Guidance and responses were provided based on information known on 5.08.25 and may become out of date. Guidance is being updated rapidly; users should look to CDC and NE DHHS guidance for updates.

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Long Term Care Webinar Series

May 8, 2025



Presentation Information

Speaker(s):

Richard Hankins, MD, MS

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Panelists:

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Kate Tyner, RN, BSN, CIC
Josette McConville, RN, CIC
Chris Cashatt, RN, BSN, CIC
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- Slides and a recording of this presentation will be available on the ICAP website: https://icap.nebraskamed.com/events/ webinar-archive/
- Use the Q&A box in the webinar platform to type a question. Questions will be read aloud by the moderator. If your question is not answered during the webinar, please either e-mail NE ICAP or call during our office hours to speak with one of our IPs.

Nurse Planner: Josette McConville, RN, CIC Moderated by Marissa Chaney jmcconville@nebraskamed.com machanev@nebraskamed.com



Continuing Education Disclosures

- 1.0 Nursing Contact Hour and 1 NAB Contact Hour is awarded for the LIVE viewing of this webinar
- In order to obtain nursing contact hours, you must attend the entire live activity and complete the post webinar survey
- No relevant financial relationships were identified for any member of the planning committee or any presenter/author of the program content
- This CE is hosted Nebraska ICAP along with Nebraska DHHS
- Nebraska Infection Control Assessment and Promotion Program is approved as a provider of nursing continuing professional development by the Midwest Multistate Division, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation

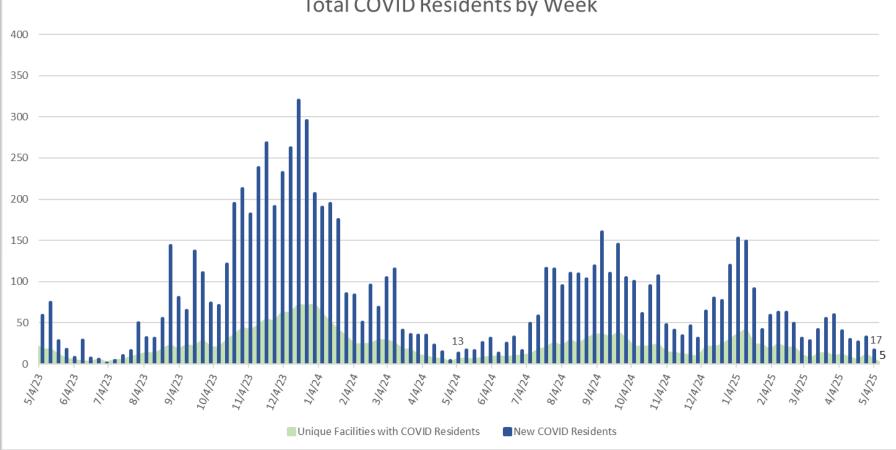


Nebraska Respiratory Illness Update



Nebraska LTC Facility COVID-19 Outbreaks

Nebraska LTC - Facilities with at Least One COVID Resident & Total COVID Residents by Week

