Infection Prevention Updates for Acute Care & Outpatient Settings

January 10, 2024



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DEPT. OF HEALTH AND HUMAN SERVICES



Presenters & Panelists & Moderator

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Panelists today:

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Questions & Answer Session

- Please use the Q&A box in the webinar platform to type a question to be read aloud.
 - If your question is not answered during the webinar, please call (402) 552-2881 Monday – Friday 8:00 am – 4:00 pm CST to speak with one of our Infection Preventionists or e-mail your question to <u>nebraskaicap@nebraskamed.com</u>

Slides & Webinar Recordings Available

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<u>1.0 Nursing Contact Hour</u> is awarded for the LIVE viewing of this webinar

Nebraska Medicine 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.

In order to obtain either contact hour, you must be present for the entire live webinar and complete the post webinar survey

No conflicts of interest were identified for any member of the planning committee, presenters or panelists of the program content

This CE is hosted by Nebraska Medicine and UNMC along with Nebraska ICAP and Nebraska DHHS

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Richard Starlin, MD Juan Teran Plasencia, MD Sarah Stream, MPH, CDA, FADAA The <u>planning committee members</u> have nothing to disclose:

Kate Tyner, RN, BSN, CIC;	Jody Scebold, EdD, MSN, RN, CIC
Margaret Deacy	Josette McConville, BSN, RN, CIC
Chris Cashatt, RN, BSN, CIC	Jenna Preusker, Pharm.D., BCPS
Lacey Pavlovsky, MSN, RN, CIC, LTC-CIP	Rebecca Martinez, BSN, BA, RN, Cl

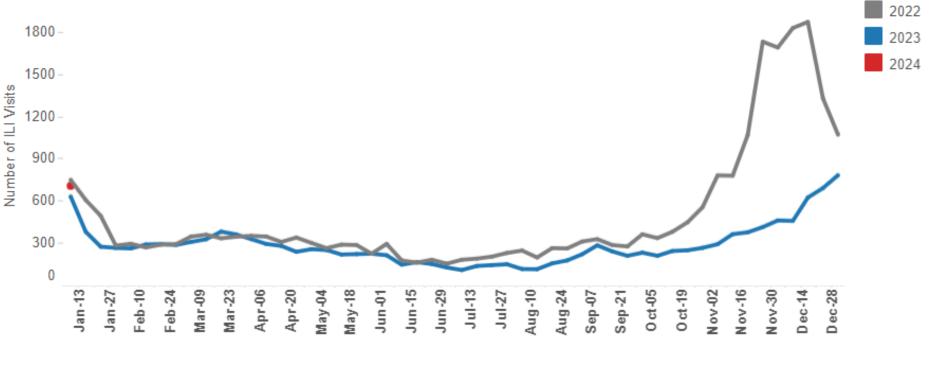
Respiratory Season Update

Juan Teran, MD Medical Director, NE ICAP



Influenza-like Illness (ILI) Report

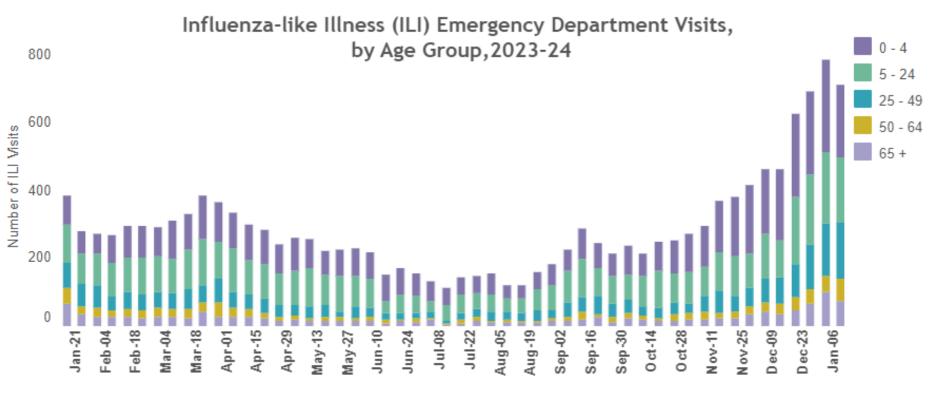
Influenza-like Illness (ILI) Emergency Department Visits



