CHICAGO

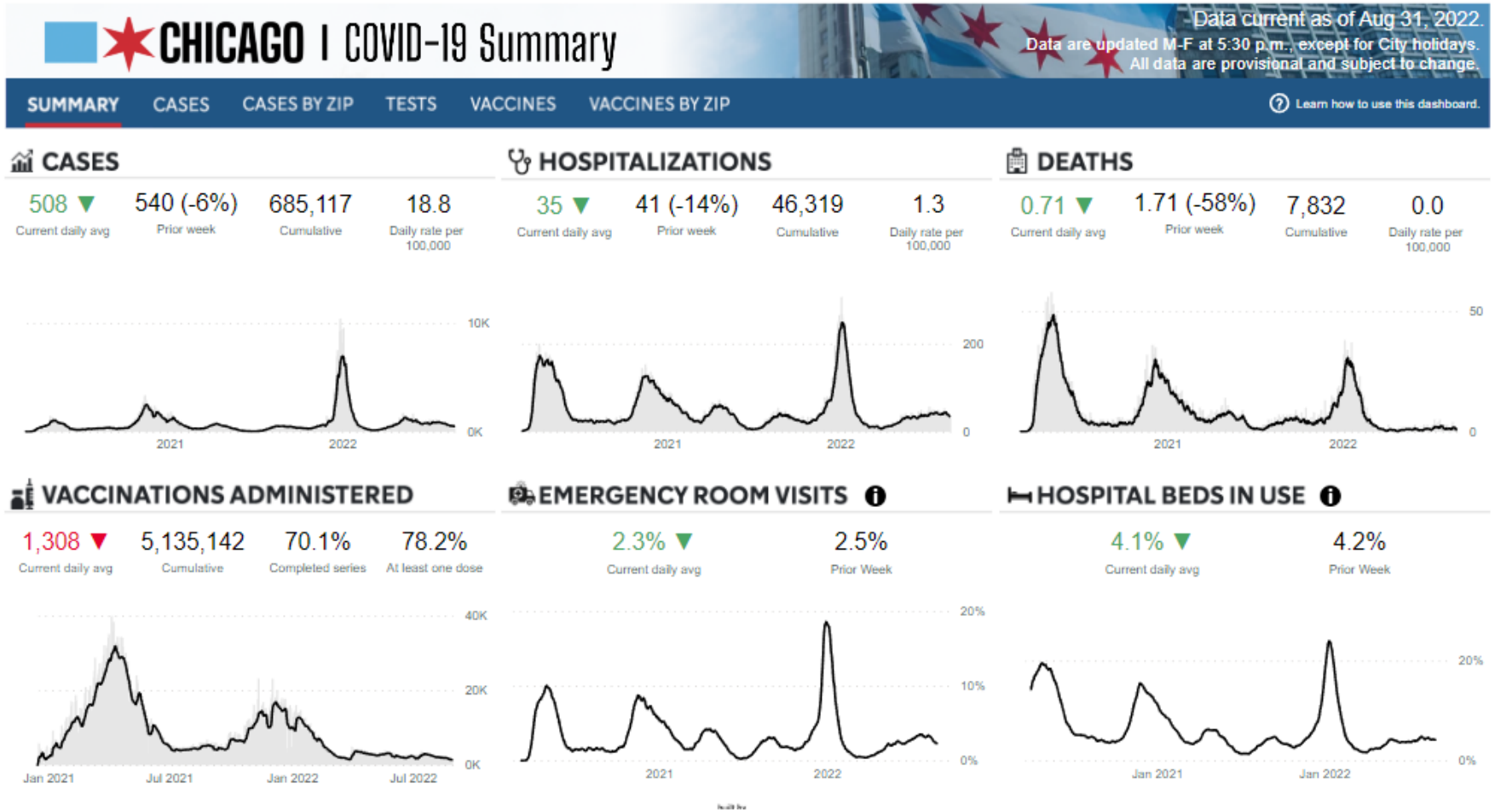
COVID-19
Chicago Long Term Care Roundtable

09-01-2022

Agenda

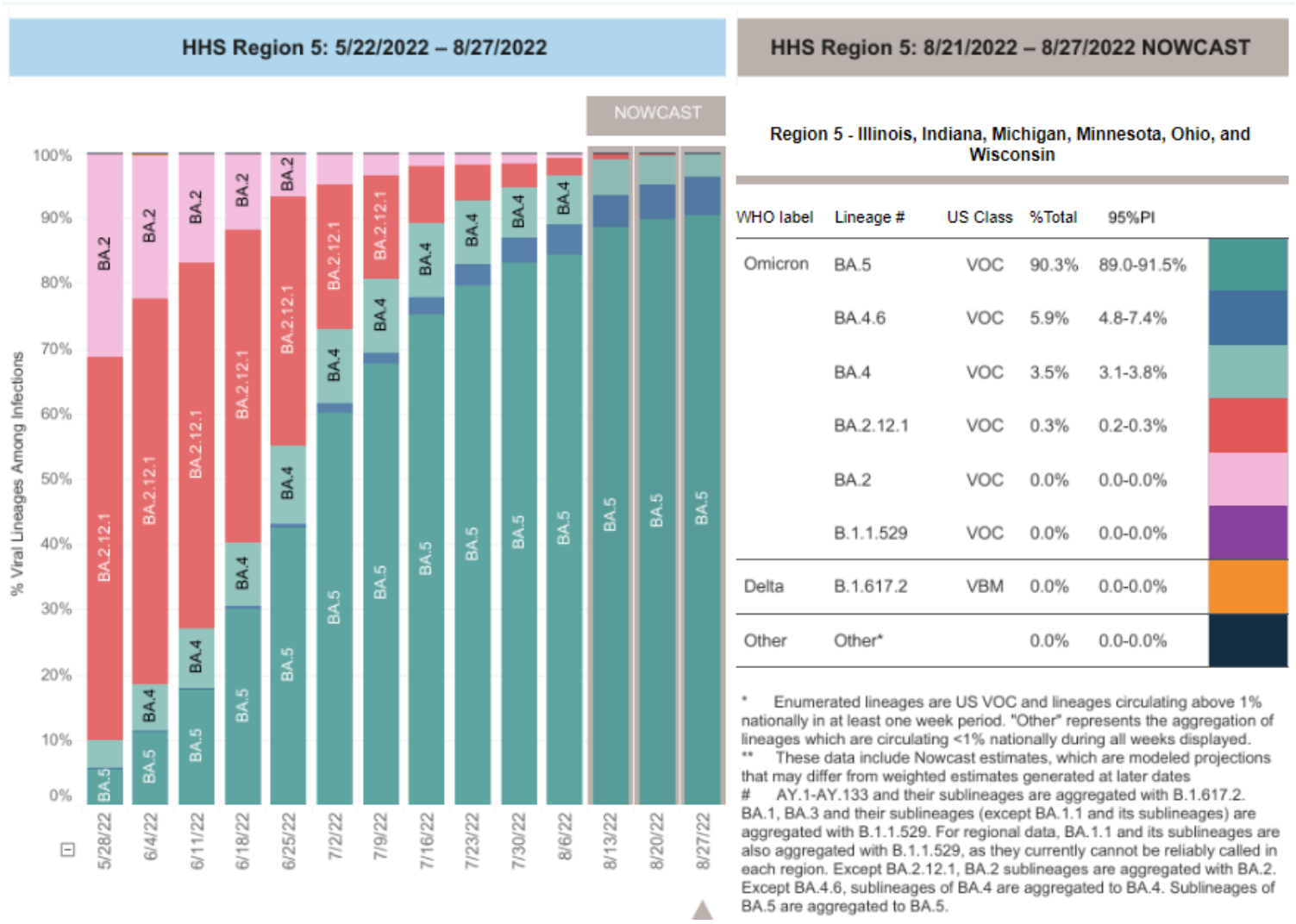
- COVID-19 Epidemiology
- COVID Reminders, Updates, and FAQs
- Carbapenem-resistant Enterobacterales (CRE)
- Questions & Answers

