Joint Commission Resources
Quality & Safety Network (JCRQSN)

Resource Guide

Infection Control: Preventing Hospital Acquired Infections (HAIs)

May 24, 2018
About Joint Commission Resources

Joint Commission Resources (JCR) is a client-focused, expert resource for healthcare organizations. It partners with these organizations, providing consulting services, educational services, and publications to assist in improving the quality, safety, and efficiency of healthcare services, and to assist in meeting the accreditation standards of The Joint Commission. JCR is a subsidiary of The Joint Commission, but provides services independently and confidentially, disclosing no information about its clients to The Joint Commission or others. Visit our web site at: www.jcrinc.com.

Disclaimers

Joint Commission Resources educational programs and publications support, but are separate from, the accreditation activities of The Joint Commission. Attendees at Joint Commission Resources educational programs and purchasers of Joint Commission Resources publications receive no special consideration or treatment in, or confidential information about, the accreditation process.

The information in this Resource Guide has been compiled for educational purposes only and does not constitute any product, service, or process endorsement by The Joint Commission or organizations collaborating with The Joint Commission in the content of these programs.

NOTE: Interactivation Health Networks is the distributor of the Joint Commission Resources Quality & Safety Network series and has no influence on the content of the series.
**TABLE OF CONTENTS**

Program Summary .................................................................................................................................................4  
Program Outline .....................................................................................................................................................5  
Continuing Education (CE) Credit ........................................................................................................................6  
National Patient Safety Goal 7 – Hospital Accreditation Program ....................................................................7  
  Goal 7 – Reduce the risk of health care-associated infections ........................................................................7  
Infection Prevention and Control (IC) Chapter, *Comprehensive Accreditation Manual for Hospitals (CAMH)* ..................................................................................................................................12  
Standards FAQs (Hospital and Hospital Clinics/Hospitals) ...................................................................................19  
  National Patient Safety Goal 7 ..............................................................................................................................19  
Infection Prevention and Control (IC) ...................................................................................................................23  
High-Level Disinfection Control Alert for Health Centers ..................................................................................27  
Disinfection and Sterilization 2017 .........................................................................................................................29  
Using the Risk Assessment to Set Goals and Develop the Infection Prevention and Control Plan ....................47  
Appendix A: Resources ........................................................................................................................................60  
Appendix B: Faculty Biographies .........................................................................................................................61  
Appendix C: Continuing Education (CE) Accrediting Bodies ...........................................................................62  
Appendix D: Discipline Codes Instructions .........................................................................................................63  
Appendix E: Post-Test ..........................................................................................................................................64  
Appendix F: JCRQSN Contact Information .........................................................................................................66
Program Summary

This page provides an overview of the program content and learning objectives. Please refer to the Table of Contents and Program Outline for a detailed list of the topics covered. The information included in this Resource Guide is intended to support but not duplicate the video presentation content. There may be additional information available online for this topic.

Program Description

Reducing the risk of hospital-acquired infections (HAIs), also known as healthcare-associated infections, is the responsibility of all staff within a healthcare organization—including direct and indirect patient care staff. The challenge requires the prevention of infections that can be acquired in a healthcare organization and introduced to the organization by patients and visitors.

During this 60-minute live activity, expert faculty examine the impact of infections on healthcare delivery systems and the implementation of strategies that can reduce or prevent the spread of infections.

Program Objectives

After completing this activity, the participant should be able to:

1. Describe The Joint Commission requirements to reduce the risk of healthcare-associated infections.
2. Identify methods to reduce or prevent the transmission of infection.

Target Audience

This activity is relevant to those responsible for the prevention and control of infections, including managers and supervisors, along with training, infection control, patient safety and quality improvement professionals.
Program Outline
Infection Control: Preventing Hospital Acquired Infections (HAIs)
May 24, 2018

I. Introduction

II. Complying with Standard IC.02.02.01, EP 2: Cleaning, High-Level Disinfecting, and Sterilization of Medical Equipment, Devices, and Supplies

III. Conclusion

<table>
<thead>
<tr>
<th>Program Broadcast Time</th>
<th>Eastern: 2:00 p.m. to 3:00 p.m.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central: 1:00 p.m. to 2:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>Mountain: 12:00 p.m. to 1:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>Pacific: 11:00 a.m. to 12:00 p.m.</td>
</tr>
</tbody>
</table>
Continuing Education (CE) Credit

After viewing the JCR Quality & Safety Network presentation and reading this Resource Guide, please complete the required online CE/CME credit activities (test and evaluation form). The test measures knowledge gained and/or provides a means of self-assessment on a specific topic. The evaluation form provides us with valuable information regarding your thoughts on the activity’s quality and effectiveness.

**Prior to the Program Presentation Day**

1. Login to the JCRQSN Learning Management System web site at [http://jcrqsn.twnlms.com/](http://jcrqsn.twnlms.com/)
   - Select the course for this program, *Infection Control: Preventing Hospital Acquired Infections (HAIs)*
   - When prompted, choose *Access Content* to confirm that you would like to access this program.

2. Display and print the desired documents (Resource Guide, etc.).

**Online Process for CE/CME Credit**

1. Read the course materials and view the entire video presentation.
2. Login to the JCRQSN Learning Management System web site at [http://jcrqsn.twnlms.com/](http://jcrqsn.twnlms.com/)
3. Select *Infection Control: Preventing Hospital Acquired Infections (HAIs)* from the courses menu block.
   - **Note:** This assumes you have already been enrolled in the program, as described above.
4. If you did not view the broadcast video presentation, view it online.
5. Complete the online post test (see Appendix E).
   - You have up to three attempts to successfully complete the test with a minimum passing score of 80%.
   - Physicians must take the post test to obtain credit.
6. Complete the program evaluation form.
7. On the top-left corner of the main course page, you will see your completion status in the *Status* block.
8. Select *Get Certificate* from within the *Status* block to print your completion certificate.
   - **Note:** Certificates for other completed courses can be printed from the “My History” tab, as well.
National Patient Safety Goal 7 – Hospital Accreditation Program

Goal 7 – Reduce the risk of health care-associated infections.

NPSG .07.01.01
Comply with either the current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines or the current World Health Organization (WHO) hand hygiene guidelines.

--Rationale for NPSG .07.01.01--
According to the Centers for Disease Control and Prevention, each year, millions of people acquire an infection while receiving care, treatment, and services in a health care organization. Consequently, health care–associated infections (HAIs) are a patient safety issue affecting all types of health care organizations. One of the most important ways to address HAIs is by improving the hand hygiene of health care staff. Compliance with the World Health Organization (WHO) or Centers for Disease Control and Prevention (CDC) hand hygiene guidelines will reduce the transmission of infectious agents by staff to patients, thereby decreasing the incidence of HAIs. To ensure compliance with this National Patient Safety Goal, an organization should assess its compliance with the CDC and/or WHO guidelines through a comprehensive program that provides a hand hygiene policy, fosters a culture of hand hygiene, and monitors compliance and provides feedback.

Elements of Performance for NPSG .07.01.01

1. Implement a program that follows categories IA, IB, and IC of either the current Centers for Disease Control and Prevention (CDC) or the current World Health Organization (WHO) hand hygiene guidelines. (See also IC.01.04.01, EP 1)  
2. Set goals for improving compliance with hand hygiene guidelines. (See also IC.03.01.01, EP 1)  
3. Improve compliance with hand hygiene guidelines based on established goals.

NPSG .07.03.01
Implement evidence-based practices to prevent health care-associated infections due to multidrug-resistant organisms in acute care hospitals.

Note: This requirement applies to, but is not limited to, epidemiologically important organisms such as methicillin-resistant Staphylococcus aureus (MRSA), Clostridium difficile (CDI), vancomycin-resistant enterococci (VRE), carbapenem-resistant enterobacteriaceae (CRE), and other multidrug-resistant gram-negative bacteria.

--Rationale for NPSG .07.03.01--
Patients continue to acquire health care-associated infections at an alarming rate. Risks and patient populations, however, differ between hospitals. Therefore, prevention and control strategies must be tailored to the specific needs of each hospital based on its risk assessment. The elements of performance for this requirement are designed to help reduce or prevent health care-associated infections from epidemiologically important multidrug-resistant organisms (MDROs).

Note: Hand hygiene, contact precautions, as well as cleaning and disinfecting patient care equipment and the patient’s environment are essential strategies for preventing the spread of health care-associated infections. Hand hygiene is addressed in NPSG.07.01.01. Contact precautions for patients with epidemiologically significant multidrug-resistant organisms (MDROs) are covered in IC.02.01.01, EP 3. Cleaning and disinfecting patient care equipment are addressed in IC.02.02.01.

Key:  indicates that documentation is required;  indicates an identified risk area
NPSG .07.03.01
Implement evidence-based practices to prevent multidrug-resistant organism acquisition and transmission. (See also IC.01.03.01, EPs 1-3)

Elements of Performance for NPSG .07.03.01

1. Conduct periodic risk assessments (in time frames defined by the hospital) for multidrug-resistant organism acquisition and transmission. (See also IC.01.03.01, EPs 1-3)

2. Educate staff and licensed independent practitioners about multidrug-resistant organisms and prevention strategies. Education occurs upon hire or granting of initial privileges and periodically thereafter as determined by the organization.

3. Educate patients, and their families as needed, who are infected or colonized with a multidrug-resistant organism about health care-associated infection prevention strategies.

4. Implement a surveillance program for multidrug-resistant organisms based on the risk assessment.

5. Measure and monitor multidrug-resistant organism prevention processes and outcomes, including the following:
   - Multidrug-resistant organism infection rates using evidence-based metrics
   - Compliance with evidence-based guidelines or best practices
   - Evaluation of the education program provided to staff and licensed independent practitioners

6. Provide multidrug-resistant organism process and outcome data to key stakeholders, including leaders, licensed independent practitioners, nursing staff, and other clinicians.

7. Implement policies and practices aimed at reducing the risk of transmitting multidrug-resistant organisms. These policies and practices meet regulatory requirements and are aligned with evidence-based standards (for example, the Centers for Disease Control and Prevention (CDC) and/or professional organization guidelines).

8. When indicated by the risk assessment, implement a laboratory-based alert system that identifies new patients with multidrug-resistant organisms.

9. When indicated by the risk assessment, implement an alert system that identifies readmitted or transferred patients who are known to be positive for multidrug-resistant organisms.

NPSG .07.04.01
Implement evidence-based practices to prevent central line-associated bloodstream infections. Note: This requirement covers short- and long-term central venous catheters and peripherally inserted central catheter (PICC) lines.

Elements of Performance for NPSG .07.04.01

1. Educate staff and licensed independent practitioners who are involved in managing central lines about central line-associated bloodstream infections and the importance of prevention. Education occurs upon hire or granting of initial privileges and periodically thereafter as determined by the organization.

2. Prior to insertion of a central venous catheter, educate patients and, as needed, their families about central line-associated bloodstream infection prevention.

3. Implement policies and practices aimed at reducing the risk of central line-associated bloodstream infections. These policies and practices meet regulatory requirements and are aligned with evidence-based standards (for example, the Centers for Disease Control and Prevention (CDC) and/or professional organization guidelines).
4. Conduct periodic risk assessments for central line-associated bloodstream infections, monitor compliance with evidence-based practices, and evaluate the effectiveness of prevention efforts. The risk assessments are conducted in time frames defined by the hospital, and this infection surveillance activity is hospitalwide, not targeted.

5. Provide central line-associated bloodstream infection rate data and prevention outcome measures to key stakeholders, including leaders, licensed independent practitioners, nursing staff, and other clinicians.

6. Use a catheter checklist and a standardized protocol for central venous catheter insertion.

7. Use a standardized supply cart or kit that contains all necessary components for the insertion of central venous catheters.

8. Perform hand hygiene prior to catheter insertion or manipulation.

9. Use maximum sterile barrier precautions during central venous catheter insertion.

10. For adult patients, do not insert catheters into the femoral vein unless other sites are unavailable.

11. Use an alcoholic chlorhexidine antiseptic for skin preparation during central venous catheter insertion unless contraindicated.

12. Use a standardized protocol to disinfect catheter hubs and injection ports before accessing the ports.

13. Evaluate all central venous catheters routinely and remove nonessential catheters.

**NPSG .07.05.01**
Implement evidence-based practices for preventing surgical site infections.

**Elements of Performance for NPSG .07.05.01**

1. Educate staff and licensed independent practitioners involved in surgical procedures about surgical site infections and the importance of prevention. Education occurs upon hire, annually thereafter, and when involvement in surgical procedures is added to an individual’s job responsibilities.

2. Educate patients, and their families as needed, who are undergoing a surgical procedure about surgical site infection prevention.

3. Implement policies and practices aimed at reducing the risk of surgical site infections. These policies and practices meet regulatory requirements and are aligned with evidence-based guidelines (for example, the Centers for Disease Control and Prevention (CDC) and/or professional organization guidelines).

4. As part of the effort to reduce surgical site infections:
   - Conduct periodic risk assessments for surgical site infections in a time frame determined by the hospital.
   - Select surgical site infection measures using best practices or evidence-based guidelines.
   - Monitor compliance with best practices or evidence-based guidelines.
   - Evaluate the effectiveness of prevention efforts.

   Note: Surveillance may be targeted to certain procedures based on the hospital’s risk assessment.
5. Measure surgical site infection rates for the first 30 or 90 days following surgical procedures based on National Healthcare Safety Network (NHSN) procedural codes. The hospital’s measurement strategies follow evidence-based guidelines.
   Note 1: Surveillance may be targeted to certain procedures based on the hospital’s risk assessment.
   Note 2: The NHSN is the Centers for Disease Control and Prevention’s health care-associated infection tracking system. NHSN provides facilities, states, regions, and the nation with data needed to identify problem areas, measure progress of prevention efforts, and ultimately eliminate health care-associated infections. For more information on NHSN procedural codes, see http://www.cdc.gov/nhsn/CPTcodes/ssi-cpt.html.

6. Provide process and outcome (for example, surgical site infection rate) measure results to key stakeholders.

7. Administer antimicrobial agents for prophylaxis for a particular procedure or disease according to methods cited in scientific literature or endorsed by professional organizations.*
   Footnote *: A limited number of National Patient Safety Goals contain requirements for practices that reflect current science and medical knowledge. In these cases, the element of performance refers to a practice that is cited in scientific literature or endorsed by professional organizations. This means that the practice used by the hospital must be validated by an authoritative source. The authoritative source may be a study published in a peer-reviewed journal that clearly demonstrates the efficacy of that practice or endorsement of the practice by a professional organization(s) and/or a government agency(ies). It is not acceptable to follow a practice that is not supported by evidence or widespread consensus. During the on-site survey, surveyors will explore the source of the practices the hospital follows.

8. When hair removal is necessary, use a method that is cited in scientific literature or endorsed by professional organizations.*
   Footnote *: A limited number of National Patient Safety Goals contain requirements for practices that reflect current science and medical knowledge. In these cases, the element of performance refers to a practice that is cited in scientific literature or endorsed by professional organizations. This means that the practice used by the hospital must be validated by an authoritative source. The authoritative source may be a study published in a peer-reviewed journal that clearly demonstrates the efficacy of that practice or endorsement of the practice by a professional organization(s) and/or a government agency(ies). It is not acceptable to follow a practice that is not supported by evidence or widespread consensus. During the on-site survey, surveyors will explore the source of the practices the hospital follows.

NPSG .07.06.01
Implement evidence-based practices to prevent indwelling catheter-associated urinary tract infections (CAUTI).
Note: Evidence-based guidelines for CAUTI are located at:
- Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals, 2014 at http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=10312260&fulltextType=RA&fileId=S0899823X00193845

Elements of Performance for NPSG .07.06.01

1. Educate staff and licensed independent practitioners involved in the use of indwelling urinary catheters about CAUTI and the importance of infection prevention. Education occurs upon hire or granting of initial privileges and when involvement in indwelling catheter care is added to an individual’s job responsibilities. Ongoing education and competence assessment occur at intervals established by the organization.

