Nebraska Infection Control Network

# Resident Safety and Vaccination

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Immanuel Newport House
With support from Dr. M. Salman Ashraf

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## Learning Outcomes

- Examine a community's vaccination program and discuss the challenges, barriers and lessons learned
- Understand the elements of a TB Screening Program; including risk assessment process and operationalizing a screening program

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# CDC Recommended Adult Vaccine Schedule

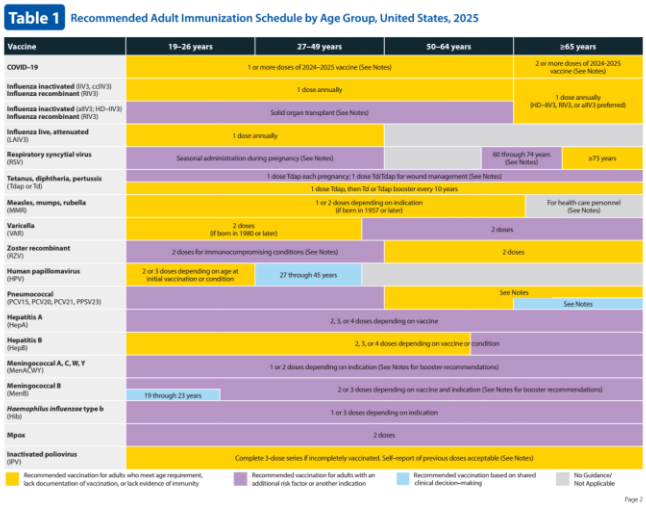

**Table 1** Recommended Adult Immunization Schedule by Age Group, United States, 2025

| Vaccine | 19–26 years | 27–49 years | 50–64 years | ≥65 years |
|---|---|---|---|---|
| **COVID-19** | 1 or more doses of 2024–2025 vaccine (See Notes) | | | 2 or more doses of 2024-2025 vaccine (See Notes) |
| **Influenza inactivated** (IIV3, cclV3) **Influenza recombinant** (RIV3) | 1 dose annually | | | 1 dose annually (HD–IIV3, RIV3, or aIIV3 preferred) |
| **Influenza inactivated** (aIIV3; HD–IIV3) **Influenza recombinant** (RIV3) | Solid organ transplant (See Notes) | | | |
| **Influenza live, attenuated** (LAIV3) | 1 dose annually | | | |
| **Respiratory syncytial virus** (RSV) | Seasonal administration during pregnancy (See Notes) | | 60 through 74 years (See Notes) | ≥75 years |
| **Tetanus, diphtheria, pertussis** (Tdap or Td) | 1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (See Notes) | | | |
| | 1 dose Tdap, then Td or Tdap booster every 10 years | | | |
| **Measles, mumps, rubella** (MMR) | 1 or 2 doses depending on indication (If born in 1957 or later) | | | For health care personnel (See Notes) |
| **Varicella** (VAR) | 2 doses (If born in 1980 or later) | | 2 doses | |
| **Zoster recombinant** (RZV) | 2 doses for immunocompromising conditions (See Notes) | | 2 doses | |
| **Human papillomavirus** (HPV) | 2 or 3 doses depending on age at initial vaccination or condition | 27 through 45 years | | |
| **Pneumococcal** (PCV15, PCV20, PCV21, PPSV23) | | | See Notes | See Notes |
| **Hepatitis A** (HepA) | 2, 3, or 4 doses depending on vaccine | | | |
| **Hepatitis B** (HepB) | 2, 3, or 4 doses depending on vaccine or condition | | | |
| **Meningococcal A, C, W, Y** (MenACWY) | 1 or 2 doses depending on indication (See Notes for booster recommendations) | | | |
| **Meningococcal B** (MenB) | 19 through 23 years | 2 or 3 doses depending on vaccine and indication (See Notes for booster recommendations) | | |
| ***Haemophilus influenzae* type b** (Hib) | 1 or 3 doses depending on indication | | | |
| **Mpox** | 2 doses | | | |
| **Inactivated poliovirus** (IPV) | Complete 3-dose series if incompletely vaccinated. Self–report of previous doses acceptable (See Notes) | | | |

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of immunity | Recommended vaccination for adults with an additional risk factor or another indication | Recommended vaccination based on shared clinical decision–making | No Guidance/ Not Applicable

