

# 2023 SPRING CONVENTION

NNFA  NALA

## Phase 3 Updates and Best Practices for Implementation: Infection Prevention and Antibiotic Stewardship

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### Objectives

- To identify CMS's phase 3 requirements of participation (RoP) interpretive guidance updates for F880 infection prevention and control, F881 antibiotic stewardship, F882 the infection preventionist, and the new tag F945 staff training.
- To identify three infection prevention and control CDC guidelines (excluding COVID) that have been updated since 2019.
- To discuss three best practices to support compliance with infection prevention program.



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# F880

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## Policies and Procedures

*“The facility must develop and implement written policies and procedures for the provision of infection prevention and control. The facility administration and medical director should ensure that current infection control standards of practice based on **recognized guidelines and facility assessment** are incorporated in the resident care policies and procedures.”*

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# National Guidelines

In addition to CDC guidelines...

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# Evidence-based Guidelines

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**SHEA**  
The Society for Healthcare Epidemiology of America

EDUCATION PRACTICE RESOURCES NEWS POLICY FOUNDATION

## PRACTICE RESOURCES

- Guidelines
  - Under Review
  - Retired Guidelines
- White Papers

Home > Practice Resources

### SHEA Guidelines and Expert Guidance Documents

Evidence-based guidelines, expert guidance documents, white papers, and other resources on infection prevention for hospitals, nursing homes, and other healthcare facilities.

<http://www.shea-online.org/>

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# Evidence-based Guidelines



Infectious Disease Society of America  
www.idsociety.org

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## National Guidelines

*Clinical Infectious Diseases*

**IDSA FEATURES**



### Clinical Practice Guideline for the Management of Asymptomatic Bacteriuria: 2019 Update by the Infectious Diseases Society of America<sup>a</sup>

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## Evidence-based Guidelines

### American Society for Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE)

- Water management plan
- HVAC
- Other physical and environmental considerations



[www.ashrae.org](http://www.ashrae.org)

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## Water Management Plan

- Description of water system
- Risk assessment – where can Legionella and other opportunistic pathogens grow – complete annually
- Measures to prevent the growth of opportunistic waterborne pathogens
  - Control measures – temperature, disinfection levels
  - How monitor control measures
  - Action plan when control measures are not met

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## Policies & Procedures - Standard Precautions

- Define standard precautions and explain their application
- How to select and use PPE (e.g., indications, donning/doffing procedures) and conditions when PPE should be used
- Respiratory Hygiene/Cough Etiquette
  - Addressing the provision of facemasks for visitors and residents with new respiratory symptoms
  - Hand hygiene to include providing resources and instructions for performing hand hygiene in or near lobby areas or entrances

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## Policies & Procedures - Hand Hygiene

*“... consistent with accepted standards of practice such as the preferential use of ABHR instead of soap and water in most clinical situations except when hands are visibly soiled (e.g., blood, body fluids), or after caring for a resident with known or suspected C. difficile or norovirus infection during an outbreak, or if rates of C. difficile infection (CDI) are high; in these circumstances, soap and water should be used”*



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## Transmission-based Precautions

- Droplet, contact, and airborne
- In addition to standard precautions
- Based on route(s) of transmission of pathogen
- May be used in combination (e.g., droplet & contact)
- Limiting the movement of a resident who is on transmission-based precautions to medically necessary purposes only (i.e., resident stays in their room)
- **Implement empirically**

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## Transmission-based Precautions

- Signage/communication of precautions
- **Identify type of precautions and PPE required**
- Signage may be posted for unit or facility-wide



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## Contact Precautions

- Wound drainage
- Fecal incontinence or diarrhea, or other discharges from the body that cannot be contained
- Examples: *C. difficile*, scabies, norovirus or any other infection listed in CDC appendix A that requires Contact Precautions
- MDRO colonization or infection when:
  - Resident has wounds, secretions, or excretions that are unable to be covered or contained; and
  - On units or in facilities where, despite attempts to control the spread of the MDRO, ongoing transmission is occurring.