2. Educate patients who will have an indwelling catheter, and their families as needed, on CAUTI prevention and the symptoms of a urinary tract infection. Note: See FAQs about “Catheter-associated Urinary Tract Infection” at http://www.sheaonline.org/images/patients/NNL_CA-UTI.pdf
3. Develop written criteria, using established evidence-based guidelines, for placement of an indwelling urinary catheter. Written criteria are revised as scientific evidence changes. Note: Examples of criteria for placement of an indwelling urinary catheter include the following:
- Critically ill patients who need accurate urinary output measurements
- Patients with acute urinary retention or bladder outlet obstruction
- Patients who require prolonged immobilization (for example, a potentially unstable thoracic or lumbar spine or multiple traumatic injuries such as pelvic fractures)
- Incontinent patients with an open sacral wound or perineal wounds
- Perioperative use for selected surgical procedures, such as patients undergoing urologic surgery or other surgery on contiguous structures of the genitourinary tract; patients who will have a prolonged duration of surgery (catheters inserted for this reason should be removed in a post-anesthesia care unit); patients anticipated to receive large-volume infusions or diuretics during surgery; patients needing intraoperative monitoring of urinary output
- End-of-life care
- Neurogenic bladder

4. Follow written procedures based on established evidence-based guidelines for inserting and maintaining an indwelling urinary catheter. The procedures address the following:
- Limiting use and duration
- Performing hand hygiene prior to catheter insertion or maintenance care
- Using aseptic techniques for site preparation, equipment, and supplies
- Securing catheters for unobstructed urine flow and drainage
- Maintaining the sterility of the urine collection system
- Replacing the urine collection system when required
- Collecting urine samples
Note: There are medical conditions that require a prolonged use of an indwelling urinary catheter in order to avoid adverse events and promote patient safety. Examples can include, but are not limited to, patients with a spinal cord injury, multiple sclerosis, Parkinson’s disease, and spina bifida.

5. Measure and monitor catheter-associated urinary tract infection prevention processes and outcomes in high-volume areas by doing the following:
- Selecting measures using evidence-based guidelines or best practices
- Having a consistent method for medical record documentation of indwelling urinary catheter use, insertion, and maintenance
- Monitoring compliance with evidence-based guidelines or best practices
- Evaluating the effectiveness of prevention efforts
Note: Surveillance may be targeted to areas with a high volume of patients using in-dwelling catheters. High-volume areas are identified through the hospital’s risk assessment as required in IC.01.03.01, EP 2.
Infection Prevention and Control (IC) Chapter, Comprehensive Accreditation Manual for Hospitals (CAMH)

Overview
The Centers for Disease Prevention and Control (CDC) reports that 1.7 million infections annually are health care related, and as a result, 99,000 people will die each year: Health care practitioners in the hospital environment know all too well about hospital-acquired infections. Modern health care, despite its great strides in preventing and treating disease, has yet to conquer the risk to patients of acquiring an infection in the very place where infection should be least present. However, multidrug-resistant infections can be acquired in almost any setting, including homes, schools, and vacant lots, making the need for effective infection prevention and control in hospitals all the more important.

Certainly, everyone who has clinical contact with patients should wash his or her hands frequently to help prevent the spread of disease. However, effective infection prevention and control plans go well beyond this approach. A strong plan will have the input and support of hospital leadership and will stress communication and collaboration. Everyone involved in the daily operations of the hospital, from practitioners to receptionists to kitchen staff and dock workers, should play a role. For example, physical rehabilitation specialists should take precautions to prevent germs from passing from patient to patient via medical equipment; staff who receive patients at intake should take measures to prevent the spread of disease from staff to paper to patient and back again; everyone should incorporate hand hygiene protocols. Clearly, all hospital staff need to observe proper infection prevention and control techniques at all times.

To help reduce the possibility of acquiring and transmitting an infection, hospitals need to establish a systematic infection prevention and control program. The design and scope of your organization's program are determined by the specific risks faced by your location, the population(s) you serve, and the types of services you provide. The infection prevention and control activities you adopt should also be practical and reasonable to follow. No organization wants to jeopardize a patient's health because its infection control activities are outmoded or too confusing to practice daily. After an effective program is in place, the hospital takes measures so that the program operates according to plan and is evaluated appropriately.

About This Chapter
The processes outlined in the “Infection Prevention and Control” (IC) chapter are applicable to all infections or potential sources of infection that hospital staff, practitioners, and administrators might encounter, including a sudden influx of potentially infectious patients. The standards are designed to assist hospitals, both large and small, in developing and maintaining an effective program that covers a wide range of situations.

These standards address activities of planning, implementation, and evaluation and are based on the following conditions necessary to establish and operate an effective infection prevention and control program. Every hospital, regardless of its size or the services it provides, should do the following:

- Recognize that its infection prevention and control program plays a major role in its efforts to improve patient safety and quality of care
- Demonstrate leadership's commitment to infection prevention and control by endorsing and participating in the organization's efforts to control infection, provide resources, and encourage improvement
- See that staff collaborate with each other when designing and implementing the infection prevention and control program
- Regularly assess its infection prevention and control program by using an epidemiological approach that consists of surveillance, data collection, analysis, and trend identification
- Coordinate its program with the larger community
- Take into account that the potential exists for an infection outbreak so extensive that it overwhelms the hospital's resources

Key: (D) indicates that documentation is required; R indicates an identified risk area
Blue text indicates a change effective July 1, 2018, unless otherwise noted in What’s New.

Chapter Outline

I. Planning
   A. Responsibility (IC.01.01.01)
   B. Resources (IC.01.02.01)
   C. Risks (IC.01.03.01)
   D. Goals (IC.01.04.01)
   E. Activities (IC.01.05.01)
   F. Influx (IC.01.06.01)

II. Implementation
   A. Activities (IC.02.01.01)
   B. Medical Equipment, Devices, and Supplies (IC.02.02.01)
   C. Transmission of Infections (IC.02.03.01)
   D. Influenza Vaccinations (IC.02.04.01)

III. Evaluation and Improvement (IC.03.01.01)

Standards, Rationales, and Elements of Performance

Introduction to Standards IC.01.01.01 Through IC.01.06.01 – Planning

For any infection prevention and control program to be effective, it needs to be well managed. Toward that end, hospital leadership assigns one or more people to be responsible for development of the program and its management. Depending on the size of the hospital and its resources, this person can be an employee, a contractor, or a consultant. After this person is in place, the work of planning the infection prevention and control program can begin by gathering staff with expertise in infection control, building management, and other key team members who can perform a risk assessment and put in place infection prevention and control activities. The infection prevention and control team may want to consult with community leaders and other outside infection control experts who can provide important information about the hospital’s population and associated health risks.

The results of the hospital's infection risk assessment should be prioritized, ideally in order of level of probability and potential for harm. The hospital can then set goals for reducing the risks of the infections that pose the greatest threat to patients and the community. These goals should lead to focused activities, based on relevant professional guidelines and sound scientific practices.

Standard IC.01.01.01

The hospital identifies the individual(s) responsible for the infection prevention and control program.

Elements of Performance for IC.01.01.01

1. The hospital identifies the individual(s) with clinical authority over the infection prevention and control program.
2. When the individual(s) with clinical authority over the infection prevention and control program does not have expertise in infection prevention and control, he or she consults with someone who has such expertise in order to make knowledgeable decisions.
3. The hospital assigns responsibility for the daily management of infection prevention and control activities. (See also HR.01.01.01, EP 1; LD.03.06.01, EP 3)
   Note: Number and skill mix of the individual(s) assigned should be determined by the goals and objectives of the infection prevention and control program.
4. For hospitals that use Joint Commission accreditation for deemed status purposes: The individual with clinical authority over the infection prevention and control program is responsible for the following:
   - Developing policies governing control of infections and communicable diseases
   - Implementing policies governing control of infections and communicable diseases
   - Developing a system for identifying, reporting, investigating, and controlling infections and communicable diseases
Standard IC.01.02.01
Hospital leaders allocate needed resources for the infection prevention and control program.

Elements of Performance for IC.01.02.01
1. The hospital provides access to information needed to support the infection prevention and control program. (See also IM.02.02.03, EP 2)
2. The hospital provides laboratory resources when needed to support the infection prevention and control program.
3. The hospital provides equipment and supplies to support the infection prevention and control program.

Standard IC.01.03.01
The hospital identifies risks for acquiring and transmitting infections.

Elements of Performance for IC.01.03.01
1. The hospital identifies risks for acquiring and transmitting infections based on the following:
   - Its geographic location, community, and population served
   - The care, treatment, and services it provides
   - The analysis of surveillance activities and other infection control data
     (See also NPSG.07.03.01, EP 1)
2. The hospital reviews and identifies its risks at least annually and whenever significant changes occur with input from, at a minimum, infection control personnel, medical staff, nursing, and leadership. (See also NPSG.07.03.01, EP 1)
3. The hospital prioritizes the identified risks for acquiring and transmitting infections. These prioritized risks are documented. (See also NPSG.07.03.01, EP 1)

Standard IC.01.04.01
Based on the identified risks, the hospital sets goals to minimize the possibility of transmitting infections.

Note: See NPSG.07.01.01 for hand hygiene guidelines.

Element of Performance for IC.01.04.01
1. The hospital's written infection prevention and control goals include the following:
   - Addressing its prioritized risks
   - Limiting unprotected exposure to pathogens
   - Limiting the transmission of infections associated with procedures
   - Limiting the transmission of infections associated with the use of medical equipment, devices, and supplies
   - Improving compliance with hand hygiene guidelines (See also NPSG.07.01.01, EP 1)

Standard IC.01.05.01
The hospital has an infection prevention and control plan.

Elements of Performance for IC.01.05.01
1. When developing infection prevention and control activities, the hospital uses evidence-based national guidelines or, in the absence of such guidelines, expert consensus.
2. The hospital's infection prevention and control plan includes a written description of the activities, including surveillance, to minimize, reduce, or eliminate the risk of infection.
3. The hospital describes, in writing, the process for investigating outbreaks of infectious disease. (See also IC.02.01.01, EP 5)
4. All hospital components and functions are integrated into infection prevention and control activities.
Standard IC.01.06.01
The hospital prepares to respond to an influx of potentially infectious patients.

Elements of Performance for IC.01.06.01
2. The hospital obtains current clinical and epidemiological information from its resources regarding new infections that could cause an influx of potentially infectious patients.
3. The hospital has a method for communicating critical information to licensed independent practitioners and staff about emerging infections that could cause an influx of potentially infectious patients.
4. The hospital describes, in writing, how it will respond to an influx of potentially infectious patients. (See also EM.01.01.01, EP 2)
   
   Note: One acceptable response is to decide not to accept patients.

Introduction to Standards IC.02.01.01 Through IC.02.03.01 – Implementation
The activities of infection prevention and control should be practical and involve collaboration between departments and staff. Everyone who works in the hospital should have a role and hold each other accountable. Important infection prevention and control information should be available to both staff and patients. Standard and transmission based precautions should be used, and any outbreak of infection within the hospital should be investigated.

Standard IC.02.01.01
The hospital implements its infection prevention and control plan.

Elements of Performance for IC.02.01.01
1. The hospital implements its infection prevention and control activities, including surveillance, to minimize, reduce, or eliminate the risk of infection. (See also MM.09.01.01, EP 5)

2. The hospital uses standard precautions* including the use of personal protective equipment, to reduce the risk of infection. (See also EC.02.02.01, EP 4)
   
   Note: Standard precautions are infection prevention and control measures to protect against possible exposure to infectious agents. These precautions are general and applicable to all patients.

3. The hospital implements transmission-based precautions** in response to the pathogens that are suspected or identified within the hospital's service setting and community.
   
   Note: Transmission-based precautions are infection prevention and control measures to protect against exposure to a suspected or identified pathogen. These precautions are specific and based on the way the pathogen is transmitted. Categories include contact, droplet, airborne, or a combination of these precautions.

4. The hospital investigates outbreaks of infectious disease. (See also IC.01.05.01, EP 5)

5. The hospital minimizes the risk of infection when storing and disposing of infectious waste. (See also EC.02.02.01, EPs 1 and 12)

6. The hospital implements its methods to communicate responsibilities for preventing and controlling infection to licensed independent practitioners, staff, visitors, patients, and families. Information for visitors, patients, and families includes hand and respiratory hygiene practices.
   
   Note: Information may have different forms of media, such as posters or pamphlets.

7. The hospital reports infection surveillance, prevention, and control information to the appropriate staff within the hospital.

8. The hospital reports infection surveillance, prevention, and control information to local, state, and federal public health authorities in accordance with law and regulation.

*For further information regarding standard precautions, refer to the website of the Centers for Disease Control and Prevention (CDC) at http://www.cdc.gov/hai/ (Infection Control in Healthcare Settings).

**For further information regarding transmission-based precautions, refer to the website of the Centers for Disease Control and Prevention (CDC) at http://www.cdc.gov/hai/ (Infection Control in Healthcare Settings).
10. When the hospital becomes aware that it transferred a patient who has an infection requiring monitoring, treatment, and/or isolation, it informs the receiving organization.

11. When the hospital becomes aware that it received a patient from another organization who has an infection requiring action, and the infection was not communicated by the referring organization, it informs the referring organization.

   *Note: Infections requiring action include those that require isolation and/or public health reporting or those that may aid in the referring organization’s surveillance.*

**Standard IC.02.02.01**
The hospital reduces the risk of infections associated with medical equipment, devices, and supplies.

**Rationale for IC.02.02.01**
The Centers for Disease Control and Prevention (CDC) estimate that 46.5 million surgical procedures are performed in hospitals and ambulatory settings each year; this includes approximately 5 million gastrointestinal endoscopies.* Each of these procedures involves contact with a medical device or surgical instrument. A major risk of all such procedures is the introduction of pathogens that can lead to infection. Additionally, many more people are at risk of developing an infection from contact with medical equipment, devices, or supplies while seeking other health services. Failure to properly clean, disinfect, or sterilize, and use or store medical equipment, devices, and supplies, not only poses risks for the person seeking health services, but also carries the risk for person-to-person transmission of infections.

There are numerous steps involved in the deaning, disinfecting, and sterilizing of medical equipment, devices, and supplies. It is critical that health care workers follow standardized practices to minimize infection risks related to medical equipment, devices, and supplies. In order to maintain a reliable system for controlling this process, organizations pay attention to the following:

- Orientation, training, and competency of health care workers who are processing medical equipment, devices, and supplies
- Levels of staffing and supervision of the health care workers who are processing medical equipment, devices, and supplies
- Standardization of process regardless of whether it is centralized or decentralized
- Reinforcing the process (for example, the use of placards which list the steps to be followed, according to manufacturer’s guidelines)
- Ongoing quality monitoring

**Elements of Performance for IC.02.02.01**
The hospital implements infection prevention and control activities when doing the following:

1. Cleaning and performing low-level disinfection of medical equipment, devices, and supplies.**

   *Note: Low-level disinfection is used for items such as stethoscopes and blood glucose meters. Additional cleaning and disinfecting is required for medical equipment, devices, and supplies used by patients who are isolated as part of implementing transmission-based precautions.*

2. Performing intermediate and high-level disinfection and sterilization of medical equipment, devices, and supplies.#

   *See also EC.02.04.03, EP 4*

   *Note: Sterilization is used for items such as implants and surgical instruments. High-level disinfection may also be used if sterilization is not possible, as is the case with flexible endoscopes.*

3. Disposing of medical equipment, devices, and supplies.

4. Storing medical equipment, devices, and supplies.

5. When reprocessing single-use devices, the hospital implements infection prevention and control activities that are consistent with regulatory and professional standards.

---

*https://www.cdc.gov/infectioncontrol/guidelines/disinfection/introduction.html

**For further information regarding cleaning and performing low-level disinfection of medical equipment, devices, and supplies, refer to the website of the Centers for Disease Control and Prevention (CDC) at https://www.cdc.gov/infectioncontrol/guidelines/disinfection/#r3.