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# CDC Recommended Adult Vaccine Schedule- Resource

https://www.cdc.gov/vaccines/hcp/imz-schedules/downloads/adult/adult-combined-schedule.pdf

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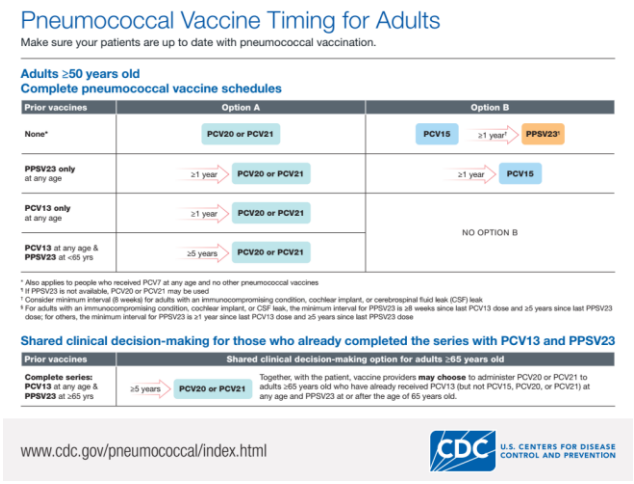
# CDC Pneumonia Vaccine Schedule



## Pneumococcal Vaccine Timing for Adults

Make sure your patients are up to date with pneumococcal vaccination.

**Adults ≥50 years old**
**Complete pneumococcal vaccine schedules**

| Prior vaccines | Option A | Option B |
|---|---|---|
| None* | PCV20 or PCV21 | PCV15 → ≥1 year† → PPSV23† |
| PPSV23 only at any age | ≥1 year → PCV20 or PCV21 | ≥1 year → PCV15 |
| PCV13 only at any age | ≥1 year → PCV20 or PCV21 | NO OPTION B |
| PCV13 at any age & PPSV23 at <65 yrs | ≥5 years → PCV20 or PCV21 | |

* Also applies to people who received PCV7 at any age and no other pneumococcal vaccines
† If PPSV23 is not available, PCV20 or PCV21 may be used
‡ Consider minimum interval (8 weeks) for adults with an immunocompromising condition, cochlear implant, or cerebrospinal fluid leak (CSF) leak
§ For adults with an immunocompromising condition, cochlear implant, or CSF leak, the minimum interval for PPSV23 is ≥8 weeks since last PCV13 dose and ≥5 years since last PPSV23 dose; for others, the minimum interval for PPSV23 is ≥1 year since last PCV13 dose and ≥5 years since last PPSV23 dose

**Shared clinical decision-making for those who already completed the series with PCV13 and PPSV23**

| Prior vaccines | Shared clinical decision-making option for adults ≥65 years old |
|---|---|
| Complete series: PCV13 at any age & PPSV23 at ≥65 yrs | ≥5 years → PCV20 or PCV21 — Together, with the patient, vaccine providers **may choose** to administer PCV20 or PCV21 to adults ≥65 years old who have already received PCV13 (but not PCV15, PCV20, or PCV21) at any age and PPSV23 at or after the age of 65 years old. |

www.cdc.gov/pneumococcal/index.html

CDC U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

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# Pneumonia Prevention Vaccines

In the United States, there are 2 types of vaccines recommended to help prevent pneumococcal disease:

- Pneumococcal conjugate vaccines (PCVs)
  - PCV15
  - PCV20
  - PCV21
- Pneumococcal polysaccharide vaccine
  - PPSV23

Each of these vaccines helps protect against specific serotypes, or strains, of pneumococcal bacteria. The number at the end of the vaccine name tells how many serotypes the vaccine includes.

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# CDC Pneumonia Vaccine Schedule- Resource

https://www.cdc.gov/pneumococcal/downloads/Vaccine-Timing-Adults-JobAid.pdf

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# Resident Vaccine Program

|  |  |
|---|---|
| Arranges external source for mass vaccine clinic | Community Infection Preventionist |
| Obtains standing order annually from medical director for vaccines (influenza, COVID) | Tracks all SNF/LTC residents vaccine status |
| Ensures vaccine consents are signed by resident/resident representative | Obtains individual orders for pneumonia vaccines |
| Ensures documentation is completed in EMR post mass vaccine clinic | Reports vaccine status monthly at QAPI |
| Liaison with pharmacy for any vaccine purchase | Ensures all data is reported timely |
| Ensures documentation is sent to billing when we have provided vaccine | Monitors outbreak trends |