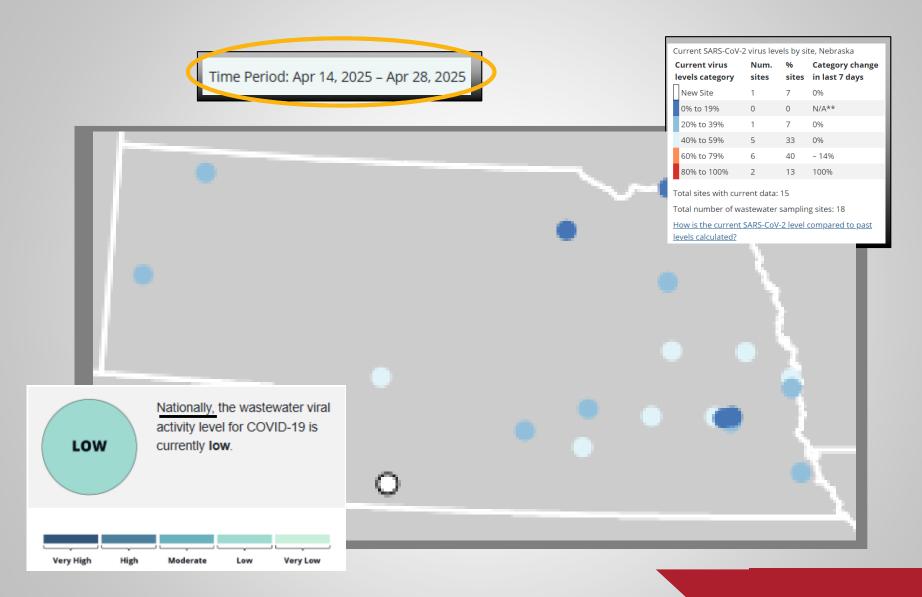


^{**}Updated: 5/5/2025
Source: Unofficial Counts Compiled by Nebraska ICAP based on data reported by facilities

and DHHS; Actual numbers may vary.

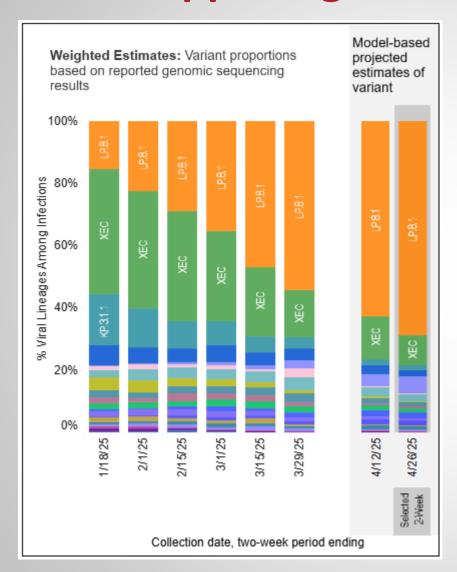


Wastewater Surveillance





What's happening with variants?



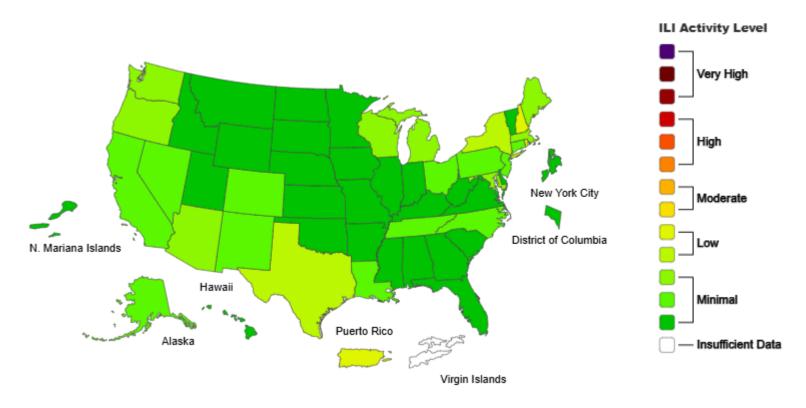
Weighted and Nowcast Estimates in United States for 2-week Period 4/13/2025 – 4/26/2025

WHO label	Lineage #	%Total	95%PI
Omicron	LP.8.1	69%	62–75%
	XEC	10%	7–14%
	LF.7.7.2	6%	1–24%
	LB.1.3.1	2%	1–4%
	MC.10.1	2%	1–4%
	LF.7.7.1	2%	1–3%
	PA.1	2%	0–5%
	XEC.4	1%	1–3%
	LF.7	1%	1–2%
	KP.3.1.1	1%	1–2%
	MC.28.1	1%	1–2%
	XEQ	1%	0–2%
	KP.3	1%	0–1%
	LF.7.2.1	1%	0–1%
	MC.1	0%	0–1%
	XEK	0%	0–1%
	JN.1.16	0%	NA NA
	MC.19	0%	NA
	JN.1	0%	NA



Flu Activity US

2024-25 Influenza Season Week 17 ending Apr 26, 2025





Staying Up to Date with COVID-19 Vaccines

Vaccine protection decreases over time, so it is important to get your 2024–2025 COVID-19 vaccine.