# For further information regarding performing intermediate and high-level disinfection of medical equipment, devices, and supplies, refer to the website of the Centers for Disease Control and Prevention (CDC) at https://www.cdc.gov/infectioncontrol/guidelines/disinfection/#r3 (Sterilization and Disinfection in Healthcare Settings).
**Standard IC.02.03.01**
The hospital works to prevent the transmission of infectious disease among patients, licensed independent practitioners, and staff.

**Elements of Performance for IC.02.03.01**
1. The hospital makes screening for exposure and/or immunity to infectious disease available to licensed independent practitioners and staff who may come in contact with infections at the workplace.
2. When licensed independent practitioners or staff have, are suspected of having, or have been occupationally exposed to an infectious disease that puts others at risk, the hospital provides them with or refers them for assessment and potential testing, prophylaxis/treatment, or counseling.
3. When patients have been exposed to an infectious disease, the hospital provides them with or refers them for assessment and potential testing, prophylaxis/treatment, or counseling.

**Introduction to Standard IC.02.04.01**
Influenza vaccination for staff and licensed independent practitioners is a major safety issue in the United States. Unvaccinated individuals who become infected are contagious at least one day before any signs or symptoms of influenza appear, and therefore these individuals can infect others without knowing they are contagious. Both government and professional organizations emphasize increasing safety to those receiving health care by decreasing their exposure to the influenza virus while receiving this care. One way to improve patient safety is for staff and licensed independent practitioners to receive the influenza vaccination annually. According to the US Department of Health and Human Services, vaccination is an effective preventive measure against influenza and can prevent many illnesses, deaths, and losses in productivity. Health care personnel (HCP) are considered a high priority for expanding influenza vaccine use. Achieving and sustaining high influenza vaccination coverage among HCP is intended to help protect HCP and their patients and reduce disease burden and health care costs (see http://www.hhs.gov/ash/initiatives/hai/hcpflu.html).

The Joint Commission's Standard IC.02.04.01 has been revised and strengthened to better reflect current science and the national focus on influenza vaccination. It requires that each organization has an influenza vaccination program and that the influenza vaccination is offered to staff and licensed independent practitioners. However, The Joint Commission does not mandate influenza vaccination for licensed independent practitioners and staff as a condition of Joint Commission accreditation. Additionally, The Joint Commission does not require accredited organizations to pay for the influenza vaccination for its licensed independent practitioners and staff. The decision on whether to pay for the influenza vaccination for staff and licensed independent practitioners will need to be made independently by each accredited organization.

**Standard IC.02.04.01**
The hospital offers vaccination against influenza to licensed independent practitioners and staff.

**Note:** This standard is applicable to staff and licensed independent practitioners only when care, treatment, or services are provided on site. When care, treatment, or services are provided off site, such as with telemedicine or telephone consultation, this standard is not applicable to off-site staff and licensed independent practitioners.

**Elements of Performance for IC.02.04.01**
1. The hospital establishes an annual influenza vaccination program that is offered to licensed independent practitioners and staff.
2. The hospital educates licensed independent practitioners and staff about, at a minimum, the influenza vaccine; non-vaccine control and prevention measures; and the diagnosis, transmission, and impact of influenza.
3. The hospital provides influenza vaccination at sites and times accessible to licensed independent practitioners and staff.
4. The hospital includes in its infection control plan the goal of improving influenza vaccination rates. (For more information, refer to Standard IC.01.04.01.)
5. The hospital sets incremental influenza vaccination goals, consistent with achieving the 90% rate established in the national influenza initiatives for 2020.
Note: The US Department of Health and Human Services' Action Plan to Prevent Healthcare-Associated Infections is located at http://www.hhs.gov/ash/initiatives/ha/ hcpflu.html

6. The hospital has a written description of the methodology used to determine influenza vaccination rates.

Note: The National Quality Forum (NQF) Measure Submission and Evaluation Worksheet 5.0 provides recommendations for the numerator and denominator for NQF performance measure #0431 Influenza Vaccination Coverage Among Health-care Personnel. While The Joint Commission recommends that organizations use the Centers for Disease Control and Prevention (CDC) and the NQF proposed performance measure to calculate influenza vaccination rates for staff and licensed independent practitioners, it does not include all contracted staff. Therefore, The Joint Commission additionally recommends that organizations also track influenza vaccination rates for all individual providing care, treatment, and services through a contract, since contracted individuals also transmit influenza.

7. The hospital evaluates the reasons given by staff and licensed independent practitioners for declining the influenza vaccination. This evaluation occurs at least annually.

8. The hospital improves its vaccination rates according to its established goals at least annually. (For more information, refer to Standards PI.02.01.01 and PI.03.01.01.)

9. The hospital provides influenza vaccination rate data to key stakeholders which may include leaders, licensed independent practitioners, nursing staff, and other staff at least annually.

Introduction to Standard IC.03.01.01 – Evaluation and Improvement
Evaluation and improvement of the hospital's infection prevention and control activities are important steps in the hospital's efforts to control and prevent infection. Infection prevention and control practices need to become a routine part of the care, treatment, and services the hospital provides to patients. They expect and deserve hygienic and safe care, at all times. Continuous review of the goals, activities, and outcomes of the hospital's program are therefore followed by improvement activities that are both realistic in expectation and effective.

Standard IC.03.01.01
The hospital evaluates the effectiveness of its infection prevention and control plan.

Elements of Performance for IC.03.01.01
1. The hospital evaluates the effectiveness of its infection prevention and control plan annually and whenever risks significantly change. The evaluation includes a review of the following:
   - The infection prevention and control plan's prioritized risks
   - The infection prevention and control plan's goals (See also NPSG.07.01.01, EP 2)
   - Implementation of the infection prevention and control plan's activities
2. Findings from the evaluation are communicated at least annually to the individuals or interdisciplinary group that manages the patient safety program.
3. The hospital uses the findings of its evaluation of the infection prevention and control plan when revising the plan. (See also LD.01.02.01, EP 4)
Standards FAQs (Hospital and Hospital Clinics/Hospitals)

National Patient Safety Goal 7

Hand Hygiene – Alcohol-based Hand Products

Do we have to use alcohol-based hand products?

Accredited organizations are required to provide health care workers with a readily accessible alcohol-based hand product. However, use of such a product by any individual health care worker is not required. The guidelines describe when this type of cleaner may be used instead of soap and water. If a healthcare worker chooses not to use it, then soap and water should be used instead.

Hand Hygiene – CDC or WHO – Categories for Recommendation Implementation

Does Joint Commission require implementation of all the recommendations in the CDC or WHO hand hygiene guidelines?

Each of the CDC and WHO hand hygiene recommendations is categorized on the basis of the strength of evidence supporting the recommendation. All “category I” recommendations (including categories IA, IB, and IC) must be implemented. Category II recommendations should be considered for implementation but are not required for accreditation purposes. Category IA recommendations are strongly supported by well-designed experimental, clinical, or epidemiological studies; category IB recommendations are supported by certain experimental, clinical, or epidemiological studies and a strong theoretical rationale; category IC recommendations are required by regulation; category II recommendations are supported by suggestive clinical or epidemiological studies or a theoretical rationale. The CDC also includes among its recommendations several “unresolved issues” for which it makes “no recommendation.”

Hand Hygiene – CDC or WHO – Choosing Guidelines

May we “pick and choose” some recommendations from CDC and some from WHO, or must we decide to follow one of the guidelines in its entirety?

Scientific guidelines are designed to function as a cohesive whole. Following parts of a guideline is not as efficacious as compliance with the entire document. Therefore, accredited organizations must choose to follow all IA, IB and IC recommendations from either CDC or WHO. Of course, the Joint Commission would encourage organizations to go “above and beyond” by complying with additional recommendations from either document as long as compliance has been achieved with all level I recommendations from either CDC or WHO.

Hand Hygiene – CDC or WHO – Nutrition Services

Is there an expectation for individuals passing patient trays at mealtime to use alcohol-based hand rub between each room?

If the person passing the food tray has, or is likely to have, direct contact with the patient, the answer is yes because both the CDC and WHO guidelines state that hand hygiene is required after direct contact (category IB). Both guidelines also say that individuals should decontaminate hands after contact with inanimate objects in the immediate vicinity of the patient, but this is identified as a Category II by the CDC recommendation. As such, while compliance with the CDC Guidelines is recommended for individuals passing meal trays who do not make direct contact with the patients, it is not required. In contrast, the WHO guidelines require hand hygiene after contact with the patient's environment (category IB).

Hand Hygiene – Corridor Dispensers of Alcohol-based Hand Products

What are the “conditions” that have to be met to be able to install alcohol-based hand rub (ABHR) dispensers in egress corridors?

Location conditions and permissible volume specifications for gel ABHR dispensers to be installed in egress corridors are as follows:

- The corridor width is 6 feet or greater and dispensers are at least 4 feet apart.
- The dispensers are not installed over or directly adjacent to an ignition source such as an electrical outlet or switch.Adjacent is defined as being at least 6 inches from the center of the dispenser to an ignition source.
- In locations with carpeted floor coverings, dispensers installed directly over carpeted surfaces are permitted only in sprinklered smoke compartments.
• Each smoke compartment may contain a maximum aggregate of 10 gallons (37.8 liters) of ABHR gel in dispensers and a maximum of 5 gallons (18.9 liters) in storage.
• The maximum individual dispenser fluid capacity is 0.3 gallons (1.2 liters) for dispensers in rooms, corridors, and areas open to corridors.
• The maximum dispenser size for individual dispensers in areas designated as suites of rooms is 0.5 gallons (2.0 liters).

The situation is a little different with respect to foam ABHR products because all of the testing upon which the NFPA and CMS decisions were based was done on the gel product, not on foam. However, industry experts and CMS have indicated that small-quantity ABHR foam dispensers may be handled the same as for ABHR gel. Therefore, pending further review, both The Joint Commission and CMS will allow any ABHR foam installation that meets the location criteria stated above for ABHR gel. Volumes of ABHR foam are based on suppliers' recommendations and in no case exceed the permissible volumes for ABHR gel as defined above. In the event that subsequent testing demonstrates a safety concern relating specifically to foam dispensers in egress corridors, The Joint Commission reserves the right to modify its position on the acceptability of such installations. In that event, previously installed dispensers would be subject to the newer restrictions; that is, they would not be “grandfathered,” and noncompliant installations would have to be removed.

Hand Hygiene – Monitoring

What are the changes regarding hand hygiene requirements beginning in 2018?
Effective January 1, 2018, for all accreditation programs:

Any observation by surveyors of individual failure to perform hand hygiene in the process of direct patient care will be cited as a deficiency resulting in a Requirement for Improvement (RFI) under Infection Prevention and Control (IC) Standard IC.02.01.01, EP 2: “The [organization] uses standard precautions, including the use of personal protective equipment, to reduce the risk of infection.” Surveyors also will continue surveying an organization's hand hygiene program to National Patient Safety Goal NPSG.07.01.01. (see also the December 2017 issue of the Perspectives Newsletter).

It is a good idea to think of NPSG.07.01.01 EPs 2 and 3 as a basic outline for a required performance improvement project. EP 2 requires each accredited organization formulate a goal for hand hygiene, and EP 3 requires organizations to improve compliance based on the goal set in EP 2. Each organization should customize its goals and improvement efforts to meet its unique needs. Please note that there is no specific requirement as to how measurement must occur other than it must occur according to CDC or WHO guidelines.

Measurement: Organizations must perform an accurate baseline assessment of hand hygiene in order to identify opportunities for improvement. Please note that participants in the Center for Transforming Healthcare Hand Hygiene Project found that their actual hand hygiene rates were significantly lower than they had previously estimated. For more information, visit the Center for Transforming Healthcare Web site. In particular, please view page four of the storyboard presentation. The Joint Commission recognizes that hand hygiene measurement is a challenge. In an effort to provide assistance, we have co-authored a monograph on this topic along with several other infection prevention leadership organizations: “Measuring Hand Hygiene Adherence: Overcoming the Challenges.”

Goal Formation: After establishing an accurate baseline, each accredited organization must formulate a goal for improvement. The Joint Commission previously required that each organization have a hand hygiene goal of at least 90%; that requirement is no longer in place. Rather, each organization must formulate a goal to improve over past performance.

Improving compliance: After measurement and goal formation, interventions to achieve improvement must be implemented. Per EP 1, these interventions must be designed utilizing either CDC or WHO guidelines. If the goal is not met, interventions should be redesigned based on an analysis of causative factors. If the goal is met, it should be adjusted to foster higher levels of compliance.

Methicillin Resistant Staphylococcus (MRSA) – Screening

Is MRSA screening required for all patients? If not, are there certain high-risk patients that must be screened?
NPSG.07.03.01 EP 7 states, “Implement policies and practices aimed at reducing the risk of transmitting multidrug-resistant organisms. These policies and practices meet regulatory requirements and are aligned with evidence-based standards (for example, the Centers for Disease Control and Prevention (CDC) and/or professional organization guidelines).” Please refer to the CDC/HICPAC guideline entitled “Management of Multidrug-Resistant
Organisms in Healthcare Settings, 2006.” See also, IC.01.05.01 EP 1 which requires that, “When developing infection prevention and control activities, the hospital uses evidence-based national guidelines or, in the absence of such guidelines, expert consensus.”

The HICPAC guideline lists two sets of interventions, designated as “general” and “intensified, tier 2.” Tier 2 interventions are not recommended of all facilities, but rather just those that meet criteria listed in the guideline. These criteria include failure to decrease MDRO rates as well as the first occurrence of an epidemiologically significant organism. Screening, also known as active surveillance cultures (ASC), is listed under the category of “intensified interventions” (recommendation V.B.5.b).

Therefore, unless an organization meets the criteria for “intensified, tier 2” interventions, Joint Commission surveyors would not expect these to be in place. Consequently, active surveillance cultures are not required at all accredited facilities. However, please note that LD.04.01.01 EP 2 requires compliance with applicable law and regulation. Many state legislatures have enacted law or regulation that requires active surveillance cultures for particular patient populations. The Joint Commission would expect these to be done per LD.04.01.01.

Multiple Drug-Resistant Organism – Surveillance

Must we perform surveillance on all MDROs, or is targeted surveillance okay?
Targeted surveillance is allowable for MDROs. Please see NPSG.07.03.01 EP 4, which states, “implement a surveillance program for multidrug-resistant organisms based on the risk assessment.” Therefore, if an organization's risk assessment shows that risk is greatest for certain organisms, patient care units or service lines, the surveillance program may be targeted to focus resources on those high-risk issues.

Central Line Associated Bloodstream Infections (CLABSI) – Documentation

Please explain the documentation icons for NPSG.07.04.01 EPs 6 and 12. What will surveyors expect to see?
NPSG.07.04.01 EP 6 requires use of “a catheter checklist and a standardized protocol for central venous catheter insertion” The checklist or protocol is not required to be a part of the patient's medical record. A simple indication that the checklist or protocol was completed, perhaps via a checkbox or brief note, is sufficient. NPSG.07.04.01 EP 12 requires use of a “standardized protocol to disinfect catheter hubs and injection ports before accessing the ports.” This is not a patient-specific documentation requirement. Surveyors will ask to see each organization's protocol; this may be in the form of a policy, protocol, etc.

Central Line Associated Bloodstream Infections (CLABSI) – Whole House Surveillance

Must we perform surveillance on all central lines, or is targeted surveillance okay?
Infection surveillance must be performed on all central lines; these lines carry significant risk of morbidity and mortality regardless of circumstances. Limiting surveillance to certain types of lines, patient care units or service lines is not allowable under NPSG.07.04.01.

Surgical Site Infections (SSI) – Surveillance and Resources

Are organizations required to conduct surveillance on all surgical procedures, or is targeted surveillance acceptable?
No, there is no requirement that all surgical procedures must be included in an organization's surveillance for surgical site infections (SSI). Organizations may choose to target SSI surveillance based on the results of a risk assessment. If an organization's risk assessment shows that risk is greatest for certain procedures or settings, the surveillance program may be targeted to focus resources on those high-risk procedures.

