DEVELOPMENT OF AN INFECTION CONTROL PROGRAM FOR LONG-TERM CARE FACILITIES

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https://spice.unc.edu/

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Discuss	Describe	List	Discuss
Discuss nursing home complex demographics	*Describe unique infection prevention challenges associated with LTCFs*	*List factors contributing to infections in the elderly*	*Discuss components of a LTCF infection control program*

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Long-term Care Environment

- Long-term care (LTC) generally refers to the large range of facilities that provide care to individual(s) unable to achieve independent self or assisted care:
  - Nursing home
  - Skilled nursing and
  - Assisted living facilities
- Encompasses medical, physical, and psychosocial care
- Typically serve as the resident's home

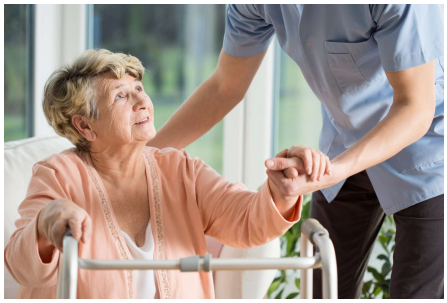

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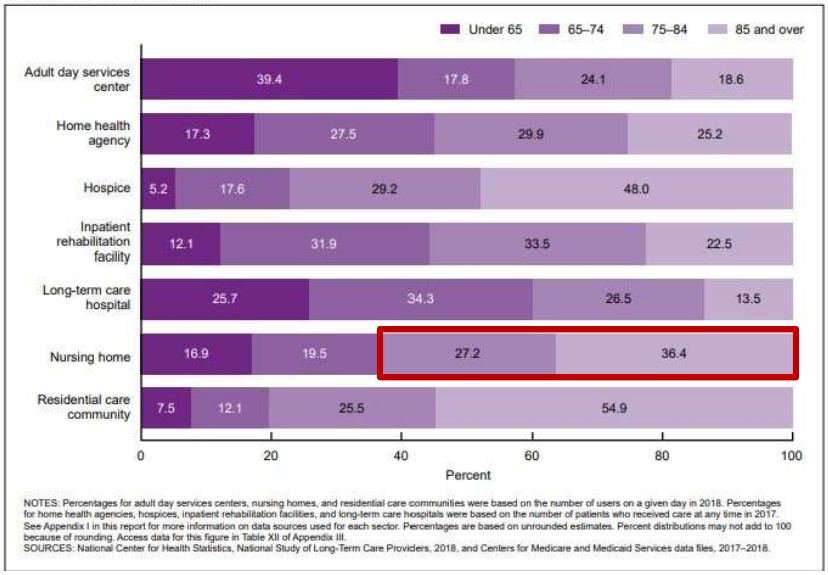
Figure 20. Percent distribution of post-acute and long-term care services users, by sector and age group: United States, 2017 and 2018



NOTES: Percentages for adult day services centers, nursing homes, and residential care communities were based on the number of users on a given day in 2018. Percentages for home health agencies, hospices, inpatient rehabilitation facilities, and long-term care hospitals were based on the number of patients who received care at any time in 2017. See Appendix I in this report for more information on data sources used for each sector. Percentages are based on unrounded estimates. Percent distributions may not add to 100 because of rounding. Access data for this figure in Table XII of Appendix III.
SOURCES: National Center for Health Statistics, National Study of Long-Term Care Providers, 2018, and Centers for Medicare and Medicaid Services data files, 2017–2018.

https://www.cdc.gov/nchs/data/series/sr_03/sr03-047.pdf

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Nursing Home Demographics

- Number of nursing homes: 15,600 (2018)
- Proportion of nursing homes with for-profit ownership: 70.0% (2018)
- Number of licensed beds: 1.7 million (2018)
- Number of residents: 1.3 million (2017)

https://www.cdc.gov/nchs/data/series/sr_03/sr03-047.pdf

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Nursing Homes

- Changed significantly over the past several decades
- Government regulation and consumer pressure
  - Highly regulated
  - Increased acuity of residents
  - Medical needs more complex

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"The problem is that nursing homes still operate on antiquated assumptions made decades ago about the complexity of care their residents require. Previously, older adults populated nursing homes primarily for custodial care and needed little in the way of medical intervention.

Scientific advances have introduced treatments for illnesses that previously were synonymous with death but now can be managed with medicine and therapies.

As a result, those who wind up in nursing homes—many after typically brief hospital stays—are extraordinarily frail, with multiple underlying conditions that demand elaborate medication regimens. "

"there is a notable rise in young patients bringing unique challenges. They are disabled by neurological disorders, trauma, or drug abuse, some have myriad afflictions from birth. younger adults are estimated to be the fastest-growing subpopulation in post-acute and long-term care, increasing to 16.5 percent in 2016."

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YOUNGER ADULT IN LTC

- LTC is no longer synonymous with "geriatric care"
- Adults aged 31-64 years fastest growing population
- 2008 (last survey) CDC estimated that nearly 12% of residents < than 65 years
- Require different approaches in care

https://paltc.org/product-store/younger-adult-long-term-care-setting

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INFECTION PREVENTION PROGRAMS

- Infection Prevention and Control (IPC) programs are inadequately staffed, as much as four-fold less than their acute care hospital counterparts
- IPs wear multiple hats
- Less than 10% have specialized training
- Difference in social environment
- Populations in LTCFs are heterogeneous

IP spend less than a third of their time on IP work; only 40% have specialized training; and less than 10% are certified …3/29/23

Council of State and Territorial Epidemiologists (CSTE): Recommendations for Surveillance and Reporting of Healthcare-Associated Infections in Long Term Care Facilities

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INFECTION PREVENTIONIST

- Virtual audience:
  - Pease put into the chat box how many other roles you are responsible for
  - Please put in the chat box how long you have been in the role of IP
- In-person-
  - Show of hands

