C. AURIS IN NEBRASKA

SAFELY TRANSITIONING PATIENTS
ACROSS THE CARE CONTINUUM



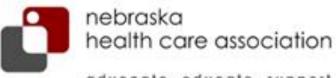




Good Life, Great Mission.

DEPT. OF HEALTH AND HUMAN SERVICES
OFFICE OF RURAL HEALTH





advocate. educate. support.

Nebraska Department of Health and Human Services

Health Alert Network

ALERT March 26, 2024

Candida auris in Nebraska

- Candida auris is an emerging antimicrobial-resistant yeast that was first identified in 2009 in Asia and began spreading in the United States in 2015.
- It can cause severe infections and spreads easily between hospitalized patients and nursing home residents.
- C. auris is often multidrug-resistant and some strains are resistant to all three major classes of antifungal medications.
- In 2019, CDC declared C. auris as one of the urgent (highest level) antibiotic resistance threats in the United States.
 - It is still rare in the US, but cases have been increasing nationwide with 8,131 C. auris cases (clinical and screening cases) detected in the US in 2022 as compared to 323 in 2018.
- Nebraska is considered a low incidence state and transmission of C. auris was not detected before this
 year. However, to-date, 5 cases (clinical and screening cases) of C. auris have been identified in
 Nebraska in 2024.
 - Therefore, it is important for all healthcare personnel in Nebraska to be aware of transmission dynamics, risk factors, diagnostic challenges, and treatment recommendations for C. auris.

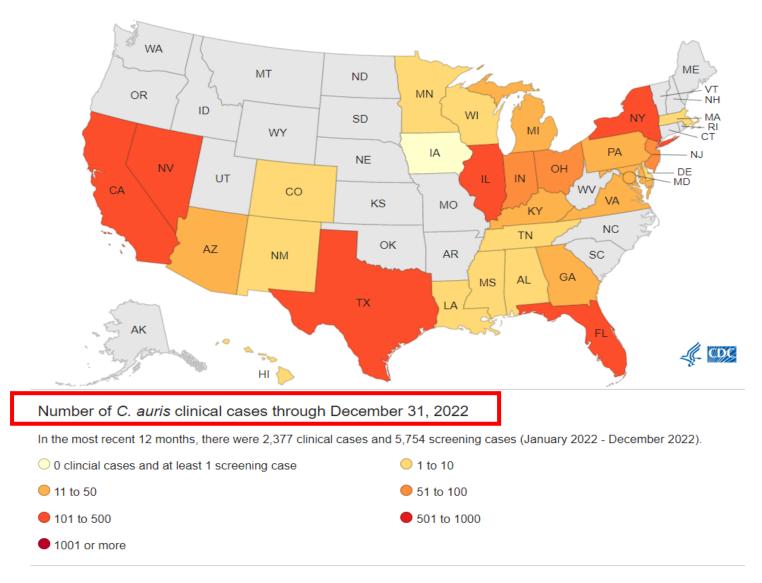
MDRO Tiers for Nebraska

Tier	Definition of Included Organisms and Mechanisms	Examples (not all inclusive) of organisms/mechanisms for Nebraska	Transmission-Based Precautions Recommendations
Tier 1	Never (or very rarely) been identified in the United States and for which experience is extremely limited	Novel Carbapenemases	Contact precautions until otherwise recommended by HAI/AR team
Tier 2	Primarily associated with healthcare settings and are not commonly identified in the region (i.e., not been previously identified in the region or have been limited to sporadic cases or small outbreaks), corresponding to "not detected" or "limited to moderate spread" epidemiologic stages. No current treatment options exist (pan not-susceptible) and potential to spread more widely.	Pan-resistant organisms Candida auris Carbapenemases (e.g., KPC, NDM, OXA-48, VIM, IMP) producing organisms (CPO) Enterobacterales Pseudomonas aeruginosa Acinetobacter Baumannii	Contact Precautions Long-term Care Facilities (LTCF): Enhanced barrier precautions (EBP) recommended for colonized resident(s)*
Tier 3	Include MDROs targeted by the facility or region for epidemiologic importance that have been identified frequently across a region, indicating advanced spread, but are not considered endemic	ESBL CRE CRPA CRAB	Contact Precautions Long-term Care Facilities (LTCF): Enhanced barrier precautions (EBP) considered for colonized resident(s)*
Tier 4	Endemic in a region and have been targeted by public health for their clinical significance and potential to spread rapidly	MRSA VRE	Contact precautions per facility risk assessment Long-term Care Facilities (LTCF): Enhanced barrier precautions (EBP) considered for colonized resident(s)*