Organizations may wish to consider conducting periodic risk assessments to ensure that the scope of the targeted procedures included in surveillance activities remains current. Conducting a risk assessment is a helpful way of identifying risks associated with various procedures performed. A proactive risk assessment examines a process in detail including sequencing of events, actual and potential risks, and failure or points of vulnerability and that prioritizes, through a logical process, areas for improvement based on the actual or potential impact (that is, criticality) of care, treatment, or services provided.

The introductory section of the Leadership (LD) chapter provides an example of a pro-active risk assessment model that an organization may use. However, this specific approach is not mandated as there are other risk assessment tools available that may better meet the needs of the organization. Other examples may include a root cause analysis, failure mode and effect analysis, plan/do/check/act process, etc., or combinations and variations.
The risk assessment should focus on all components of the surgical continuum, including - but not limited to - staff knowledge and competency, adoption of - and compliance with - evidence-based guidelines for reprocessing of instruments, policies and procedures, surgical attire, practitioner engagement, and patient education. Compliance with any state-specific reporting requirements should also be evaluated. From a quality and safety perspective, ensure that surgical procedures performed in all locations have been integrated into the organization-wide quality assessment and performance improvement (QAPI) program.

Additional Resources:
- The Center for Transforming Healthcare: Surgical Site Infections Project
- Preventing infections in ASCs: It's All about Teamwork: Infographic
- Reducing Colorectal Surgical Site Infections
- Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals
- Video: Tackling Surgical Site Infections
- The Joint Commission's Implementation Guide for NPSG.07.05.01 on Surgical Site Infections
- Educating Patients About Surgical Site Infections: Complying with NPSG.07.05.01
- CDC: Prevention of Surgical Site Infection, 2017

Available to accredited organizations via their secure Extranet site: High-level Disinfection and Sterilization BoosterPak

Catheter-Associated Urinary Tract Infection (CAUTI) – Surveillance

My facility performs a risk assessment every year as required by IC.01.03.01. We consider a wide range of infection risks, and we rank them per IC.01.03.01 EP 5. Our risk assessment shows CAUTI is a very low patient risk; there are many other higher priorities. Must I perform surveillance for CAUTI because of the NPSG.07.06.01 even though my risk assessment does not identify it as a priority?

NPSG.07.06.01 was a new goal on catheter-associated urinary tract infection (CAUTI) that was published in the July 2011 edition of Perspectives. Reasons for this goal are captured in the following quote from the Perspectives article: “The Joint Commission's Patient Safety Advisory Group, a group of external national experts on patient safety issues, recommended that NPSG.07.06.01 for CAUTIs be considered for adoption. CAUTI is the most frequent type of health care-acquired infection (HAI), and represents as much as 80% of HAIs in hospitals. The frequency of CAUTIs creates a patient safety and quality concern.”

The Joint Commission recognizes that a variety of surveillance approaches are appropriate for various types of infections. For example, NPSG.07.04.01 on catheter-associated bloodstream infection requires that all catheters be monitored; EP 4 states surveillance must be “hospital-wide, not targeted.” However, NPSG.07.03.01 on multi-drug resistant organisms allows for the risk assessment to drive surveillance, hence EP 4 says surveillance may be “targeted rather than hospital-wide.” In a similar fashion, NPSG.07.05.01 on surgical site infection allows organizations to determine which surgeries to monitor, and EP 5 states, “Surveillance may be targeted to certain procedures based on the hospital's risk assessment.”

NPSG.07.06.01 on CAUTI does not specify either hospital-wide or targeted surveillance. In fact, it does not specifically require that surveillance for CAUTI be performed at every accredited hospital. Rather, it allows for each organization to decide, based on its risk assessment (IC.01.03.01) whether CAUTI is a priority warranting surveillance. Having said this, The Joint Commission urges organizations to review the scientific literature and consensus-based guidelines when considering CAUTI surveillance. One summary of the epidemiology of CAUTI that bears consideration is the following excerpt from the CDC/HICPAC document entitled “Guideline for Prevention of Catheter-Associated Urinary Tract Infections 2009.”

Urinary tract infections are the most common type of healthcare-associated infection, accounting for more than 30% of infections reported by acute care hospitals. Virtually all healthcare-associated UTIs are caused by instrumentation of the urinary tract. Catheter-associated urinary tract infection (CAUTI) has been associated with increased morbidity, mortality, hospital cost, and length of stay. In addition, bacteriuria commonly leads to unnecessary antimicrobial use, and urinary drainage systems are often reservoirs for multidrug-resistant bacteria and a source of transmission to other patients.”
Infection Prevention and Control (IC)

Instrument Reprocessing – Immediate Use Steam Sterilization (IUSS)

What are important considerations associated with Immediate-Use Steam Sterilization?

Immediate-Use Steam Sterilization (IUSS), formerly termed “flash” sterilization, is described as “the shortest possible time from the item being removed from the sterilizer to the aseptic transfer onto the sterile field.” IUSS items are not intended to be stored for future use.

Considerations for IUSS:

• Review and adhere to manufacturer instructions for use (IFU) to determine if the device or instrument may be reprocessed via IUSS. If so, follow the IFUs regarding cycle type, temperature setting, exposure time, and drying times.
• IUSS does not imply that reprocessing steps, such as appropriate cleaning and transport, may be omitted.
• Items are to be reprocessed in approved/validated containers/trays suitable for IUSS.
• IUSS should not be used for mere convenience, or due to limited instruments or equipment for the number of cases/procedures performed.
• Evidence-based guidelines should be adopted to minimize the use of IUSS. Scenarios when IUSS may be appropriate include:
  – When a specific instrument is needed for an emergency procedure.
  – When a non-replaceable instrument has been contaminated and needs to be replaced to the sterile field immediately.
  – When an item has dropped on the floor and is needed to continue a surgical procedure.

Identifying Gaps and Risk reduction strategies to consider:

• When ‘loaner’ trays or instruments (including those brought in by a provider) are used, establish an agreement with the vendor/provider requiring that delivery occurs sufficiently in advance of scheduled case(s) to allow complete reprocessing of trays by the organization. Such a requirement is an example of a performance expectation to include in a contract (see LD.04.03.09).
• Develop policies, procedures, staff orientation and competencies based on evidence-based guidelines.
• Regular rounding by Leadership experienced in sterilization practices to all areas where instruments are used and reprocessed is critical. Such rounds should include:
  – Review of manufacturer's IFUs for both the device used for IUSS as well as the equipment/instruments being reprocessed to ensure compliance with their guidelines.
  – Allowing sufficient time to actually observe reprocessing activities, including a review of any documentation requirements.
  – Soliciting questions/concerns from staff responsible for performing IUSS and implement plans to reduce/eliminate concerns.
• Ensure there is a defined, evidence-based process in place for the premature release of items, to include documentation of IUSS.
• When limited resources are identified, work with Leadership to develop a plan to ensure sufficient resources are available to support the delivery of safe, quality of care (see LD.03.03.01).
• Ensure that sterilization practices, in all locations, have been fully incorporated into the organization's Quality Assessment Performance Improvement (QAPI) activities (see LD.01.03.01 EP 21 and PI.01.01.01 EP 4).
• Evaluate the IUSS process in all locations that it is being performed. Surveyors evaluate compliance based on the evidence-based guidelines, policies, procedures, practices and competencies adopted by the organization (see IC.02.02.01 EP 2).
• Conducting a risk assessment is a helpful way of identifying risks and gaps in compliance with evidence-based guidelines and product manufacturer's instructions for use. A proactive risk assessment examines a process in detail including sequencing of events, actual and potential risks, and failure or points of vulnerability and that prioritizes, through a logical process, areas for improvement based on the actual or potential impact (that is, criticality) of care, treatment, or services provided. The introductory section of the Leadership (LD) chapter provides an example of a pro-active risk assessment model that an organization may use. However, this specific approach is not mandated as there are other risk assessment tools available that may better meet the needs of the organization.
Resources:
- The Association for Professionals in Infection Control and Epidemiology (APIC)
- The Association of periOperative Registered Nurses (AORN)
- The Association for the Advancement of Medical Instrumentation (AAMI).

Instrument Reprocessing – Point-of-Use and Pre-Cleaning Expectations

What is meant by pre-cleaning at point-of-use in decentralized locations for sterilization reprocessing?

'Pre-cleaning' is described as the means of removal of visible gross blood, body fluids, and/or bio-burden in order to prevent hardening of debris or the development of biofilm due to processing delays.

- Applies to surgical instruments, devices, supplies that, based on manufacturer instructions for use, are intended to be reprocessed (meaning they are not single-use disposable items).
- When there are delays in the cleaning/decontamination reprocessing steps gross soil should be removed at the point of use.
- Pre-cleaning at the point-of-use is required when soiled items cannot be immediately contained and transported to a decontamination area or soiled utility area. 'Immediately' is described as 'without delay'.
- Pre-cleaning at the point-of-use requires that visible bio-burden is removed from the instruments prior to transport to a decontamination area where pre-cleaning or preparation for transport to a reprocessing area occurs.
- If a product is selected for pre-cleaning purposes, determine compliance based on the manufacturer's IFU.
- When there are delays in instruments reaching decontamination in central sterile processing, items must be pre-cleaned and remain moist while awaiting transport to decontamination.
- Use of pre-cleaning product or other acceptable method to keep instruments moist applies when there are delays in transporting instruments.

Identifying Gaps to Ensure Compliance:

- Evaluate pre-cleaning practices at the point-of-use. The evaluation should be based on the evidence-based guidelines adopted by the organization.
- Surveyors evaluate compliance based on the guidelines on which leadership has based policies, procedures, practices and competencies.
- If a product is selected for pre-cleaning purposes, follow manufacturer instructions for use. For example, if the instructions for use state that hinged instruments are to be in the open position before application, the practice should be consistent with this recommendation.

'Immediately' vs 'delays' are important concepts to understand and clarify in the pre-cleaning at point-of-use process step to promote standardization, frontline staff compliance, and education. For example:

- Instruments from the ER are picked up and transported to central sterile processing at the end of each day. Since there will be a delay with instruments reaching decontamination in central sterile processing, items must be pre-cleaned and remain moist while awaiting transport to decontamination.
- Due to high volumes of instruments requiring reprocessing, instruments may wait hours in decontamination to be cleaned/decontaminated. Instruments are therefore pre-cleaned and transported moist, to prevent hardening of debris or the development of biofilm due to processing delays.

Conducting a risk assessment is a helpful way of identifying risks and gaps in compliance with evidence-based guidelines and product manufacturer's instructions for use. A proactive risk assessment examines a process in detail including sequencing of events, actual and potential risks, and failure or points of vulnerability and that prioritizes, through a logical process, areas for improvement based on the actual or potential impact (that is, criticality) of care, treatment, or services provided. The introductory section of the Leadership (LD) chapter provides an example of a pro-active risk assessment model that an organization may use. However, this specific approach is not mandated as there are other risk assessment tools available that may better meet the needs of the organization.
Examples of organizations that promulgate nationally recognized infection and communicable disease control guidelines, and/or recommendations include, but not limited to:

- The Association of periOperative Registered Nurses (AORN), Published online January 2017, doi: 10.6015/psrp.15.01.615
- The Association for the Advancement of Medical Instrumentation (AAMI).
- The Association for Professionals in Infection Control and Epidemiology (APIC).

Laryngoscopes Blades and Handles – How to clean, disinfect and store these devices

Laryngoscopes – Blades and Handles – How should we clean, disinfect and store these devices? How will the surveyors evaluate this process?

Devices such as laryngoscope blades and handles, may be exposed to potentially infectious material during indicated use, and can become contaminated through direct contact with the patient's skin, mucous membranes, secretions and blood. To reduce the risk of infection, the importance of standardizing the reprocessing and storage of the laryngoscope's blade and handle is emphasized (for non-disposable laryngoscopes).

Cleaning – Laryngoscope Blades:

Equipment used for intubation such as laryngoscope blades should be properly cleaned using the process for disinfection and sterilization of semi-critical items as designated by the CDC as “high-level” disinfection. Please refer to the CDC and HICPAC document entitled Guidelines for Disinfection and Sterilization in Healthcare Facilities, 2008.

In addition, the CDC's Healthcare Infection Control Practices Advisory Committee (HICPAC) states laryngoscope blades are “semi critical” items, which should be sterilized or subjected to high-level disinfection before reuse. Read CDC and HICPAC's document entitled Guidelines for Preventing Healthcare-Associated Pneumonia, 2003. The last page of the guideline lists laryngoscope blades as semi-critical items. Recommendation IIIA1b (pages 57-58) states how semi-critical items must be processed and packaged:

“Whenever possible, use steam sterilization (by autoclaving) or high-level disinfection by wet heat pasteurization at 158F (70c) for 30 minutes for reprocessing semi-critical equipment or devices (i.e., items that come into direct or indirect contact with mucous membranes of the lower respiratory tract) that are not sensitive to heat and moisture (see examples in Appendix). Use low-temperature sterilization methods (as approved by the Office of Device Evaluation, Center for Devices and Radiologic Health, FDA) for equipment or devices that are heat- or moisture-sensitive (307;309;310;314;315). After disinfection, proceed with appropriate rinsing, drying, and packaging, taking care not to contaminate the disinfected items in the process (308;310). CATEGORY IA”

Cleaning – Laryngoscope Handles:

Laryngoscope handles are considered contaminated after use and must be processed prior to use with the next patient. Some manufacturers suggest a low-level surface disinfectant be utilized on the surface of the handle, while others may recommend high level disinfection or sterilization. As is the case with all medical devices, the manufacturer's indications for use (IFU) must be followed. Also check with your state for additional law or regulation; we are aware of at least one state that requires additional processing.

Storage:

Laryngoscopes should be kept free from contamination until the time of use. Once opened, there is potential for microorganisms to settle on the equipment the longer it remains open and unused. In addition, increased handling of the opened unused blade increases the probability of contamination. Ensure that the storage area provides protection against dust, moisture, temperature and humidity extremes. Please refer to the CDC and HICPAC document entitled Guidelines for Disinfection and Sterilization in Healthcare Facilities, 2008.

Storing laryngoscope blades individually eliminates the potential for contaminating multiple blades if packaged together, and therefore having to reprocess several unused blades as opposed to the one that was used. An option would be to contain the individual blade in a closed plastic bag, placed in a clean storage location or if steam sterilized, a peel-pack may be used.
When testing the light source and blade use proper hand hygiene and partially remove the blade from the package, attach to
the light source, and test.

Following testing, insert the blade back into the package and return to a clean storage location (manipulation of the blade
onto the light source/handle can be tested without actually removing the blade from the bag or pack without touching the
blade itself).

Institute this practice to all areas where laryngoscopes are used. Examples are: code carts, anesthesia carts, and difficult
airway boxes or carts.

Surveyor Evaluation:

Joint Commission surveyors will evaluate processes related to laryngoscope blades/handles to ensure that they are safe for
use on the next patient. Surveyors will check for the following:

Laryngoscope blades are processed via either high-level disinfection or sterilization.

Laryngoscope handles, the organization is following the manufacturer's instructions-for-use for cleaning/disinfection
guidance.

Laryngoscope blades/handles are packaged in some way. Note: CDC and HICPAC guidelines do not specify the manner in
which laryngoscope blades should be packaged.

The organization demonstrates a consistent process applied to all appropriate areas as reflected by organization policy and
procedure.

Laryngoscope blades/handles are stored in a way that would prevent contamination.

Examples of compliant storage include, but are not limited to, a peel pack post steam sterilization, or containment within a
closed plastic bag.

Examples of noncompliant storage would include unwrapped blades in an anesthesia drawer, as well as unwrapped blades
on top of or within a code cart.
High-Level Disinfection Control Alert for Health Centers

March 19, 2018
By Pam Komperda
Project Manager, Community Health Center Accreditation

Our surveyors at community health centers are observing many serious infection control-related risks concerning high-level disinfection and sterilization practices during recent onsite survey events.