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STAFFING

- CMS issued Proposed Rule: ***""Medicare and Medicaid Programs; Minimum Staffing Standards for Long-Term Care Facilities and Medicaid Institutional Payment Transparency Reporting".***

Medicare and Medicaid Programs; Minimum Staffing Standards for Long-Term Care Facilities and Medicaid Institutional Payment Transparency Reporting

A Proposed Rule by the Centers for Medicare & Medicaid Services on 09/06/2023

https://www.federalregister.gov/documents/2023/09/06/2023-18781/medicare-and-medicaid-programs-minimum-staffing-standards-for-long-term-care-facilities-and-medicaid

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Core Staffing Proposals

1. Minimum nurse staffing standards of 0.55 hours per resident day (HPRD) for RNs and 2.45 HPRD for Nurses Aides (NAs);
2. Requirement to have an RN onsite 24 hours a day, seven days a week; and
3. Enhanced Facility Assessment

Includes staggered implementation schedule and possible hardship exemption

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Strengthening the Facility Assessment

- Clarifying that facilities must use ***evidence-based methods*** when care planning for their residents, including consideration for those residents with behavioral health needs;
- Requiring that facilities use the facility assessment to ***assess the specific needs of each resident*** in the facility and to adjust as necessary based on any significant changes in the resident population;
- Requiring that facilities ***include the input of facility staff***, including, but not limited to, nursing home leadership, management, direct care staff (i.e., nurse staff), representatives of direct care staff, and staff who provide other services; and,
- Requiring facilities to develop a staffing plan to maximize recruitment and retention of staff consistent with what was described in the President's April Executive Order on Increasing Access to Higher Quality Care and Supporting Caregivers.

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Timeline-Non-rural Facilities

1. Require facilities comply with facility assessment requirements 60 days after publication of final rule
2. Require facilities to comply with RN onsite 24/7 **two years** after publication date of final rule
3. Require facilities to comply with minimum staffing requirement **three years** after publication of final rule

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Timeline-Rural Facilities

1. Require facilities comply with facility assessment requirements 60 days after publication of final rule
2. Require facilities to comply with RN onsite 24/7 **three years** after publication date of final rule
3. Require facilities to comply with minimum staffing requirement five years after publication of final rule

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Permitting Regulatory Flexibility

- LTC facilities may qualify for a temporary hardship exemption from the minimum nurse staffing HPRD standards only if they are able to meet specific criteria demonstrating the following:
  - Workforce unavailability based on location
  - Demonstrate good faith efforts to hire and retain staff
  - A financial commitment to staffing

CMS officials are looking to finalize the nursing home minimum staffing proposal in 2024

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Takeaway Points

- Among all nursing facilities, fewer than ***1 in 5*** could currently meet the required number of hours for registered nurses and nurse aides, which means over ***80% of facilities would need to hire nursing staff.***
- 90% of for-profit facilities would need to hire additional nursing staff compared with 60% of non-profit and government facilities.
- The percentage of nursing facilities that would meet the requirements in the proposed rule varies from ***all in Alaska (100%)*** to nearly ***none in Louisiana (1%).***

https://www.kff.org/medicaid/issue-brief/what-share-of-nursing-facilities-might-meet-proposed-new-requirements-for-nursing-staff-hours/

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INFECTION PREVENTION CHALLENGES

- Never been required to deal with emerging infectious diseases
- Regulatory oversight - Isolation should be the least restrictive possible (CMS)
  - PPE used much less frequently
  - Education/monitoring absent or inadequate

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GAO: Report to Congressional Addressees

Actions HHS should continue	Actions HHS should enhance	Action HHS should discontinue
Continue required data reporting to the National Healthcare Safety Network.	Develop staffing solutions.	Discontinue extended use of limitations on visitation and group activities.
Continue to emphasize and prioritize infection prevention and control.	Strengthen mandatory infection prevention and control training.	
Continue to prioritize nursing homes for resources.	Increase infection prevention and control technical assistance.	
Continue to use strike teams.	Strengthen the use of non-monetary enforcement actions.	
Continue to consider granting federal flexibilities in future emergencies.	Ensure consistent guidance.	
Continue stakeholder communication and briefings.	Incentivize infection prevention and control research.	
	Strengthen emergency preparedness.	

HHS = Department of Health and Human Services

Source: GAO analysis of statements made by a roundtable of 13 experts. | GAO-23-105613

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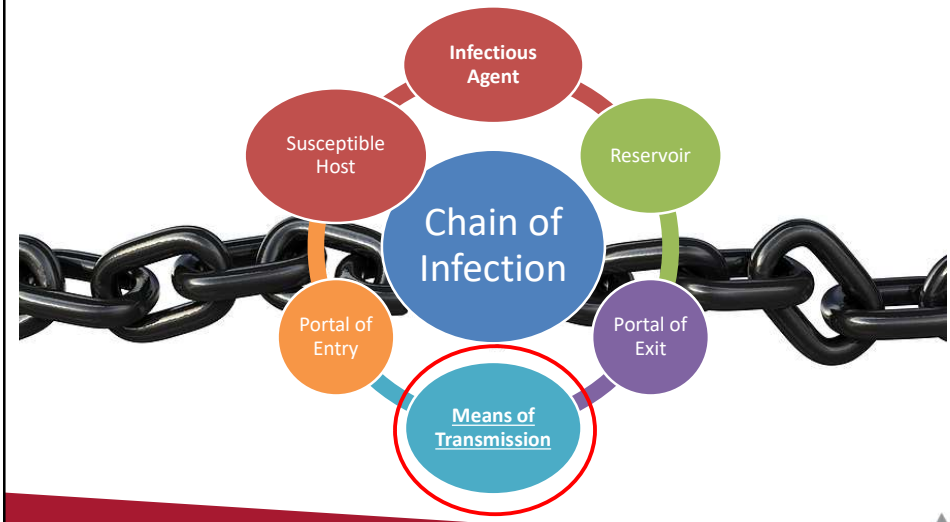
ELEMENTS REQUIRED FOR AN INFECTION TO OCCUR