Week ending dates



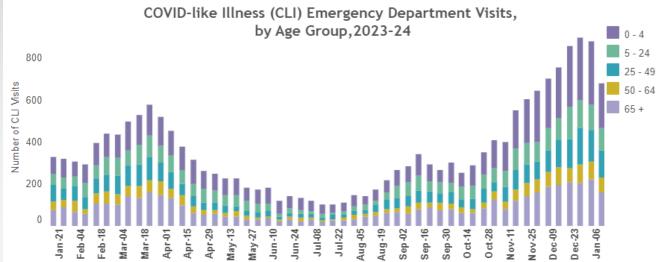
ILI Emergency Visits By Age Group

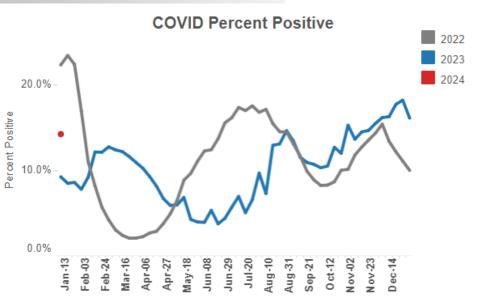


Week ending dates



NE DHHS COVID Data





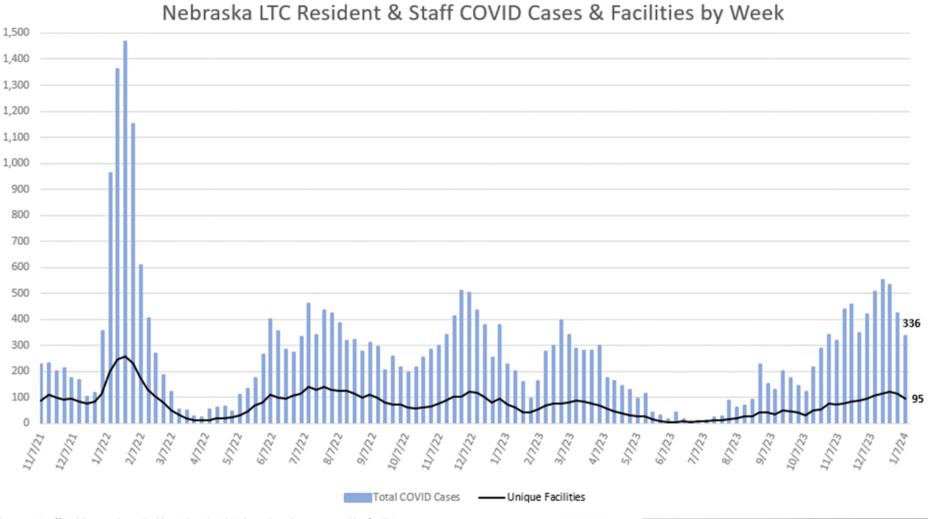
Week ending dates

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Week ending dates

COVID Cases Long Term Care



Source: Unofficial Counts Compiled by Nebraska ICAP based on data reported by facilities and DHHS; Actual Numbers may vary slightly

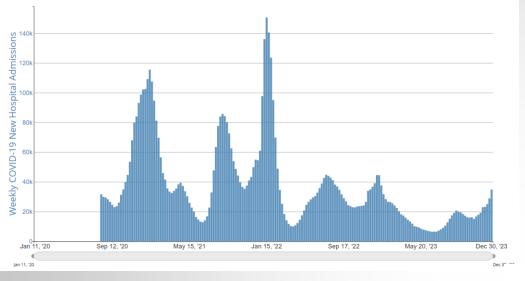


CAP

NE

COVID Rate of Hospitalizations US

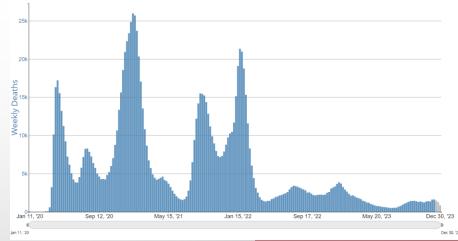
COVID-19 New Hospital Admissions, by Week, in The United States, Reported to CDC