Any immediate threat to the health or safety of patients or staff that is identified during your onsite survey can lead to a Preliminary Denial of Accreditation decision.

Resources for This Year’s Survey
If your health center is due for survey this year, be sure to review the specific concerns our surveyors are identifying below. Also, be sure to utilize BoosterPak (available to accredited organizations through the secure Extranet site), a key resource that includes helpful information and strategies relating to infection control processes. You may also find that reviewing our past educational teleconferences and presentation materials related to infection control is helpful. These are accessible via phone and audio stream on The Joint Commission's website.

Top Non-Compliance Item
The No. 1 standard found out of compliance is IC.02.02.01, EP 2: The organization implements infection prevention and control activities when doing the following: Performing intermediate and high-level disinfection and sterilization of medical equipment, devices, and supplies.

Specific infection control-related breaches recently identified by our survey teams in medical and dental sterilization processes tend to follow certain themes.

Poor Training
- lack of documented frontline staff competency and training specific to the sterilization processes specific to infection control
- lack of trained, documented managerial/supervisory oversight specific to the sterilization process

Overlooking Evidence
- little use or adherence to any sterilization Evidence Based Guidelines (EBGs); use of chemical indicator for ultrasound probes expired
- poor adherence to manufacturers' Instructions for Use (IFU) for medical and dental instruments and supplies lack of leadership oversight and accountability regarding evidence-based, manufacturer supported reprocessing of surgical instruments
- no accurate means of measurement for pre-cleaning detergent and enzymatic

Ignoring Indicators
- premature release of instruments prior to the 24-hour read time of biological indicator result as required per the manufacturer's IFUs
- inconsistent use of chemical indicators in paper-plastic peel pouches
- inadequate documentation of physical/mechanical monitoring that sterilization parameters were met (time, temperature, pressure)

Non-Compliant Use of Instruments
- hinged instruments observed to be in closed position in peel packs
- failure to use personal protective equipment (PPE) including protective gowns or eye shields during decontamination activities
- instruments being cleaned, decontaminated and left to dry in the only sink available in the procedure room. No clean sink available for hand hygiene
- lack of physical or defined separation of contaminated and clean instruments within the dental procedure areas where decontamination activities occur
Broken Processes

- lack of documentation of monthly sterilizer preventative maintenance and cleaning as required per manufacturer instructions for use
- insufficient process to ensure that brushes used in the decontamination area were cleaned when soiled
- unsatisfactory tracking of sterilizer maintenance (blanks on logs)
- inadequate tracking/monitoring parameters for cycles

If you have any questions regarding your processes or policies and procedures, please contact our Standards Interpretation Department directly via the standards online question form. Patient safety is being compromised by all these sterilization issues and we are here to help reverse this trend.

_Pam Komperda has worked at The Joint Commission for 10 years, as an account executive, then was promoted to manager of accreditation programs. She has been in project management since 2011._
Disinfection and Sterilization 2017

Karen Martin RN, MPH, CIC
Consultant, Infection Prevention Services
Joint Commission Resources

Objectives

• List the most cited findings for JC Standard 02.02.01.
• Identify the most frequently missed must haves involved in disinfection and sterilization to provide safe and quality care.
• Review the latest updates to professional organization recommendations.

Most Frequent Non-Compliant Standards For 2016

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>68%</td>
<td>EC.02.06.01</td>
<td>The hospital establishes and maintains a safe, functional environment.</td>
</tr>
<tr>
<td>60%</td>
<td>IC.02.02.01</td>
<td>The hospital reduces the risk of infections associated with medical equipment, devices, and supplies.</td>
</tr>
<tr>
<td>67%</td>
<td>EC.02.06.01</td>
<td>The hospital manages risks associated with its utility systems.</td>
</tr>
<tr>
<td>51%</td>
<td>LS.02.01.35</td>
<td>The hospital provides and maintains systems for extinguishing fires.</td>
</tr>
<tr>
<td>50%</td>
<td>LS.02.01.30</td>
<td>The hospital provides and maintains building features to protect individuals from the hazards of fire and smoke.</td>
</tr>
<tr>
<td>49%</td>
<td>LS.02.01.20</td>
<td>The hospital maintains the integrity of the means of egress.</td>
</tr>
<tr>
<td>48%</td>
<td>LS.02.01.10</td>
<td>Building and fire protection features are designed and maintained to minimize the effects of fire, smoke, and heat.</td>
</tr>
<tr>
<td>47%</td>
<td>EC.02.02.01</td>
<td>The hospital manages risks related to hazardous materials and waste.</td>
</tr>
<tr>
<td>46%</td>
<td>PC.02.01.02</td>
<td>The hospital provides care, treatment, and services as ordered or prescribed, and in accordance with law and regulation.</td>
</tr>
<tr>
<td>42%</td>
<td>RC.01.01.01</td>
<td>The hospital maintains complete and accurate medical records for each individual patient.</td>
</tr>
</tbody>
</table>

Note: The data determined for the hospital program were derived from 1,441 applicable surveys.
What's Wrong With This Picture For 2017

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>86%</td>
<td>LS.02.01.35</td>
<td>The hospital provides and maintains systems for extinguishing fires.</td>
</tr>
<tr>
<td>74%</td>
<td>LS.02.01.30</td>
<td>The hospital provides and maintains building features to protect individuals from the hazards of fire and smoke.</td>
</tr>
<tr>
<td>73%</td>
<td>EC.02.05.01</td>
<td>The hospital manages risks associated with its utility systems.</td>
</tr>
<tr>
<td>70%</td>
<td>IC.02.02.01</td>
<td>The hospital reduces the risk of infections associated with medical equipment, devices, and supplies.</td>
</tr>
<tr>
<td>68%</td>
<td>EC.02.06.01</td>
<td>The hospital establishes and maintains a safe, functional environment.</td>
</tr>
<tr>
<td>66%</td>
<td>LS.02.01.10</td>
<td>Building and fire protection features are designed and maintained to minimize the effects of fire, smoke, and heat.</td>
</tr>
<tr>
<td>62%</td>
<td>EC.02.02.01</td>
<td>The hospital manages risks related to hazardous materials and waste.</td>
</tr>
<tr>
<td>60%</td>
<td>LS.02.01.20</td>
<td>The hospital maintains the integrity of the means of egress.</td>
</tr>
<tr>
<td>60%</td>
<td>EC.02.05.05</td>
<td>The hospital inspects, tests, and maintains utility systems.</td>
</tr>
<tr>
<td>57%</td>
<td>RC.01.01.01</td>
<td>The hospital maintains complete and accurate medical records for each individual patient.</td>
</tr>
</tbody>
</table>

Note: The data determined for the hospital program were derived from 763 applicable surveys.

It's Headed In The Wrong Direction – IC.02.02.01

- From 60%
- To 70%
Top Cited Standards From 4/17 - 8/17

<table>
<thead>
<tr>
<th>StandardChapterLabel</th>
<th>StandardAndEPMELabel</th>
<th>Count of Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td>IC.02.01.01 EP 1</td>
<td>407</td>
</tr>
<tr>
<td>IC</td>
<td>IC.02.02.01 EP 2</td>
<td>285</td>
</tr>
<tr>
<td>IC</td>
<td>IC.02.01.01 EP 1</td>
<td>266</td>
</tr>
<tr>
<td>IC</td>
<td>IC.02.02.01 EP 4</td>
<td>193</td>
</tr>
<tr>
<td>IC</td>
<td>IC.02.01.01 EP 2</td>
<td>93</td>
</tr>
<tr>
<td>IC</td>
<td>IC.02.01.01 EP 3</td>
<td>20</td>
</tr>
<tr>
<td>IC</td>
<td>IC.01.03.01 EP 2</td>
<td>19</td>
</tr>
<tr>
<td>IC</td>
<td>IC.02.02.01 EP 3</td>
<td>16</td>
</tr>
<tr>
<td>IC</td>
<td>IC.01.03.01 EP 1</td>
<td>13</td>
</tr>
<tr>
<td>IC</td>
<td>IC.01.05.01 EP 2</td>
<td>11</td>
</tr>
<tr>
<td>IC</td>
<td>IC.01.04.01 EP 4</td>
<td>10</td>
</tr>
<tr>
<td>IC</td>
<td>IC.02.01.01 EP 6</td>
<td>10</td>
</tr>
<tr>
<td>IC</td>
<td>IC.01.01.01 EP 3</td>
<td>9</td>
</tr>
<tr>
<td>IC</td>
<td>IC.01.02.01 EP 3</td>
<td>8</td>
</tr>
<tr>
<td>IC</td>
<td>IC.01.03.01 EP 5</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1445</strong></td>
</tr>
</tbody>
</table>

What This Means For Patients

- Breaking News: GHS: 4th patient with rare infection dies
- Cartoon: Meet the Hospital Staph
- Employees must wash hands before returning to work.
CDC Progress Report For HAI's

Among national acute care hospitals, the report found:

- 50 percent decrease in CLABSI between 2008 and 2014.
- No change in overall CAUTI between 2009 and 2014.
  - However, there was progress in non-ICU settings between 2009 and 2014, progress in all settings between 2013 and 2014, and even more progress in all settings towards the end of 2014.
- 17 percent decrease in SSI related to the 10 select procedures tracked in previous reports.
  - 17 percent decrease in abdominal hysterectomy SSI between 2008 and 2014.
- 8 percent decrease in C. difficile infections between 2011 and 2014.
- 13 percent decrease in MRSA bacteremia between 2011 and 2014.
HAI Prevalence Survey

<table>
<thead>
<tr>
<th>Major Site of Infection</th>
<th>Estimated No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonia</td>
<td>157,500</td>
</tr>
<tr>
<td>Gastrointestinal Illness</td>
<td>123,100</td>
</tr>
<tr>
<td>Urinary Tract Infections</td>
<td>93,300</td>
</tr>
<tr>
<td>Primary Bloodstream Infections</td>
<td>71,900</td>
</tr>
<tr>
<td>Surgical site infections from any</td>
<td>157,500</td>
</tr>
<tr>
<td>inpatient surgery</td>
<td></td>
</tr>
<tr>
<td>Other types of infections</td>
<td>118,500</td>
</tr>
<tr>
<td><strong>Estimated total number of infections in hospitals</strong></td>
<td><strong>721,800</strong></td>
</tr>
</tbody>
</table>

IC Standard 02.02.01
The hospital reduces the risk of infections associated with medical equipment, devices, and supplies which includes:

**Elements of Performance**
- Cleaning and performing low-level disinfection of medical equipment, devices and supplies.
- Performing intermediate and high level disinfection and sterilization.
- Disposing of medical equipment, devices and supplies.
- Storing medical equipment, devices, and supplies.

**Standardized Practices**
- Orientation, training and competency
- Levels of staffing and supervision
- Standardization of process
- Reinforcement
- Ongoing quality monitoring

**IC.02.02.01 Medical Equipment, Devices and Supplies**
- Orientation, training, and competency of health care workers who are processing medical equipment, devices, and supplies
- Levels of staffing and supervision of the health care workers who are processing medical equipment, devices, and supplies

**What Needs TO Be Done TO Improve**
- Training
- Clear concise policies
- Standardization of process
- Follow manufacturers' direction for use
Training and Competency

- Training and Competency
  - Upon hire
  - At least annually
  - Whenever new item or equipment:
    - borrowed
    - leased
    - purchased
  - Whenever new policies and procedures are implemented
- Training should include*
  - Principles of cleaning, disinfection and sterilization
  - Inspection, preparation, and packaging of instruments
  - Worker safety and use of personal protective equipment (PPE)
  - Manufacturer's instructions for use
  - Quality control of processes
  - Endoscope model specific cleaning and disinfection, if applicable

*Abbreviated list for presentation purposes.

- Training is NOT equivalent to demonstrated competency.
- Competency is ability of the individual to perform specific tasks in accordance to the standards that are required.
- Competency should be performed by a competent trainer.

Policies and Procedures

- Clear – no room for interpretation (creativity and work-a-rounds not appropriate).
- Based on:
  - scientifically based standards.
  - manufacturer's instructions for use.
  - infection control and prevention practices.
- Apply to all locations and staff.
- Readily accessible to staff.
Low Level Disinfection

Findings of Noncompliance

- Lack of clear policy
- Separation of Clean/Dirty
- Identifying what is clean
- Proper *wet* contact time
- Not following policy (PPE)
IC.02.02.01 Medical Equipment, Devices and Supplies – Surveyors Have Found:

Failure to properly:
• Clean
• Disinfect
• Sterilize
• Use
• Store

Medical equipment, devices, and supplies

**Room Design**

In hospitals, the decontamination area/room and the packaging, sterilization, and sterile storage rooms should be in physically separate rooms. In ambulatory surgery and office-based surgical facilities where separate rooms might not be possible, the decontamination sink should be separated from the clean work area by either a 4-foot distance from the edge of the sink or a separating wall or screen. If a screen is used, it should extend a minimum of 4 feet above the sink rim. (Facilities Guidelines 2014)

**Existing Space**

• May not allow for the above configuration in existing rooms design.
• AAMI states interim measures are desirable to allow for the appropriate separation of clean/dirty.
• The decontamination sink should be separated from the clean work area by either a 4-foot distance from the edge of the sink or a separating wall or screen. If a screen is used, it should extend a minimum of 4 feet above the sink rim. (Facilities Guidelines Institute, 2014).
New Construction Considerations

• Work volume and departments served
• Type of distribution
• Required equipment
• Space and equipment
• HVAC and other utility systems
• Steam requirements

©2017 Association for the Advancement of Medical Instrumentation – ANSI/AAMI ST79:2017

Cleaning

• Cleaning should be performed at point of use as soon as possible after use.
• Instruments should be handled as little as possible.
• Instruments must remain wet either with a enzymatic or wet towels to prevent drying.
Transportation

Transportation of Instruments
- AAMI states instruments must be contained when transported, type of containment depends on instrument being transported.
- OSHA states instruments must be transported in a closed, leak proof, puncture proof container.
- Containers labeled with a biohazard label.
- All instruments in open positions.

Transportation Equipment
- Be designed to prevent items from falling over or off during transport;
- Be large enough to maintain the security and package integrity of the items being transported;
- Be covered or closed;
- Be decontaminated after each use; and
- Have wheels that turn easily and are routinely cleaned.
Transporting Supplies, Equipment, Specimens

Personal Protective Equipment
- Donned by all persons entering decontamination areas:
  - Fluid-resistant gown or jump suit
  - Hair and shoe covering
- Individuals performing decontamination of instruments or equipment:
  - Heavy-duty gloves
  - Fluid-resistant mask
  - Eye protection

Cleaning
- Detergent dilution
- Manual
- Ultrasonic
- Follow IFU’s
- Remove all parts
- Rinse
- Inspect
Cleaning Agents

- Follow IFU's.
- Volume and temperature of water is essential to the efficacy of the product.
- Change solution after every use.
- Monitor water temperature per IFU's.
- NOTE-Lukewarm water and detergent solutions (at temperatures optimally in the range of 27°C to 44°C [80°F to 110°F], but not to exceed 60°C [140°F]).

Decontamination

- Follow recommended dilution of cleaning chemicals and soak times.
- Rinse according to cleaning agent manufacturer's instructions.
- Brushes:
  - may be labeled as single or multiple use.
  - reusable brushes should be disinfected.
  - In accordance with device instructions.
- Follow IFU's a must.
- Cleaning solution is clean, which means it may be after one use.
- Instruments in open position.
- Rinse using IFU's.
- Cloths should be clean and non linting.
- Brushes reusable or disposable.
Decontamination (cont.)
• Follow manufacturer's instructions.
• May require:
  – Manual.
  – Mechanical.
  – Combination of both.
• Ensure entire instrument is disassembled, cleaned and rinsed including valves, channels, connectors and all detachable parts in accordance with manufacturer's instructions.