Chicago Dashboard



Source: https://www.chicago.gov/city/en/sites/covid-19/home/covid-dashboard.html

COVID-19 Variant Proportions



HHS Region 5: 8/21/2022 – 8/27/2022 NOWCAST

Region 5 - Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin

WHO label	Lineage #	US Class	%Total	95%PI
Omicron	BA.5	VOC	90.3%	89.0-91.5%
	BA.4.6	VOC	5.9%	4.8-7.4%
	BA.4	VOC	3.5%	3.1-3.8%
	BA.2.12.1	VOC	0.3%	0.2-0.3%
	BA.2	VOC	0.0%	0.0-0.0%
	B.1.1.529	VOC	0.0%	0.0-0.0%
Delta	B.1.617.2	VBM	0.0%	0.0-0.0%
Other	Other*		0.0%	0.0-0.0%

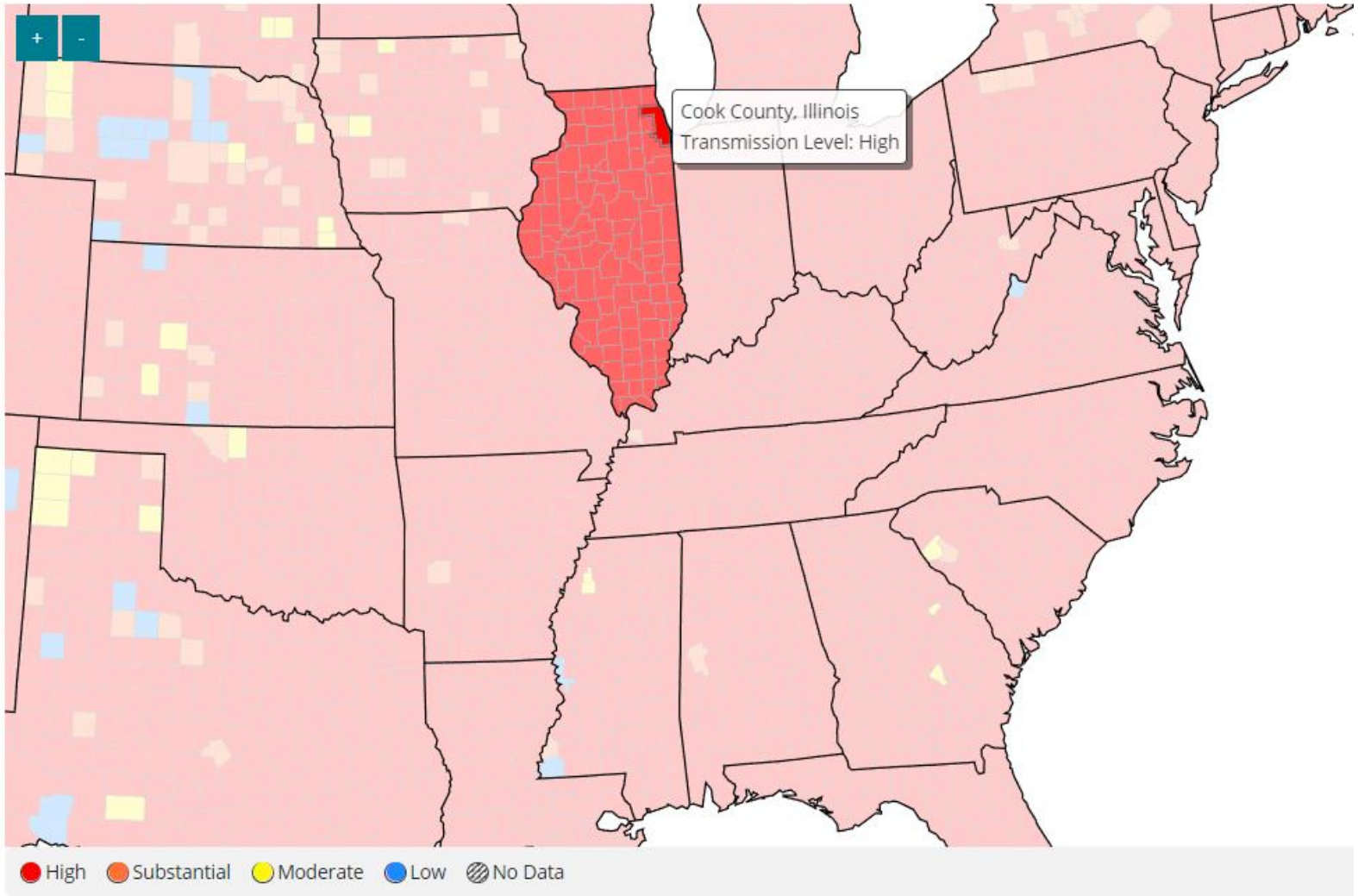
* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.
** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates
# AY.1-AY.133 and their sublineages are aggregated with B.1.617.2. BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. For regional data, BA.1.1 and its sublineages are also aggregated with B.1.1.529, as they currently cannot be reliably called in each region. Except BA.2.12.1, BA.2 sublineages are aggregated with BA.2. Except BA.4.6, sublineages of BA.4 are aggregated to BA.4. Sublineages of BA.5 are aggregated to BA.5.