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## Newport House Vaccine Program

- Previously- in house mass vaccine program (community purchasing vaccine from pharmacy, administrating, and billing)
- Now- utilize external company to provide mass immunizations to long term care residents, will additionally vaccinate employees with insurance
- Order individual vaccines for SNF residents

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## Vaccination Status of New Admit

- How to find most updated vaccination information
  - Hospital record
  - CyncHealth
  - Contact PCP Office
  - Ask resident/family
  - NESIIS

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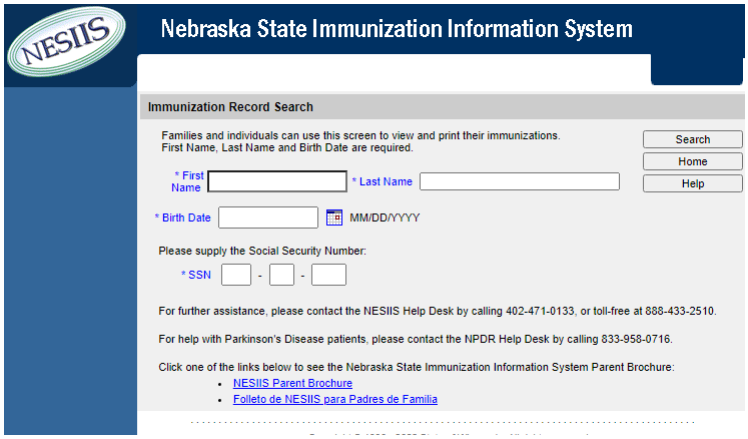
# Nebraska State Immunization Information System (NESIIS)

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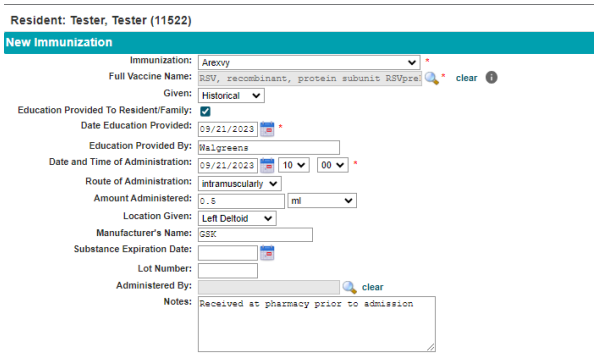
# Documenting Vaccine History in EMR

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# Resident Immunization Status At A Glance- PCC

Immun | Orders | Wts/Vitals | Results | MDS | Assmnts | Therapy | Prog Note | Care Plan | Tasks | Care Pathways | Misc | Inbound

| Immunization | Date Given |
|---|---|
| Influenza | 10/12/2023 |
| Influenza | 10/19/2022 |
| Influenza | 10/7/2021 |
| Influenza | 10/1/2020 |
| TB 2 Step Mantoux Skin Test (Step 2) | 3/20/2021 |
| TB 2 Step Mantoux Skin Test (Step 1) | 3/10/2021 |
| Vericella Zoster (shingles) | 10/1/2020 |
| Tdap | 3/4/2021 |
| Pneumo-PCV13(Prevnar 13) | 7/13/2020 |
| Pneumococcal Polysaccharide Vaccine (PPSV23) | 12/5/2018 |
| SARS-COV-2 (COVID-19) (Dose 2) | 3/18/2021 |
| SARS-COV-2 (COVID-19) (Dose 1) | 2/18/2021 |
| SARS-COV-2 (COVID-19 | 5/9/2023 |
| SARS-COV-2 (COVID-19 | 9/29/2022 |
| SARS-COV-2 (COVID-19 | 5/6/2022 |
| SARS-COV-2 (COVID-19 | 11/18/2021 |
| Arexvy | 10/13/2023 |
| SARS-COV-2 (COVID-19) - Moderna Fall 2023 | 9/21/2023 |

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# Immunization Status Reports from EMR- PCC

PointClickCare

Home | Admin | Clinical | Insights | CRM | Reports

**Immunization Report - Report Setup**

Report Options

Resident Number: Leave blank for all residents
Resident: clear
Unit: All
Floor: All
Status: Current
Sort By: Resident Name / Administered Date
Report Output Format: PDF