Preparation of Instruments
• Cleaned.
• Dried.
• Inspected for cleanliness, flaws, and damage, assembled.
• Packaged according to the manufacturer's written IFU.

Noncompliance Findings Sterilization
• Quality monitoring parameters (physical, chemical, and biological) not being consistently conducted or documented per manufacturer's instructions, or use of evidence based guidelines.
• Approximating use of cleaning products not measuring per manufacturer's instructions.
• No documentation of routine cleaning or preventative maintenance of the sterilizer.

Noncompliance High Level Disinfection
• Use of a low-level disinfectant wipe instead of a high level disinfectant to reprocess a vaginal ultrasound probe between patient use.
• Lack of quality monitoring documentation (temperature, time. Minimal effective concentration of high-level disinfectant per manufacturers' instructions or evidence based guidelines.
• Reusable brushes to clean endoscopes not being cleaned or disinfected between each use or at the end of the day per evidence -based guidelines or manufactures' instructions.
• Not following device manufacturer instructions for use or high level disinfection evidence-based guidelines for endoscopes or probes (vaginal, rectal).
IC.02.02.01 Medical Equipment, Devices and Supplies
• Standardization of process regardless of whether it is centralized or decentralized.
• Reinforcing the process.
• Ongoing quality monitoring.

Performing Intermediate and High Level Disinfection and Sterilization

Equipment
• Use in accordance to manufacturer's instructions.
• Test at installation and at least weekly, if applicable.
Monitoring and Documentation

• If the device includes a printout, staff should verify that all sterilization parameters were met by initialing the printout.
• If no recording device is part of the device, the operator should verify in writing that sterilization parameters as indicated by the manufacturer were met.

Record Keeping

• The date on which service was requested.
• The model and serial number of the sterilizer.
• The location of the equipment (facility identification, if applicable).
• The name of the individual from the health care facility who requested and authorized the service.
• The reason for the service request.
• A description of the service performed (e.g., calibration, repair).
• The types and quantities of parts replaced.
• The name of the person who performed the service.

Packaging and Labeling

• Sterile Items:
  – Compatible with process.
  – Used according to manufacturer's instruction.
• High Level Disinfection:
  – Identify the date reprocessed, person reprocessing, date reprocessing expired.
• Clean Items:
  – Clearly able to differentiate from sterile.

Labeling Sterile Products

• Label should:
  – Not compromise the barrier.
• Include:
  – Contents.
  – Date sterilized.
  – Identifier that allows the item to be tracked back to the sterilization load.
Loading

Figure 7 – Examples of sterilizer cart loads
(Figure courtesy of STERIS Corporation)

Sterilization Monitoring
- Physical Monitoring
- Chemical Indicators External Type 1
- Bowie-Dick Type 2
- Internal CLs
- Type 3
- Type 4
- Type 5
- Type 6
- BIs

Immediate Use Sterilization
- Immediate-use steam sterilization (IUSS) should not be used for purposes of convenience or as a substitute for sufficient instrumentation. Instrument inventories should be sufficient to meet anticipated surgical volume and to ensure that there is enough time to complete all critical elements of reprocessing.
- Immediate-use steam sterilization should be kept to a minimum and should be used only in urgent clinical situations.
**Storage of Sterile Devices**

- AAMI: sterile items be stored:
  - At least 8 inches of the floor.
  - 18 inches below ceiling or sprinkler.
  - 2 inches from outside wall.
  - Away from any location where they could become wet.
- Dust covers may be used to protect sterilized.
- If open shelves are used, traffic control, ventilation, and housekeeping should be monitored.
  - Bottom shelves should be solid to prevent soiling when floors are cleaned.
  - Covered or closed cabinets limit dust and are preferred for seldom used items.

**AAMI**

- This recommended practice covers steam sterilization in health care facilities, including dental.
- The recommendations are intended to promote sterility assurance and to guide health care personnel in the proper use of processing equipment.
- Included within the scope of the recommended practice are functional and physical design criteria for sterilization processing areas (decontamination, preparation, sterilization, and sterile storage areas); staff qualifications, education, and other personnel considerations; processing procedures; installation, care, and maintenance of steam sterilizers; quality control; and quality process improvement.
Essential References for Endoscopy
- Society of Gastroenterology Nurses and Associates (SGNA)
- American Society for Gastrointestinal Endoscopy (ASGE)
- Gastrointestinal Society of Australia (GESA)

Essential References
- AAMI
- AORN
- CDC Guidelines
- OSHA Bloodborne Pathogens Standard
- State Regulations

Immediate Jeopardy?

Surgical Attire for Head and Facial Hair
AORN Recommendation IV
Using the Risk Assessment to Set Goals and Develop the Infection Prevention and Control Plan

Using the Risk Assessment

Conducting a risk assessment is a crucial task for health care organizations, but identifying risks, compiling them into an assessment, tucking the assessment into a binder, and declaring the job “done” is not the point of the process. The risk assessment should serve as the basis for developing written goals and measurable objectives for the infection control program. In other words, the assessment is the foundation of every organization’s infection prevention plan. This chapter provides information about Joint Commission and JCI requirements related to setting goals to minimize the possibility of transmitting infections. It gives specific guidance on developing an infection prevention and control plan.

Setting the Goals

The Joint Commission’s Infection Prevention and Control (IC) standards require organizations to use the risk assessment process to set goals for a comprehensive infection control plan. Specifically, Standard IC.01.04.01 states, “Based on the identified risks, the [organization] sets goals to minimize the possibility of transmitting infections.”

The standard includes these elements of performance:

The organization’s written infection prevention and control goals include the following (EPs 1–5):

1. Addressing its prioritized risks.
2. Limiting unprotected exposure to pathogens.
3. Limiting the transmission of infections associated with procedures.
4. Limiting the transmission of infections associated with the use of medical equipment, devices, and supplies.
5. Improving compliance with hand hygiene guidelines

Joint Commission International (JCI) accreditation standards also require organizations to establish goals for their infection prevention and control program. Standard PCI.5 requires organizations to “design and implement a comprehensive program to reduce the risks of health care–associated infections in patients and health care workers.” Measurable Element 6 of that standard states: “Risk reduction goals and measurable objectives are established and regularly reviewed.”

International organizations should use their risk assessment to guide the program and set appropriate goals.

When determining the goals, organizations may want to look at the mission statement for the year as a starting point. The Joint Commission standard’s five elements of performance (EPs) also describe the minimum goals that organizations should incorporate into the plan. As discussed in Chapter 2, prioritizing risks as part of the assessment process is important to determine where to focus infection prevention and control (IPC) resources. The emphasis should be on using resources wisely to address the risks that have the most serious potential for harm. By linking goals to the highest priorities identified in the risk assessment, an organization is moving from knowing about potential problems to working to prevent them. For example, if the organization identifies the incidence of Vancomycin-resistant enterococci (VRE) as a significant risk, staff should set a goal to reduce the incidence and take action to meet that goal. The main focus for each goal is a measurable objective, an action plan, and an evaluation process to determine if the objective has been met. Sidebar 3-1 on page 48 provides a list of organizations that offer best practices and guidelines that may be used when setting goals and developing the IPC plan.

Limiting Unprotected Exposure to Pathogens

After addressing prioritized risks, the second part of the ICP goal-setting process should include limiting unprotected exposure to pathogens. This EP refers to the strategies organizations use to protect patients, residents, staff, visitors, and others from contact with potentially infectious organisms. The use of personal protective equipment (PPE) falls into this category. PPE provides a physical barrier to reduce the risk of transmitting pathogens, to prevent exposure to potentially
infectious material, and to reduce cross-contamination during patient care activities. PPE includes gloves to protect hands, gowns to protect clothing and skin, surgical masks to protect the mouth and nose, respirators to protect the respiratory tract from airborne pathogens, goggles to protect the eyes, and face shields to protect the eyes, mouth, and nose.¹ Staff should not have to search for PPE; leaders should ensure through the goal-setting process that PPE is readily and easily available in an organization. Leaders should also work with infection prevention and control personnel to make sure the right types of PPE are being used for infection prevention and control. Isolation, engineering controls for tuberculosis (TB) and other infections, barriers during construction, safety hoods in the laboratory, and special preparation areas in the pharmacy for mixing intravenous fluids also would be appropriate topics or issues within the goal-setting process. In addition, use of aseptic technique and hand hygiene fall within this category.

Sidebar 3-1: Use Best Practices, Guidelines

Health care organizations should consider best practices and guidelines for combating infections. Following is a list of organizations that provide resources:

U.S. Government Accountability Office

The U.S. Government Accountability Office (GAO) has issued a series of reports on HAIs. An October 2008 report addressed state reporting programs and individual hospital initiatives to reduce these deadly infections, and a report released in April 2008 urged the U.S. Department of Health and Human Services (HHS) to establish greater consistency and compatibility of the data gathered on HAIs. In the latter report on necessary leadership, GAO recommended that HHS prioritize the large number of CDC-recommended practices in order to promote greater implementation.

A Compendium of Strategies to Prevent Health Care–Associated Infections in Acute Care Hospitals

The compendium, issued in October 2008, provides practical, science-based strategies to prevent six health care-associated infections. These six HAIs are catheter–associated bloodstream infections, catheter-associated urinary tract infections, Clostridium difficile, MRSA, surgical site infections, and ventilator-associated pneumonia (VAP).

The compendium was produced by SHEA and the Infectious Diseases Society of America (IDSA), in partnership with the American Hospital Association (AHA), APIC, and The Joint Commission. Publication of the compendium was an important component in the development of The Joint Commission’s National Patient Safety Goal on HAIs, which includes MDROs, central line–associated bloodstream infections, and surgical site infections.¹ The strategies, which have also received the support or endorsement of 29 other health care and safety-related organizations, will be updated by infection control experts at SHEA and IDSA as science evolves.

These strategies are science-based and offer practical steps for all levels of health care personnel, especially those working directly with patients in acute care hospitals, to prevent infections. The compendium includes numerous guidelines that have addressed infection control for many years; it also includes information on newer research to identify the best scientific strategies to prevent HAIs. The strategies are presented in a concise format for the six HAIs, they are implementation focused, and they prioritize recommendations based on the strength of evidence, the consensus of a multidisciplinary panel of experts, and the intensity of resources required for implementation. Also included are recommended performance measures for internal quality improvement efforts. Recommendations contained in the compendium are prioritized into two categories:

1. Minimum basic practices that should be adopted by all acute care hospitals

2. Special approaches for use in locations and/or populations within the hospitals when infections are not controlled using basic practices

Although the compendium is based on previous recommendations and current research, it represents an improvement over previous documents for several reasons.

First, compendium recommendations are written in a much clearer and more concise manner than previous guidelines; the information is not new, but the presentation of the information is unique. “In developing these strategies, we looked at all existing HAI guidelines and literature to create recommendations that are understandable, easy-to-use, and stress accountability,” said David Classen, IDSA spokesperson and coauthor of the compendium.¹ Second, the compendium not only offers best practices for hospitals to follow in their fight against HAIs, but it also provides hospitals with advice on which approaches not to pursue. In addition, although it represents a compilation of current research and evidence-based recommendations, it is distinguished from previous guidelines because it presents practical recommendations using an implementation-focused format. As the compendium’s lead author and SHEA spokesperson, Dr. Deborah S. Yoke, states, “Healthcare providers’ goal is to offer the best and safest patient care possible. Not all HAIs are preventable, but it is imperative that we implement practices that we know are effective to prevent as many of these infections as possible.”¹ Lastly, the compendium takes a two-tiered approach by recommending special approaches when first-line basic strategies are not successful in lowering infection rates.
Other measures designed to limit exposure to pathogens include the following: Airborne infection isolation rooms: Also called negative pressure isolation rooms, these are patient-care rooms designed for one patient that are used to isolate individuals who may have an airborne infectious disease.²

**Waterborne pathogens precautions**: Organizations should take steps to ensure their facility’s water supply does not become contaminated, including water in cooling towers, domestic hot and cold water systems, and aerosolizing water systems. For example, health care organizations report 600 to 1,300 water-related *Legionella pneumophila* infections every year. Water systems must be properly designed, installed, and maintained. The Joint Commission recommends organizations work with design professionals who adhere to American Society of Heating, Refrigerating, and Air-Conditioning Engineers and American Institute of Architects guidelines. Organizations should also follow the CDC’S Guidelines for Environmental Infection Control in Health Care.²

**Bloodborne pathogens precautions**: PPE, discussed above, is a key method of preventing exposure to bloodborne pathogens. Organizations should be aware of and adhere to U.S. Occupational Safety and Health Administration Standards (OSHA) related to bloodborne pathogens. Among other precautions, OSHA requires that frontline health care workers be involved in selecting devices that have engineered sharps safety protection and that all available safety devices be used unless there is a patient or employee safety issue associated with the device. The CDC offers resources on some ways organizations can prevent exposure to bloodborne pathogens here: http://www.cdc.gov/ncidod/dhqp/bp.html.⁹
Limiting Transmission of Infections Associated with Procedures

Minimizing the risk of transmitting infections associated with procedures is a crucial component of the goal-setting process. This includes procedures used to diagnose, improve, or maintain health.

Invasive procedures such as surgery, for example, carry significant infection risks. Risks for surgical site infections (SSIs) vary according to factors such as the following:

- Health of the patient
- Duration of the procedure
- State of the wound (clean or dirty)

For example, a healthy patient having clean hernia repairs has a relatively low risk for SSI, as compared to a trauma patient requiring bowel surgery.

Surgical site infections (SSIs) are among the most frequently occurring types of HAIs, globally, according to the World Health Organization (WHO). Surgical site infections have been shown to compose up to 20% of all healthcare-associated infections.

With approximately 27 million surgical procedures performed in the United States each year, the number of SSIs are also on the rise, with patients “opened up” for surgery exposed to risks that bacteria will be introduced into the blood, tissues, and organs. An estimated 290,000 patients acquire SSIs each year, accounting for 14% to 16% of all healthcare-acquired infections.

To comply with the Joint Commission EP, goals and related policies and procedures to limit the risk of transmitting infections should be established for all surgical care service areas, including preoperative, perioperative, and postoperative settings. This EP recognizes that settings where invasive procedures are performed require constant vigilance from the IPC team to ensure that effective policies and practices are being carried out. These settings can include, but are not limited to the following:

- Interventional radiology
- Endoscopy and bronchoscopy settings
- Chemotherapy
- Anesthesia
- Dialysis

Goals Related to Infections Associated with Equipment, Devices, Supplies

The use of medical equipment, devices, and supplies is also part of the infection prevention and control goal-setting process and a specific EP. This includes safe use of medical devices such as IV needles and tubing, bronchoscopes, and ventilators; storage of supplies; reuse of single-use devices; managing equipment and sterile supplies, and so forth. The goals and associated policies related to cleanliness, disinfection, sterilization, storage, and transport of equipment, sterile supplies, and single-use devices should be reviewed and approved by the IPC committee. Compliance with infection prevention practices should be monitored as delegated by the organization.

Goals Related to Improving Hand Hygiene Compliance

Improving compliance with hand hygiene guidelines is the final EP for this standard; this is also a National Patient Safety Goal requirement for all accredited organizations. The JCI standard that addresses hand hygiene does so in concert with other important precautions. Standard PCI.9 states, “Gloves, masks, eye protection, other protective equipment, soap, and disinfectants are available and used correctly when required.” The measurable elements include provisions related to hand hygiene and other IPC precautions, including the following:

1. The organization identifies those situations for which gloves and/or masks or eye protection are required.
2. Gloves and/or masks or eye protection are correctly used in those situations.
3. The organization identifies those situations for which hand washing and hand disinfection or surface disinfecting procedures are required.
4. Handwashing and hand disinfection procedures are used correctly in those areas.
5. The organization has adopted hand hygiene guidelines from an authoritative source.
International organizations also should comply with International Patient Safety Goal 5, Measurable Elements 2 and 3, which require organizations to adopt or adapt currently published and generally accepted hand hygiene guidelines, and implement an effective hand hygiene program.