Soucre: https://covid.cdc.gov/covid-data-tracker/#variant-proportions

Reminder: CDC COVID Data Tracker

Indicator - If the two indicators suggest different transmission levels, the higher level is selected	**Low Transmission Blue**	**Moderate Transmission Yellow**	**Substantial Transmission Orange**	**High Transmission Red**
Total new cases per 100,000 persons in the past 7 days	0-9.99	10-49.99	50-99.99	≥100
Percentage of NAATs[1] that are positive during the past 7 days	0-4.99%	5-7.99%	8-9.99%	≥10.0%

CDC COVID Data Tracker: Cook County

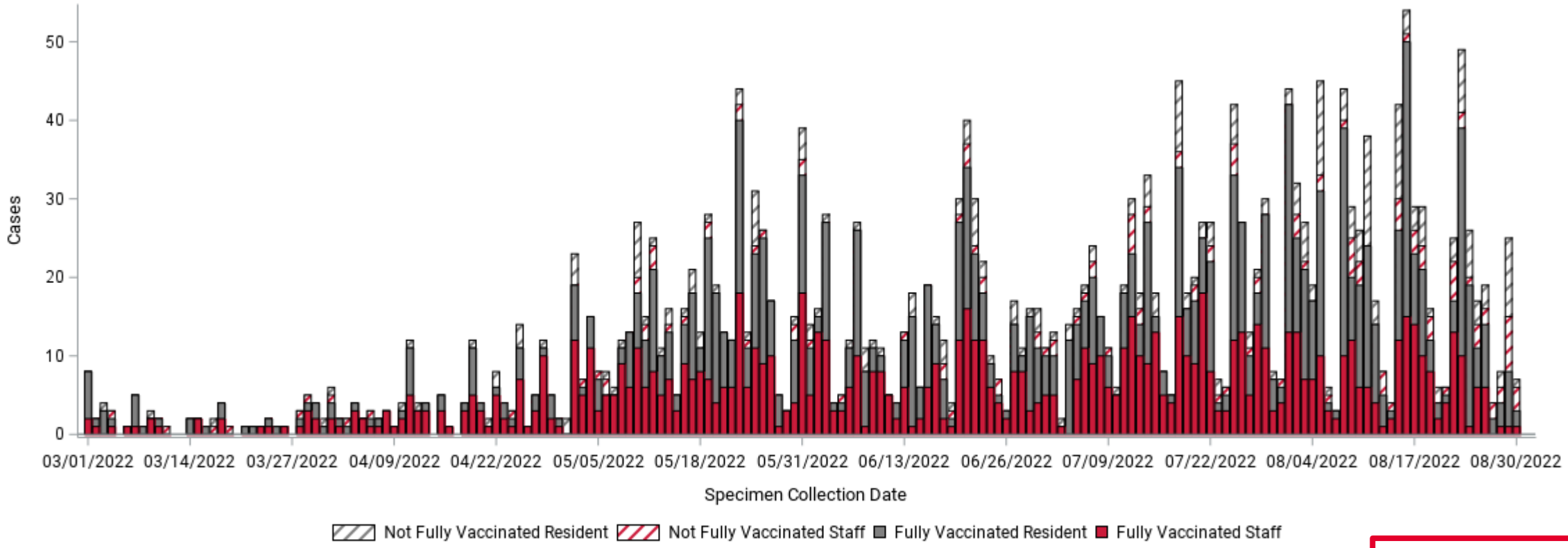


Source: https://covid.cdc.gov/covid-data-tracker/#county-view?list_select_state=Illinois&data-type=Risk&list_select_county=17031

Data as of 8/31/2022

Small Increase in Incidence of Skilled Nursing Home Cases

(Mar. 1, 2022 – Aug 31, 2022)



Data Sources: INEDSS (Illinois state) and REDCap (facility self report)

A fully vaccinated case occurs when the positive test specimen was collected at least 14 days after the individual completed their COVID vaccination

Fully vaccinated cases may be underestimated due to delayed reporting

59 (75%) SNFs have active outbreaks

Reminder: Minimum Routine Staff Testing Frequency

Vaccination Status	Community Transmission Level	Testing Frequency
Not up to date*	High	2x a week
	Substantial	2x a week
	Moderate	1x a week
	Low	No required routine testing*
Up to date	All	No required routine testing*

Based on Illinois Executive Order and related Emergency Rules
* An individual has not received all COVID-19 vaccinations for which they are eligible
** Unless symptomatic, had a high-risk exposure, or your facility is in outbreak and performing unit/broad-based testing.

Source: https://ilsos.gov/departments/index/register/volume46/register_volume46_issue_9.pdf

Reminder: Minimum Routine Resident Testing Frequency

Vaccination Status	Community Transmission Level	Routine Testing Frequency
Unvaccinated*	All	No required routine testing**
Partially vaccinated*	All	No required routine testing**
Vaccinated but not up to date*	All	No required routine testing**
Up to date*	All	No required routine testing**
New and readmissions, regardless of vaccination status	Low & Moderate	No required routine testing**
New and readmissions, regardless of vaccination status	Substantial & High	Must be tested upon admission (unless tested within the 72 hours prior to admission) ***and*** at 5-7 days post-admission

*Excluding new/readmissions when community transmission is substantial or high
**Unless symptomatic, had a high-risk exposure, or your facility is in outbreak and performing broad-based testing.