^{*}Contact precautions for acute/active infections or uncontained drainage/secretions

Transmission of *C. Auris*

5 cases (clinical and screening cases) of C. auris have been identified in Nebraska in 2024



Transmission Dynamics



This Photo by Unknown Author is licensed under CC BY-ND



This Photo by Unknown Author is licensed under CC BY-NC-ND

- C. auris can spread easily in healthcare facilities through contact with contaminated surfaces (e.g., bedrails, bedside tables), shared mobile medical equipment (e.g., glucometers, ultrasound machines) or the hands or clothing of healthcare personnel.
- Most people who get C. auris infections already have underlying clinical risk factors such as weakened immune system, being on mechanical ventilation, presence of indwelling medical devices, receiving complex or high acuity medical care, frequent or long healthcare stays and/or colonization or infection with other multidrug resistant organisms.
- Can also persist on patients and surfaces for long periods of time and since many commonly used hospital grade disinfectants are not effective against it
 - Ensure disinfectants used are effective against C. auris (by checking they are listed on the EPA List P of disinfectants).

Risk Factors

Patients who have received healthcare outside the US or within the US in parts of country with high burden of C. auris are at higher risk for C. auris colonization and/or infection.

Patients with current or previous healthcare encounters at any facility in the US with currently suspected or confirmed C. auris transmission will also be at higher risk for colonization and/or infection with C. auris, especially those with underlying clinical risk factors described above.

Therefore, all healthcare facilities in Nebraska must remain vigilant for the following high-risk indicators for C. auris patients:

- History of an overnight stay in a healthcare facility outside of the United States within the previous 12 months, OR
- History of ambulatory surgery or hemodialysis performed outside of the United States within the previous 12 months, OR
- History of an overnight stay within the previous 12 months in a hospital or skilled nursing facility in any of the states with high burden of C. auris such as California, Nevada, Texas, Illinois, Florida, New York, New Jersey. (For most up to date information on states with high C. auris burden refer to the CDC C. auris tracking data) OR
- Patients that are a roommate or close contact to a known C. auris positive patient in a healthcare setting, OR
- Patients from healthcare facilities with high prevalence or ongoing transmission of C. auris.



This Photo by Unknown Author is licensed under CC BY-NC-ND

Diagnostic Challenges

Identification Method	Database/Software, if applicable	C. auris is confirmed if initial identification is C. auris.	C. auris is possible if the following initial identifications are given. Further work-up is needed to determine if the isolate is C. auris.
Bruker Biotyper MALDI-TOF	RUO libraries (Versions 2014 [5627] and more recent)	C. auris	n/a
Bruker Biotyper MALDI-TOF	CA System library (Version Claim 4)	C. auris	n/a
	RUO library (with Saramis Version 4.14 database and Saccharomycetaceae update)	C. auris	n/a
bioMérieux VITEK MS MALDI-	IVD library (v3.2)	C. auris	n/a
TOF	Older IVD libraries	n/a	C. haemulonii C. lusitaniae No identification
	Software version 8.01*	C. auris	C. haemulonii C. duobushaemulonii Candida spp. not identified
VITEK 2 YST	Older versions	n/a	C. haemulonii C. duobushaemulonii Candida spp. not identified
API 20C		n/a	Rhodotorula glutinis (without characteristic red color) C. sake Candida spp. not identified
API ID 32C		n/a	C. intermedia C. sake Saccharomyces kluyveri
BD Phoenix		n/a	C. catenulata C. haemulonii Candida spp. not identified
MicroScan		n/a	C. lusitaniae** C. guilliermondii** C. parapsilosis** C. famata Candida spp. not identified
RapID Yeast Plus		n/a	C. parapsilosis** Candida spp. not identified
GenMark ePlex BCID-FP Panel		C. auris	n/a

^{*} There have been reports of C. auris being misidentified as C. lusitaniae and C. famata on VITEK 2. A confirmatory test such as cornmeal agar may be warranted for these species.