## Enhanced Barrier Precautions

- Residents who do not meet criteria for contact precautions but are infected or colonized with MDROs or have risk factors for MDRO acquisition
- Resident with wounds
- Residents with indwelling devices
- Gowns and gloves for high contact care
- Residents can leave the room



## Duration of Enhanced Barrier Precautions

Resident with history of MDRO remains on EBP for duration of stay even with negative cultures.

Resident who no longer has a device or wound has healed may be removed from EBP.

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## Environmental Cleaning & Disinfection

- Routine cleaning/disinfection of frequently touched or visibly soiled surfaces in common areas and resident rooms
- Room cleaning upon discharge
- Resident care equipment including shared equipment
- **Privacy curtains** – changed when visibly soiled and laundered/disinfected with EPA registered disinfectant and follow manufacturer's instructions for curtain and disinfectant
- Objective methods for **evaluating cleaning/disinfection**

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## Employee/Occupational Health

- Reporting of staff illnesses and following work restrictions per nationally recognized standards and guidelines
- Assessing risks for tuberculosis (TB) based on exposure or cases of TB in the facility. Then screen staff for TB to the extent permitted under applicable federal guidelines and state law.
- Do you have a policy that addresses employee exclusion for exposure/illnesses other than COVID?
- When does an employee need to stay home from work when exposed to a person with disseminated shingles?

## F880 - Training & Education

- *“Knowledge and skills pertaining to the IPCP’s standards, policies and procedures are needed by all staff in order to follow proper infection control practices (e.g., hand hygiene and appropriate use of PPE) while other needs are specific to particular roles, responsibilities, and situations (e.g., injection safety and point of care testing); and*
- *Residents and their representatives should receive education on the facility’s IPCP as it relates to them (e.g., hand hygiene, cough etiquette) and to the degree possible/consistent with the resident’s capacity. For example, residents should be advised of the IPCP’s standards, policies and procedures regarding hand hygiene before eating and after using the restroom.”*

# F945 Staff Training

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## F945 IPC Staff Training

- All facilities must develop, implement and permanently maintain an effective training program for all staff, which includes, training on the standards, policies, and procedures for the infection prevention and control program as described at §483.80(a)(2), that is appropriate and effective, and as determined by staff need.
- All training should support current scope and standards of practice through curricula which detail learning objectives, performance standards, evaluation criteria, and addresses potential risks to residents, staff, and volunteers if procedures are not followed.
- Track participation and understanding of training

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## Training topics

- Surveillance system and processes
- When and to whom possible incidents of communicable disease or infections in the facility should be reported
- Standard precautions
- Hand hygiene
- Environmental cleaning and disinfection
- Transmission-based precautions
- Occupational health policies and work restrictions for illness and exposures
- IPC practices for resident care activities as it pertains to particular staff roles, responsibilities, and situations

## F881

### Antibiotic Stewardship

## F881 Antibiotic Stewardship

- Protocols for review of signs and symptoms and laboratory reports to determine if an antibiotic is indicated or if adjustments to therapy are needed
  - Antibiotic “time-out” process
  - Review antibiotic use in response to antibiotic and laboratory results when available
- System for provision of feedback reports on antibiotic use, antibiotic resistance patterns based on laboratory data, and prescribing practices for the prescribing practitioner

## F882

### The Infection Preventionist

## Infection Control § 483.80

Designate one or more individuals as the Infection Preventionist(s) (IP) who are responsible for the IPCP

- Have primary professional training in nursing, medical technology, microbiology, epidemiology, or other related field
- Be qualified by education, training, experience, or certification
  - Have completed specialized training in infection prevention and control
- Work at least part-time at the facility
- IP must be a member of the facility's QAPI committee (also see F868)

## F882 Infection Preventionist

- Responsible for infection prevention and control program (F880) and antibiotic stewardship (F881)
- Responsible for assessing, developing, implementing, monitoring, and managing the IPCP
- Designated IP hours per week can vary based on the facility and its resident population; determined based on facility assessment

## CDC Guidance

### Infection Prevention and Control Program

Assign One or More Individuals with Training in Infection Control to Provide On-Site Management of the IPC Program

- This should be a full-time role for at least one person in facilities that have more than 100 residents or that provide on-site ventilator or hemodialysis services. Smaller facilities should consider staffing the IPC program based on the resident population and facility service needs identified in the [IPC risk assessment](#).