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HEALTHCARE- ASSOCIATED INFECTIONS (HAI)

- Limited data
- 1 – 3 million serious infections annually
- Infections include:
  - UTI, diarrheal disease, antibiotic-resistant staph infection and others
- Major cause of hospitalization
- 380,000 die of infections in LTCFs annually

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HEALTHCARE- ASSOCIATED INFECTIONS (HAI)

- Account for 26% of all serious adverse events
- **59% deemed preventable**
- Among the most frequent causes of transfer to acute care hospitals and 30-day hospital readmissions.
- Cost of infection-related hospitalizations was estimated to be $83 million in single month

OIG. Adverse Events in Skilled Nursing Facilities: National Incidence Among Medicare Beneficiaries, OEI-06-11-00370, February 2014

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SPECIFIC INFECTIONS IN LTCFS

- Urinary Tract Infections
  - 30% of hospital readmissions in 30 days
- Respiratory Track Infections
  - Pneumonia 5th lead cause of death >65
- Skin and Soft Tissue
- Gastroenteritis
  - *C difficile* most common
- Conjunctivitis
- Bacteremia(s)
  - 50% related to UTI

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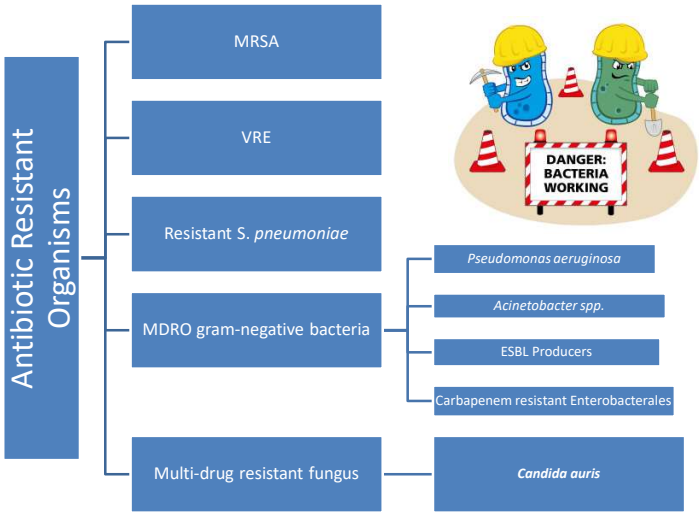
SPECIFIC INFECTIONS IN LTCFS



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CDC Home | Search | Health Topics A-Z

MMWR

Weekly

March 11, 2005 / 54(09);220-223

Transmission of Hepatitis B Virus Among Persons Undergoing Blood Glucose Monitoring in Long-Term--Care Facilities --- Mississippi, North Carolina, and Los Angeles County, California, 2003--2004

Regular monitoring of blood glucose levels is an important component of routine diabetes care (*1*). Capillary blood is typically sampled with the use of a fingerstick device and tested with a portable glucometer. Because of outbreaks of hepatitis B virus (HBV) infections associated with glucose monitoring, CDC and the Food and Drug Administration (FDA) have recommended since 1990 that fingerstick devices be restricted to individual use (*2*,*3*). This report describes three recent outbreaks of HBV infection among residents in long-term--care (LTC) facilities that were attributed to shared devices and other breaks in infection-control practices related to blood glucose monitoring. Findings from these investigations and previous reports suggest that recommendations concerning standard precautions and the reuse of fingerstick devices have not been adhered to or enforced consistently in LTC settings (*2*--*5*). The findings underscore the need for education, training, adherence to standard precautions, and specific infection-control recommendations targeting diabetes-care procedures in LTC settings (*4*--*6*) (Box 1).

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RESIDENT FACTORS *(NON-MODIFIABLE)* CONTRIBUTING TO INFECTIONS

- Medications affecting resistance to infection
- Limited physiologic reserve
- Compromised host defenses (↓ cough reflex, thinning skin, decreased tear production and immune dysfunction)
- Coexisting chronic diseases
- Impaired responses to infection
- Increase frequency of therapeutic toxicity

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Health needs increase with age among nursing home residents

According to the CDC, top diagnoses among nursing home residents are:

Medical Diagnosis	Percentage of Nursing Home Residents
Hypertension	71.5%
Alzheimer's disease or other dementias	47.8%
Depression	46.3%
Heart Disease	38.1%
Diabetes	32.0%

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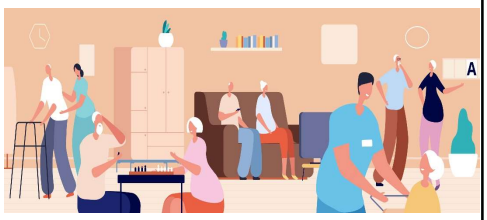
MODIFIABLE FACTORS CONTRIBUTING TO INFECTION TRANSMISSION

- Lack of a staff member dedicated to the function of infection prevention and control
  - Staff education, **monitoring** and competency
- Semi-private rooms
- Inadequate ventilation systems and/or systems maintenance
- Residents sharing space, air, food in a crowded institutional setting
- Multiple visitors



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REGULATORY AND/OR ACCREDITING AGENCIES

- OSHA (Occupational Safety and Health Administration)
- OBRA (Omnibus Budget Reconciliation Act)
- CMS
- TJC (The Joint Commission)

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ADDITIONAL NC STATE REGULATIONS

- Rules Governing the Sanitation of Hospitals, Nursing and Rest Homes, Sanitariums, Sanitoriums and Other Institutions - 15A NCAC 18A .1300
- NC Communicable Disease Rule 10A NCAC 41A .0206.
- NC Rules for the Licensing of Nursing Homes and Beds in Homes for the Aged Licensed as Part of a Nursing Home