Immunization Details

Type of Immunization

SARS-COV-2 (COVID-19
Diphtheria
H1N1
Hepatitis B
Influenza
Meningitis
Pneumo-PCV13(Prevnar 13)
Pneumococcal Polysaccharide Vaccine (PPSV23)
Pneumovax Dose 1
Pneumovax Dose 2
Pneumovax Dose 3
Polio
Prevnar 13
PREVNAR 20
SARS-COV-2 (COVID-19)
Shingrix Dose 1
Shingrix Dose 2
TB 1 Step Mantoux (PPD)
TB 2 Step Mantoux Skin Test
Td
Tdap
Tetanus
Varicella (chicken pox)
Vericella Zoster (shingles)

Consent Status
Date Range * 09/01/2022 to 09/30/2022
Education Provided to Resident/Family
Administered By
Include Struck out Immunization

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# Tracking Resident Vaccines

| | PPSV 23 | Prev 13 | PCV20 | COVID-19 Dose 1 | COVID-19 Dose 2 | COVID-19 Booster 1 | COVID-19 Booster 2 | COVID-19 Bivalent Booster #1 | COVID-19 Bivalent Booster #2 | COVID-19 Fall 2023 | Influenza | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3/2/2010 | 2/12/2016 | | 2/3/2021 | 3/10/2021 | 2/10/2022 | 5/5/2021 | 9/22/2022 | 6/30/2023 | 10/30/2023 | 10/12/2023 | |
| 2 | | | | 3/9/2021 | 3/30/2021 | 1/24/2022 | | | | 9/22/2023 | 10/12/2023 | |
| 3 | 1/11/2012 | 8/27/2017 | | 1/18/2021 | 2/8/2021 | 10/27/2021 | 5/5/2021 | 9/22/2022 | 5/10/2023 | 10/30/2023 | 10/12/2023 | |
| 4 | | | | 1/20/2021 | 2/17/2021 | 11/9/2021 | 4/12/2022 | 10/7/2022 | Refused | Refused | 10/12/2023 | |
| 5 | | | | 1/4/2021 | 1/25/2021 | 10/3/2021 | | | | 1/26/2024 | 9/30/2023 | |
| 6 | 8/14/2020 | 10/13/2015 | | 12/28/2020 | 1/18/2021 | 10/20/2021 | 5/5/2021 | 9/22/2022 | 5/10/2023 | 10/30/2023 | 10/12/2023 | |
| 7 | 12/22/2018 | 10/26/2015 | | 12/28/2020 | 1/18/2021 | 10/27/2021 | 5/5/2021 | 9/22/2022 | 5/10/2023 | 10/30/2023 | 10/12/2023 | |
| 8 | 5/15/2015 | 10/17/2016 | | 1/20/2021 | 2/10/2021 | 10/20/2021 | 5/11/2022 | 9/22/2022 | 5/10/2023 | 10/30/2023 | 10/12/2023 | |
| 9 | | 10/29/2016 | | 1/12/2021 | 2/9/2021 | 11/3/2021 | 5/9/2022 | 10/18/2022 | 6/30/2022 | 10/30/2023 | 10/12/2023 | |
| 10 | 8/26/2018 | 9/30/2015 | | 12/28/2020 | 1/18/2021 | 10/27/2021 | 5/5/2021 | 9/22/2022 | 5/10/2023 | 10/30/2023 | 10/12/2023 | |
| 11 | 8/23/2014 | 2/22/2017 | | 2/9/2021 | 3/9/2021 | 4/5/2022 | | 10/26/2022 | 5/10/2023 | 10/30/2023 | 10/12/2023 | |
| 12 | 1/21/2013 | 4/2/2016 | | 2/23/2021 | 3/23/2021 | 11/3/2021 | 5/5/2021 | 9/22/2022 | 5/3/2023 | 10/30/2023 | 10/12/2023 | |
| 13 | 6/28/2018 | 4/28/2016 | | 1/5/2021 | 1/26/2021 | 11/2/2021 | 6/30/2022 | 4/20/2023 | | 10/30/2023 | 10/12/2023 | |
| 14 | 6/23/2015 | 1/1/2008 | | 2/10/2021 | 3/3/2021 | 12/1/2021 | | | | 10/30/2023 | 10/12/2023 | |
| 15 | | | 11/16/2022 | 1/20/2021 | 2/17/2021 | 11/9/2021 | 5/5/2021 | 9/22/2022 | 5/10/2023 | 10/30/2023 | 10/12/2023 | |
| 16 | 10/12/2018 | | 11/15/2022 | 1/20/2021 | 2/17/2021 | 11/9/2021 | 5/5/2021 | 9/22/2022 | 5/11/2023 | 10/30/2023 | 10/12/2023 | |
| 17 | | | 11/15/2022 | 1/20/2021 | 2/17/2021 | 4/12/2022 | | 9/22/2022 | 5/11/2023 | 10/30/2023 | 10/12/2023 | |
| 18 | Refused | Refused | Refused | Refused | Refused | Refused | Refused | Refused | Refused | Refused | Refused | |
| 19 | 8/8/2012 | 7/29/2015 | | 1/20/2021 | 2/17/2021 | 11/9/2021 | 4/12/2022 | 9/22/2022 | 5/10/2023 | 10/30/2023 | 10/12/2023 | |
| 20 | | | | | | | | 9/27/2022 | | 10/30/2023 | 10/12/2023 | |
| 21 | 6/1/1998 | 12/2/2015 | | 12/28/2020 | 1/18/2021 | 10/27/2021 | 5/11/2022 | 9/22/2022 | 5/10/2023 | 10/30/2023 | 10/12/2023 | |
| 22 | 4/11/2020 | 10/23/2018 | | 12/28/2020 | 1/18/2021 | 10/20/2021 | 5/11/2022 | 9/22/2022 | 5/10/2023 | 10/31/2023 | 10/12/2023 | |
| 23 | | 1/16/2018 | | 2/10/2021 | 3/5/2021 | | | | | | | |
| 24 | 1/3/2018 | 10/21/2015 | | 2/4/2021 | 2/25/2021 | 9/26/2021 | 4/28/2022 | 10/25/2022 | | 10/30/2023 | 10/10/2023 | |