Hand hygiene cannot be overestimated as an infection prevention and control measure. Goals and objectives related to hand hygiene can include a specified increase in hand hygiene compliance, improved hand hygiene technique, and improved accessibility to hand hygiene products. Strategies to improve hand hygiene compliance are discussed in Chapter 6.6

Including Objectives to Make Goals Measurable
As discussed at the beginning of this chapter, goals are the general, non-measurable statements that establish intent, direction, and board parameters for the desired achievements of an infection control program.7 By adding objectives to goals, organizations move beyond communicating intent to incorporating specific numeric targets and timeframes for outcomes. For example, a hospital might set a goal that the IPC program will reduce catheter–related bloodstream infections. This goal becomes an objective by stating that the such infections in the medical intensive care unit (MICU) will be reduced by 30% from the previous year’s incidence rate and by a certain date.

The following are examples of goals and objectives8,9:

**Goal: Reduce VAP in MICU**

**Objective:** Reduce VAP by 50% or more—from 1.4/1,000 ventilator days to 0.7/1,000 ventilator days in the medical MICU by June 2011. Achieve zero VAPs for minimum of 3 months by January 2011 in MICU. Perform daily assessment of need for ventilators documented for 98% MICU ventilated patients by January 2011.

**Goal: Decrease sharps injuries in employees**

**Objective:** Reduce needlestick injuries in direct care and support staff by at least 60% from current rate within six months. Reduce scalpel injuries in surgical staff by 80% from current rate with implementation of pass zone by June 2011.

**Goal: Increase immunizations in organization**

**Objective:** Identify and immunize at least 90% of eligible patients with pneumococcal vaccine by December 2011. Immunize 100% eligible staff in organization with influenza vaccine within six months of initiating a mandatory flu vaccine program.

**Goal: Increase hand hygiene compliance**

**Objective:** Achieve at least 95% compliance with hand hygiene policy on at least 80% of nursing units by October 2011.

**Goal: Reduce transmission of infectious disease in the organization**

**Objective:** Achieve at least 98% compliance with contact isolation policy for patients with MRSA and *Clostridium difficile* on all patient care units during 2011.

**Goal: Prevent infection**

**Objective:** Achieve a rate of at least 95% notifications to IPC before any construction, renovation, or alteration in facility for all appropriate (per policy) construction projects by March 2011.

**Goal: Maintain consistent cleaning of reusable patient equipment in the intensive care units**

**Objective:** Achieve at least 98% notification with appropriate cleaning procedures for reusable direct care patient equipment during patient stay and at discharge in the MICU, SICU, and NICU during 2011.

**Goal: Prepare for the response to an influx or risk of influx of infectious patients**

**Objective:** Meet at least 90% of Hospital Emergency Incident Command System (HEICS) plan requirements related to infectious patients during at least three drills in 2011. Goals and measurable objectives establish targets for performance improvement activities and allow the IPC program to evaluate progress and success or failure in these efforts. The established goals and objectives are then used to develop an infection prevention and control plan.

Goals and measurable objectives establish targets for performance improvement activities and allow the IPC program to evaluate progress and success or failure in these efforts. The established goals and objectives are then used to develop an infection prevention and control plan. IC.03.01.01 requires organizations to evaluate goals; creating measurable objectives facilitates such an evaluation.
Developing and Assessing an Infection Prevention and Control Plan

Although The Joint Commission and JCI both require organizations to have an infection prevention and control program that takes into account their identified infection risks, many still do not have comprehensive or effective plans. For example, some organizations may focus excessively on hand hygiene, while others may view IPC as a static process and fail to take into account new risks.

The risk assessment and goal-setting processes required as part of accreditation are designed to give organizations the information needed to create a dynamic IPC plan that allows for a rapid response to changes and demands in the environment, such as emerging infectious diseases, new requirements for mandatory reporting of HAI information, new services, and construction projects. Figure 3-1, below, shows this annual process.

Organizations should also make sure that the IPC plan has an appropriate scope, covering not just patients but all individuals who interact with the organization. This includes associates, physicians, students, contract workers, volunteers, and others throughout the organization.

**TIP Creating the Foundation**

Every IPC plan should have a description of risks, a statement of goals, a description of strategies to address risks, and a description of how these strategies will be evaluated. These four components form the backbone of an organization’s IPC plan and represent a continuous process improvement approach to managing infection risks. If any one of these components is missing, the organization will have put itself at risk for infection-related problems.

Using a multidisciplinary approach, the team developing an IPC plan should address issues such as the following:

- Effective management of the IPC program
- Infection risks and prevention and control strategies
- Evaluation process
- Occupational health
- Emergency planning
- Communication
- Applicable requirements of government, accrediting, and other organizations
- Leadership support and resources allocated

**Figure 3-1: Annual Infection Control and Prevention Process**

This figure illustrates the evaluation process as part of the infection prevention and control (IPC) program.

The concise plan should identify priorities and needs, set goals and objectives, list strategies to meet identified goals, and set out an evaluation process. The plan’s background section—including mission, demographics, reporting structure, and so forth—is likely to stay relatively stable from year to year unless there are significant changes in the program.
plan, with risk assessment priorities, goals, objectives, and so forth, is the area more likely to change during annual reviews. The plan may include or append narratives, policies and procedures, protocols, practice guidelines, clinical paths, care maps, or other relevant documents. Table 3-1, below offers content suggestions to consider when developing an IPC plan. Sidebar 3-2 on page 54 offer tips for writing the IPC plan.

**Table 3-1. Suggested Content for an IPC Program Plan**

<table>
<thead>
<tr>
<th>Background Information</th>
<th>Action Plan</th>
<th>Supportive Documents</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Information About the Organization Mission/Vision/Structure/ Processes of the IPC</td>
<td>- Risk Assessment Priorities</td>
<td>- Surveillance Plan</td>
<td>- Research Activities</td>
</tr>
<tr>
<td>- Scope of Services</td>
<td>- Goals and Objectives</td>
<td>- Outbreak Investigation</td>
<td>- Performance Improvement Activities</td>
</tr>
<tr>
<td>- Staffing and Credentials</td>
<td>- Action Plans</td>
<td>- Education Plan</td>
<td>- Key Resources</td>
</tr>
<tr>
<td>- Decision Authority for IPC (Authority Statement)</td>
<td>- Evaluation Methods</td>
<td>- Key Procedures and Policies</td>
<td>- Budget</td>
</tr>
<tr>
<td>- Integration of IPC with Patient Safety and Performance Improvement</td>
<td>- Responsible Persons</td>
<td>- Care Plans</td>
<td>- Decision Algorithms</td>
</tr>
<tr>
<td>- Committee Functions and Responsibilities</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- Education of Staff, Patients, and IPC Team</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- Consultation Services</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- Role in Emergency Preparedness and Management</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- Public Health Partnerships</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- Relationship with Occupational Health/Employee Health Regulatory Compliance</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- Specific Patient Care or Environmental Issues</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- Other Special Issues</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Barbara M. Soule, RN, MPA, CIC.

Joint Commission Standard IC.01.0501 requires organizations to have an infection prevention and control plan. Organizations accredited by Joint Commission International (JCI) also are required to establish priorities and activities to prevent and reduce the incidence of HAIs in standards PCI.3 and PCI.5. The IPC plan should have the following two sections:

- Background information about the program and services offered by the IPC department
- Annual action plan

*Also see the sample IPC plan found in Appendix, and in the online extras for this book at http://www.jcri.com/ RAH0109R/ed.
The “background” part of the IPC plan establishes the foundation for the work that will be carried out throughout the organization. For example, the plan should include a mission or purpose as well as a vision. This might be a statement such as, “The infection prevention and control program minimizes risk of infection to promote a high quality of care, safety, and well-being in patients, staff, and visitors.” Background information in the plan may include the following:

- Structure of the program: staff and roles, committees, authority of designated individuals, and so forth
- Scope of services: staff education and training, surveillance and outbreak investigation, provision of PPE and hygiene products, and so forth
- Use of scientific knowledge, practice guidelines, laws and regulations, and so forth

The second part of the IPC plan provides everyone in the organization with the details of what will be accomplished that year. This includes the goals, objectives, and evaluation process.

The following sections discuss Joint Commission and JCI standards related to developing an IPC plan. Sidebar 3-3 on page 57 addresses the need for strong leadership support for the IPC plan and activities. (See Table 3-2 on page 55 for an example of risks and possible solutions.)

**Sidebar 3-2: Writing an IPC Plan**

To get started on writing the IPC plan, consider the following tips:

- Develop an outline and create a table of contents for the written IPC plan
- Identify the local, state, and federal regulations and other requirements (i.e., accreditation standards and IPC standards and guidelines) that are applicable to the specific health care setting
- Perform a risk assessment
- Establish and prioritize goals and develop measurable objectives
- Develop strategies to meet the IPC program’s goals and objectives
- Establish mechanisms for evaluating the effectiveness of the IPC program
- Set up a system to be notified of any new services or procedures
- Develop a timeline and assign responsibility for periodically reviewing the plan
- Ask for review and comments from key personnel and revise, as needed
- Network with infection professionals who practice in similar health care settings to obtain and share information needed to develop and maintain the IPC program


**Use of Evidence-Based Guidelines or Expert Consensus**

Organizations should use evidence-based national guidelines or, in the absence of such guidelines, expert consensus when developing IPC activities. The Joint Commission and JCI both require organizations to use the most current scientific evidence and expert consensus thinking to update the IPC plan and program, which includes patient care, maintenance of the environment, staff safety, and so forth. These requirements can be found in Joint Commission Standard IC.01.05.01, EP 1, and JCI Standard PCI.3.

**Written Description of Activities**

The Joint Commission and JCI require that the organization’s infection prevention and control plan include a written description of the activities, including surveillance, to minimize, reduce, or eliminate the risk of infection. By documenting activities, organizations make clear how the program’s resources will be allocated and used. Putting the planned activities into writing also helps to emphasize the importance of the activities and maintains focus for leadership and staff. To ensure that this written document can be used as intended, the plan should be written in a simple style that is understandable and accessible to the infection preventionists and other staff who will carry out the activities. Likewise, the JCI standard requires organizations to regularly review its risk-reduction goals and measurable objectives.

Each organization must design a surveillance program that takes into account its unique characteristics, populations, services, risks, and requirements. For example, surveillance activities in ambulatory settings that do not perform invasive procedures are focused on processes or practices such as the percentage of eligible patients who receive immunizations, compliance rates for hand hygiene, and assessment of environmental cleanliness. A hospital, for example, focuses surveillance on outcomes of care such as HAIs.

There is no nationally or internationally standardized method for identifying, collecting, managing, analyzing, and reporting data on infections, but the CDC’s NHSN surveillance methodology and criteria are used by a variety of health care organizations and settings worldwide. Surveillance definitions have been established for hospital, dialysis unit, long term care, and home health care and home hospice settings.
The Joint Commission standard that requires organizations to have an IPC plan includes an EP that the plan must contain a written description of the process for evaluating the goals and objectives that have been set out. Likewise, the JCI standard requires organizations to regularly review its risk-reduction goals and measurable objectives. This provides a mechanism to guide the evaluation process and encourages organizations to regularly reevaluate the plan. The evaluation process should be determined by the IPC committee, patient safety committee, and organization leadership and should be aligned with organizational performance evaluation methods.

Table 3-2. IPC Risks and Possible Solutions

<table>
<thead>
<tr>
<th>IPC Risk</th>
<th>Possible Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care—associated infection outbreak</td>
<td>Have a response plan in place that involves immediate response, education, and data monitoring</td>
</tr>
<tr>
<td>No risk assessment or risk priorities in the IPC plan</td>
<td>Work with a multidisciplinary team to identify risks, considering the organization's geographic location, community environment, patient populations, and services provided, as well as relevant surveillance data.</td>
</tr>
<tr>
<td>IPC plan does not reflect priorities</td>
<td>Revise plan to take into consideration identified risks. These priorities should be posted where IPC staff can easily see them. They should also be reviewed regularly.</td>
</tr>
<tr>
<td>No measurable objectives or evaluation of objectives for the IPC plan</td>
<td>Work with a multidisciplinary group to establish goals that reflect the organization's priorities. Data collection should allow for measuring how the organization meets these goals.</td>
</tr>
<tr>
<td>Lack of communication and collaboration between departments about IC issues</td>
<td>Establish IPC as an organizationwide program. Leadership from all aspects of an organization should be involved in IPC activities. If possible, IPC professionals should sit on committees throughout the organization.</td>
</tr>
<tr>
<td>Minimal data collection</td>
<td>Collect data that help identify risks, respond to issues, determine the effectiveness of IPC initiatives, and meet with local, state, and federal regulations.</td>
</tr>
<tr>
<td>Inadequate resources allocated to the IPC program</td>
<td>Dedicate sufficient resources to the IPC program. Using creative staffing solutions, such as hiring contract employees, may help with this issue.</td>
</tr>
</tbody>
</table>


**Evaluation of the IPC Plan**

The Joint Commission standard that requires organizations to have an IPC plan includes an EP that the plan must contain a written description of the process for evaluating the goals and objectives that have been set out. Likewise, the JCI standard requires organizations to regularly review its risk-reduction goals and measurable objectives. This provides a mechanism to guide the evaluation process and encourages organizations to regularly reevaluate the plan. The evaluation process should be determined by the IPC committee, patient safety committee, and organization leadership and should be aligned with organizational performance evaluation methods.
The idea behind an evaluation of the IPC plan is to determine which activities of the program are effective and which activities should be changed to improve outcomes. Organizations should ask themselves: Have our interventions been correct? Have they been effective? Do we need to reevaluate and determine whether different interventions would be more appropriate? Does the risk analysis need to be conducted again? The following strategies offer guidance for answering these questions:

- **Evaluate whether changes need to be made to the IPC program by consulting sources such as the CDC, WHO, international agencies, and other stakeholders regarding emerging diseases.** As previously discussed, organizations must conduct an evaluation of the IPC program at least annually and/or whenever risks change significantly and should use expert consensus or guidelines to develop interventions. For example, if a state experiences a whooping cough outbreak in the winter or an uptick in a pathogen such as measles, new guidelines and information from studies should be incorporated into organizational plans, policies, and procedures.

- **Reevaluate the effectiveness of the IPC plan if/when the scope of the organization’s services changes.** When an organization changes the scope of its services, introducing new services or new sites of care, the organization should consider whether there are new infection risks. For example, if an organization adds a wing to provide cardiac care, a Level III neonatal intensive care unit, or a Level I high-risk trauma center, the organization may need to make adjustments to IPC protocols to protect patients in the new areas.

- **Use data collection and analysis to analyze the effectiveness of the IPC program.** For example, external comparisons (with other organizations) can be done against national benchmarks or published studies, and internal measurement (comparing the organization’s performance over time) can also be conducted. Many organizations use some kind of statistical analysis tool for these purposes. Commonly used tools include run charts and control charts that permit statistical analysis of data points over time.

- **Open communication about IPC should be welcomed so that valuable feedback about the effectiveness of the plan and program can be obtained.** Organizations should ensure that staff feel comfortable voicing their concerns about infection control. This feedback can be gathered through tools such as surveys, focus groups, discussions, and hotlines. Whichever method is chosen should be easy for staff members to use.

### TIP Resources for an IPC Program

Among the physical—as opposed to human—resources that should be allocated for an infection prevention and control program are systems to access information, laboratory support, equipment, and supplies. Access to information includes access to clinical/health records, employee health records, admission logs, incident reports, lab records, pharmacy records, treatment plans, performance improvement data, and systems that will assist with the collection, analysis, and reporting of necessary data. Equipment may include computers and printers needed for data management, while supplies may be alcohol-based hand rubs and personal protective equipment such as gowns, masks, gloves, and goggles.