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SHEA/APIC GUIDELINE:

infection prevention and control in the long-term care facility

- *In this document, as in several published HICPAC, SHEA, and APIC guidelines, each recommendation is categorized based on existing scientific evidence, theoretical rationale, applicability, and national or state regulations*

*Healthcare Infection Control Practices Advisory Committee (HICPAC)
*Society Healthcare Epidemiology of America (SHEA)
*Association for Professionals in Infection Control and Epidemiology (APIC)

Smith et al; AJIC September 2008

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CATEGORIZATION OF RECOMMENDATIONS

- Category IA: Strongly recommended and strongly supported
- Category IB: Strongly recommended with some support
- **Category IC: Required by law/regulation**
- Category II: Recommended for implementation
- No Recommendation: Unresolved issues

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LTCF INFECTION PREVENTION PROGRAM

- An active, effective, facility-wide infection prevention program should be established in the LTCF (Cat 1C).
  - The Purpose of the program is to reduce the risk of development and spread of infectious disease
- The IP Program must comply with federal, state and local regulations (Cat 1C)

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INFECTION PREVENTION AND CONTROL PROGRAM (IPCP)

- **§483.80 Infection Control**
  - The facility must establish and maintain an infection **prevention and control** program designed to provide a safe, sanitary and comfortable environment and to help prevent the development and transmission of **communicable** disease and infection

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INFECTION PREVENTION AND CONTROL PROGRAM (IPCP)

- Requires system for preventing, identifying, reporting, investigating and controlling infections and communicable diseases that:
  - Covers all residents, staff *(direct and indirect care),* visitors, volunteers and other service providers. Expectation that facilities tailor the emphasis of their IPCP for visitors and to work tor prevent transmission

    For example, "*screening may be* passive using signs to alert *family members and* visitors with signs and symptoms of communicable diseases not to enter. *More active screening may include the completion of a screening tool or questionnaire which elicits information related to recent exposures or current symptoms. That information is reviewed by the facility staff and the visitor is either permitted to visit or is excluded*
  - **Is based on the individual facility assessment**
  - Follows accepted national standards

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INFECTION PREVENTION AND CONTROL PROGRAM (IPCP)

- Must include, at a minimum policies and procedures that address - **§483.80(a)(2)**:
  - Surveillance (communicable diseases and infections)
  - Reporting
  - Standard and Transmission-based Precautions (define and explain application and how to utilize)
  - Emphasis that isolation should be the least restrictive
- Ensure staff are aware of policies
- Annual review of the IPCP and update as needed

Appendix PP State Operations manual 2/23

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POLICIES INCLUDE-*continued*

- Hand hygiene
  - *ABHR preferential use*
- Selection and use of PPE
- Addressing use of facemasks for residents with new respiratory symptoms
- Addressing resident room assignment
- How to manage when on TBP and single room not available
- Limiting movement if on TBP

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POLICIES INCLUDE-*continued*

- Respiratory Hygiene/Cough Etiquette
  - Increase prevalence of respiratory infections should have facemasks available and offer them to visitors and others entering the facility.
  - Post signs with instructions on visitation restriction for those with symptoms
- Environmental cleaning and disinfection
  - Routine cleaning and disinfection/frequently touched surfaces
  - Privacy curtains-changed when visibly dirty
  - Shared equipment-routine cleaning and disinfection
  - Objective methods for evaluation
    - Direct observation; Fluorescent markers; Adenosine triphosphate (ATP)

Appendix PP State Operations manual 10/22-updated 2/23

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POLICIES INCLUDE-*continued*

- Occupational Health
  - Work restrictions, prohibiting contact with food or residents
  - Assess risk for TB based on exposure or cases of TB in the facility and screen
  - Monitor for clusters or outbreaks among staff
  - Exposure control plan

Educate staff, residents and visitors on the IPCP
Monitor adherence

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POLICIES INCLUDE-*continued*

- Linens
  - Use standard precautions if potentially contaminated (e.g., gloves, gowns when sorting and rinsing)
  - No special precautions (e.g., double bagging, melting bags) or categorizing (e.g., biohazard, color-coded) for linen originating in transmission-based precaution rooms is necessary

Appendix PP State Operations manual 10/22; updated 2/23

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Legionellosis

- *"Legionellosis" refers to two clinically and epidemiologically distinct illnesses:*
  - ***Legionnaires'** disease, which is typically characterized by fever, myalgia, cough, and clinical or radiographic pneumonia and*
  - ***Pontiac fever,** a milder illness without pneumonia (e.g., fever and muscle aches).*

Caused by Legionella bacteria

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Water Management

- *Legionella can grow in parts of building water systems that are continually wet (e.g., pipes, faucets, water storage tanks, decorative fountains), and certain devices can spread contaminated water droplets via aerosolization (i.e., converted into a spray or mist in the air).*
- *Facilities must be able to demonstrate its measure to minimize the risk of Legionella and other opportunistic pathogens in building water systems such as by having a documented water management plan.*
  - *An assessment (identify where could grow and spread*
  - *Measures to prevent growth and how to monitor them*

CMS does not require water cultures as part of routine program validation

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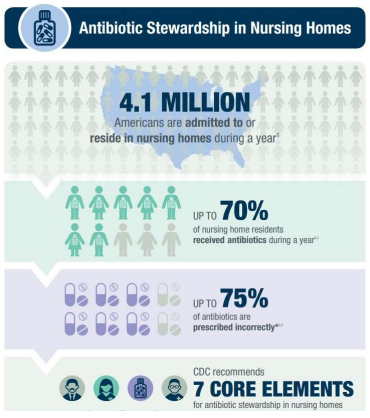
INFECTION PREVENTION AND CONTROL PROGRAM (IPCP)F881

- An antibiotic stewardship program that includes antibiotic use protocols and a system to monitor use
- A system for recording incidents identified and the corrective actions taken



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Antibiotic Stewardship Program

- Incorporate monitoring of antibiotic use, including the frequency of monitoring/review. Monitor/review *response to antibiotics, and laboratory results when available, to determine if the antibiotic is still indicated or adjustments should be made (e.g., antibiotic time-out)*
- *Facilities should provide* feedback (e.g., verbal, written note in record) to prescribing practitioners regarding antibiotic resistance data, their antibiotic use and their compliance with facility antibiotic use protocols *to improve prescribing practices and resident outcomes*.
- *Require antibiotic orders to include the indication, dose, and duration*.