## Updated Guidelines

## National Guidelines

# Infection Control in Healthcare Personnel

<https://www.cdc.gov/infectioncontrol/guidelines/healthcare-personnel/index.html>

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## Employee Exclusion

Disease	Exclusion/Work Restriction Duration
<b>Varicella (i.e., Chickenpox)</b>	Exclude from duty until lesions dry and crusted. See Herpes Zoster below for exposure guidance.
<b>Herpes Zoster (i.e., Shingles)</b>	<p><u>Localized in healthy person:</u> Lesions must be covered and evaluate care provided to high-risk patients (i.e. immunocompromised).</p> <p><u>Disseminated or localized in immunosuppressed HCW:</u> Exclude from patient care until lesions are dry and crusted.</p> <p><u>Post-exposure susceptible HCW:</u> Exclude from patient contact from 8<sup>th</sup> day after first exposure to 21<sup>st</sup> day after last exposure. Best to vaccinate within 5 days of exposure. Pregnant HCW contraindicated for vaccination and immune globulin is recommended.</p> <p><u>Post-exposure vaccinated HCW (2 doses) or documented varicella immunity:</u> Monitor daily during postexposure days 8–21 for fever, skin lesions, and systemic symptoms suggestive of varicella. If become symptomatic, exclude and provide antiviral.</p> <p><u>Post-exposure HCW with 1 dose of vaccine:</u> Vaccinate with second dose of vaccine and monitor for symptoms daily day 8 – 21. If symptomatic, exclude and provide antiviral.</p>

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# TB Screening of HCW Upon Hire

## HCW w/o previous positive TST

1. Individual risk assessment
2. Symptom screen
3. TB test (TST or IGRA)
  - 2-step skin test
  - Document measurement of result
4. TB education

## If HCW has had a previous positive TST

1. Individual risk assessment
2. Symptom screen
3. Chest X-ray or documentation of normal chest X-ray
4. TB education



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# CDC Individual Risk Assessment

## Risk Factors

- Exposure to TB disease
- Time spent in countries where TB is common
- Current or planned immune system suppression

**Health Care Personnel (HCP) Baseline Individual TB Risk Assessment**

**HCP should be considered at increased risk for TB if any of the following statements are marked "Yes":**

	<b>Temporary or permanent residence of ≥1 month in a country with a high TB rate</b>	YES <input type="checkbox"/>
	Any country other than the United States, Canada, Australia, New Zealand, and those in Northern Europe or Western Europe	NO <input type="checkbox"/>
<b>OR</b>		
	<b>Current or planned immunosuppression,</b>	YES <input type="checkbox"/>
	including human immunodeficiency virus (HIV) infection, organ transplant recipient, treatment with a TNF-alpha antagonist (e.g., infliximab, etanercept, or other), chronic steroids (equivalent of prednisone ≥15 mg/day for ≥1 month) or other immunosuppressive medication	NO <input type="checkbox"/>
<b>OR</b>		
	<b>Close contact with someone who has had infectious TB disease since the last TB test</b>	YES <input type="checkbox"/>
		NO <input type="checkbox"/>

Abbreviations: HCP, health-care personnel; TB, tuberculosis; TNF, tumor necrosis factor. Individual risk assessment information can be useful in interpreting TB test results (see Leventhal, CDC, Leonard, MS, Lofgren, PA, et al. Official American Thoracic Society/Infectious Diseases Society of America/Centers for Disease Control and Prevention Clinical Practice Guidelines: Diagnosis of Tuberculosis in Adults and Children. Clin Infect Dis 2017;64:111-45). Adapted from: Risk assessment form developed by the California Department of Health, Tuberculosis Control Branch.

