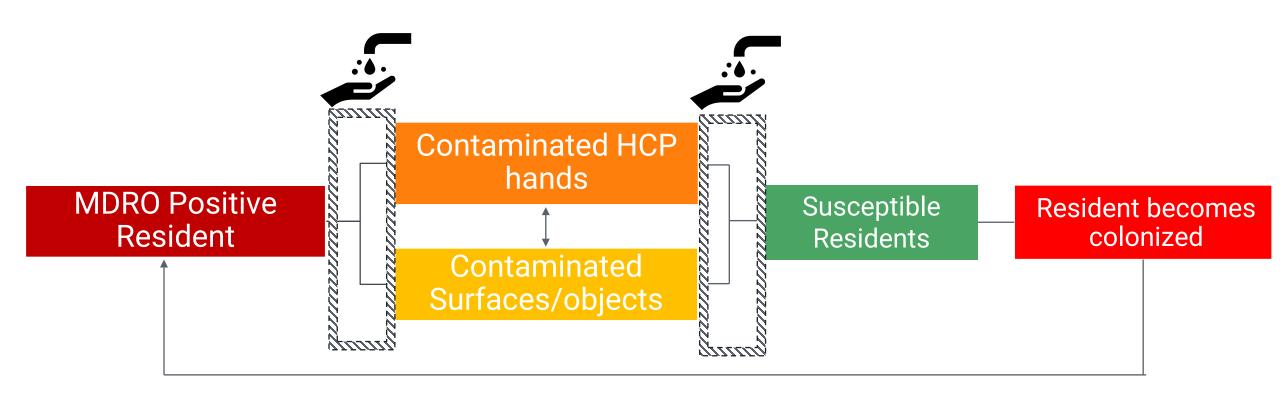
After touching Res/Pt surrounding

- So, we don't bring germs **OUT** of the room to
 - Other residents
 - Surfaces
 - Equipment

Also Protect HCP



X Hand Hygiene & MDRO Transmission





* Alcohol-Based Hand Sanitizer v. Soap and Water

Alcohol-Based Hand Sanitizer

- Kills Germs
- Preferred in most clinical situations.
- Less drying/damaging to hands
- Faster and easier



Soap and Water

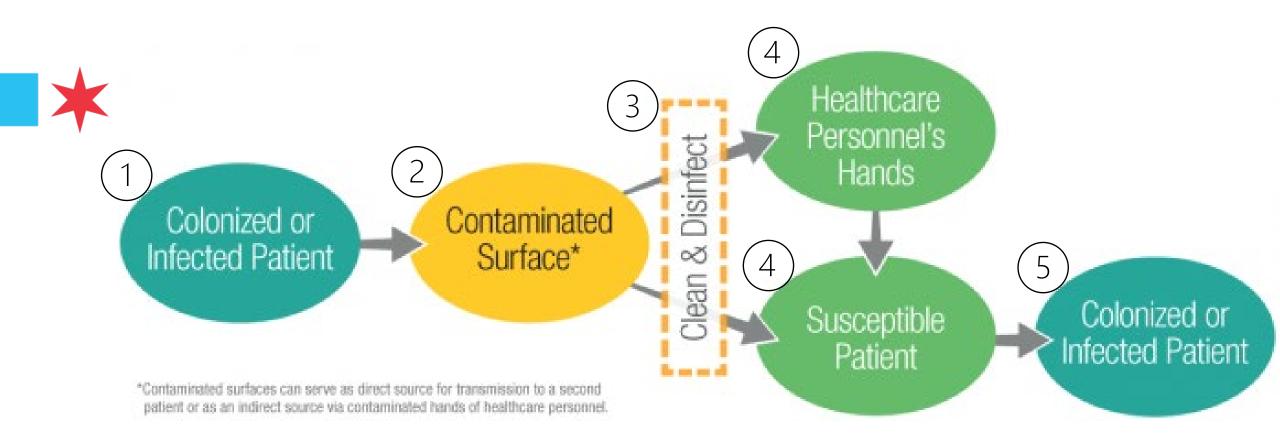
- Washes germs/dirt off.
- · Preferred when:
 - Hands are visibly soiled.
 - When certain germs are present/suspected
 - C. diff.
 - Norovirus
 - After the restroom.
 - Before/after eating.





X Cleaning and Disinfection

- In addition to keeping our hands clean, we need to keep the environment clean.
 - Otherwise, our equipment and hands are likely to become contaminated regardless.
- High touch surfaces should be cleaned at least 1x daily.
- Contact time is how long a surface needs to stay WET to kill germs.
 - If you have cleaning duties, you need to know the contact time of the cleaning products you use.
- When cleaning an area:
 - Clean from top → down and clean → dirty!



- Direct care of MDRO colonized/infected res isn't the only source of MDRO contamination on hands.
 - HCP hands and clothing can become contaminated while providing care.

Contact Precautions

When:

- Active MDRO infection or Colonization
- Secretions or excretions that are unable to be controlled.

What

- Temporary
- Gown and gloves must be worn by anyone entering the room.
- Residents remain in their rooms (unless medically necessary)

Enhanced Barrier Precautions

• When:

- 1. Colonized or infected with MDROs,
- 2. OR with wounds or indwelling devices.
- 3.Excretions or secretions that **CAN** be controlled.