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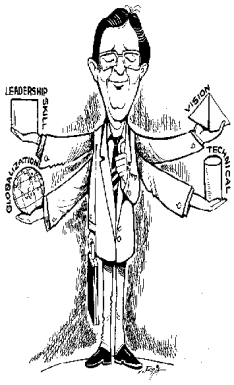
INFECTION PREVENTIONIST-F882

- Collection and analysis of infection data
- Evaluation of products and procedures
- Development of policies
- Consultation
- Education



- Implementation of mandated changes
- Application of epidemiologic principles-*outbreak management*
- Antimicrobial management
- Research
- High quality services in a cost-efficient manner

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483.80(b) Infection Preventionist

Issued 10-21-22; Effective 10-21-22; Implementation 10-24-22;Revised 2/23

- *The facility must designate one or more individuals as the infection preventionist (IP) who is responsible for assessing, developing, implementing, monitoring, and managing the IPCP.*
- *The IPCP includes content required in §§483.80(a)(1)-(4), (F880, Infection Prevention and Control and at F881, Antibiotic Stewardship Program (ASP)).*
- *While an ASP is a team effort, the IP is responsible for ensuring the program meets the requirements for ASPs (at §483.80(a)(3), F881).*
- *The IP should review and approve infection prevention and control training topics and content, as well as ensure facility staff are trained on the IPCP (for further information, see §483.95(e), F945, Infection Control Training).*
  - *Does not have to perform the IPCP training, since some facilities may have designated staff development personnel*

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- **Have primary professional training**:
  - Nursing-earned a certificate/diploma or degree in nursing,
  - Medical technology-an associate's degree in medical technology or clinical laboratory science,
  - Microbiology-earned a bachelor's degree in microbiology,
  - Epidemiology-earned a bachelor's degree in epidemiology
  - Examples of other related fields of training that are appropriate include physicians, pharmacists and physician's assistants

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- **Qualified by education, training, experience or certification**
  - *The IP should remain current with infection prevention and control issues and be aware of national organizations' guidelines as well as those from national/state/local public health authorities (e.g., emerging pathogens). The facility should ensure the individual selected as the IP has the background and ability to fully carry out the requirements of the IP based on the needs of the resident population, such as interpreting clinical and laboratory data.*

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Reading Materials

Online embedded reader plus optional printed books

- **MODULE 1**: Long-Term Care Settings
- **MODULE 2**: Microbiology, Epidemiology, and Normal Aging Processes
- **MODULE 3**: The Infection Prevention and Control Program
- **MODULE 4**: Surveillance of Communicable Diseases
- **MODULE 5**: Prevention and Control of Communicable Diseases
- **MODULE 6**: Infection Prevention for Ancillary Services

Online Study Tools:

- ***Assessment-helps determine your current knowledge/areas for improvement***
- ***Module Quizzes-need further study***
- ***Flashcards-Practice key terms and concepts***
- ***Glossary-Look up key terms***
- ***Resource Center-Links to IP information referenced in printed materials, downloadable e-book versions***
- ***Post-Test***
- ***Reports-Track your progress, compare results of quizzes and pre- and post-tests***

https://learnipc.apic.org/ltc-cip-certification/

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- **Works at least part time in the facility**
  - *Designated IP hours per week can vary based on the facility and its resident population. Therefore, the amount of time required to fulfill the role must be at least part-time and should be determined by the facility assessment, conducted according to §483.70(e), to determine the resources it needs for its IPCP, and ensure that those resources are provided for the IPCP to be effective.*
  - *Based upon the assessment, facilities should determine if the individual functioning as the IP should be dedicated solely to the IPCP. A facility should consider resident census as well as resident characteristics, types of units such as respiratory care units, memory care, skilled nursing and the complexity of the healthcare services it offers as well as outbreaks and seasonality of infections such as influenza in determining the amount of IP hours needed.*
  - *The IP must have the time necessary to properly assess, develop, implement, monitor, and manage the IPCP for the facility, address training requirements, and participate in required committees such as QAA.*
  - *Must physically work onsite in the facility*

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- **Completed specialized training**
  - *An IP must have obtained specialized IPC training beyond initial professional training or education prior to assuming the role. Training can occur through more than one course, but the IP must provide evidence of training through a certificate(s) of completion or equivalent documentation.*

Infection prevention and control program overview,
The *infection preventionist's role,*
Infection surveillance,
Outbreaks,
Principles of standard precautions
Principles of transmission-based precautions,
Resident care activities (e.g., use and care of indwelling urinary and central venous catheters, wound management, and point-of-care blood testing),
Water management,
Linen management,
Preventing respiratory infections (e.g., influenza, pneumonia),
Tuberculosis prevention,
Occupational health considerations (e.g., employee vaccinations, exposure control plan, and work exclusions),
Quality assurance and performance improvement,
Antibiotic stewardship and
Care Transitions

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SPICE Mentorship Program

- In collaboration with the North Carolina Department of Health and Human Services (NC DHHS), the North Carolina Statewide Program for Infection Control and Epidemiology (SPICE) would like to encourage your participation in a ***free performance improvement project*** focusing on Infection Prevention and Control (IPC).
  - Funded by CDC via contract with NCDHHS
  - Onsite mentoring
  - Visits, standardized plan of activities and topics