United States

Weekly COVID-19 New Hospital Admissions: 34,798 Date: December 30, 2023

Provisional COVID-19 Deaths, by Week, in The United States, Reported to CDC



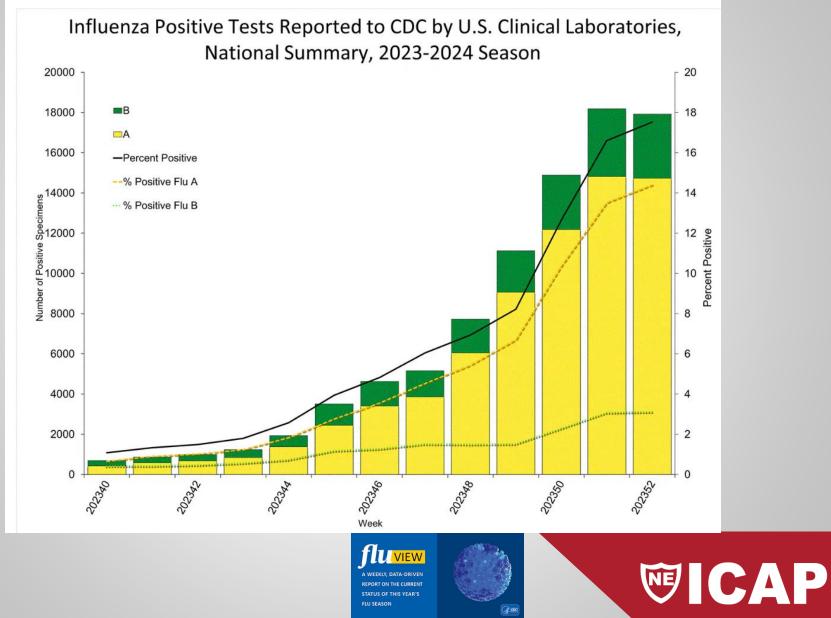
United States

Weekly Deaths: 1,450 Date: December 16, 2023

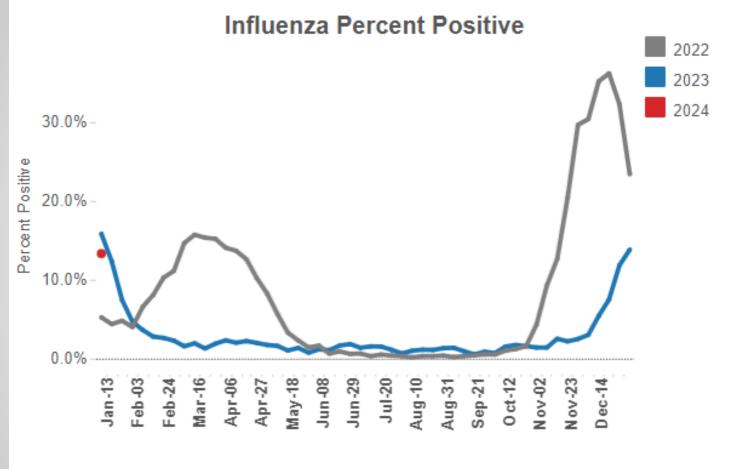
Centers for Disease Control and Prevention CDC 24/7: Saving Lives, Protecting People™