Sites 28, 109-142, Lubinski, RN, et al. Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019. MMWR Morbidity and Mortality Weekly Report 2019;68:4239-42. <https://www.cdc.gov/tuberculosis/diagnosis/2019-08-28-tb-screening-0819a.pdf>



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## Annually

- No screening for HCW unless exposure or ongoing transmission in healthcare setting
  - Must follow local and state public health requirements
- HCW identified with LTBI who do not undergo treatment, must have symptom screen annually
  - Repeat chest X-ray NOT required unless symptomatic
- TB education for all staff
  - TB risk factors
  - TB signs and symptoms
  - TB infection control procedures

## Pneumococcal Vaccination

- Guidelines updated November 2019 and again February 2022
- Still recommended for adults aged 65 or older
- 4 vaccines available – PCV13, PCV15, PCV20, & PPSV23
- Please refer to CDC's Pneumococcal Vaccine Timing for Adults documents for more detailed information

<https://www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf>

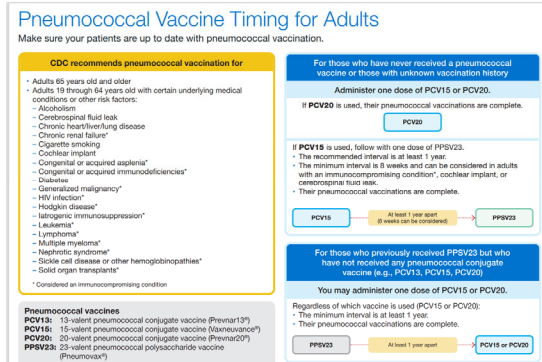
## Vaccine Timing Algorithms

Never received pneumococcal vaccine

- One dose of PCV20 and vaccinations complete

OR

- PCV15 followed by PPSV23 one year later, then vaccinations complete



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## Pneumococcal Vaccine for 65 and Older

If received PPSV23 and no other pneumococcal vaccine, then administer one dose of PCV15 or PCV20 at least one year after PPSV23 was given.

If received PCV13, then administer PPSV23 one year later for persons without immunocompromising condition, cerebrospinal fluid leak, or cochlear implant.

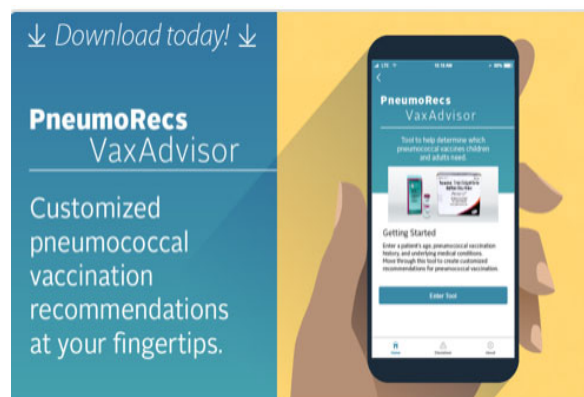
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## Immunocompromised Condition

- Chronic renal failure,
- Nephrotic syndrome
- Immunodeficiency,
- Iatrogenic immunosuppression
- Generalized malignancy,
- Human immunodeficiency virus
- Hodgkin disease, leukemia
- Lymphoma,
- Multiple myeloma
- Solid organ transplants
- Congenital or acquired asplenia
- Sickle cell disease, or other hemoglobinopathies

## CDC Resource Tool



## UTI Surveillance Criteria

### McGeer 2012

- Leukocytosis = >14,000 leukocytes/ mm<sup>3</sup>
- Straight catheter specimen collection – positive = 100 cfu

### CDC – Updates 2019 & 2021

- Leukocytosis = > 10,000 leukocytes/ mm<sup>3</sup>
- Straight catheter specimen collection – positive = 100,000 cfu