To request additional information or for questions please contact Evelyn Cook at evelyn_cook@med.unc.edu

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INFECTION PREVENTIONIST (IP)

- The individual designated as the IP (or at least one if there is more than one) must be:
  - A member of the facilities quality assessment and assurance committee
  - Report on the IPCP on a regular basis

QAPI at a Glance:
A Step by Step Guide to Implementing Quality Assurance and Performance Improvement (QAPI) in Your Nursing Home

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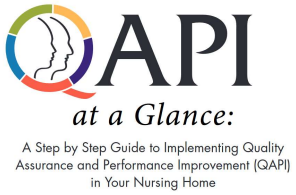
INFECTION PREVENTIONIST (IP)



- *Reporting may include, but is not limited to, facility process and outcome surveillance, outbreaks (ongoing and any since the last meeting) and control measures, occupational health communicable disease illnesses (e.g., TB, influenza) and the Antibiotic Stewardship Program (ASP) related to antibiotic use and resistance data.*
- *In order to be considered an active participant, the IP should attend each QAA meeting. If the IP cannot attend, another staff member should report on the IP's behalf, but this does not change or absolve the IP's responsibility to fulfill the role of QAA committee member or reporting on the IPCP.*

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QUALITY ASSURANCE PERFORMANCE IMPROVEMENT

- Develop, implement and maintain an effective, comprehensive, data-driven QAPI program
  - Address all systems of care and management practices
  - Include clinical care, quality of life and resident choice
  - Define and measure indicators of quality and facility goals
  - Reflect the complexities, unique care and services the facility provides

"Quality Assurance and Performance Improvement (QAPI)" *is the coordinated application of two mutually-reinforcing aspects of a quality management system: Quality Assurance (QA) and Performance Improvement (PI). QAPI takes a systematic, interdisciplinary, comprehensive, and data-driven approach to maintaining and improving safety and quality in nursing homes while involving residents and families in practical and creative problem solving.*

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MONITORING PERFORMANCE: AUDITS

- Quality audits are performed to verify conformance to standards through objective review.
- Should be an opportunity for improvement and not punitive
- Audits can assist the facility in:
  - Establishing a baseline of performance for each activity
  - Identifying what needs to be improved, and
  - Targeting educational needs

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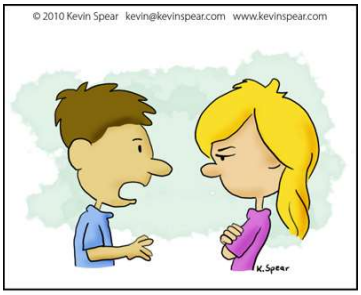

"It's not that I don't love you.
It's just that a ten year-old needs his freedom."

- **Timely**
- **Based on data that is valid**
- **Comparisons between peers may be helpful**
- **Sustained**

Feedback is one of many data sources which provide valuable information the facility must incorporate into an effective QAPI program. Each facility must establish and implement written policies and procedures for feedback.

Examples of mechanisms for obtaining resident and staff feedback may include, but are not limited to:

- *Satisfaction surveys and questionnaires;*
- *Routine meetings, e.g., care plan meetings, resident council, safety team, town hall; and*
- *Suggestion or comment boxes*

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ADMINISTRATIVE STRUCTURE

(Committee)

- Oversight of the IP program should be defined and should include participation of the IP, administration, nursing staff, and physician staff (Category II)
  - Meet on regular basis
  - Written minutes with action plans and recommendations
  - Evaluate effectiveness
  - Review of IP data
  - Approve policies and procedures

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FACILITY-WIDE ASSESSMENT

- "Determine what resources are necessary to care for its residents competently during both day-to-day operations and emergencies"
- "The facility must review and update that assessment:
  - As necessary
  - At least annually
  - Whenever there is, or facility plans for, any change that would require a substantial modification to any part of this assessment"
- Must include a facility-based and community-based risk assessment (*MDROs, HAIs and communicable diseases*)

https://www.federalregister.gov/documents/2023/09/06/2023-18781/medicare-and-medicaid-programs-minimum-staffing-standards-for-long-term-care-facilities-and-medicaid

Source: Appendix PP State Operations manual_2/23

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RESIDENTS

- The facility's resident population *(the number and facilities capacity)*
- The care required for resident population:
  - Types of diseases, conditions, physical and cognitive disabilities
  - Overall acuity
  - Other pertinent facts that are present within that population
- Staff competencies necessary to provide level of care
- Physical environment, equipment, services
- Ethnic, cultural or religious factors

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INFECTION PREVENTION RISK ASSESSMENT

https://spice.unc.edu/resources/template-risk-assessment-for-ltc/

https://www.cdc.gov/longtermcare/training.html#anchor_1557254909

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INFECTION CONTROL RISK ASSESSMENT

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EVENT	PROBABILITY OF OCCURRENCE (How likely is this to occur)[1]				RISK LEVEL OF FAILURE (What would be the most likely)[2]				POTENTIAL CHANGE IN CARE (Will treatment/care be needed for resident/staff)[3]				PREPAREDNESS (Are processes in place and can they work)[4]			YEAR: ____ RISK LEVEL Add rankings (score of 8 or >are considered highest priority for improvement efforts)
Score	High	Med	Low	None	Life Threatening	Permanent Harm	Temp Harm	None	High	Med	Low	None	Poor	Fair	Good	
	3	2	1	0	3	2	1	0	3	2	1	0	3	2	1	
Example: Lack of Communication with Transfering Facility		2					1			2					1	6
External Factors (Community, Demographics) Identify other risk factors in the community based on geographic location (coast, mountains etc.)																
Risk of TB in the community																
Risk of emerging infectious disease in the community																
Internal Factors (Facility Related)																
Facility Associated Infection(s)																
Symptomatic urinary tract infection (SUTI)																
Influenza like illness																
Pneumonia																