People ages 65 years and older are up to date when they have received:

- 2 doses of any 2024–2025 COVID-19 vaccine 6 months apart.
 - While it is the recommended to get 2024-2025 COVID-19 vaccine doses 6
 months apart, the minimum time is 2 months apart, which allows
 flexibility to get the second dose prior to typical COVID-19 surges, travel,
 life events, and healthcare visits



NHSN

Report annual healthcare personnel (HCP) influenza vaccination data into NHSN by **May 15, 2025** to meet CMS reporting requirements for the 2024-2025 influenza season.

- The reporting period for the 2024-2025 influenza season is from October 1, 2024, through March 31, 2025. Facilities are only required to submit one report that covers the entire reporting period by **May 15, 2025**.
- Facilities must report annual HCP influenza vaccination summary data through the NHSN Healthcare Personnel Safety (HPS) Component.

Resources:

Materials pertaining to annual HCP influenza vaccination data reporting are organized under the "Annual" reporting headings on this webpage: <u>HCP Flu Vaccination | HPS | NHSN | CDC [t.emailupdates.cdc.gov]</u>.

This slide deck reviews how LTCFs can report annual HCP influenza vaccination data through NHSN: <u>Healthcare Personnel Safety Component</u> Healthcare Personnel Vaccination Module Influenza Vaccination Summary Long-Term Care Facilities [t.emailupdates.cdc.gov].

Please direct all questions regarding CMS SNF QRP requirements and deadlines to: SNFQualityQuestions@cms.hhs.gov.



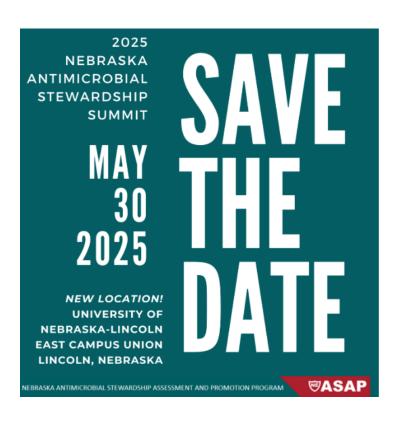
NHSN

CDC highly encourages all LTC facilities to complete the **Annual Facility Survey** in NHSN.

- Accessing the Survey: You can find the survey under the "Action Items" section or by clicking the
 "Surveys" tab on the left navigation panel on the NHSN application home page.
- **Survey Period:** The survey covers facility characteristics and practices from January 1, 2024, through December 31, 2024.



2025 Nebraska ASAP Antimicrobial Stewardship Summit



New this year, **Antimicrobial Stewardship Foundations Track!**

Target audience: infection preventionists working in long-term care

- Core Elements Workshop
- Interpreting and Acting on Microbiology results
- Best practices with the "big 3 infections" UTI, respiratory infection, and skin & soft tissue infection
- Data use workshop: completing an antibiotic log and using/ presenting summary data
- Talking to your frontline staff and partners about stewardship and getting the support you need

Click Here to Register! 2025 Nebraska Antimicrobial Stewardship Summit



Chlorhexidine Decolonization

Richard Hankins, MD, MS
Assistant Professor of Infectious Diseases

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Background

Hospital-acquired infections (HAI) and multi-drug resistant organisms (MDRO) are a significant cause of morbidity and mortality in the hospital setting.

Bacteria often colonize patient's skin and can become a source of infection.

Chlorhexidine (CHG) is a broad-spectrum disinfectant that at low concentration causes bacterial osmotic disequilibrium and at high concentration enters into the bacterial cytoplasm resulting in rapid cell death.