| Immunization % to be administered or offered | |
|---|---|
| Prevnar 13 | |
| PCV20 | |
| PPSV 23 | |
| Influenza | |

| Immunization % to be administered | |
|---|---|
| COVID-19 Dose 1 | |
| COVID-19 Dose 2 | |
| COVID-19 Booster 1 | |
| COVID-19 Booster 2 | |
| COVID-19 Bivalent Booster | |

| Color Key | |
|---|---|
| | Vaccination due |
| | Vaccination not due |
| | Up to date/offered all vaccinations |
| | Refused |

Residents with vaccines not due are counted as current.

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# Standing Order

Newport House
an Immanuel care community

(Place resident label here)

**PHYSICIAN'S ORDERS/PROGRESS NOTES**

Authorization is given for dispensing by generic name unless checked here ☐
Please indicate allergies: ☐ None ☐ Codeine ☐ Penicillin ☐ Sulfa ☐ Aspirin ☐ Other

| DATE | PHYSICIAN'S ORDER | DATE | PROGRESS - Note progress of case, complications, consultations, change in symptoms, condition upon discharge, and instructions to patient. |
|---|---|---|---|
| | Administer 15-Valent vaccine | | |
| | (Prevnar 15) 0.5ml IM X 1 | | |
| | Dr. Susan Scholer, MD | | |
| | Newport House Medical Director | | |

ORDERS LEFT SIDE ONLY – USE BLACK BALLPOINT PEN AND AVOID ABBREVIATIONS.

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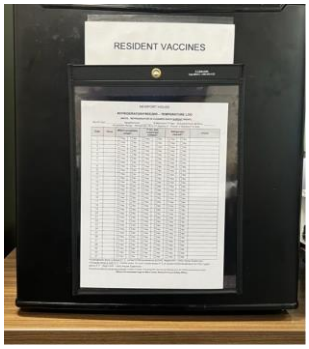
# Storing Vaccines

- Designate a specific refrigerator for vaccines
  - Continuous temperature monitoring

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# Basic Strategies to the prevention and control of TB

- Identify and treat
- Contact investigation
- Screening populations at high risk for TB

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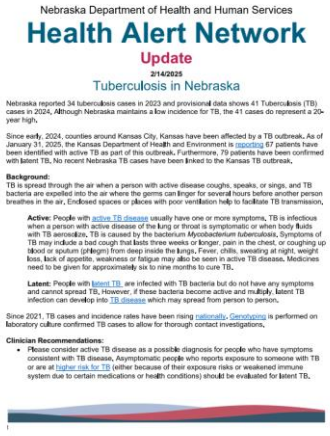
# TB in NE Update



Nebraska Department of Health and Human Services

**Health Alert Network**

**Update**

**2/14/2025**

Tuberculosis in Nebraska

Nebraska reported 34 tuberculosis cases in 2023 and provisional data shows 41 Tuberculosis (TB) cases in 2024. Although Nebraska maintains a low incidence for TB, the 41 cases do represent a 20-year high.