SPICE-LTC-IC-Risk-Assessment-2020

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2 TYPES OF EVENTS/RISKS

- **Community/External**
  - TB risk (HCP & residents)
  - **COVID transmission in community**
  - Geographical area & environmental issues such as flooding, mudslides, hurricane, tornado, legionella, etc.
  - Population served & socioeconomic status such as retirement community, rural, low income, drug abuse, etc.
  - Regulatory - DHSR - OSHA
- **Facility specific/Internal**
  - Healthcare associated infections
  - Antibiotic stewardship/ MDROs
  - Exposure related events
  - HCP compliance
  - Resident/family
  - New services/construction
  - Procedures/devices

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FOUR FACTORS TO CONSIDER: RANKING THE RISK

Probability of Occurrence (Likelihood)	*Risk Level of Failure*	*Potential Change in Care*	*Preparedness*
• High: If there were more events than baseline numbers or more than experienced historically • Medium: If there were a similar number of events experienced historically • Low: If there were fewer events than expected or experienced historically • None: No events occurred	• Life-Threatening: Event associated with high rates of mortality • Permanent Harm: Event associated with loss of limb or permanent change in status • Temporary Harm: Event associated with a temporary change in ambulation	• High: Event resulted in transfer to higher level of care (hospital) • Medium: Event resulted in major change to resident's care plan (acquisition of *C difficile* for example) • Low: Event resulted in minor/short term modification to treatment (change in VS routine for example) • None: No change in treatment or care plan	• Poor: No policies or procedures or process in place • Fair: Policies/procedures in place but no monitoring to ensure compliance • Good: Policies/procedures in place and compliance being monitored with staff feedback

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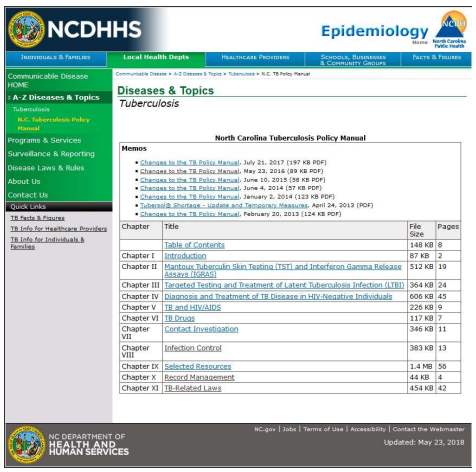

TB
RISK ASSESSMENT

http://epi.publichealth.nc.gov/cd/lhds/manuals/tb/toc.html

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TB Screening, Testing and Treatment of U.S. Health Care Personnel
(CDC Recommendations 2019)

- U.S. healthcare personnel should be screened for TB upon hire (i.e., preplacement)
- TB screening includes a process that includes:
  - A baseline individual TB risk assessment (2019 updated recommendations)
  - TB symptom evaluation
  - A TB test (e.g., TB blood test or a TB skin test) and
  - Additional evaluation for TB diseased as needed

Figure 3.1 Health care worker collecting a blood

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NORTH CAROLINA SPECIFIC RULES

S. Quick Reference for Tuberculin Skin Testing Requirements:

1. Tuberculin Skin Testing (TST) or IGRA (Interferon Gamma Release Assays) testing is **required** by communicable disease/TB rules for:

- **household and other close contacts** of active cases of pulmonary and laryngeal tuberculosis
  By: 10 A NCAC 41A .0205
  Frequency: at the time of exposure and 3 months post exposure
- persons reasonably **suspected of having tuberculosis disease**
  By: 10 A NCAC 41A .0205
  Frequency: when suspected
- **inmates in the custody of the Department of Corrections**
  By: 10 A NCAC 41A .0205; DOC policy
  Frequency: upon incarceration and annually
- **Department of Correction employees with direct inmate contact**
  By: 10A NCAC 41A .0205; OSHA; DOC policy
  Frequency: upon employment
- **patients in long term care facilities**
  By: 10A NCAC 41A .0205; 10A NCAC 13D .2202 &.2209
  Frequency: upon admission (two-step for TST or IGRA) & by risk assessment (DFS regulations require an annual screening which can be accomplished by a verbal elicitation of symptoms)
- **long term care facility employees**
  By: 10A NCAC 41A .0205; 10A NCAC 13D .2202 & .2209; OSHA
  Frequency: upon employment (two-step for TST or IGRA) & by risk assessment (DFS regulations require an annual screening which can be accomplished by a verbal elicitation of symptoms)
- **employees of adult day care centers providing care for persons with HIV infection or AIDS**

NC TB Control Program Policy Manual (Rev. 07/17) XI-40

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NORTH CAROLINA SPECIFIC RULES

10A NCAC 41A.0205

- A 2-step TST or IGRA must be performed on all new residents.