O'Grady *AJIC* 2011 Popovich *ICHE* 2009 Huang *NEJM* 2013



Antiseptic uses in healthcare:

- Hand antisepsis at 2% and 4%
- Dental hygiene
- 1990s: Cleaning of skin prior to line insertion
- 1990s: Pre-operative bathing
- 2000s: Surgical prep
- 2010s: Universal ICU bathing
- 2019: CHG for non-ICU bathing
- 2023: Universal bathing outside of the hospital



Why is Decolonization Needed?

Because human pathogen transmission is a cascade of unfortunate events

- Humans shed pathogens
 - Environment contaminated
 - Contamination persists
 - Failure to clean or disinfect
 - Staff acquires pathogen
 - Staff fails to remove
 - Transfers to patient
 - Risk for infection



Interventions

Humans shed pathogens
 Environment contaminated
 Contamination persists
 Failure to clean or disinfect
 Staff acquires pathogen
 Staff fails to remove
 Transfers to patient
 Risk for infection

Future vaccines

Is there a benefit in Nursing Homes or Long Term Care?



MDROS in Nursing Homes

- In hospitals, 10-15% of patients harbor an MDRO
- In nursing homes, 65% of residents harbor an MDRO
- Higher prevalence in nursing homes may be related to:
 - Shared activities
 - Shared rooms
 - Longer lengths of stay
 - More chronic illness and devices, including feeding tubes
 - Less stringent infection prevention vs hospitals



The Protect Trial

- Cluster-Randomized Pragmatic Trial
 - 28 nursing homes
 - Involved nearly 14,000 residents
- Group 1: Routine Care
 - Usual soap for showering/bathing
- Group 2: Decolonization
 - CHG for all bathing/showering
 - Nasal iodophor for all residents, M-F twice daily, every other week



Decolonization Benefits in Nursing Homes

The below results are from the Protect Trial and were redemonstrated during the SHIELD regional intervention, both of which involved pragmatic adoption of decolonization in nursing homes.

Residents less colonized by MDROs

✓	Any MDRO	30% reduction
---	----------	---------------

- ✓ MRSA 27% reduction
- ✓ VRE 71% reduction
- ✓ ESBL **50% reduction**

Decolonization results in fewer MDROs, less MDRO colonization, and fewer residents on contact precautions

Residents less likely to be hospitalized

- ✓ Overall hospitalization rate 18% reduction
 - 1 hospitalization prevented for every
 9 residents treated
- ✓ Infection hospitalization rate 31% reduction
 - 1 infection-related hospitalization prevented for every 10 residents treated

Decolonization prevents 1.9 infection-related hospitalizations *per month* per 100 beds



SHIELD Trial

- 28-month regional intervention: April 2017-July 2019
- Participants:
 - 16 nursing homes (NHs)
 - 3 long-term acute care hospitals (LTACHs)
 - 16 hospitals with high patient sharing in Orange County, CA
- NHs and LTACHs: universal decolonization
 - CHG antiseptic soap for routine bathing/showering
 - Nasal iodophor for 5 days on admission and every other week
- Hospitals: decolonize patients on contact precautions
 - Daily CHG bathing/showering
 - Nasal iodophor decolonization for 5 days
 - Support ongoing ICU CHG daily bathing



