Indiana Department of Health

Infection Prevention Press

October 2024

Respiratory Illnesses

Respiratory illness season reminders

By Shireesha Vuppalanchi, MD, former IDOH Medical Director

Fall and Winter Respiratory Viruses are upon us

Each year, respiratory viruses (COVID-19, RSV, flu and others) are responsible for millions of infections, thousands of hospitalizations and deaths in the United States. Proper precautions can help protect us from health risks caused by respiratory viruses.

Strategies to protect from health risks caused by respiratory viruses:

1. Follow your current county-level information at CDC's **respiratory illness in your community.**

2. Vaccination:

   - Encourage influenza vaccination during the entire flu season. CDC recommends everyone over 6 months of age (with rare exceptions) should get a flu vaccine. September and October are generally good times to be vaccinated against influenza. Ideally, everyone should be vaccinated by the end of October

   - Encourage residents and HCP to **remain up to date with recommended COVID-19 vaccine doses**
   - RSV vaccination is recommended for 75 and older and 60-74 who are at increased risk of severe RSV disease. RSV vaccine is a single dose and is not an annual vaccine
   - Encourage pneumococcal vaccination for unvaccinated residents aged 65 years and older, and for younger high-risk individuals as **recommended by the CDC**

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Respiratory illness season reminders continued…

3. Basic infection control principles:
    - If you are sick, stay home and away from others until the criteria for the specific organism to return to work for healthcare settings has been met
    - Cover your mouth and nose with a tissue when you cough or sneeze
    - Consider masking in times of higher respiratory viral spread
    - Wash hands using proper handwashing technique
    - Post visual alerts (i.e., facility expectations, tips on how to prevent the spread of germs).
    - Improve airflow:
        - Limit crowding in communal spaces
        - Explore options, in consultation with facility engineers, to implement strategies to improve indoor air quality
    - Consider setting up triage stations
    - Clean frequently touched surfaces, such as countertops, handrails, and doorknobs
    - Visitors with symptoms of respiratory infection should be encouraged to defer non-urgent routine visits in favor of alternative mechanisms (e.g., video-call applications on cell phones or tablets) until they have recovered
4. Test promptly and/or place in appropriate transmission-based precautions based on symptoms.
5. If indicated, start antiviral treatment early for cases of COVID-19 and flu.
6. **Report outbreaks** to the state: At least 3 residents with the same infection in one defined area (such as hall, unit, neighborhood, street, pod, secured unit, vent unit) in a 48-hour period; or 10% or more of the current building census with the same infection.

Community Guidance Snapshot:

If you have suggestions about what you would like to see in future editions of the *IP Press* newsletter, email Bethany Lavender at BLavender@health.in.gov.

Antibiotics Awareness Week Webinar Series
November 2024

Indiana Department of Health

The Indiana Department of Health's Healthcare Associated Infections and Antimicrobial Resistance Team is hosting a free webinar series on Nov. 19, 20 and 21.

Scan the QR code at right to register for the webinar series. Registration for the Microsoft Teams virtual event will be open until Nov. 19.

Schedule of Events

Nov. 19
- Antibiogram overview
- Statewide stewardship initiatives
- Urinary tract infections and stewardship programs

Nov. 20
- Antibiotic resistance pattern
- Optimizing pediatric antibiotic use and stewardship strategies

Nov. 21
- *Candida auris* and antifungals in stewardship
- Decolonization techniques

Note: Topics are subject to change up until the date of listed event.

Questions?

Please visit the IDOH webpage here or contact **Dhivya Selvaraj** at 812-287-3595 or DSelvaraj@health.in.gov.

BE ANTIBIOTICS AWARE
SMART USE, BEST CARE

Moving the Needle: International Infection Prevention Week (IIPW) 2024

By Janene Gumz-Pulaski, IP Program Manager with information from APIC

IIPW 2024 was October 13 – 19, 2024!
Infection Preventionists (IPs) play a crucial role in keeping the public safe and healthy — protecting us from surges in healthcare-associated infections and so many other infectious threats.