COVID Data Tracker

Influenza Report CDC



Influenza NE DHHS report

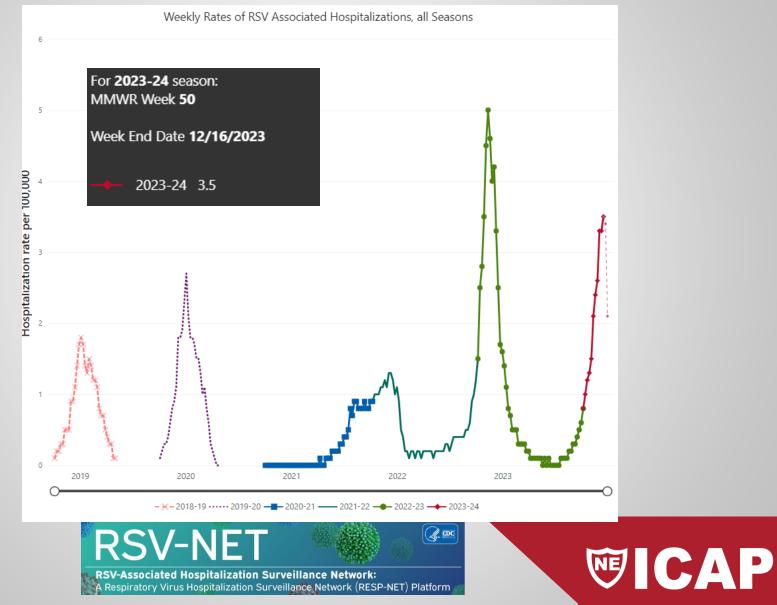


Week ending dates

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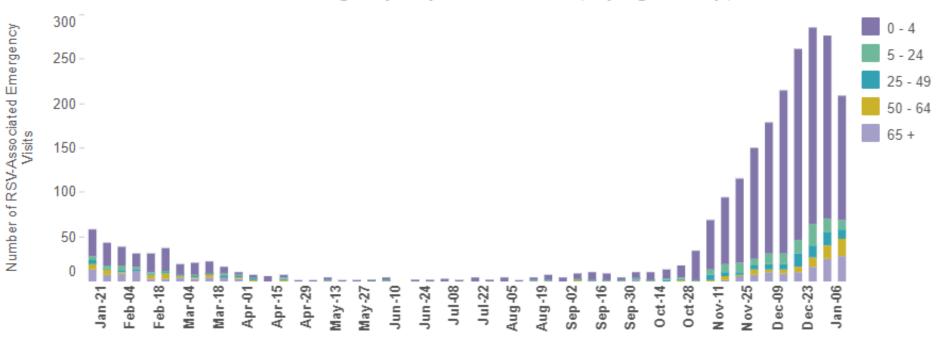
P CAP

RSV Hospitalization Rate US



RSV ER Visits By Age Group

RSV-Associated Emergency Department Visits, by Age Group, 2023-24



Week ending dates

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Infection Prevention in Health Care Providers: Employee Health Review and FAQs

Richard Starlin, MD

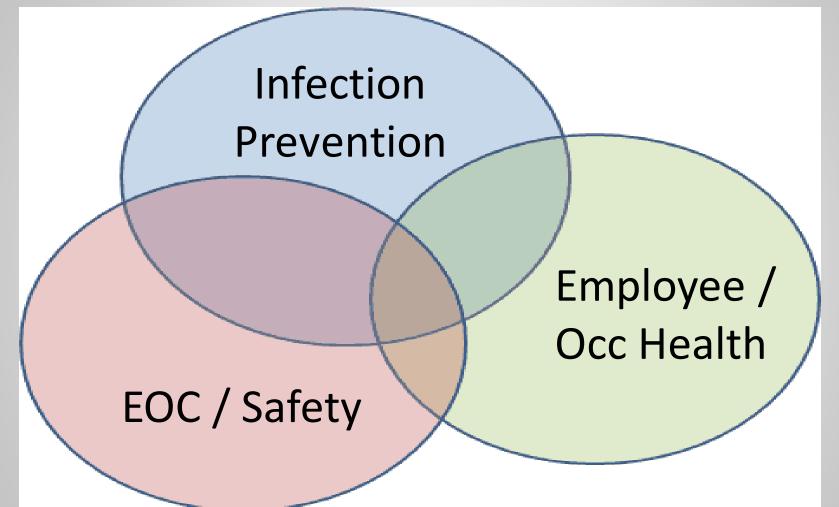
Acute Care Medical Director, NE ICAP

Assistant Professor Division of Infectious Diseases, UNMC

Associate Medical Director Employee Health, Nebraska Medicine



Overview of the Relationship





When we say employee...

- People paid by you PLUS
 - -Students
 - -Volunteers
 - -Licensed Independent Practitioners (MD, PA, NP)
 - –Contracted workers
 - -Vendors (in some cases)

Basics of the Program

What should the program include?

- Pre-employment health assessment in relation to work risks
- Vaccination & immunity- Pre-employment and ongoing during employment
- Fit testing
- What should employee do if sick
- Return to work after illness- when? Process?
- Management of possible/known exposures
- Colleague health conditions- pregnancy, immune compromise
- How to handle emerging risks

Pre-employment Assessment

- Health care providers are at risk for exposure to and acquisition of vaccine preventable diseases. This risk can be minimized by:
 - Strict adherence to handwashing
 - Rapid institution of appropriate isolation for patients with known or suspected communicable diseases
 - Maintaining up to date immunizations in health care providers
- Health status as pertains to risk of illness in employment role
 - Health issues and potential exposure to patients infected with or lab work with special pathogens
 - Risk of vaccination with health conditions (i.e. ACAM vaccine)