If C. auris is possible: Further work-up is needed to determine if actually C. auris. Send isolates to a reference lab, a state public health lab, a regional lab, or CDC for further identification. Place patient in transmission-based precautions and notify state and local health departments and CDC (candidaauris@cdc.gov).

- It is important to note that C. auris can be misidentified as a number of different organisms when using traditional phenotypic methods for yeast identification such as VITEK 2 YST, API 20C, BD Phoenix yeast identification system, and MicroScan.
- Detailed algorithms for when to suspect *C. auris* based on identification methods are available at this link.
- An increase in infections due to unidentified Candida species in a patient care unit, including increases in isolation of Candida from urine specimens, should also prompt suspicion for C. auris.
- Additional information regarding identification of C. auris and diagnostic challenges can be found at this <u>link</u>.



^{**} C. guilliermondii, C. lusitaniae, and C. parapsilosis generally make hyphae or pseudohyphae on cornmeal agar. If hyphae or pseudohyphae are not present on cornmeal agar, the isolate should raise suspicions of being C. auris typically does not make hyphae or pseudohyphae. However, some C. auris isolates have formed hyphae or pseudohyphae. Therefore, it would be prudent to consider any C. guilliermondii, C. lusitaniae, and C. parapsilosis isolates identified on MicroScan and any C. parapsilosis isolates identified on RapID Yeast Plus as possible C. auris isolates and further work-up should be considered.

If C. auris is confirmed: Place patient in transmission-based precautions, report to CDC (candidaauris@cdc.gov), and notify state and local health departments.

Mitigation Strategies

Upon identification of any of the epidemiological risk factors, healthcare facilities can mitigate risk of C. auris transmission with following considerations:

- Using the appropriate level of <u>transmission-based precautions</u>, (usually contact precautions for hospitals and enhanced barrier precautions for the nursing homes in most situation) while C. auris colonization and/or infection is being ruled out AND
- Ensuring adherence to hand hygiene, AND
- Conducting admission screening (bilateral axilla and groin swab) for C. auris when patients (especially those with clinical risk factors) are identified to have any of the epidemiological risk factors, AND
- Conducting a widespread (point prevalence) screening based on intra-facility risk, if C. auris is detected, AND
- Ensuring disinfectants used by environmental services personnel are effective against C. auris (by checking they are listed on the EPA List P of disinfectants).
 - If a List P disinfectant is not immediately available, use disinfectants found on EPA List K.



This Photo by Unknown Author is licensed under <u>CC BY</u>



Treatment

- In the United States, about 90% of C. auris isolates have been resistant to fluconazole, and about 30% have been resistant to amphotericin B.
- Most strains of C. auris in the US (>95%) have been susceptible to echinocandin although reports of echinocandin or pan-resistant cases are increasing.
 - This organism appears to develop resistance quickly.
- Consultation with an infectious disease specialist is highly recommended when caring for patients with C. auris infection.
- Even after treatment for invasive infections, patients generally remain colonized with C. auris for long periods, and perhaps indefinitely.
- Treatment of C. auris identified from noninvasive sites (such as respiratory tract, urine, and skin colonization) when there is no evidence of infection is not recommended.
 - Similar to recommendations for other Candida species, treatment is generally only indicated if clinical disease is present.

Notification to Facilities for Targeted MDROs

Initial Notification

Upon Identification of targeted MDRO (such as any CP-CRE or *C. auris*), HAI/AR team notify all facilities that patient have previously visited so the chart can be flagged.

Adding an Alert

HAI/AR team adds an infectious diseases alert into the CyncHealth, which also generate notification for HAI/AR team when the patient gets admitted to hospital, visit ED or get discharged.



Prospective Monitoring Upon receiving new admission/visit alert, HAI/AR team reaches out to the IP at the facility to make sure they have received the notification and proper precautions are being taken.



Patient Placement

It should be noted that the decisions regarding admission or discharge of a patient should be based on clinical criteria and the ability of the facility to provide care – not on the presence or absence of infection or colonization with *C. auris*.

When transferring a patient with *C. auris* colonization or infection to another healthcare facility or to another unit within a facility, **notify the receiving facility or unit of the patient's** *C. auris* **infection or colonization status**, including recommended Transmission-Based Precautions.



Put on gloves before room ent Discard gloves before room exi



Put on gown before room entr Discard gown before room exit

Do not wear the same gown ar for the care of more than one;



Use dedicated or disposable eq Clean and disinfect reusable ed before use on another person.