FAQ: I heard there is a new type of COVID-19 vaccine coming out soon. Is that true?

- Yes, the FDA gave emergency use authorization (EUA) for a new bivalent COVID-19 vaccine on August 31, 2022.
- Next step is for the Advisory Committee on Immunization Practices (ACIP)/CDC to provide an official recommendation before administration can begin.
  - ACIP meeting is scheduled for today (September 1st) and tomorrow (September 2nd)

Source: https://www.cdc.gov/vaccines/covid-19/downloads/cdc-fall-vaccination-operational-planning-guide.pdf

Bivalent Booster

- The updated vaccine is called a "bivalent booster"
  - It is a mix of two versions of the vaccine and will boost protection against the original coronavirus strain as well as protecting against the currently circulating omicron subvariants (BA.4 & BA.5).
- Will be a single shot.
- Must have completed at least the primary series.
- Minimum spacing is two months after the previous shot.
- Those aged 12+ (for Pfizer) and 18+ (for Moderna) will be eligible for the vaccine once approved.

Source: https://www.cdc.gov/vaccines/covid-19/downloads/cdc-fall-vaccination-operational-planning-guide.pdf

Bivalent Booster

- Doses will be limited upon initial rollout, but long-term care facility residents are a priority group.
  - Assuming ACIP/CDC recommends the vaccine, rollout should start within the next week.

- TBD whether the bivalent booster will be included in the "up to date" definition.

- Please connect with your pharmacy or vaccine provider ASAP to discuss logistics.

Poll Questions

Poll Question 1

Our facility has had a recent case (within the last 14 days), so we are currently in outbreak. We do not ask our vendors/providers for proof of negative test before entering the facility. Should we be asking this information?

A. Yes
B. No

Answer

Yes!

If a facility has had a case within the last 14 days (in outbreak), they should require proof of negative test from vendors and external providers at the same frequency of HCP at the facility.

Poll Question 2

Our facility has one level. We want to be extra careful about COVID-19. All staff wear full PPE (including gowns and gloves) even when we aren't having interactions with residents or conducting patient care. This is ok, right?

A. Yes

B. No

Answer

No!

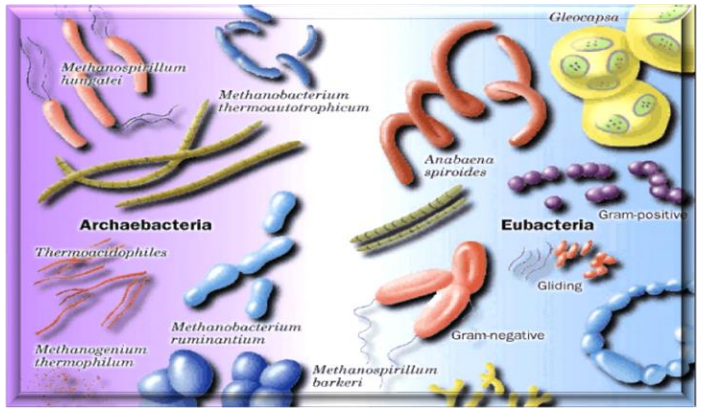
Regardless of the layout of your facility, gowns and gloves should only be worn when providing care to residents as indicated. Gowns and gloves should not be worn when resident care is not being performed. This includes areas like the nursing station, walking the halls, etc. Additionally, gloves and gowns should never be reused, except for disposable gowns that are laundered in between uses. Extended use (i.e., wearing the same gown from room to room) is also not permitted.

Poll Question 3

Can portable room air cleaners improve room ventilation to decrease the risk of COVID-19 transmission?

A. Yes

B. No



Answer

Yes!

Yes, using portable room air cleaners with a high efficiency particulate air (HEPA) filter can enhance air cleaning. They reduce the airborne concentrations and reduce the risk that residents, visitors, and HCP come in contact with viral particles Air cleaners need to have the appropriate CADR (Clean Air Delivery Rate) rating for the room size.

Poll Question 4

We had an up-to-date resident go out on pass for the weekend with his family. Do we need to test him when he gets back?

A. Yes

B. No

Answer

Yes!

This resident would be considered equivalent to a readmission since they were out of the building for >24 hours. As Cook County is currently experiencing high transmission, the resident must be tested upon readmission and 5-7 days later. Since the resident is up to date, they do not need to be quarantined upon return.

Carbapenem-Resistant Enterobacterales (CRE) Reporting Requirements:

- CRE are Enterobacterales (e.g., E. coli, Klebsiella species, Enterobacter species, Proteus species, Citrobacter species, Serratia species, Morganella species or Providentia species) with one of the following test results:

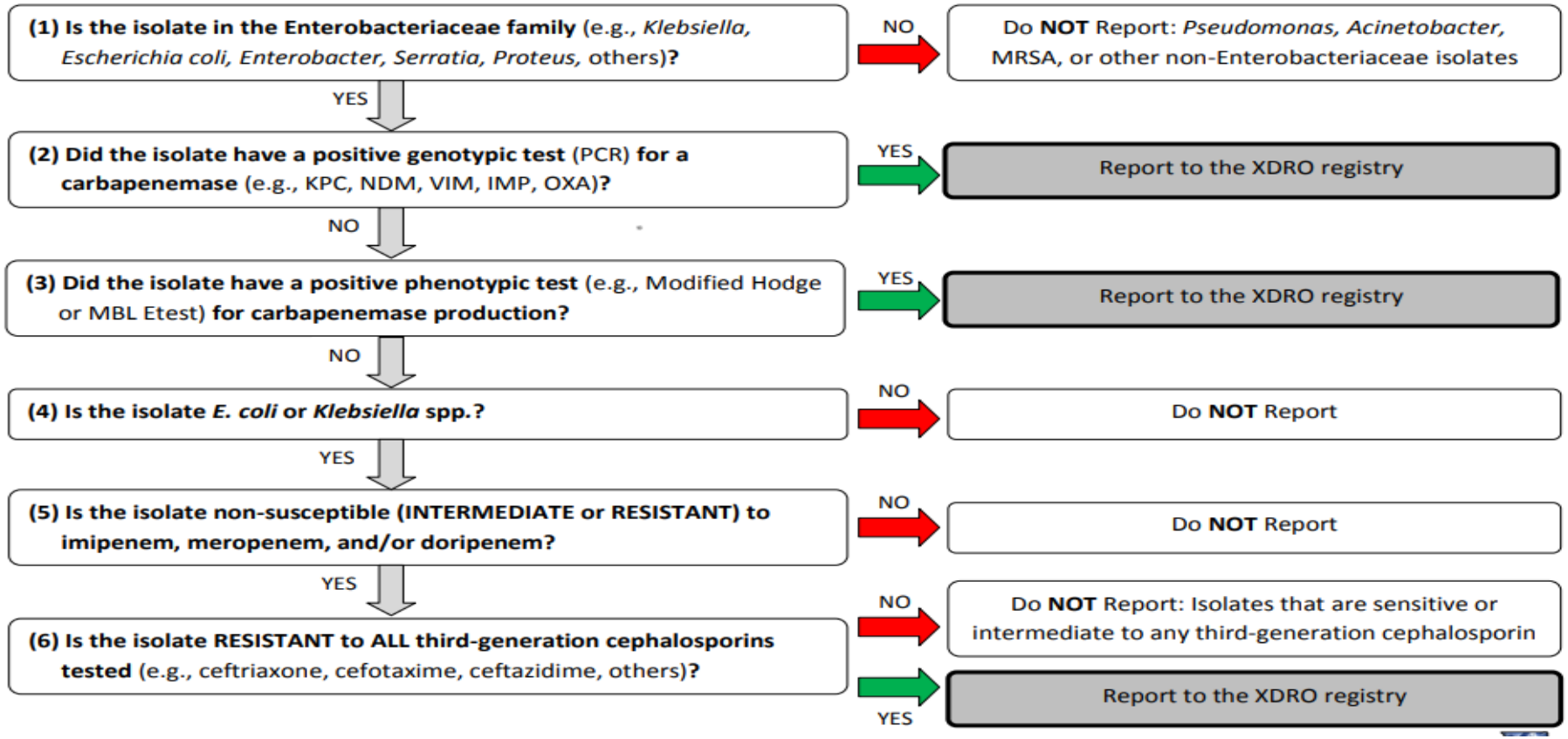
(1) a molecular test, such as PCR, specific for carbapenemase, or

(2) a phenotypic test, such as Modified Hodge Test, specific for carbapenemase production, or

(3) Susceptibility test ***(for E. coli and Klebsiella species only):*** any isolate that is non-susceptible to one of the carbapenems (doripenem, meropenem, or imipenem) and resistant to all third generation cephalosporins tested (ceftriaxone, cefotaxime, and ceftazidime).

- **Facilities should report the first CRE event per patient per healthcare facility encounter**. (Note: if a CRE-positive patient is reported to the registry, discharged and then readmitted at a later date with a new CRE-positive culture, that new CRE culture should be reported to the XDRO registry because it is the first CRE event of the new patient encounter.)

Report Carbapenem-Resistant Enterobacteriaceae (CRE) isolates to the XDRO registry



Example 1:

Suspected Agent: Escherichia coli

ANTIMICROBIC	MIC (µg/mL)	INTERPRETATION
Amikacin	<=1	S
Ampicillin	>32	R
Aztreonam	64	R
Cefazolin	>8	R
Cefepime	>32	R
Cefotaxime	>64	R
Cefotaxime-clavulanic acid**	>32	
Cefoxitin	>16	R
Ceftazidime	>128	R
Ceftazidime-clavulanic acid**	>64	
Ceftriaxone	>32	R
Chloramphenicol	8	S
Ciprofloxacin	>8	R
Colistin	0.5	
Doripenem	>8	R
Ertapenem	>8	R
Gentamicin	<=0.25	S
Imipenem	8	R
Levofloxacin	>8	R
Meropenem	>8	R
Piperacillin-tazobactam	>128/4	R
Polymyxin B	0.5	
Tetracycline	>32	R
Tigecycline	<=0.5	S
Tobramycin	<=0.5	S
Trimethoprim-sulfamethoxazole	>8/152	R

https://www.xdro.org/img/Reporting_Requirements_for_XDRO.pdf

Suspected Agent: **Escherichia coli**

ANTIMICROBIC	MIC (µg/mL)	INTERPRETATION
Amikacin	<=1	S
Ampicillin	>32	R
Aztreonam	64	R
Cefazolin	>8	R
Cefepime	>32	R
Cefotaxime	>64	R
Cefotaxime-clavulanic acid**	>32	
Cefoxitin	>16	R
Ceftazidime	>128	R
Ceftazidime-clavulanic acid**	>64	
Ceftriaxone	>32	R
Chloramphenicol	8	S
Ciprofloxacin	>8	R
Colistin	0.5	
Doripenem	>8	R
Ertapenem	>8	R
Gentamicin	<=0.25	S
Imipenem	8	R
Levofloxacin	>8	R
Meropenem	>8	R
Piperacillin-tazobactam	>128/4	R
Polymyxin B	0.5	
Tetracycline	>32	R
Tigecycline	<=0.5	S
Tobramycin	<=0.5	S
Trimethoprim-sulfamethoxazole	>8/152	R