International Infection Prevention Week (IIPW), established in 1986, aims to shine a light on infection prevention each and every year.

We hope everyone had a great week and thank you for all your hard work year round!

MOVING THE NEEDLE ON INFECTION PREVENTION APIC

Tracheostomies and infection prevention

By Mary Enlow, Southern Region IP

A tracheostomy (artificial airway) is a surgical procedure to provide a secure, durable airway, and requires routine care to prevent infections. Tracheostomy care and suctioning are performed collaboratively by nurses and respiratory therapists. Tracheostomy care should be performed routinely to keep the flange, tracheostomy dressing, ties or straps, and surrounding area clean to reduce the introduction of bacteria into the trachea and lungs. For care and suctioning always review and follow facility policy regarding these specific skills.

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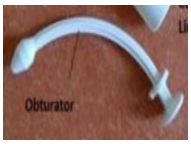
Trachs continued...

Tracheostomy Tube standard components and suctioning supplies:


Outer Cannula


Inner Cannula



Obturator

- The end of the tracheostomy tube should be placed securely against the patient's neck. The flange, part of the outer cannula, is secured around the patient's neck with tie straps, and a split 4" x 4" tracheostomy dressing is placed under the flange to absorb secretions. Assess the stoma for infection and skin breakdown. caused by flange pressure.

Oral Suction	Nasal Suction	Pharyngeal Suction	Tracheostomy (Open)	Tracheostomy (Closed)
				
Yankauer a rigid plastic suction catheter	Sterile, soft, flexible catheter	Sterile, soft, flexible catheter	Sterile catheter kit	Inline suctioning catheter

Infection prevention and control measures:

- Gather supplies prior to care and procedures
- Ask a staff member to assist
- Perform adequate tracheostomy cleaning and care
- Manage secretions appropriately
- Perform meticulous hand hygiene
- Use appropriate personal protective equipment (PPE)
    - Follow guidelines for transmission-based precautions or enhanced barrier precautions
- Inspect the dressing (i.e. drainage, amount, color, odor)
- Inspect stoma site for signs and symptoms of infection (i.e., redness, drainage)
- Inspect stoma site for skin breakdown caused by flange pressure
- Provide oral care to prevent hospital-acquired pneumonia
- Oropharyngeal secretion removal to prevent oral colonization and micro-aspiration
- Replace the trach ties as needed i.e., if they are visibly soiled or if the Velcro loses its effectiveness
- Ensure staff and residents have appropriate vaccination
- If the patient is on a mechanical ventilator, the head of the bed should be maintained at 30-45 degrees to prevent ventilator-associated pneumonia
- Clean and disinfect equipment and supplies per policies
    - PPE is required when cleaning or processing equipment and instruments, to protect against splashing, spraying or aerosols

Warning Signs to report to Clinician:

- Difficulty Breathing through the tube.
- Cough and coughing with blood.
- Bleeding from the stoma or tube
- Fever, Chills
- Swelling around the tube
- Mucus changes (yellow, green, or brown colored, smells bad, bloody, thick) or purulent drainage.
- Signs and Symptoms of Infection
- Erythematous change
- Swelling around wound
- Purulent discharge
- Pain at the stoma or tracheotomy site
- Vomiting

Bloodborne pathogens overview

By Victor Zindoga, Northern Region IP

Bloodborne pathogens are infectious microorganisms present in human blood that can lead to serious diseases. The primary pathogens of concern include Hepatitis B (HBV), Hepatitis C (HCV), and Human Immunodeficiency Virus (HIV). Healthcare workers and others who handle blood and body fluids are at particular risk of exposure, making it essential for workplaces to implement safety protocols.

What are Bloodborne Pathogens?

According to the **Centers for Disease Control and Prevention (CDC), bloodborne pathogens** are microorganisms such as viruses or bacteria carried in the blood that can cause disease in humans. While HIV, HBV, and HCV are among the most well-known, there are other less common pathogens such as syphilis, malaria, and brucellosis that can also be transmitted through blood exposure.