Baseline		Intervention						
Colonization	No. of MDRO-	Mean (SD) prevalence across facilities, %	No. of MDRO- positive persons	Mean (SD) prevalence across facilities, %	OR (95% CI)		More likely to be	
Nursing homes	positive persons	across racinces, 70	positive persons	across facilities, 70	(mbro positive	MIDICO POSICIVE	, value
Any MDRQ	511	63.9 (12.2)	709	49.9 (11.3)	0.77 (0.69-0.86)	l a l		<.001
Nares	236	29.5 (7.3)	360	25.1 (8.6)	0.84 (0.71-0.99)			.04
Axilla or groin	370	46.3 (13.7)	337	24.7 (8.0)	0.51 (0.44-0.60)	اها ا		<.001
Perirectal	412	51.5 (13.5)	473	34.1 (11.1)	0.65 (0.57-0.74)			<.001
Any MRSA	343	42.9 (11.2)	422	29.8 (9.3)	0.68 (0.59-0.79)			<.001
Nares	236	29.5 (7.3)	360	25.1 (8.6)	0.84 (0.71-0.99)			.04
	247							<.001
Axilla or groin		30.9 (10.5)	176	13.1 (6.5)	0.40 (0.33-0.49)			
Perirectal	207	25.9 (9.2)	142	10.8 (5.5)	0.39 (0.31-0.48)	H•		<.001
Any VRE	125	15.6 (7.6)	134	9.4 (6.7)	0.61 (0.48-0.78)			.001
Axilla or groin	68	8.5 (5.4)	37	2.7 (3.3)	0.32 (0.21-0.48)	⊢• −		<.001
Perirectal	114	14.3 (7.8)	120	8.4 (5.8)	0.60 (0.47-0.78)	⊢•⊢		.002
Any ESBL	269	33.6 (17.2)	356	25.5 (10.5)	0.74 (0.63-0.87)	⊢●H		.003
Axilla or groin	167	20.9 (12.0)	163	12.1 (6.1)	0.55 (0.44-0.68)	⊢● ⊢		<.001
Perirectal	248	31.0 (16.5)	310	22.3 (9.5)	0.70 (0.59-0.83)	⊢● ⊢		<.001
Any CRE	17	2.1 (4.3)	22	1.6 (2.8)	0.78 (0.41-1.47)	⊢	—	.44
Axilla or groin	12	1.5 (3.5)	16	1.1 (2.0)	0.79 (0.37-1.68)	⊢	——	.54
Perirectal	8	1.0 (2.1)	11	0.9 (1.5)	0.83 (0.33-2.09)	•		.70
Long-term acute care	e facilities			()			,	
Any MDRO	120	80.0 (7.2)	80	53.3 (13.3)	0.67 (0.50-0.89)	⊢		.01
Nares	35	23.3 (9.5)	25	16.7 (8.3)	0.71 (0.43-1.20)			.20
	91	60.7 (9.0)	36	24.0 (6.0)	0.40 (0.27-0.58)		1	<.001
Axilla or groin	109							
Perirectal		72.7 (9.5)	68	45.3 (12.9)	0.62 (0.46-0.85)			.003
Any MRSA	49	32.7 (8.3)	30	20.0 (10.6)	0.61 (0.39-0.97)			.04
Nares	35	23.3 (9.5)	25	16.7 (8.3)	0.71 (0.43-1.20)	•	-	.20
Axilla or groin	25	16.7 (3.1)	12	8.0 (2.0)	0.48 (0.24-0.96)	-		.04