Report to XDRO

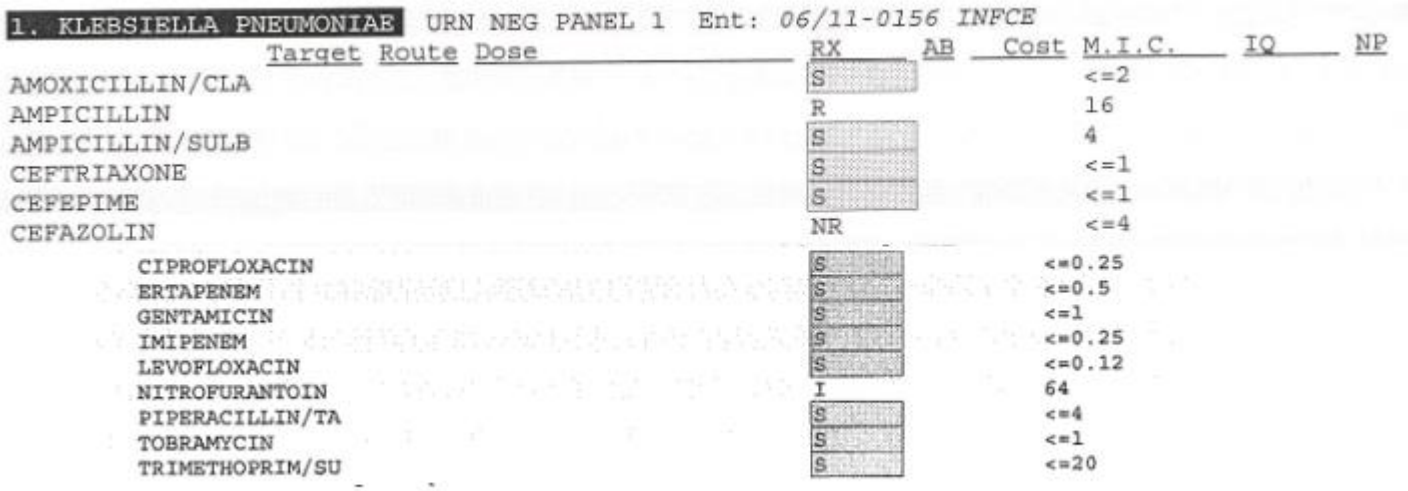
https://www.xdro.org/img/Reporting_Requirements_for_XDRO.pdf

Example 2:

1. KLEBSIELLA PNEUMONIAE URN NEG PANEL 1 Ent: *06/11-0156 INFCE*

Target	Route	Dose	RX	AB	Cost	M.I.C.	IQ	NP
AMOXICILLIN/CLA			S			<=2		
AMPICILLIN			R			16		
AMPICILLIN/SULB			S			4		
CEFTRIAXONE			S			<=1		
CEFEPIME			S			<=1		
CEFAZOLIN			NR			<=4		
CIPROFLOXACIN			S			<=0.25		
ERTAPENEM			S			<=0.5		
GENTAMICIN			S			<=1		
IMIPENEM			S			<=0.25		
LEVOFLOXACIN			S			<=0.12		
NITROFURANTOIN			I			64		
PIPERACILLIN/TA			S			<=4		
TOBRAMYCIN			S			<=1		
TRIMETHOPRIM/SU			S			<=20		

Example 2:

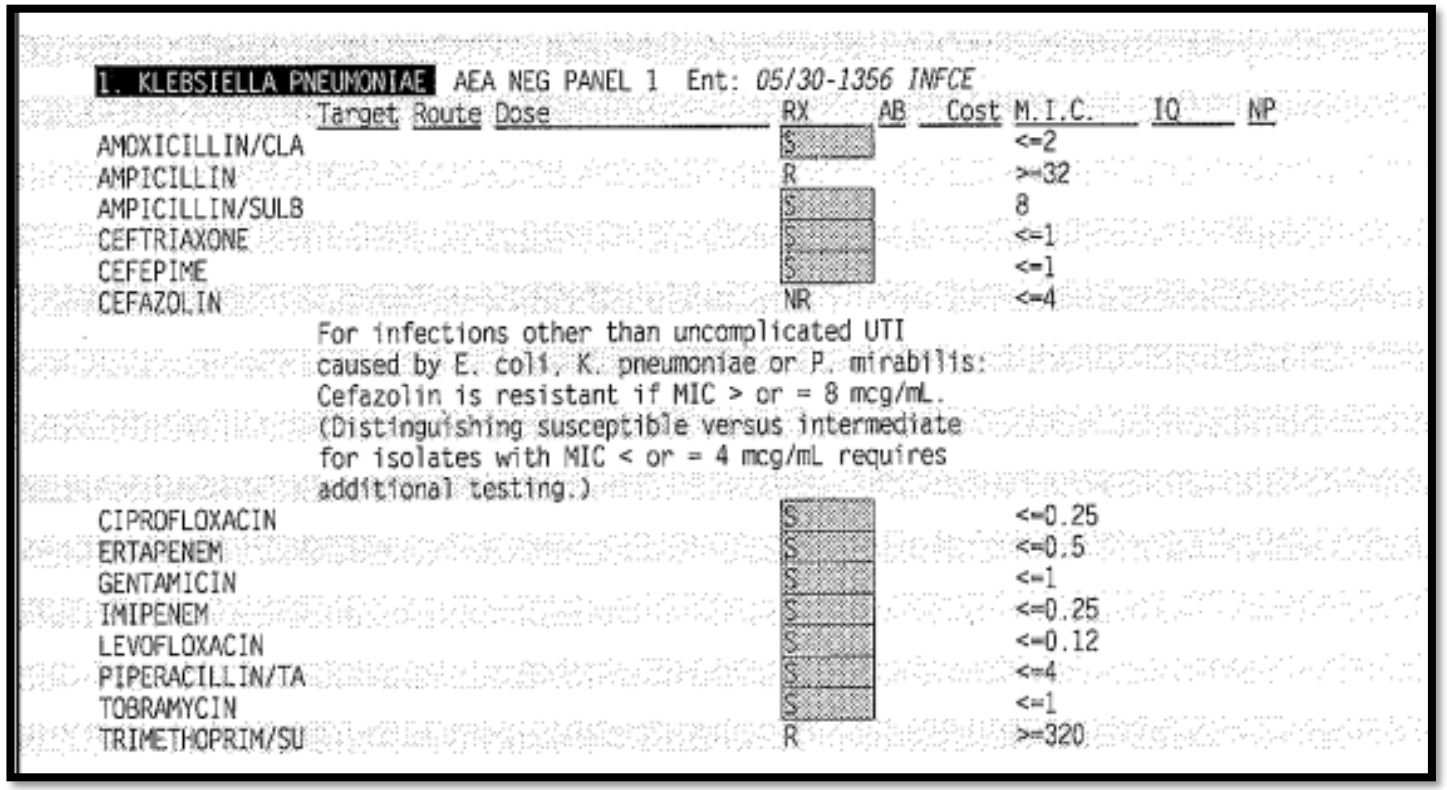


1. KLEBSIELLA PNEUMONIAE URN NEG PANEL 1 Ent: *06/11-0156 INFCE*

Target	Route	Dose	RX	AB	Cost	M.I.C.	IQ	NP
AMOXICILLIN/CLA			S			<=2		
AMPICILLIN			R			16		
AMPICILLIN/SULB			S			4		
CEFTRIAXONE			S			<=1		
CEFEPIME			S			<=1		
CEFAZOLIN			NR			<=4		
CIPROFLOXACIN			S			<=0.25		
ERTAPENEM			S			<=0.5		
GENTAMICIN			S			<=1		
IMIPENEM			S			<=0.25		
LEVOFLOXACIN			S			<=0.12		
NITROFURANTOIN			I			64		
PIPERACILLIN/TA			S			<=4		
TOBRAMYCIN			S			<=1		
TRIMETHOPRIM/SU			S			<=20		

Do *NOT* Report to XDRO

Example 3:



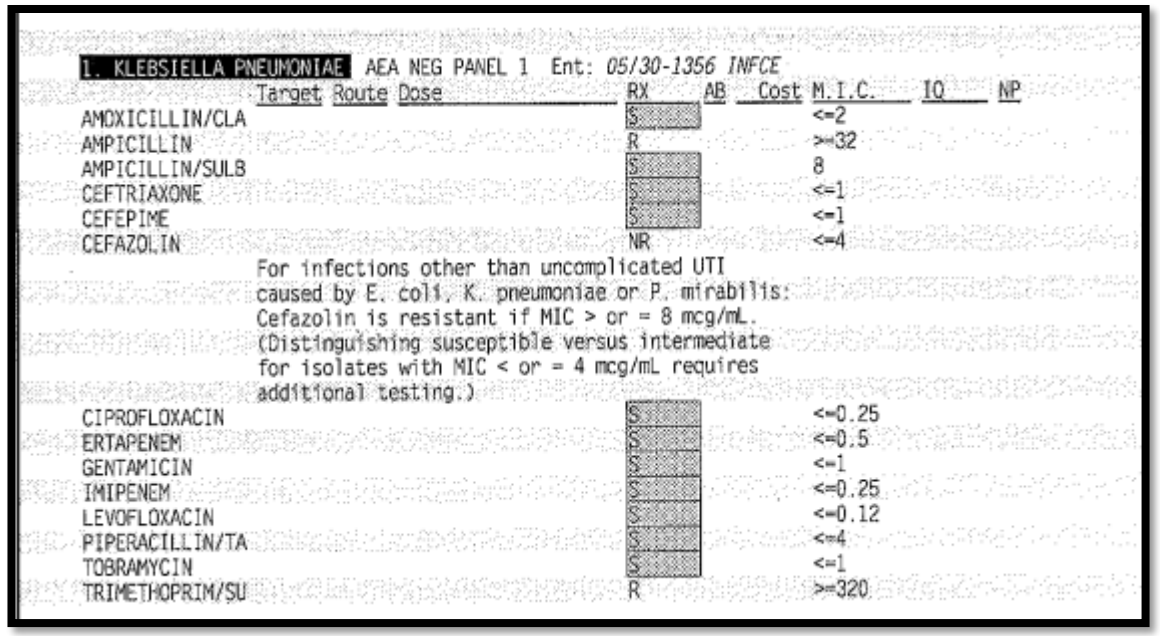
1. KLEBSIELLA PNEUMONIAE AEA NEG PANEL 1 Ent: *05/30-1356 INFCE*

	Target	Route	Dose	RX	AB	Cost	M.I.C.	IQ	NP
AMOXICILLIN/CLA				S			<=2		
AMPICILLIN				R			>=32		
AMPICILLIN/SULB				S			8		
CEFTRIAXONE				S			<=1		
CEFEPIME				S			<=1		
CEFAZOLIN				NR			<=4		

For infections other than uncomplicated UTI caused by E. coli, K. pneumoniae or P. mirabilis: Cefazolin is resistant if MIC > or = 8 mcg/mL. (Distinguishing susceptible versus intermediate for isolates with MIC < or = 4 mcg/mL requires additional testing.)

CIPROFLOXACIN				S			<=0.25		
ERTAPENEM				S			<=0.5		
GENTAMICIN				S			<=1		
IMIPENEM				S			<=0.25		
LEVOFLOXACIN				S			<=0.12		
PIPERACILLIN/TA				S			<=4		
TOBRAMYCIN				S			<=1		
TRIMETHOPRIM/SU				R			>=320		

Example 3:



1. KLEBSIELLA PNEUMONIAE AEA NEG PANEL 1 Ent: *05/30-1356 INFCE*

	Target	Route	Dose	RX	AB	Cost	M.I.C.	IQ	NP
AMOXICILLIN/CLA				S			<=2		
AMPICILLIN				R			>=32		
AMPICILLIN/SULB				S			8		
CEFTRIAXONE				S			<=1		
CEFEPIME				S			<=1		
CEFAZOLIN				NR			<=4		

For infections other than uncomplicated UTI caused by E. coli, K. pneumoniae or P. mirabilis: Cefazolin is resistant if MIC > or = 8 mcg/mL. (Distinguishing susceptible versus intermediate for isolates with MIC < or = 4 mcg/mL requires additional testing.)