These pathogens can spread through direct contact with infected blood or other potentially infectious materials (OPIM). This typically happens when blood or OPIM enters the body through a puncture, cut, or abrasion, but they can also be spread through mucous membranes, such as the eyes, nose, or mouth.

Occupational Risks and Exposure

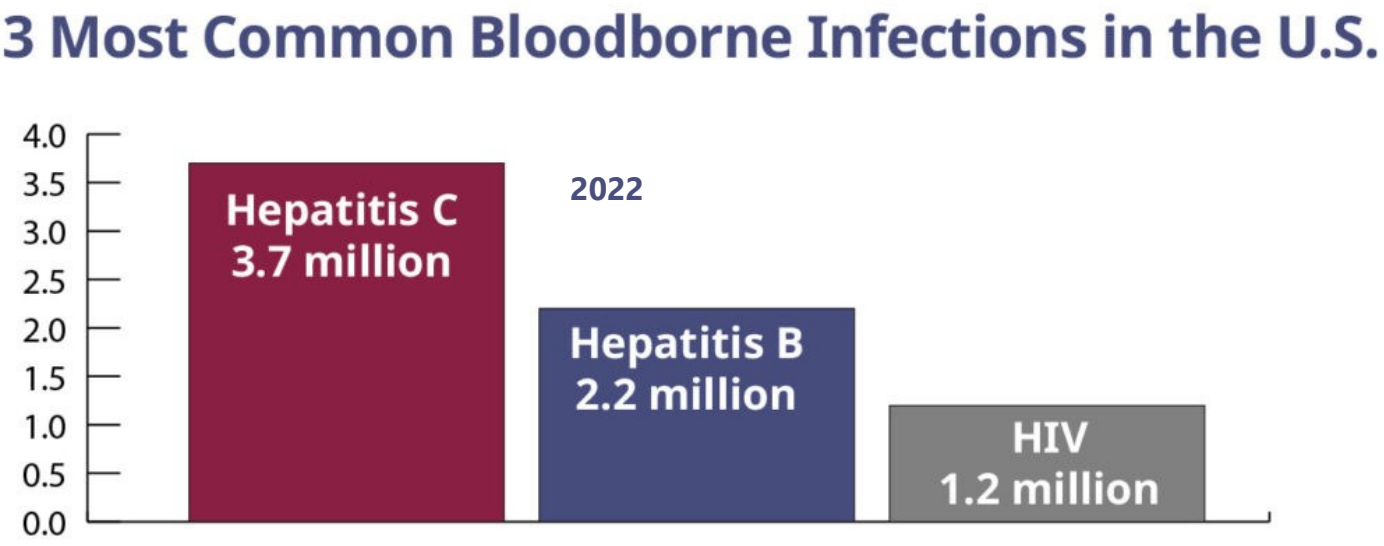
The Occupational Safety and Health Administration (OSHA) has identified healthcare workers, emergency personnel, laboratory researchers, and others whose work involves exposure to blood or OPIM as high-risk groups. Exposure can occur through:

1. Needlestick injuries

2. Cuts from contaminated sharp objects

3. Contact of mucous membranes (eyes, mouth) or broken skin with contaminated blood

OSHA's Bloodborne Pathogens Standard, which has been in place since 1991, requires employers to implement a comprehensive exposure control plan. This includes identifying potential risks, providing appropriate personal protective equipment (PPE), and offering training and vaccination programs.



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Bloodborne pathogens overview continued.....

Prevention and Control

Prevention is key when dealing with bloodborne pathogens. The CDC recommends several strategies to mitigate risks of transmission, including: -

Use of Personal Protective Equipment (PPE):
PPE such as gloves, masks, and gowns form a barrier between the worker and potential exposure to infectious materials.