**Reference:**
Summary Reports

A good method to use for evaluating the IPC plan is a summary report. Organizations that already have an annual infection control committee or annual department report may use this as the evaluation. Or, the evaluation can be performed collaboratively by individuals, a group of stakeholders, or a committee.

Although each evaluation process and report format will be somewhat different, depending on the needs and nature of the organization and its programs, the evaluation report should consist of the following components:

- A description of organizational changes that influence the scope of the IPC program.
- A review of each objective of the IPC program linked to the program’s scope and goals. Include activities performed to meet the goal and data that show how measurable objectives are being achieved.
  - Data may be presented in a table or a graph. Include any infection control data that are presented in the institution’s quality dashboard.
  - Objectives that cannot be evaluated on the basis of data can be evaluated using qualitative methods, as with employee or patient feedback. For example, if one objective is to educate staff on a particular topic, a pre-education and post education evaluation of knowledge about the topic can be performed and described.

Sidebar 3-3: Joint Commission Leadership Standards and Infection Control

What goes into effective leadership at a health care organization? The answer is not so simple, because leaders must manage a diverse and, at times, complex set of responsibilities. But the bottom line is that leaders are responsible for all aspects of care provided to patients. This makes infection control a leadership responsibility.

The Joint Commission Leadership standards provide a framework for effective leadership by identifying and defining various leadership groups and their responsibilities. Standards address the key issues of leadership structure, leadership relationships, culture and system performance expectations, and operations. An organizations culture, systems, and leadership structure and relationships all come together to drive and shape operations.

Establishing a culture that is focused on preventing infections is one of many responsibilities that leaders must meet. As with other initiatives, the key factors in success include the following:

- A culture that fosters safety as a priority for everyone who works in the organization
- The planning and provision of services that meet the needs of patients
- The availability of resources—human, financial, and physical—for providing care
- The existence of competent staff and other care providers
- Ongoing evaluation of and improvement in performance

Specifically, Joint Commission leadership standards relate to infection control in the following ways:

- Leaders create and maintain a culture of safety and quality throughout the organization. Since preventing infections is one of the key strategies for promoting safe, high-quality care for patients or residents, in both the inpatient and outpatient settings, it is important for leadership and the IPC program team to collaborate to establish this culture and safe environment. Infection preventionists (IPs) should take a proactive approach to keeping leaders apprised of the status of the IPC program goals and objectives, any significant changes, sentinel events, clusters or outbreaks, and other issues. Communication with leaders is also important. Leaders should know about the successes of the program, such as reductions in infection rates, new strategies that have proven effective, and the financial implications of preventing infections.

- The organization uses data and information to guide decisions and to understand variation in the performance of processes supporting quality and safety. This standard implies that the IPC program will supply the leaders with valid and reliable information to use in making care decisions. The data may come from internal surveillance information, the literature, or regulatory agencies. IPs must take a hands-on approach to providing leaders with important and timely information.

- The organization communicates information related to safety and quality to those who need it, including staff, licensed independent practitioners, patients, families and external interested parties. One of the responsibilities of the IPC team is to have a communication strategy to share IPC information with the leaders, medical and clinical staff, support teams, and patients and families. This may be in the form of a written newsletter, eNews, educational programs, podcasts, webcasts, videos, or personal conversations. The role of the organizational leaders is to support the communication systems and provide the resources to get the important information to all people who need it.

Reference:
• A summary of any important issues or activity that was not part of a specific objective. These may become part of next year’s objectives. Examples include biological disaster and construction activities, investigation of practices at a new facility, special assigned projects, and so forth.
• A description of the challenges that occurred over the year and the actions implemented. This information will influence planning for the coming year.

**TIP Common Approaches in Successful Intervention Programs**

Infection prevention and control programs that achieve great success in reducing risks have common approaches. Successful interventions include the following aspects:

- Team driven, staff empowered
- Commitment from administration
- Involvement of practice leaders as champions
- Uniform policies and procedures that include evidence-based practices
- Supplies facilitating safe and evidence-based practice
- Education and competency verification
- Monitoring of practice and outcomes via surveillance
- Communication, including outcome feedback to staff
- Evaluation of interventions and continuous improvement
- Hardwiring of intervention into “culture” to maintain the gain
- Celebration of success!

Reference:

**A Plan That Produces Desired Results**

Creating and sustaining a dynamic and comprehensive IPC program is an ongoing process. Infection risks must be identified and addressed through goals, with activities evaluated to determine effectiveness. Only then can real progress be made in achieving the goal of minimizing the possibility of transmitting infections.

Although Chapter 3 has focused on the components necessary to create a successful IPC plan, considering the reasons organizations struggle is worthwhile. Infection prevention and control programs may not produce desired results for three common reasons:

- Lack of knowledge (staff do not know how to perform the task correctly, or they do not understand the policy or process or why it is important).
- Inadequate system support, such as lack of equipment or supplies or barriers to getting or using the equipment or supplies (staff members know how to do the task, but the equipment or supplies do not support the task or are unavailable or do not work) or other barriers in the system preventing the desired behavior.
- Lack of motivation or management reinforcement to perform the task correctly (staff members know how, and equipment or supplies are appropriate, but they still do the task incorrectly).

Chapter 4 discusses infection risk that occur frequently in different health care settings.
References


©The Joint Commission
Appendix A: Resources

Print Resources

*JCR* periodical articles can be purchased on PubMed via Ingenta ([http://www.ingentaconnect.com/](http://www.ingentaconnect.com)).

Electronic Resources

The Joint Commission: [http://www.jointcommission.org](http://www.jointcommission.org)

Joint Commission Resources: [http://www.jcrinc.com](http://www.jcrinc.com)

**NOTE:** The Internet is an ever-evolving environment and links are subject to change without notice.
Appendix B: Faculty Biographies

**NOTE:** These presenters do not have any financial arrangements or affiliations with corporate organizations that either provide educational grants to this program or may be referenced in this activity. These presenters have also attested that their discussion will not include any unapproved or off-label use of products.

**Lisa A. Waldowski, DNP, PNP, CIC**  
Director of Infection Prevention  
The New York Eye and Ear Infirmary of Mt. Sinai

As of January 2018, Lisa Waldowski is the Director of Infection Prevention at The New York Eye and Ear Infirmary of Mt. Sinai, applying an Infection Prevention and Control Program to an ambulatory surgical center model within a hospital environment.

Prior to this role, Dr. Waldowski was the Infection Control Specialist for The Joint Commission enterprise, under the Standards Interpretation Group (SIG) at The Joint Commission from 2013 to 2018. In her role, Dr. Waldowski advised surveyors with interpretations and education of infection control findings, and responded to challenging questions, complaints, and potential threat to life/patient safety infection control related events. In addition, she contributed to ongoing communication and education with Infection Prevention and Control related podcasts, articles, interviews, webinars, workbooks/toolkits, and the High-level Disinfection and Sterilization BoosterPak™.

Additionally, Dr. Waldowski worked with Shriner's Hospitals for Children – Honolulu, the State of Hawaii Department of Health, and Hawaii Pacific Health in Honolulu, Hawaii.

Dr. Waldowski earned her DNP from RUSH University. She is a Pediatric Nurse Practitioner and certified as an Infection Preventionist.

**Burton L. Thelander, RN, MS, NE-BC**  
Field Representative, The Joint Commission  
Performance Improvement Specialist, NYU-Langone Hospitals

Burton Thelander currently is a resident of New York State. He surveys the standards in the Comprehensive Accreditation Manual for Hospitals and Behavioral Health Care and presently is a surveyor in the Hospital and Behavioral Health Accreditation Program.

Mr. Thelander is employed part time at NYU Langone Medical Center in New York, New York as a Performance Improvement Specialist. Prior to joining The Joint Commission, Mr. Thelander was a Director of Nursing and Director of Advanced Practice within the New York State Office of Mental Health inpatient and outpatient behavioral health service.

Mr. Thelander is certified as a Nurse Executive by the American Nurse Credentialing Center and currently is licensed in New York State as a Professional Registered Nurse.
Appendix C: Continuing Education (CE) Accrediting Bodies

To be eligible for CE credit from any of the following accrediting bodies, you MUST view the video presentation and read the Resource Guide first. Then, complete the post test at http://twnlms.com/ by the due date listed online. See Appendix E.

The Joint Commission is accredited by the Accreditation Council for Continuing Medical Education (ACCME-AMA PRA Category 1™), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

Note: No ACPE credit was provided for this program

The Joint Commission is provider approved by the California Board of Registered Nursing, provider number CEP 6381, for 1 contact hour.

The Joint Commission is authorized to award 1.0 contact hour of pre-approved ACHE Qualified Education credit for this program toward advancement or recertification in the American College of Healthcare Executives. Participants in this program wishing to have the continuing education hours applied toward ACHE Qualified Education credit should indicate their attendance when submitting application to the American College of Healthcare Executives for advancement or recertification.

This activity has been approved by the National Association for Healthcare Quality (NAHQ) for 1.0 Certified Professional Healthcare Quality (CPHQ) credit.

The Joint Commission Enterprise has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET).

This education offering qualifies for 1.0 Certified Joint Commission Professional (CJCP) credit hours towards CJCP recertification. In order to obtain CJCP credit hours, an individual must first be certified before they start acquiring CJCP credit hours. CJCP credit hours will not be retroactive.

Full attendance at every session is a prerequisite for receiving full continuing education credits. If a participant needs to leave early, his or her continuing education credits will be reduced.

Successful completion of this CE activity includes the following:

- View the presentation and read the accompanying Resource Guide.
- Complete the online Evaluation Form and Post Test.
- A CE certificate/statement of credit can be printed online following successful completion of the Post Test and the Evaluation Form.

Note: This information applies to The Joint Commission Resources Quality & Safety Network program titled, Infection Control: Preventing Hospital Acquired Infections (HAIs), originally presented on Thursday, May 24, 2018 from 2:00 – 3:00 p.m. ET. There is no individual participant fee for this educational activity.
## Appendix D: Discipline Codes Instructions

Some of our programs are accredited for more than one discipline. To ensure that we issue each participant a certificate by the appropriate accrediting body, we ask that you supply us with the following information: 1) two-digit discipline code. 2) followed by the position code (example: for a medical doctor, use 10 MD).

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Discipline Code</th>
<th>Position Code</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician (CME)</td>
<td>10 MD</td>
<td>RT</td>
<td>Respiratory Therapist, Registered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RTC</td>
<td>Respiratory Therapist, Certified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RPNC</td>
<td>Resp. Practitioner, Non-Critical Care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RPCC</td>
<td>Resp. Practitioner, Critical Care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RHA</td>
<td>Health Information Administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RHT</td>
<td>Health Information Technician</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CCS</td>
<td>Coding Specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CCP</td>
<td>Coding Specialist, Physician-Based</td>
</tr>
<tr>
<td></td>
<td>20 RT</td>
<td>Respiratory Therapist, Registered</td>
<td></td>
</tr>
<tr>
<td>Radiology</td>
<td>22 RAD</td>
<td>Radiologic Technologist</td>
<td></td>
</tr>
<tr>
<td>Sonography</td>
<td>23 MS</td>
<td>Medical Sonographer</td>
<td></td>
</tr>
<tr>
<td>Athletic Training</td>
<td>24 AT</td>
<td>Athletic Trainer</td>
<td></td>
</tr>
<tr>
<td>HC Quality</td>
<td>25 HQP</td>
<td>Healthcare Quality Professional</td>
<td></td>
</tr>
<tr>
<td>Activity Professional</td>
<td>26 ADP</td>
<td>Profession Activity Director</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADC</td>
<td>Activity Director</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AAC</td>
<td>Activity Assistant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACC</td>
<td>Activity Consultant</td>
</tr>
<tr>
<td>Physician (CME)</td>
<td>10 MD</td>
<td>RN</td>
<td>Registered Nurse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ARNP</td>
<td>Advanced RN Practitioner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NP</td>
<td>Nurse Practitioner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LPN</td>
<td>Licensed Practical Nurse (or LVN)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ON</td>
<td>Other Nursing Professional</td>
</tr>
<tr>
<td>Psychology</td>
<td>33 PSY</td>
<td>Psychologist (non-MD)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PSYL</td>
<td>Psychologist, Limited License</td>
</tr>
<tr>
<td>Case Mgmt</td>
<td>35 CCM</td>
<td>Certified Case Manager</td>
<td></td>
</tr>
<tr>
<td>Nursing Assistant</td>
<td>45 C N A</td>
<td>Certified Nursing Assistant</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>RA</td>
<td>Restorative Care Aide</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H S A</td>
<td>Health Support Aide</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NA</td>
<td>Nurse Aide, Non-certified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NT</td>
<td>Nursing Technician</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>46 CFR</td>
<td>First Responder</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EMTB</td>
<td>EMT, Basic Level/EMT1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EMTI</td>
<td>EMT, Intermediate Level/EMT2/EMT3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EMTP</td>
<td>EMT, Paramedic Level/EMT4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OTH</td>
<td>Other</td>
</tr>
<tr>
<td>Health Unit Coor</td>
<td>55 CHUC</td>
<td>Health Unit Coordinator, Certified</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>27 OTH</td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

© 2018 Joint Commission Resources
Appendix E: Post-Test

To be eligible for CE credit, you MUST view the video presentation and read the Resource Guide first. Then complete the post-test at http://jcrqsn.twnlms.com/ by the due date listed online.

1. Hospitals are required to comply with the current _____ hand hygiene guidelines.
   a. Centers for Disease Control and Prevention (CDC)
   b. World Health Organization (WHO)
   c. a or b
   d. None of the above.
2. Hospitals are required to improve compliance with hand hygiene guidelines based on their established goals.
   a. True
   b. False
3. When implementing a surveillance program for surgical-site infections, addressed under NPSG 07.05.01, based on a risk assessment, surveillance may be targeted, as opposed to hospitalwide.
   a. True
   b. False
4. Hospital-based infection prevention policies and procedures must _____.
   a. meet regulatory requirements
   b. align with evidence-based standards and/or professional guidelines
   c. a and b
   d. None of the above.
5. Educating staff and licensed independent practitioners involved in surgical procedures regarding surgical site infections and the importance of prevention occurs _____.
   a. upon hire
   b. annually
   c. when involvement in surgical procedures is added to an individual's job responsibilities
   d. All of the above.
6. Pre-cleaning at the point-of-use is required when soiled items cannot be immediately (without delay) contained and transported to a decontamination area or soiled utility area.
   a. True
   b. False
7. Surveyors evaluate compliance contingent upon the guidelines on which leadership has based _____.
   a. policies
   b. procedures
   c. practices
   d. competencies
   e. All of the above.
8. The Infection Control standard that is found out of compliance most often is IC.02.02.01, EP _____: The organization implements infection prevention and control activities when doing the following: Performing intermediate and high-level disinfection and sterilization of medical equipment, devices, and supplies.
   a. 1
   b. 2
   c. 3
   d. 4
9. Organizations can improve their compliance with IC.02.02.01, EP 2 ______.
   a. through training and observation of practice
   b. through clear and concise policies
   c. through standardization of processes
   d. by following manufacturers' instructions for use
   e. All of the above.

10. IC.01.03.01 requires hospitals to identify risks specific to ______.
    a. location, community, and population served
    b. care, treatment, and services provided
    c. analyzing activities and data
    d. prioritizing identified risks
    e. All of the above.
Appendix F: JCRQSN Contact Information

General information, customer service issues, or program reception issues
JCRQSN Customer Service Team
support@jcrqsn.com
toll-free 1-888-219-4678

Questions or comments about JCRQSN educational programming
George Riccio
Executive Producer, Video and Audio Programs
Lean Six Sigma Certified Yellow Belt
Publications and Education Department
griccio@jcrinc.com
1-630-792-5428

Questions about continuing education
JCRQSN Continuing Education Support Team
support@jcrqsn.com
1-888-219-4678

Questions about standards
Joint Commission Standards Interpretation Group
1-630-792-5900

Questions about JCR education or other resources
JCR Customer Service Center
1-877-223-6866