- All medical facilities that provide direct patient care are encouraged to formulate and implement a comprehensive immunization policy for all health care providers
- This policy should describe exactly what the risk of exposure to vaccine preventable diseases is, according to job description
- Recommendations for immunization should be based upon the risk of exposure
- All new employees should receive a prompt review of their immunization status prior to starting to care for patients

- All health care providers should be immune to measles, mumps, rubella, and varicella.
- All health care providers with potential exposure to blood or body fluids should be immune to hepatitis B.
- All health care providers should be offered annual immunization with influenza vaccine.
- All health care workers should receive a one-time dose of Tdap as soon as possible, unless they are certain that they have received Tdap.



• At-risk health care providers and laboratory personnel should be offered the following vaccines: polio, meningococcal, rabies, plague, typhoid, and hepatitis A.



- Offer vaccination free of charge?
- Define what will count as immunity
 Documented infection? Titers? Vaccination?
- Define your requirements and consequences of refusal
- Approach to non-responders



Hepatitis B: Documented proof of a positive Hepatitis B antibody titer post vaccination series. Value >10

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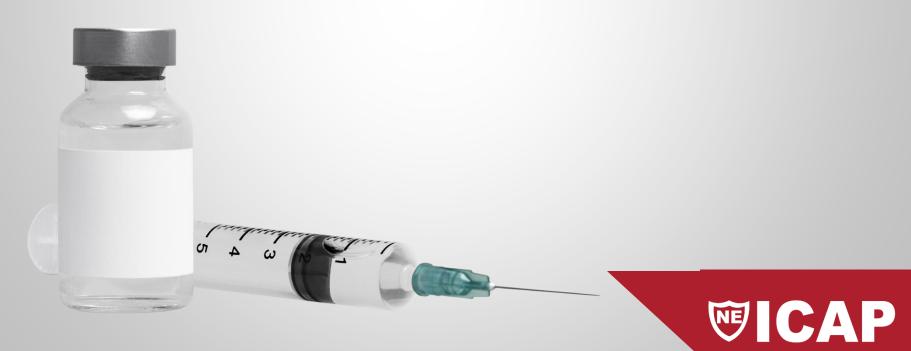
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- Rubeola (Measles): Documentation of 2 MMR vaccinations administered at least 28 days apart OR documented proof of a positive Rubeola titer at >12 months of age
- Mumps: Documentation of 2 MMR vaccinations administered at least 28 days apart OR documented proof of a positive Mumps titer at >12 months of age
- Rubella: Documentation of 1 MMR vaccination OR documented proof of a positive Rubella titer at >12 months of age.
- Varicella: Documentation of 2 Varicella vaccinations administered at least 28 days apart OR documented proof of a positive Varicella titer.

Influenza Vaccination

- HCP
 - Mandate for vaccine?
 - -Mandate for vaccine or declination?
 - -Simply offer vaccine?



COVID Vaccination

- There are many benefits of getting vaccinated against COVID-19
 - Vaccines available in the United States are safe and effective at protecting people from getting seriously ill, being hospitalized, and even dying
 - COVID-19 vaccines can offer added protection to people who had COVID-19, including protection against being hospitalized from a new infection, especially as variants continue to emerge
 - As with vaccines for other diseases, people are protected best when they stay up to date with the recommended number of doses and boosters, when eligible



COVID-19 Vaccination

- Vaccination with one of the available vaccines is indicated for all health care workers unless there is a contraindication (which is quite rare)
- Have to keep up with changes in requirements and recommendations
- Staying up to date with latest boosters



TB Assessment

- Plan depends on facility TB risk assessment
 - Work closely with IP
- In regions with low TB incidence rate, HCWs should undergo initial TB screening with individual risk assessment and symptom evaluation
 - For individuals without documented prior TB disease or LTBI, baseline TB testing with an IGRA or a TST should be performed
 - In the absence of a known exposure or ongoing transmission, no routine serial TB testing at any interval after baseline is warranted
 - Serial TB screening may be reasonable for HCWs at increased risk for occupational exposure to TB (such as pulmonologists or respiratory therapists) or for HCWs in certain settings (such as emergency departments)
- TST vs IGRA
 - Interpreting results
 - CXR and Referral if positive?