CIPROFLOXACIN				S			<=0.25		
ERTAPENEM				S			<=0.5		
GENTAMICIN				S			<=1		
IMIPENEM				S			<=0.25		
LEVOFLOXACIN				S			<=0.12		
PIPERACILLIN/TA				S			<=4		
TOBRAMYCIN				S			<=1		
TRIMETHOPRIM/SU				R			>=320		

Do *NOT* Report to XDRO

Example 4:

SPECIMEN DESCRIPTION: BLOOD
GRAM SMEAR: YEAST
GRAM SMEAR: (CRITICAL/ALERT VALUE)
GRAM SMEAR: CALLED TO, READ BACK AND CONFIRMED TO (RN) ON 11/6/18 AT 2347 BY
CULTURE: CANDIDA AURIS NOTE:
CULTURE: implement contact precautions as soon as possible per infection prevention policy.
CULTURE: this susceptibility report provides only quantitative mic results. there are no
CULTURE: clsi criteria for interpretation.
CULTURE: CALLED TO, READ BACK AND CONFIRMED [CANDIDA AURIS] BY
CULTURE: RN) AT 2015 ON 11/8/18 TO FML9240.
REPORT STATUS: FINAL 11/11/2018

Example 4:

SPECIMEN DESCRIPTION: BLOOD
GRAM SMEAR: YEAST
GRAM SMEAR: (CRITICAL/ALERT VALUE)
GRAM SMEAR: CALLED TO, READ BACK AND CONFIRMED TO (RN) ON 11/6/18 AT 2347 BY
CULTURE: CANDIDA AURIS NOTE:
CULTURE: implement contact precautions as soon as possible per infection prevention policy.
CULTURE: this susceptibility report provides only quantitative mic results. there are no
CULTURE: clsi criteria for interpretation.
CULTURE: CALLED TO, READ BACK AND CONFIRMED [CANDIDA AURIS] BY
CULTURE: RN) AT 2015 ON 11/8/18 TO FML9240.
REPORT STATUS: FINAL 11/11/2018

Report to CDPH

(Only IDPH can report C. *auris* to *XDRO*)

Example 5:

- Patient had a CRE positive (meeting the reporting requirement) urine culture on 06/27

add to XDRO

- Patient had a CRE positive (meeting the reporting requirement) urine culture on 06/28:

no need to add to XDRO

- The patient was discharged and re-admitted on 07/01 and had another CRE positive culture on new admission

add to XDRO

Example 6:

- A patient is admitted to your facility with an unknown status:

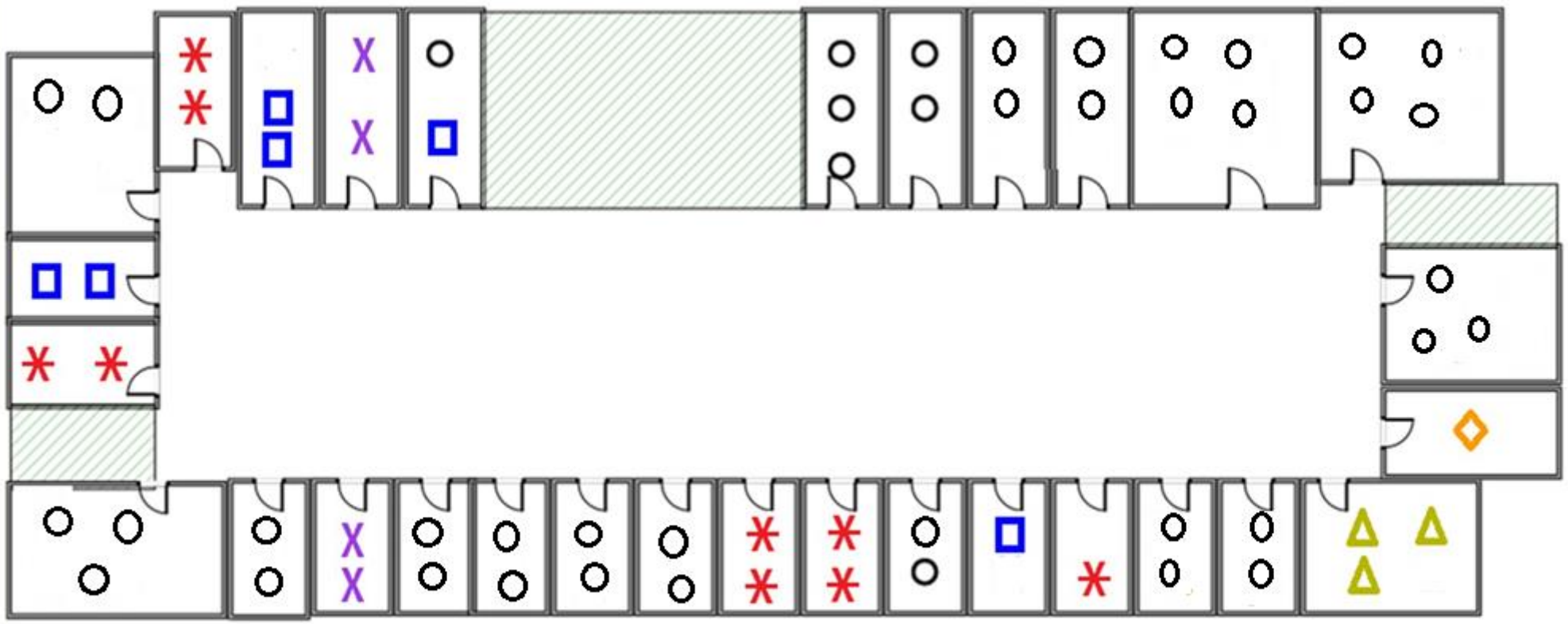
✓Query XDRO: Previous record of CRE from 2019 : place the patient on isolation precautions.

✓If subsequent positive cultures are identified on this encounter add them to XDRO (1st CRE event per patient per healthcare facility encounter).

✓If there was molecular testing done and a mechanism is identified that also needs to be added to XDRO.

Cohorting Multi drug resistant organisms

- Can you cohort a CRE KPC with a CRE NDM?
- Can you cohort a Candida auris with CRE?



C. auris positive

C. auris, and KPC-CPO

KPC-CPO

C. auris, KPC-CPO, NDM-CPO

C. auris, KPC-CPO, VIM-CPO

No known CPO or *C. auris*

Questions & Answers

A special thanks to:

CDPH HAI SNF Team:

Dr. Stephanie Black
Shannon Xydis
Hira Adil
Liz Shane
Winter Viverette
Stephanie Villarreal
Kelly Walblay
Dan Galanto
Christy Zelinski
Anudeep Dharkar
Nisreen Droubi
Leirah Jordan
Matthew Mondlock
Brittney Pitchford
Tasa Procter
Michelle Gardner

For additional resources and upcoming events, please visit the CDPH LTCF HAN page at:
https://www.chicagohan.org/covid-19/LTCF