This Photo by Unknown Author is licensed under C



PROVIDERS AND STAFF MUST ALSO:



Wear gloves and a gown for the following High-Contact Resident Care Activities.

Transfi Chang Provid Chang Device

Bathing/Showering Transferring Changing Linens Providing Hygiene Changing briefs or assisting with toileting

central line, urinary catheter, feeding tube, tracheostomy Wound Care: any skin opening requiring a dressing

Do not wear the same gown and gloves for the care of more than one person.



https://www.cdc.gov/fungal/candida-auris/c-auris-infection-control.html#transferhttps://dhhs.ne.gov/han%20Documents/ALERT03262024.pdf

Requirements for Hospital Discharges to Post-Acute Care Providers

DEPARTMENT OF HEALTH & HUMAN SERVICES Centers for Medicare & Medicaid Services 7500 Security Boulevard, Mail Stop C2-21-16 Baltimore, Maryland 21244-1850



Center for Clinical Standards and Quality/Quality, Safety & Oversight Group

Ref: QSO-23-16-Hospitals

DATE: June 6, 2023

TO: State Survey Agency Directors

FROM: Director, Quality, Safety & Oversight Group (QSOG)

SUBJECT: Requirements for Hospital Discharges to Post-Acute Care Providers

Memorandum Summary

CMS is committed to ensuring that the health and safety of patients are protected when discharges from hospitals and transfers to post-acute care providers occur. Therefore, we are providing the following information:

- Reminding state agencies (SAs), accrediting organizations (AOs), and hospitals of the regulatory requirements for discharges and transfers to post-acute care providers.
- Highlighting the risks to patients' health and safety that can occur due to an unsafe discharge.
- Recommendations that hospitals can leverage to improve their discharge policies and procedures to improve and protect patients' health and safety.

Background:

When a patient is discharged from a hospital, it is important to provide their post-acute provider and caregivers as applicable with the appropriate patient information related to a patient's treatment and condition in order to decrease the risk of readmission or an adverse event. For example, when a patient is discharged to a post-acute care (PAC) provider such as a skilled nursing facility (SNF) or home health agency (HHA), these providers must receive accurate and complete information related to the patient's condition and treatment (e.g., diagnoses and medications) in order to protect and improve the patient's health and safety.

Call to Action for Patient Transfers

Hospitals

- Update referral forms or software to include Tier 2 MDRO's for isolation needs
- Staff filling out these forms for referrals to post-acute care facilities need to understand and be aware of the importance to communicate MDRO status
- Care management staff need education on these organisms
- Confirm that this status is understood by receiving facility

Post-Acute Care Facilities

- Admission coordinator needs to be aware of the need to ask about MDRO status of referrals
- Update all intake forms and software to include MDRO status for patient being referred
- Admissions coordinator needs to be educated on the importance on communicating this information to infection prevention and leadership at the facility.

Inter-facility Infection Control Transfer Form

This form must be filled out for transfer to accepting facility with information communicated prior to or with transfer.

Please attach copies of latest culture reports with susceptibilities if available.

Sending Healthcare Facility:

Patient/Resident Last Name	First Name		Date of Birth	Medical Record Number
Name/Address of Sending Facility	Sending Unit		Sending Facility Phone	

Sending Facility Contacts	Contact Name	Phone	E-mail
Transferring RN/Unit			
Transferring physician			
Case Manager/Admin/SW			
Infection Preventionist			

Does the person* currently have an infection, colonization OR a history of positive culture of a multidrug-resistant organism (MDRO) or other potentially transmissible infectious organism?	Colonization or history (Check if YES)	Active infection on Treatment (Check if YES)
Methicillin-resistant Staphylococcus aureus (MRSA)	Yes	Yes
Vancomycin-resistant Enterococcus (VRE)	Yes	Yes
Clostridioides difficile	Yes	Yes
Acinetobacter, multidrug-resistant	Yes	Yes
Enterobacteriaceae (e.g., E. coli, Klebsiella, Proteus) producing- Extended Spectrum Beta-Lactamase (ESBL)	Yes	Yes
Carbapenem-resistant Enterobacteriaceae (CRE)	Yes	Yes
Pseudomonas aeruginosa, multidrug-resistant	Yes	Yes
Candida auris	Yes	Yes
Other, specify (e.g., lice, scabies, norovirus, influenza):	Yes	Yes

Example Inter-Facility Infection Control
Transfer Form can be found at:
https://www.cdc.gov/hai/pdfs/toolkits/
Interfacility-IC-Transfer-Form-508.pdf

Work with your admissions staff/care management staff, or anyone taking possible referrals, to update their intake/referral forms to specifically include Tier 2 organisms for Nebraska so proper precautions can be taken upon admission.