What:

- Long-Term
- Targeted use of PPE (gown & gloves) during "high-contact" care activities.
- Residents may leave their rooms



X PPE: Enhanced Barrier Precautions

- Enhanced Barrier Precautions require:
 - A gown and gloves during high-contact activities:
 - For other activities, gloves and gown are not required (Standard Precautions still apply)
- "High contact" care activities include:
 - Dressing
 - Bathing/showering
 - 3. Transferring
 - 4. Hygiene
 - Changing linens
 - Assisting with briefs or toileting
 - Indwelling device care or access
 - Wound care

* Summary

- Your residents are at risk for severe illness and death from MDRO infections.
- The spread of MDROs and their antimicrobial resistance is a direct threat to our ability to use drugs to treat infections.
 - This results in: Morbidity, mortality, and economic costs.
- The best ways to prevent MDRO transmission is through high-quality hand hygiene, and environmental cleaning, Contact & Enhanced Barrier Precautions and, appropriate PPE use.



Questions

Question:

An HCP always performs hand hygiene when leaving residents' rooms but doesn't always before entering. Does this increase the risk of MDRO transmission?

- A. No, because performing hand hygiene when leaving the room prevents us from bringing germs out of the room.
- B. No, because outside residents' rooms all surfaces are considered "clean".
- C. Yes, because if we touch something in the environment with germs on it before our next care encounter, but don't perform hand hygiene before entering the room, we will then expose residents to those germs.
- D. Yes, but not enough to make hand hygiene worth it.

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Question

True or False:

When caring for residents with MDROs we can know with certainty that MDROs only exist on surfaces *inside* resident rooms because Hand Hygiene, Transmission-Based and Enhanced Barrier Precautions, and Environmental Cleaning and Disinfection practices ensure containment.

Question

True of False:

When caring for residents with MDROs we can know with certainty that MDROs only exist on surfaces *inside* resident rooms because Hand Hygiene, Transmission-Based and Enhanced Barrier Precautions, and Environmental Cleaning and Disinfection practices ensure containment.

FALSE

These practices are intended to contain MDROs, but 100% containment is impossible without very advanced methods. (Biological Safety Level-4)

***** Question:

What is likely **the single most important** practice for preventing infections in healthcare settings?

- A. Environmental cleaning and disinfection
- B. Proper Transmission-Based Precautions (TBP)
- C. Hand Hygiene
- D. Proper PPE use

***** Question:

What is likely **the single most important** practice for preventing infections in healthcare settings?

A. Environmental cleaning and disinfection

Environmental cleaning and disinfection reduces germs in the environment, but if staff are carrying germs on their hands directly from patient to patient, it won't be effective.

B. Proper Transmission-Based Precautions (TBP)

TBP, like contact and droplet are special practices added on top of **standard precautions** for certain contagious diseases. However, they won't be effective without standard precautions (like hand hygiene)

C. Hand Hygiene

D. Proper PPE use

PPE reduces HCP exposure to germs and reduces the contamination of hands/clothing etc. with germs. However, its not always 100% effective and contamination while doffing is very common. Hand hygiene should *always* be performed before putting on and after taking it off PPE.



Thank you!

Any Questions?



Chicago.gov/Health



HealthyChicago@cityofchicago.org



@ChicagoPublicHealth



aChiPublicHealth



X Facility Spotlight: Mercy Circle

- Staff places stickers on certain reusable equipment to indicate when and by whom it has been disinfected
- Visual reminders help to increase awareness and compliance







Upcoming Event: LTC Outbreak Management

- American Association of Post-Acute Care Nursing/APIC webinar on Outbreak Management in Long Term Care, with a focus on norovirus and RSV
- June 26th at 2 p.m.
- Register <u>here</u>

Upcoming AAPACN Webinar Presented by APIC

Outbreak Management in Long-Term Care

Outbreaks may represent a single case of a disease or an increase in the occurrence of a particular illness above what is expected or usual within the long-term care (LTC) facility. Early identification of an outbreak and prompt reporting to public health authorities is essential, in addition to the development of an action plan for response and management. During this 60minute webinar, Joan N. Hebden, MS, RN, CIC, FAPIC, FSHEA, and Marko Predic, MS, CIC, FAPIC, will provide an overview of the phases of an outbreak investigation and the tasks relevant to each phase in the context of two commonly seen diseases in the LTC setting - respiratory syncytial virus (RSV) and norovirus.

Email your questions now to webinarquestions@AAPACN.org to be answered during the Q&A.

Register



Upcoming Event: Cook County Infection Prevention and Control Conference

- Free in-person conference covering infection prevention and control in long-term care settings
- June 4th 8:30 4:30 p.m. @ Triton Community College
- CEUs available
- To register, scan QR code on flyer

Infection Prevention & Control

FOR LONG-TERM CARE PROFESSIONALS

June 4, 2025 | 830AM-430PM CST

Triton Community College 2000 5th Ave. - Bldg. B River Grove, IL

Join us to learn about:

- · Candida Auris in Illinois
- IDPH Web Portal XDRO registry
- · Infection Control Assessment and Response (ICAR)
- Admission Screening Program
- Enhanced Barrier Precautions and Transmission-Based Precautions
- · Outbreak Management in Long-Term Care Facilities

Includes:

- · Catered lunch and breakfast will be provided
- Free parking
- · Free IPUs and CEUs



REGISTER

Presentations by

- Cook County Department of Public
- Illinois Department of Public Health Regional Infection Prevention Program, Division of Patient Safety and Quality
- DuPage County Health Department
- · Hektoen Institute of Medicine

Opening & Closing Remarks by Cook County Department of Public Health









X Upcoming Roundtables

- Switching from monthly to every other month
- Next roundtable will be July 24th
- Look out for a new calendar invite for the remaining 2025 roundtables
- If other individuals at your facility want to attend, they can sign up using this link





Questions & Answers

For additional resources and upcoming events, please visit the CDPH LTCF HAN page at:

https://www.chicagohan.org/covid-19/LTCF