Perirectal	28	18.7 (11.0)	11	7.3 (7.6)	0.39 (0.20-0.79)	├		.01
Any VRE	83	55.3 (5.0)	38	25.3 (10.1)	0.46 (0.31-0.67)	⊢•⊢		<.001
Axilla or groin	55	36.7 (6.4)	13	8.7 (3.1)	0.24 (0.13-0.43)	├		<.001
Perirectal	78	52.0 (5.3)	38	25.3 (10.1)	0.49 (0.33-0.72)	⊢•		<.001
Any ESBL	58	38.7 (9.0)	39	26.0 (10.4)	0.67 (0.45-1.01)	⊢•		.06
Axilla or groin	40	26.7 (5.8)	18	12.0 (3.5)	0.45 (0.26-0.79)	├		.01
Perirectal	52	34.7 (8.1)	34	22.7 (11.7)	0.65 (0.42-1.01)	—		.06
Any CRE	13	8.7 (1.2)	10	6.7 (3.1)	0.77 (0.34-1.76)	⊢		.53
Axilla or groin	11	7.3 (1.2)	5	3.3 (3.1)	0.45 (0.16-1.31)	-	-	.14
Perirectal	11	7.3 (1.2)	10	6.7 (3.1)	0.91 (0.38-2.15)			.83
Hospitals with patien			10	0.7 (3.12)	0.51 (0.50 2.15)			.03
Any MDRO	474	64.1 (8.5)	409	55.4 (13.8)	0.86 (0.75-0.98)	l ⊕ l		.03
Nares	221	29.9 (6.5)	220	29.7 (10.9)	1.00 (0.83-1.21)			.97
Axilla or groin	242	32.9 (10.8)	167	22.5 (14.1)	0.69 (0.57-0.84)			<.001
Perirectal	363	49.2 (9.0)	273	37.2 (13.2)	0.75 (0.64-0.88)		1	<.001
Any MRSA	265	35.9 (7.6)	252	34.2 (13.3)	0.95 (0.80-1.13)		Π.	.60
Nares	221	29.9 (6.5)	220	29.7 (10.9)	1.00 (0.83-1.21)	. 1		.97
Axilla or groin	104	14.1 (7.5)	93	12.8 (11.0)	0.89 (0.68-1.18)	-		.43
Perirectal	105	14.3 (6.7)	88	12.1 (9.2)	0.84 (0.64-1.12)	⊢•-	H	.24
Any VRE	185	25.1 (7.1)	141	19.3 (11.9)	0.76 (0.61-0.94)	⊢●⊣		.01
Axilla or groin	101	13.8 (6.6)	49	6.7 (5.9)	0.48 (0.34-0.68)	⊢●		<.001
Perirectal	175	23.8 (6.7)	134	18.4 (11.6)	0.76 (0.61-0.95)	⊢•⊢		.02
Any ESBL	202	27.3 (6.8)	143	19.3 (6.0)	0.69 (0.55-0.87)	⊢●⊢		.001
Axilla or groin	97	13.1 (5.9)	49	6.7 (3.4)	0.71 (0.57-0.88)	⊢● ⊢		.002
Perirectal	181	24.5 (5.5)	125	16.9 (6.6)	0.51 (0.36-0.71)	⊢•⊣		<.001
Any CRE	18	2.4 (2.3)	15	2.1 (3.0)	0.83 (0.42-1.65)	-		.60
Axilla or groin	6	0.8 (1.3)	8	1.1 (1.6)	1.34 (0.46-3.86)			.59
Perirectal	17	2.3 (2.0)	13	1.8 (2.5)	0.76 (0.37-1.57)			.46
7 CHICCEGE		2.3 (2.0)	13	1.5 (2.5)	5 0 (0.57 1.57)			. 10
					0	OR (95% C	The Property of the Property o	•