Add Tier 2 organisms for Nebraska

Hospital to Post-Acute Care Transfer Form (cont'd)



K. Nursing Care				
Physical and Sensory Function				
Ambulation	□ Independent	☐ With Assistance	☐ With Assistive Device	☐ Not Ambulatory
Weight Bearing	□ Full	□ Partial L / R	□ None L/R	
Transfer	☐ Self	☐ 1-Person Assist	☐ 2-Person Assist	
Sensory Function	Sight: ☐ Normal ☐ Impaired ☐	Blind	Hearing: ☐ Normal ☐ Impaire	ed 🗆 Deaf
Devices	□ Wheelchair	☐ Walker	□ Cane	☐ Crutches
	☐ Prosthesis	Glasses	□ Contacts	☐ Dentures
	☐ Hearing Aid L / R			
Bladder Function Reason for catheter Bowel Function Date of last bowel move		☐ Monitor Output ☐ Other (☐) Ostomy	serted/) (describe)	
Nutrition and Hydration				
Diet	Consiste	ency	Free Water Restrict	tion
Eating Instructions	□ Self □ With A	Assistance Difficulty Swallov	wing (Attach speech therapy recom	mendations if available)
Tube Feeding	☐ G-tube ☐ J-tube ☐ Date in	serted//	Free Water Bolus	cc everyh
	☐ Tube feed product		Rate:	.cc/h Durationh/day
	□TPN			
Treatments and Therapeutic D ☐ PICC		/ / (Please	attach imaging report confirming pla	rement)
Cardiac	□ Pacemaker		er (specify)	cement y
Respiratory	□ CPAP		L prn continuous	☐ Suction ☐ Trach size
nespiratory	☐ Tracheostomy Care	□ Ventilator Care	E Din Donaldon	Li Saction Li Haci Size
Therapies (please attach assess	ment/recommendations)			
□ PT	□ от	☐ Speech	Respiratory	☐ Dialysis
Skin Care				
☐ No skin breakdown	☐ Pressure ulcer/injury: Stage	Location □ 2nd	d Pressure ulcer/injury: Stage	Location
☐ Other wounds (specify)				
Risks and Precautions (check al	that apply)			
☐ Fall ☐ Delirium	☐ Agitation ☐ Aggres	ssion Unescorted exiting	☐ Aspiration ☐ Othe	er
Precautions		•		
Infection Control Issues	☐ Other (specify)			
Infection/Colonization	□ MRSA □ VRE	□ C.difficle	□ ESBL □ Nor	rovirus
HITECOOTI/ COTOTIIZATION	LITHIUM LI VINE		L ESDE LINOI	Ovinus Linu/respiratory
	□ COVID: □ No □ Yes (date):	/ /		
Isolation Precautions	☐ COVID: ☐ No ☐ Yes (date):_ ☐ Yes ☐ No	_/_/		
Isolation Precautions): □ No □ Yes (date): / /	

Example Hospital to Post-Acute Care Transfer Form:

https://pathway-interact.com/wpcontent/uploads/2021/08/22-INTERACT-Hospital-to-Post-Acute-Care-Transfer-Form-2021.pdf

Work with your admissions staff/care management staff, or anyone taking possible referrals, to update their intake/referral forms to specifically include Tier 2 organisms for Nebraska so proper precautions can be taken upon admission.