TB Assessment- PPE

Fit testing



- The Occupational Safety and Health Administration (OSHA) requires annual fit testing
- HCWs should wear respiratory protection in the following circumstances:
 - While in the room of a patient with known or suspected active infectious TB
 - While accompanying a patient with known or suspected active infectious TB, such as during transit
 - While present during a procedure for a patient with known or suspected active infectious TB that induce coughing or aerosolization, such as:
 - Endotracheal intubation
 - Bronchoscopy
 - Sputum induction
 - Chest physical therapy
 - Administration of aerosolized drugs
 - Irrigation of a tuberculous abscess
 - Autopsy on a cadaver with untreated TB disease

HCWs who are unable to use an N95 mask due to poor fit (for example, individuals with beards or those whose facial structure precludes a tight seal) should use a PAPR

Colleague Illness

- Employee illness and symptoms
 - Generally febrile colleagues should not report to work
 - Certain conditions, e.g., boils, weeping dermatitis, infected wounds or sores, acute gastroenteritis, uncontrolled cough, profuse sneezing or runny nose require removal from work
 - Duration out and RTW depends on syndrome, diagnosis and recovery
 - What is required for RTW?
- Exposure to contagious pathogen-very pathogen and situation dependent
 - Can colleague work?
 - Any PEP?



Return to Work - Respiratory

Illness	Work Restrictions	Duration
COVID 19	Exclude from work	Protocol managed by Employee Health.
Influenza	Exclude from work Upon return, exclude from working in departments with known "high-risk" patient contact* for a minimum of 7 days starting from day of symptom onset	 Until the following criteria have been met (typically 3-5 days): Fever free (<100 F) for 24 hours without the use of fever-reducing medication Improvement of symptoms for 24 hours Symptoms mild enough to be tolerable to work with, do not interfere with the ability to perform one's job duties, and confinable by donning an appropriate mask
RSV and Other Upper Respiratory Infections (RSV, Bronchitis, Common Cold, Rhinovirus, etc.)	Exclude from work	 Until the following criteria have been met: Fever free (<100 F) for 24 hours without the use of fever-reducing medication Improvement of symptoms for 24 hours Symptoms mild enough to be tolerable to work with, do not interfere with the ability to perform one's job duties, and confinable by donning an appropriate mask

*High risk departments primarily consist of immunocompromised patients including neonatal patients, and/or patients undergoing cancer treatment or organ transplant. If the employee can be reassigned to a department that does not have "high-risk" patient contact and has met all other listed criteria, then the employee may RTW in the reassigned department while waiting to get full clearance to RTW in departments with "high-risk" patient contact.

Return to Work – Diarrheal Diseases

Illness	Work Restrictions	Duration
Gastroenteritis	Exclude from work	 Until the following criteria have been met: Until symptoms (vomiting, diarrhea) have resolved without the use of anti-diarrheal medications for 24 hours Fever free (<100 F) for 24 hours without the use of fever-reducing medication
Norovirus	Exclude from work	 Until the following criteria have been met: Until symptoms (vomiting, diarrhea) have resolved without the use of anti-diarrheal medications for 48 hours Fever free (<100 F) for 24 hours without the use of fever-reducing medication
Clostridium difficile (C-diff)	Exclude from work	 Until the following criteria have been met: Until symptoms (vomiting, diarrhea) have resolved without the use of anti-diarrheal medications for 72 hours Fever free (<100 F) for 24 hours without the use of fever-reducing medication

Surveillance for Infection in HCPs

- Ongoing close coordination with your local Health Department
 - -What's going around?
 - -Seasonal
- Investigation of hospital acquired infection

 Risk to colleagues?
- Accidental Exposure to Communicable Disease





Post-Exposure Assessment

For all Communicable Diseases, define "exposure"

- Route of Transmission
- Type of Contact
- Duration of Exposure
- Period of Communicability
- Incubation period
- Exposed population
 - -Goes beyond employees during care
 - -May include pre-hospitalization as well