## Best Practices

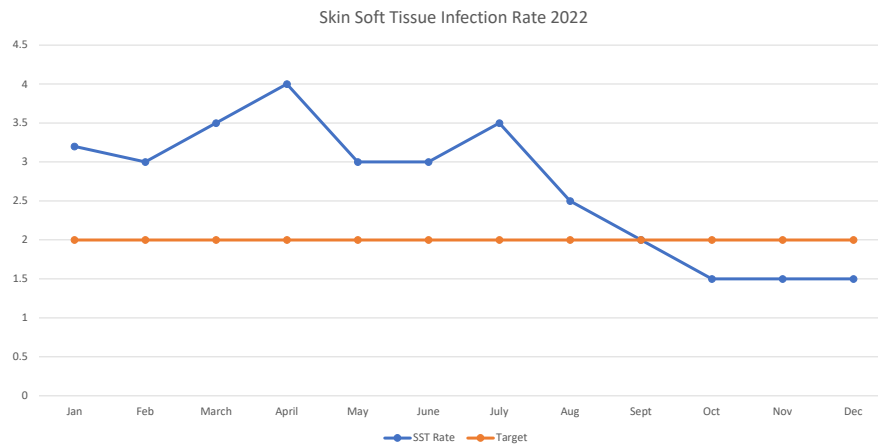
## Best Practices

- Availability and placement of supplies
  - Disinfectant wipes, alcohol-based hand rub
- Recognize infection prevention as multi-disciplinary
  - It's not just about nursing, it is also about epidemiology, the environment, employee health, education & training, antibiotic stewardship, AND behavior change, leadership, and quality improvement

## Meaningful Data – Outcome Measures

- Infection rates by infection type
  - $(\# \text{ HAI Skin Soft Tissue infections} \div \text{resident days}) \times 1000$
  - $[\# \text{ HAI UTI} \div (\text{resident days} - \text{urinary catheter days})] \times 1000$
  - $(\# \text{ HAI CAUTI} \div \text{urinary catheter days}) \times 1000$
  - Per 1000 resident days or per 1000 device days
- Present data in context
  - Point of reference – goal/objective, in comparison to baseline
- Antibiotic use data that targets inappropriate antibiotic use

## SST Infection Rate



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## Antibiotic Use - Treatment Ratio

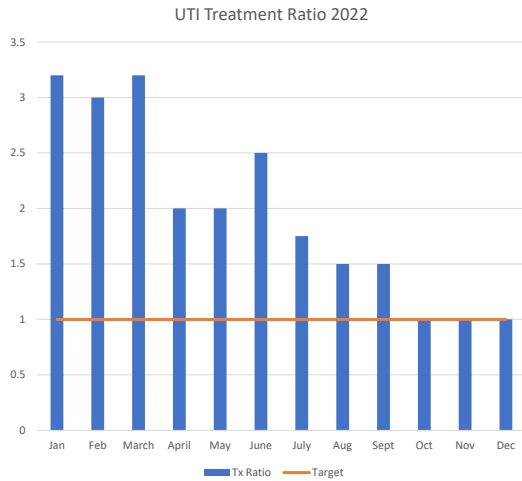
Compares the number of antibiotic starts for specified event such as a UTI to the number of actual events such as true UTI

- $\# \text{ Antibiotic starts for UTI} \div \# \text{ of UTI}$
- Desired result = 1
- Less than 1, then some residents did not receive treatment who should have
- Greater than 1, then more antibiotic starts than infections
- CDC metric included in NHSN protocol

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## Treatment Ratio Example



- 4 antibiotic starts for diagnosis of UTI
- 3 antibiotic starts for UTI meeting infection criteria
- Treatment ratio =  $4 \div 3 = 1.33$

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## Meaningful Data & Behavior Change

- Observe staff practices
- Provide feedback on performance
  - 1:1 coaching
  - Group performance
- Celebrate Success
- Accountability

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## Process Surveillance

### Competency

- Demonstration of all steps in the process in a controlled situation
- Did you perform all the steps for washing your hands with soap and water correctly?

### Compliance


- Performance of the correct action for the situation
- Did you perform hand hygiene when you were supposed to?
- Yes/no

## Process Measures

- By June 30, 2023, achieve 95% compliance with hand hygiene when exiting the resident room and sustain compliance through the end of the year.
- By June 30, 2023, achieve 95% compliance with correctly donning and doffing PPE for transmission-based precautions rooms.
- By June 30, 2023, achieve 95% compliance with documentation of signs and symptoms of UTI prior to the start of antibiotic and sustain compliance through the end of the year.
- By December 31, 2023, 95% of prescriptions for Ciprofloxacin will comply with protocol for indications for use.

Q&A

Questions???



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# THANK YOU




To learn more about this topic please contact  
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