Exceptions

- If the resident is being admitted directly from another hospital, licensed nursing home/adult care home in NC **AND** there is documentation of a 2-step skin test or single IGRA test
  →**NO need to re-test**
- A single TST or IGRA in the following situations
  – Person has ever had a 2-step skin test
  – Person has had a single skin test within the last twelve months

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OTHER ISSUES TO INCLUDE:

- Resident Care
  - Accessible sink with soap and water; availability of alcohol-base hand rubs
  - Skin Care Program
  - Program to Prevent UTIs
  - Program to minimize risk of pneumonia
- Resident Health
  - H&P on admission with immunization status
  - TB screening (2 step and CXR if positive)
  - Vaccine for tetanus, diphtheria, influenza, pertussis, pneumococcal pneumonia

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§483.80(d) INFLUENZA AND PNEUMOCOCCAL IMMUNIZATIONS

- Influenza: Facility must develop policies and procedures to ensure that:
  - Before offering, education provided
  - Offered when it becomes available each season is most effective versus date specific (October 1-March 31) annually
  - Right to refuse
  - Documentation
- Pneumococcal disease: Facility must develop policies and procedures to ensure that:
  - Before offering, education provided
  - Offered unless already immunized or medically contraindicated
  - Right to refuse
  - Documentation

Self-reported doses of the vaccines included above are acceptable

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Federal Register /Vol. 88, No. 107 /Monday, June 5, 2023 /Rules and Regulations- Effective date: 8/4/23

- The rule also finalizes requirements for these facilities to provide education about COVID–19 vaccines and to offer COVID–19 vaccines to residents, clients, and staff.

https://www.govinfo.gov/content/pkg/FR-2023-06-05/pdf/2023-11449.pdf

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Recommendations 12 years and older

(NOT *moderately or severely immunocompromised*)

COVID-19 vaccination history prior to updated (2023–2024 Formula) vaccine†	Updated (2023–2024 Formula) vaccine	Number of updated (2023–2024 Formula) doses indicated	Dosage (mL/ug)	Vaccine vial cap and label colors¶	Interval between doses
Unvaccinated	Moderna	1	0.5 ml/50 ug	Dark Blue cap/blue label	-
	OR				
	Novavax	2	0.5 ml/5 ug rS protein and 50 ug Matrix-M adjuvant	Blue cap/blue label	Dose 1 and Dose 2: 3-8 weeks apart
	OR				
	Pfizer-BioNTech	1	0.3 ml/30 ug	Gray cap/gray label	-

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Recommendations 12 years and older

(NOT *moderately or severely immunocompromised*)

COVID-19 vaccination history prior to updated (2023–2024 Formula) vaccine[†]	Updated (2023–2024 Formula) vaccine	Number of updated (2023–2024 Formula) doses indicated	Dosage (mL/ug)	Vaccine vial cap and label colors[¶]	Interval between doses
1 OR more doses any mRNA; 1 or more doses Novavax or Janssen, including in combination with any Original monovalent or bivalent COVID-19 vaccine doses	Moderna	1	0.5 ml/50 ug	Dark Blue cap/blue label	At least 8 weeks after last dose
	OR				
	Novavax	1	0.5 ml/5 ug rS protein and 50 ug Matrix-M adjuvant	Blue cap/blue label	At least 8 weeks after last dose
	OR				
	Pfizer-BioNTech	1	0.3 ml/30 ug	Gray cap/gray label	At least 8 weeks after last dose

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Recommendations for COVID-19 vaccination?

- All people <u>ages 65 years</u> and older ***should*** receive one (1) additional dose of any updated ***(2023-2024 Formula***) COVID-19 vaccine (i.e., Moderna, Novavax, Pfizer-BioNTech) ***at least 4 months*** following the previous updated dose.

https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html

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Up to Date COVID-19 definition

- When are you ***Up to Date***?
  - People aged 5-64 years:
    - When you have received ***1 updated*** COVID-19 vaccine
  - Children aged 6 months – 4 years:
    - When you have received all recommended doses, including ***at least 1 dose of updated COVID-19 vaccine***
  - Everyone aged 65 years and older:
    - You are up to date when you have received:
      - ***2 updated 2023-2024 COVID-19 vaccine doses OR***
      - ***Have received one dose of the updated vaccine within the past four months.***

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KEY ELEMENTS – EMPLOYEE HEALTH

Immunize	Establish	Adhere
Immunize against vaccine-preventable diseases • Hepatitis B • Influenza • MMR • Varicella • Tetanus, diphtheria, pertussis • COVID-19	Establish sick leave policies that encourage: • Healthcare personnel to stay home when they are ill • Reporting of signs, symptoms, and diagnosed illnesses that may represent a risk to their patients and coworkers	Adhere to federal and state standards and directives applicable to protecting healthcare workers against transmission of infectious agents

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EDUCATION AND TRAINING OF HEALTHCARE PERSONNEL ON INFECTION PREVENTION

- Training should be:
  - Job-specific and adapted to the individual healthcare personnel
  - Performed before duties can be assigned and at least annually
  - Additional training to recognized lapses in adherence
  - **Require HCP to demonstrate competency following each training**
  - System of documentation of competency for each healthcare personnel

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HEALTHCARE WORKER EDUCATION

- Topics should include, but are not limited to:
  - Routes of disease transmission
  - Hand Hygiene
  - Sanitation procedures
  - MDROs
  - Transmission-based precautions
  - OSHA required education

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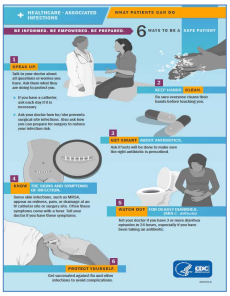
PATIENT, FAMILY AND CAREGIVER INFECTION PREVENTION EDUCATION

- Include information about . . .
  - How infections spread
  - How they can be prevented
  - What signs or symptoms should prompt reevaluation and notification of the patient's healthcare provider
- Instructional materials and delivery should address varied levels of education, language comprehension, and cultural diversity
- Provide education to patients, family members, visitors, and their caregivers



https://www.cdc.gov/drugresistance/pdf/HAI-Patient-Empowerment_DPK.PDF

https://apic.org/Resource_/TinyMceFileManager/IP_and_You/IPandYou_InfographicPoster_2013.pdf

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IN CONCLUSION

- ✓ One person, the IP, should be assigned the responsibility of directing, infection control activities in LTCF
- ✓ The IP should have a written job description of infection control activities
- ✓ The IP requires the support of administration in order to function effectively
- ✓ The IP needs to be guaranteed sufficient time to direct the infection control program
- ✓ The IP should have written authority to institute infection control measures.

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