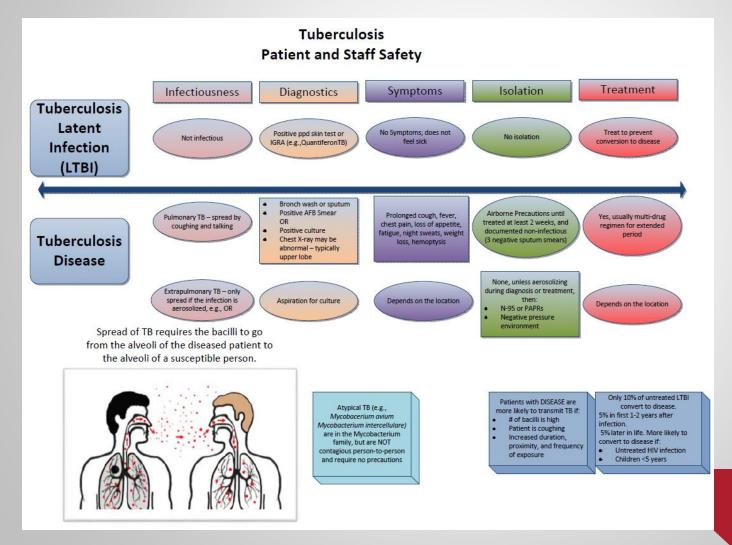
Tuberculosis

- Patient with Tuberculosis
 - -Were precautions used?
 - -When were they started?
 - Who was in the closest proximity?
 - Low rate of infection
 - Concentric circle
- Exposed
 - Baseline skin test
 - -Retest





Differentiating Latent TB from Tuberculosis Disease



WICAP

- Bloodborne Pathogens- HIV, HBV, HCV
 - Define based on significant exposure AND significant route
 - The pathogen involved.
 - The type and severity of exposure
 - The amount of blood involved in the exposure
 - The amount of pathogen in the patient's blood at the time of exposure.



- Bloodborne Pathogens- HIV, HBV, HCV
 - What is the risk?

- HIV
 - The estimated risk of HIV infection from a sharps injury is about
 0.3 percent (1 in 300)
 - —The risk appears to be greater than 0.3% for exposure to HIV (+) patients involving deep injury, visible blood on the device causing the injury or a device previously placed in the source patient's vein or artery. Lower for mucocutaneous exposure
- HBV
 - —The chance of becoming infected with hepatitis B from a sharps injury is estimated to be between 6 and 30%
- HCV
 - —The risk of infection after percutaneous exposure to HCV-infected blood is 1.8% (between 0.8 and 3%)



- What should you do if you have a blood occupational exposure?
 - Wash the site of the needlestick or cut with soap and water.
 - ⁻ Flush splashes to the nose, mouth, or skin with water.
 - ⁻ Irrigate eyes with clean water, saline, or sterile irrigants.
 - Report the incident to your supervisor or the person in your practice responsible for managing exposures.
 - Immediately seek medical evaluation from a qualified health care professional because, in some cases, postexposure treatment may be recommended and should be started as soon as possible.

- -Baseline testing of the source and the recipient
 - Could be an employee or other patient
- -What to do if something positive
 - Reporting results
 - PEP
 - Referral?



Fetal Protection & Infections

- Concern is with HCW <u>and the fetus</u>
- Isolation Policies designed to isolate the organism and/or the patient to protect employees and other patients in the hospital (pregnant and non-pregnant).

- The need for further restriction is unusual.

- Responsibility of pregnant employees
 - be especially aware of identified and unidentified infectious conditions in a hospital
 - use extra caution in hygiene measures and appropriate isolation/precaution procedures
 - talk with the Employee/Occupational Health Nurse and/or the Infection Control Preventionist to understand the risks.



Fetal Protection

Agent	Special Precautions or Restrictions due to Pregnancy
Cytomegalovirus (CMV)	None; Use Standard precautions.
Hepatitis B	None; Use Standard precautions.
Hepatitis C	None; Use Standard precautions.
Herpes simplex	None; Use Standard precautions.
Human immunodeficiency virus	None; Use Standard precautions. Consider postexposure prophylaxis after high-risk needlestick exposure.
Influenza	None; Use Droplet precautions. Receive Vaccine (safe during pregnancy)
Measles	None; Use airborne precautions. Receive Vaccine**
Methicillin Resistant Staph aureus (MRSA)	None; Use contact precautions if infected.
Parvovirus B19	None; Use Droplet precautions.
Rubella	None; Use droplet precautions for acute infection; Contact precautions for Congenital Rubella. Receive vaccine**
Tuberculosis	None; Use airborne precautions.
Varicella-zoster	None; Use airborne and contact precautions. Receive Vaccine**; VZIG within 96 hours of exposure if susceptible.