Proper Disposal of Needles and Sharp Objects:
Used needles should never be recapped. Instead, they should be disposed of in puncture-resistant sharps containers.

Vaccination:
The CDC strongly recommends that healthcare workers receive the Hepatitis B vaccination as a preventive measure. OSHA mandates that employers offer this vaccine to employees at risk of exposure.

Immediate Response to Exposure:
If an employee is exposed to bloodborne pathogens, OSHA and the CDC recommend immediate washing of the affected area with soap and water, followed by medical evaluation. Post-exposure prophylaxis (PEP) should also be considered in cases of potential HIV exposure.

Training and Education

OSHA emphasizes that training is an essential part of protecting employees. Their Bloodborne Pathogens Standard requires employers to educate workers on the risks associated with bloodborne pathogens and the procedures to follow to minimize exposure. Workers must also be made aware of the importance of vaccinations and the correct use of PPE. OSHA states: Training must be conducted at the time of initial assignment to tasks where occupational exposure may take place and at least annually thereafter. This training helps ensure that workers are well-prepared to handle potential exposures safely and effectively.

Conclusion

Bloodborne pathogens pose significant health risks, especially in healthcare and other industries where workers may come into contact with blood and bodily fluids. However, adherence to safety standards, proper use of PPE, vaccination, and ongoing education can significantly reduce the risk of transmission. Both the CDC and OSHA provide comprehensive guidelines to protect workers and ensure a safe working environment. For more information, visit the CDC's Bloodborne Infectious Diseases webpage and OSHA's Bloodborne Pathogens Standard page.

IP Team Map

Infection Prevention Team Regions

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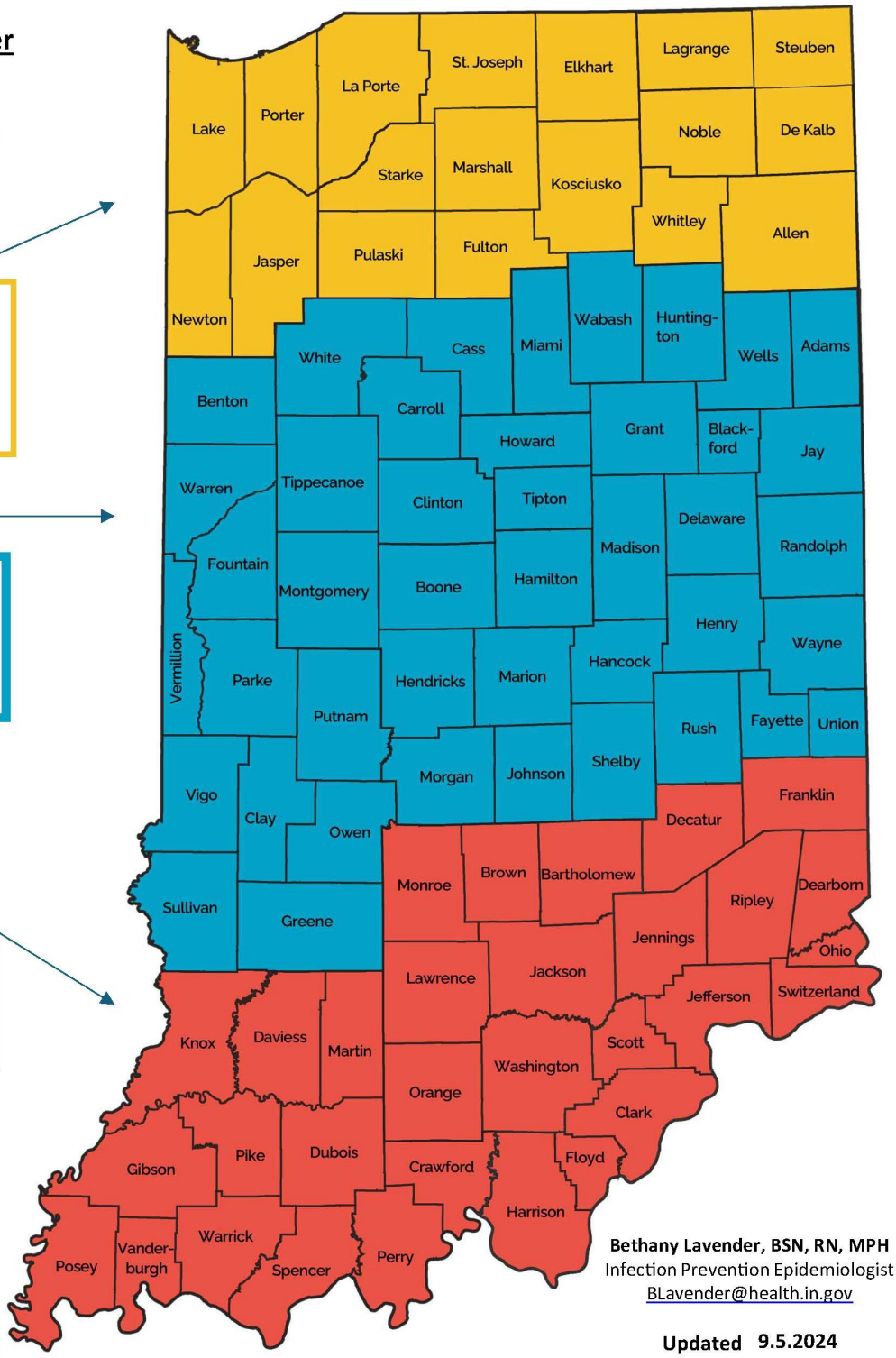