Since early, 2024, counties around Kansas City, Kansas have been affected by a TB outbreak. As of January 31, 2025, the Kansas Department of Health and Environment is reporting 67 patients have been identified with active TB as part of this outbreak. Furthermore, 79 patients have been confirmed with latent TB. No recent Nebraska TB cases have been linked to the Kansas TB outbreak.

**Background:**
TB is spread through the air when a person with active disease coughs, speaks, or sings, and TB bacteria are expelled into the air where the germs can linger for several hours before another person breathes in the air. Enclosed spaces or places with poor ventilation help to facilitate TB transmission.

**Active**: People with active TB disease usually have one or more symptoms. TB is infectious when a person with active disease of the lung or throat is symptomatic or when body fluids with TB aerosolize. TB is caused by the bacterium *Mycobacterium tuberculosis*. Symptoms of TB may include a bad cough that lasts three weeks or longer, pain in the chest, or coughing up blood or sputum (phlegm) from deep inside the lungs. Fever, chills, sweating at night, weight loss, lack of appetite, weakness or fatigue may also be seen in active TB disease. Medicines need to be given for approximately six to nine months to cure TB.

**Latent**: People with latent TB, are infected with TB bacteria but do not have any symptoms and cannot spread TB. However, if these bacteria become active and multiply, latent TB infection can develop into TB disease which may spread from person to person.

Since 2021, TB cases and incidence rates have been rising nationally. Genotyping is performed on laboratory culture confirmed TB cases to allow for thorough contact investigations.

**Clinician Recommendations:**

- Please consider active TB disease as a possible diagnosis for people who have symptoms consistent with TB disease. Asymptomatic people who reports exposure to someone with TB or are at higher risk for TB (either because of their exposure risks or weakened immune system due to certain medications or health conditions) should be evaluated for latent TB.

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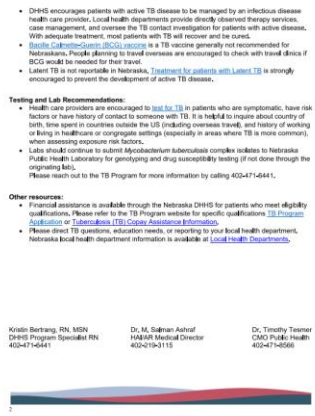

- DHHS encourages patients with active TB disease to be managed by an infectious disease health care provider. Local health departments provide directly observed therapy services, case management, and oversee the TB contact investigation for patients with active disease. With adequate treatment, most patients with TB will recover and be cured.
- Bacille Calmette-Guerin (BCG) vaccine is a TB vaccine generally not recommended for Nebraskans. People planning to travel overseas are encouraged to check with travel clinics if BCG would be needed for their travel.
- Latent TB is not reportable in Nebraska. Treatment for patients with Latent TB is strongly encouraged to prevent the development of active TB disease.

**Testing and Lab Recommendations:**

- Health care providers are encouraged to test for TB in patients who are symptomatic, have risk factors or have history of contact to someone with TB. It is helpful to inquire about country of birth, time spent in countries outside the US (including overseas travel), and history of working or living in healthcare or congregate settings (especially in areas where TB is more common), when assessing exposure risk factors.
- Labs should continue to submit *Mycobacterium tuberculosis* complex isolates to Nebraska Public Health Laboratory for genotyping and drug susceptibility testing (if not done through the originating lab).
  Please reach out to the TB Program for more information by calling 402-471-6441.

**Other resources:**

- Financial assistance is available through the Nebraska DHHS for patients who meet eligibility qualifications. Please refer to the TB Program website for specific qualifications. TB Program Application or Tuberculosis (TB) Copay Assistance Information.
- Please direct TB questions, education needs, or reporting to your local health department. Nebraska local health department information is available at Local Health Departments.