Cost Analysis from SHIELD Trial

			Infection-F	Related Hospitaliza	tion			
Frants		Unadjusted Analysis			Adjusted Analysis b			
Decolonization Group	Events per 1,000 Resident Days		Clustered Hazard	Group-By-Period Interaction Effect		Clustered Hazard	Group-By-Period Interaction Effect	
Огоир	Baseline Intervention		Ratio	% Reduction (95% CI)	P-value	Ratio	% Reduction (95% CI)	P-value
Participant	2.31	1.94	0.60	-26.9%	<0.001	0.60	-26.7%	<0.001
Non-Participant	1.90	2.03	0.81	(-21.0, -32.4)	\0.001	0.82	(-19.0, -34.5)	V0.001
		Costs A	ssociated with	n Infection-Related	Hospitaliza	tion		
	Contr		Unadjusted Analysis		Adjusted Analysis ^b			
Decolonization	Costs per 1,000 Resident Days		Group-By-Period Clustered Interaction Effect		Group-By Clustered Interaction			
Group	Baseline	Intervention	Cost Ratio	% Reduction (95% CI)	P-value	Cost Ratio	% Reduction (95% CI)	P-value
Participant	\$64,651	\$55,149	1.00	-26.2%	<0.001	0.96	-26.8%	<0.001
Non-Participant	\$55,151	\$59,327	1.36	(-26.0, -26.2)	\0.001	1.31	(-26.7, -26.9)	V0.001
		Deaths /	Associated wit	h Infection-Related	l Hospitaliza	ation		
Events			Unadjusted Analysis			Adjusted Analysis b		
Decolonization Group			Clustered	Group-By-Period Interaction Effect		Clustered Hazard	Group-By-Period Interaction Effect	
Огоир	Baseline	Intervention	Ratio	% Reduction (95% CI)	P-value	Ratio	% Reduction (95% CI)	P-value
Participant	0.29	0.25	0.62	-23.6%	0.006	0.62	-23.7%	0.006
Non-Participant	0.23	0.24	0.81	(-7.4, 37.0)	0.000	0.81	(-4.5, -43.0)	0.000
			Any-Ca	use Hospitalization	n			
Events		Unadjusted Analysis		Adjusted Analysis b				
Decolonization per 1,000		Resident Days Clustered		Interaction Effect		Clustered	Group-By-Period Interaction Effect	
Group	Baseline	Intervention	Hazard Ratio	% Reduction (95% CI)	P-value	Hazard Ratio	% Reduction (95% CI)	P-value
Participant	4.08	4.24	0.79	-7.0%	0.01	0.80	-6.7%	0.02
Non-Participant	3.46	3.74	0.85	(-1.6, -12.1)	0.01	0.86	(-1.3, -11.8)	0.02

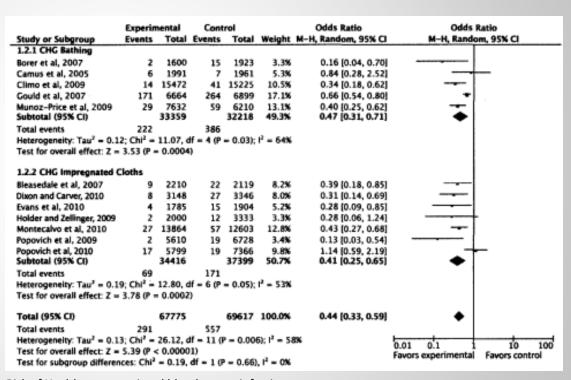
Is there a difference in 2% wipes compared to 4 % solution?



Background Literature

Benefits of Chlorhexidine between the two methods

- Reduces bloodstream infections (0.44 odds ratio)
- Reduces CLABSI (0.40 odds ratio)
- Reduces multidrug-resistant organism (MDRO) acquisition 4.78 vs 6.60 per 1000 patient days



Risk of Healthcare-associated bloodstream infection



2% Cloth Wipe vs 4% Solution

	2% CHG cloth	4% CHG solution	No bath
	n= 411 assessments	n= 425 assessments	n =54 assessments
Overall Microbial Colonization (IQR)	691 CFU/cm ² (0,30)	1,627 CFU/cm ² (0,265) ^a	8,519 CFU/cm ² (10,1130) ^e
Arm	559 CFU/cm ²	$1236 \mathrm{CFU/cm^2}$	2,336 CFU/cm ²
Leg	824 CFU/cm ²	2018 CFU/cm ²	14,588 CFU/cm ²
Overall Chlorhexidine Concentration (IQR)	1,300.4 ppm (100,2000)	307.2 ppm (30, 200) ^b	32.8 ppm (0,20) ^f
Arm	1058.7 ppm	274.2 ppm	18.3 ppm
Leg	1543.3 ppm	340.2 ppm	47.2 ppm
Hospital Acquired Infections ^g	7	6 ^c	0
Adverse Events	0	0	0
Braden Score ^g	15.0	15.3 ^d	18.4
Antimicrobial Use (per 1000 patient days)	773.0	718.4 ^h	

Adverse Effects of Chlorhexidine

- Generally well tolerated
- Skin Allergy
- Sensation of wipes



Important Takeaway for Implementation

- Bathing at admission is key
- CHG is safe on face and hair, avoid eyes and ears
- Nasal decolonization is important
- Implementation Resources
 - AHRQ Toolkit
 - https://www.ahrq.gov/hai/tools/abate/index.html



QUESTIONS?