Example: C. auris colonization can be written under "other"

Enhanced Barrier Precautions in Nursing Homes

DEPARTMENT OF HEALTH & HUMAN SERVICES Centers for Medicare & Medicaid Services 7500 Security Boulevard, Mail Stop C2-21-16 Baltimore, Maryland 21244-1850



Center for Clinical Standards and Quality/Quality, Safety & Oversight Group

Ref: QSO-24-08-NH

DATE: March 20, 2024

TO: State Survey Agency Directors

FROM: Director, Quality, Safety & Oversight Group (QSOG)

SUBJECT: Enhanced Barrier Precautions in Nursing Homes

Memorandum Summary

- CMS is issuing new guidance for State Survey Agencies and long term care (LTC)
 facilities on the use of enhanced barrier precautions (EBP) to align with nationally
 accepted standards.
- EBP recommendations now include use of EBP for residents with chronic wounds or indwelling medical devices during high-contact resident care activities regardless of their multidrug-resistant organism status.
- The new guidance related to EBP is being incorporated into F880 Infection Prevention and Control.

Resident Placement on EBP

Residents on EBP may share rooms with other residents.

 Facilities with capacity to offer single-person rooms or create roommate pairs based on MDRO colonization may choose to do so.

When residents are placed in shared rooms, strategies to help minimize transmission of pathogens between roommates including:

- Maintaining spatial separation of at least 3 feet between beds
- Use of privacy curtains to limit direct contact,
- Cleaning and disinfecting any shared reusable equipment,
- · Cleaning and disinfecting environmental surfaces on a frequent schedule, and
- Changing personal protective equipment (if worn) and performing hand hygiene when switching care from one roommate to another.

Resident Placement Specific Recommendation for Tier 2 Organisms

 When admitting new residents who do not have an active infection but are known to be colonized with a <u>Tier 2 organisms</u> (e.g., *C. auris*), ICAP recommends keeping that patient in <u>enhanced barrier precautions in a</u> <u>private room.</u>

 However, if it is not possible to place the new residents with colonization history with Tier 2 organisms in a private room and shared room appear to be the only option, then contact ICAP to discuss possible options on how it can be done in a safe manner.

Upcoming Educational Activities

2024 Nebraska Antimicrobial Stewardship Summit

Smart Antibiotic Choices, Stronger Future

Friday, May 31, 2024 | 7:30 am - 3:30 pm

Embassy Suites LaVista Hotel & Conference Center

Registration open now: 2024 Nebraska Antimicrobial Stewardship Summit: Smart

Antibiotic Choices, Stronger Future | Center for Continuing Education (unmc.edu)







2024 ANTIMICROBIAL STEWARDSHIP SUMMIT

Smart Antibiotic Choices, Stronger Future

AGENDA — May 31, 2024

7:30 a.m.	Registration / Breakfast				
7:55	Welcome Jenna Preusker, PharmD, BCPS, BCIDP				
8:00	Nebraska Antimicrobial Stewardship U Jenna Preusker, PharmD, BCPS, BCIDP	lpdate			
8:30	Nebraska Healthcare-Associated Infec Muhammad Salman Ashraf, MBBS, FIDSA	tions and Antimicrobial Resistance Update			
9:00	Approaching a Reluctant Administration				
9:45	Break				
10:00	Universal Decolonization of Multi-Drug Resistant Organisms Susan Huang, MD, MPH				
10:45	Antimicrobial Stewardship at Transitions of Care Valerie Vaughn, MD, MS, SFHM, FACP				
11:30	Lunch				
12:30 p.m.	Poster Session / Poster Rounds				
1:00	Nurses — The Central Stewards of Antibiotic Safety Elizabeth Monsees, PhD, MBA, RN, CIC, FAPIC				
1:45	Poster Awards / Break				
	Breakout Sessions	Local Health Department	S Outpatient Care Outpatient Care		
2:15	Using Data to Drive Long-Term Care Antimicrobial Stewardship Alex Neukirch, PharmD	Antibiotic Myths — A Patient Case-Based Panel Rudolf Kotula, MD; David Quimby, MD; and Erica Stohs, MD, MPH	A33 Updates in Uncomplicated Gram-Negative Rod Bacteremia Nicolas Cortes-Penfield, MD, FACP		
2:45	Break	,	•		
3:00	B1: Outpatient Antimicrobial Stewardship Mackenzie Keintz, MD	Focused Stewardship Initiatives: Shorter Is Better Jeremy Tigh, PharmD, BCIDP	Safety Network (NHSN) Antibiotic Use Data in Your Hospital Melinda Neuhauser, PharmD, MPH, FCCP, FASHP, FIDP		
3:30	Closing Remarks	•			





QUESTIONS?





THANK YOU

DIVISION OF PUBLIC HEALTH

NEBRASKA

Good Life, Great Mission, pept of healthand human services