Kristin Bertrang, RN, MSN
DHHS Program Specialist RN
402-471-6441

Dr, M, Salman Ashraf
HAIAR Medical Director
402-219-3115

Dr, Timothy Tesmer
CMO Public Health
402-471-6566

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# TB Risk Assessment

- Complete a yearly risk assessment
  - CDC TB Risk Assessment Worksheet (Appendix B)
- Verify risk with DHHS- Health Department
  - Review Tuberculosis in NE Annual Report
  - https://dhhs.ne.gov/Pages/Tuberculosis.aspx

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# Tuberculosis (TB) risk assessment worksheet

Centers for Disease Control and Prevention
Division of Tuberculosis Elimination

09/27/2006 — Centers for Disease Control and Prevention, Division of Tuberculosis Elimination

**Appendix B. Tuberculosis (TB) risk assessment worksheet**

This model worksheet should be considered for use in performing TB risk assessments for health-care facilities and nontraditional facility-based settings. Facilities with more than one type of setting will need to apply this table to each setting.

| Scoring | √ or Y = Yes | X or N = No | NA = Not Applicable |
|---|---|---|---|

**1. Incidence of TB**

| | |
|---|---|
| What is the incidence of TB in your community (county or region served by the health-care setting), and how does it compare with the state and national average? What is the incidence of TB in your facility and specific settings and how do those rates compare? (Incidence is the number of TB cases in your community the previous year. A rate of TB cases per 100,000 persons should be obtained for comparison.)* This information can be obtained from the state or local health department. | Community rate _____<br>State rate _____<br>National rate _____<br>Facility rate _____<br>Department 1 rate _____<br>Department 2 rate _____<br>Department 3 rate _____ |
| Are patients with suspected or confirmed TB disease encountered in your setting (inpatient and outpatient)? | Yes No |
| If yes, how many patients with suspected and confirmed TB disease are treated in your health-care setting in 1 year (inpatient and outpatient)? Review laboratory data, infection-control records, and databases containing discharge diagnoses. | Year — No. patients: Suspected / Confirmed<br>1 year ago _____ _____<br>2 years ago _____ _____<br>5 years ago _____ _____ |
| If no, does your health-care setting have a plan for the triage of patients with suspected or confirmed TB disease? | Yes No |

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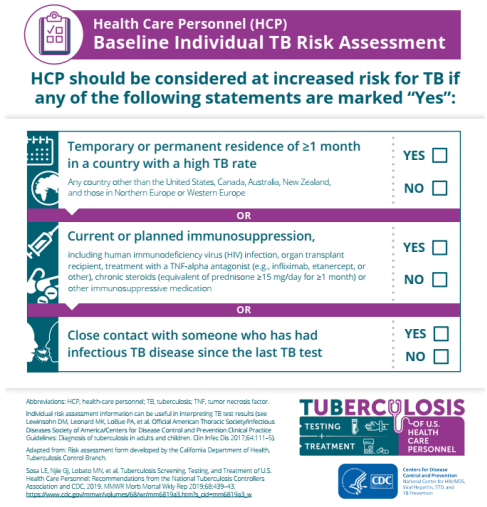
# CDC TB Screening of HCP

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# Newport House TB Screening

- Residents
  - ALL new admits
    - IGRA (interferon gamma release assay) upon admission
    - Chest x-ray (history of positive)
- Employees
  - New hire
    - IGRA (interferon gamma release assay)
  - Exposure

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# Questions?

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# References


- CDC. (Nov 2024) https://www.cdc.gov/vaccines/hcp/imz-schedules/downloads/adult/adult-combined-schedule.pdf
- CDC.(2024) https://www.cdc.gov/pneumococcal/downloads/Vaccine-Timing-Adults-JobAid.pdf
- NE DHHS Health Alert Network (2025, Feb 14) https://dhhs.ne.gov/Pages/Health-Alert-Network.aspx
- CDC. (2023, Dec 15). https://www.cdc.gov/tb-healthcare-settings/media/pdfs/Health_Care_Personnel_Baseline_Individual_TB_Risk_Assessment.pdf
- CDC. (2023, Dec 15). *Appendix B. Tuberculosis (TB) risk assessment worksheet. https://www.cdc.gov/tb-healthcare-settings/hcp/facility-risk-assessment/index.html*


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