* ** Live vaccines are given routinely before pregnancy

Reference: Guidelines for Infection Control in Health Care Personnel, 1998

Special Situations - Emerging Diseases

- MPox
- Ebola
- Maarburg
- Polio
- Pandemic Influenza
- Others?

Be able to speak to the difference and calm the fears.



References

Guideline for infection control in health care personnel, 1998. Personal Author(s): Bolyard, Elizabeth A.; Deitchman, Scott; Pearson, Michele L.; Shapiro, Craig N.; Tablan, Ofelia C.; Williams, Walter W.; Corporate Authors(s): Hospital Infection Control Practices Advisory Committee (U.S.); National Center for Infectious Diseases (U.S.); National Immunization Program (Centers for Disease Control and Prevention); National Institute for **Occupational Safety and Health.; Published Date : June 1998** Series : American journal of infection control; v. 23, no. 3, p. 289-354; Infection control and hospital epidemiology; v. 19, no. 6, p. 407-63; URL : https://stacks.cdc.gov/view/cdc/11563



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Project Firstline Micro-Learn Resources

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PFL Micro-Learn Resources

- Short, adaptable training resource
- Can be used at morning huddles or any meeting
- Connect infection control topics to immediate, practical action items
- Topics currently available
 - Blood
 - Rash
 - Cough and Congestion
 - Draining Wound
 - <mark>Diarrhea</mark>



CDC Project Firstline | Infection Control Training Toolkits



Cough and Congestion Micro-Learn



- Includes a discussion guide for facilitators and a printable job aid
- Discussion guide includes key talking points
- Can be incorporated into any meeting or huddle in less than 5 minutes
- Reinforce infection control concepts to mitigate risk to frontline staff
- Facilitator notes:
 - Introduce topic
 - Expand on topic
 - Discuss with team
 - Wrap up and reinforce

CDC Project Firstline | Cough and Congestion Micro-Learn



Misc. Updates & Upcoming Educational Opportunities







- Online, on-demand, self paced courses focused on Infection Prevention and Control
- Free to register and complete courses
- Watch for more courses to be added as we move forward

https://icapasaplearning.nebraskamed.com



Join Us on Upcoming Webinars

- February, 2024
 - Misc. Topics
 - Sinks as Potential Sources of Transmission
 - NHSN Annual Survey Tips and Reminders
 - SLICE Tool for self-led assessment of IPC practices



Image Courtesy of rawpixel.com

• March 13, 2024

- To Be Determined (TBD)
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Inpatient Dialysis Assessments



INJECTION PRACTICES

HAND HYGIENE



MEDICATION PREP

AUDIT IPC PRACTICES



FISTULA/GRAFT ACCESS

CATHETER ACCESS



DIALYSIS SITE CARE

CLEANING & DISINFECTION

PPE USE



Focused ICAR Visits Are Available

Nebraska ICAP is available for on-site infection control assessment and response (ICAR) nonregulatory voluntary visits. Based on your request, we can provide a more focused assessment including some, or all of the below domains. An example would be an SSI focused ICAR looking at surgical suite practices including device reprocessing.

- Surgical Site Infection (SSI) Prevention
- Device Reprocessing including sterilization and high-level disinfection
- Infection Control Program and Infrastructure
- Hand Hygiene
- Personal Protective Equipment (PPE)
- Catheter-associated Urinary Tract Infection (CAUTI) Prevention
- Central Line associated Bloodstream Infection (CLABSI) Prevention
- Ventilator-associated Event (VAE) Prevention
- Injection Safety
- Clostridioides difficile infection (CDI) Prevention
- Environmental Cleaning & Disinfection (ATP testing offered during visit)
- Systems to Detect, Prevent, and Respond to HAIs and MDROs
- Healthcare Personnel Safety
- Water Management
- COVID-19 Prevention and Response
- Antimicrobial Stewardship
 - The NE ASAP program can provide comprehensive assessments



Please let us know if interested nebraskaicap@nebraskamed.com (402) 552-2881

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CNE 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)
 - Survey functionality is lost on mobile devices
- ✓ One certificate is issued quarterly for all webinars attended
 - Certificate comes directly from ICAP via email