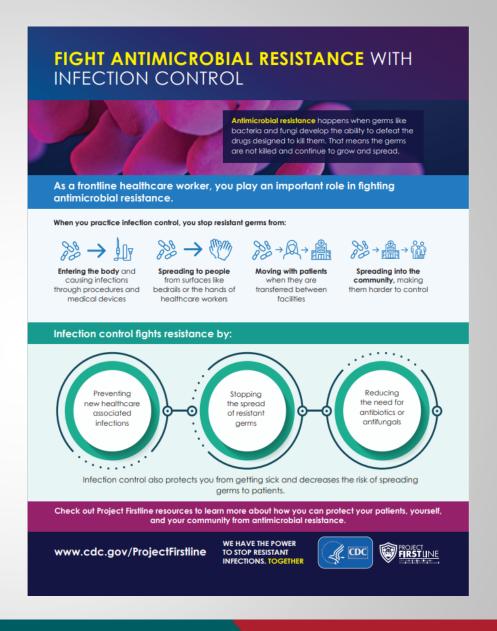


In Closing



Project Firstline Resource

Fight Antimicrobial Resistance with Infection Control





2025 Nebraska ASAP Antimicrobial Stewardship Summit



New this year, **Antimicrobial Stewardship Foundations Track!**

Target audience: infection preventionists working in long-term care

- Core Elements Workshop
- Interpreting and Acting on Microbiology results
- Best practices with the "big 3 infections" UTI, respiratory infection, and skin & soft tissue infection
- Data use workshop: completing an antibiotic log and using/ presenting summary data
- Talking to your frontline staff and partners about stewardship and getting the support you need

Click Here to Register! 2025 Nebraska Antimicrobial Stewardship Summit



Register Now: Workshop for Healthcare Facility Water System Safety

8 am	Welcome by Nebraska DHHS
8:15	From Plumbing to Patients: Christine Yount
8:45	Pathophysiology of Waterborne Pathogens: Richard Hankins
10:20	Water Treatment Basics: Mike Ballmer
12:20	Plumbing Basics: Jeffrey Bergers
1:20	Ensuring Safe Water: Comprehensive Strategies for Legionella Prevention in Healthcare Facilities: Jen Vogelsberg
3 pm	Uh-oh, Mitigation Approaches and Technology to Remediate When Your Water System is Implicated: Dr. Brooke Decker
4 pm	Closing: Lacey Pavlovsky



Registration Link

To register, click on or scan the QR code!





Join Us - Upcoming ICAP Webinars

June 12, 2025

 12:00 – 1:00 PM (CST), Environmental Rounding for Infection Prevention and Control



Webinar CE Process

1 Nursing Contact Hour is offered for attending this LIVE webinar.

Individual surveys must be completed for each attendee.

Questions? Contact us at:

nebraskaicap@nebraskamed.com 402-552-2881

Nursing Contact Hours:

- Completion of survey is required.
 - ➤ The survey must be specific to the individual obtaining credit. (i.e.: 2 people cannot be listed on the same survey)
- One certificate is issued quarterly for all webinars attended
- ➤ Certificate comes directly from ICAP via email



Infection Prevention and Control Hotline Number:

Call 402-552-2881

Office Hours are Monday – Friday

8:00 AM - 4:00 PM Central Time

On-call hours are available for emergencies only

Weekends and Holidays from 10:00 AM- 4:00 PM

*Messages left outside of Office or On-call hours will be answered the next business day.

**Please call the main hotline number to ensure the quickest response.