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Indiana Department of Health

Links and References

If you are viewing this newsletter online, you can open the **links** throughout by clicking on them. If you are viewing in printed form, the full URLs are below:

Respiratory illness season reminders:

1. Respiratory illness in your community: https://www.cdc.gov/respiratory-viruses/data/index.html
2. Remain up to date with COVID-19: https://www.cdc.gov/covid/vaccines/stay-up-to-date.html
3. Pneumococcal vaccine Recommendations by the CDC: https://www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf
4. Project Firstline (image and reference): https://www.cdc.gov/project-firstline/hcp/infection-control/index.html
5. Report outbreaks: https://www.in.gov/health/ltc/files/Revised-Reporting-Chart-Revised-LTC-COVID-19-Reporting-Guidance-Chart-7-12-23.pdf

Antibiotic Awareness Week Webinar Series:

1. Antibiotic Stewardship IDOH page: https://www.in.gov/health/idepd/healthcare-associated-infections-and-antimicrobial-resistance-epidemiology/antimicrobial-stewardship/
2. Registration: https://redcap.isdh.in.gov/surveys/?s=CM9P3YNC7WXWDNTF

International Infection Prevention Week 2024:

1. IIPW webpage and image: https://infectionpreventionandyou.org/iipw/

Tracheostomies and infection prevention:

1. Reference: https://www.ncbi.nlm.nih.gov/books/NBK559124/
2. Reference: https://tracheostomyeducation.com/infection-control-issues-in-caring-for-patients-with-tracheostomy/
3. Reference: https://www.ncbi.nlm.nih.gov/books/NBK596713/
4. Reference: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8411156/
5. Reference: https://www.ncbi.nlm.nih.gov/books/NBK214361/

Bloodborne Pathogens (BBP):

1. CDC BBP information: https://www.cdc.gov/niosh/topics/bbp/
2. OSHA BBP information: https://www.osha.gov/bloodborne-pathogens
3. Graph image: https://idcare.com/blog/a-guide-to-common-bloodborne-diseases/
4. Needle Image: https://www.randrmagonline.com/articles/90433-how-restorers-can-protect-against-blood-borne-pathogens-part-2
5. Hazard bag image: https://www.nycoproducts.com/resources/blog/bloodborne-pathogens-in-your-facility-why-you-should-care/

To promote, protect, and improve the health and safety of all Hoosiers

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