

## MANAGEMENT OF INFECTIOUS DISEASES AND INFECTION PREVENTION AND CONTROL PROGRAMS

**1. REASON FOR ISSUE:** This directive establishes requirements in Department of Veterans Affairs (VA) medical facilities for Infectious Diseases and Infection Prevention and Control Programs. **NOTE:** *Requirements and responsibilities regarding HIV and viral hepatitis are under the National HIV Program and the National Viral Hepatitis Program in the HIV, Hepatitis, and Related Conditions Program within the Office of Specialty Care Services (10P11) and are beyond the scope of this document and the purview of NIDS. For more information about these programs visit the VHA Web sites on HIV, <https://www.hiv.va.gov/> and viral hepatitis <https://www.hepatitis.va.gov/>.*

### 2. SUMMARY OF CONTENT:

a. Amendment dated November 22, 2019 adds Appendix H.

b. Amendment dated July 16, 2019 adds Appendix G.

c. Amendment dated December 4, 2018 includes the addition of Appendix F, Prevention of Methicillin-Resistant *Staphylococcus aureus* (MRSA) Infections in VHA Inpatient Acute Care Facilities. The addition of Appendix F subsequently rescinds VHA Directive 2006-006, Methicillin-Resistant *Staphylococcus auerus* (MRSA) Prevention Initiative.

d. This new Veterans Health Administration (VHA) directive consolidates and rescinds two directives and one manual chapter addressing infectious diseases and infection prevention and control related topics.

(1) Definition for contact precautions.

(2) References for Methicillin-Resistant *Staphylococcus aureus* (MRSA)-specific documents and guidance.

(3) Appendix F, Prevention of Methicillin-Resistant *Staphylococcus aureus* (MRSA) Infections in VHA Inpatient Acute Care Facilities.

**3. RELATED ISSUES:** VHA Directive 1031, Antimicrobial Stewardship Programs; VHA Handbook 1101.10, Patient Aligned Care Team (PACT) Handbook; VHA Directive 1304, National Human Immunodeficiency Virus (HIV) Program; and VHA Directive 1300.01, National Viral Hepatitis Program.

**4. RESPONSIBLE OFFICE:** The National Infectious Diseases Service (NIDS, 10P11), within Specialty Care Services, Office of the Deputy Under Secretary for Health for Policy and Services (10P), is responsible for the contents of this VHA directive.

**November 7, 2017**

**VHA DIRECTIVE 1131(3)**

Questions may be referred to the Director, National Infectious Diseases Service at 513-246-0270.

**5. RESCISSIONS:** VHA Directive 2011-007, Required Hand Hygiene Practices, dated February 16, 2011; VHA Directive 2013-008, Infectious Diseases Reporting, dated June 25, 2013; and Manual M-2, Clinical Programs, Part IV, Medical Service, Chapter 6, Infectious Diseases, dated April 29, 1994; are rescinded.

**6. RECERTIFICATION:** This VHA directive is scheduled for recertification on or before the last working day of November 2022. This VHA directive will continue to serve as national VHA policy until it is recertified or rescinded.

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## MANAGEMENT OF INFECTIOUS DISEASES AND INFECTION PREVENTION AND CONTROL PROGRAMS

### 1. PURPOSE

This Veterans Health Administration (VHA) directive provides policy and establishes requirements for the management of Infectious Diseases and Infection Prevention and Control Programs within the Department of Veterans Affairs (VA). This directive defines the minimum Infectious Diseases and Infection Prevention and Control Programs and services that must be made available at all VA medical facilities. NOTE: Based on Program alignment in VHA, requirements regarding HIV and viral hepatitis are beyond the scope of this document and the purview of NIDS, and are under the National HIV Program and the National Viral Hepatitis Program in the HIV, Hepatitis, and Related Conditions Program within the Office of Specialty Care Services. **AUTHORITY:** Title 38 United States Code (U.S.C.) 7301(b).

### 2. BACKGROUND

a. Management of infections and control and prevention of infectious diseases in VHA follow evidence-based practices across VA medical facilities. While some basic national guidance and framework is provided, many aspects of Infectious Diseases and Infection Prevention and Control Programs are locally administered and applied, based on local context, needs, and assessments of risk.

b. The National Infectious Diseases Service (NIDS) is comprised of several different programs (Clinical Management Services, Infection Prevention and Control Program, and Infectious Diseases Biosurveillance) and provides primary subject matter expertise in VA and VHA for infectious diseases, antimicrobial stewardship, infection prevention and control, and infectious diseases biosurveillance activities. NIDS is a consultant and subject matter expert to VA and VHA Central Office, Veterans Integrated Service Networks (VISNs), and VA medical facilities, and provides current and evidence-based guidance related to infectious diseases and infection prevention and control in order to provide the highest quality of care to Veterans. Information about NIDS policy and guidance can be found at the [NIDS Web site, http://vaww.va.gov/INFECTIOUSDISEASES/](http://vaww.va.gov/INFECTIOUSDISEASES/). **NOTE:** *This is an internal VA Web site that is not available to the public.* Background on NIDS can be found in Appendix A. NIDS has been charged to:

(1) Provide a VHA Central Office service for consultation and technical assistance with respect to infectious diseases and infection prevention and control

(2) Develop policy and guidance for emerging changes in the field of infectious diseases and infection prevention and control, which includes, but is not limited to, antimicrobial stewardship, infectious diseases biosurveillance, and prevention programs.

c. The provision of infectious diseases clinical services and infection prevention and control within VHA follows, at a minimum, the core guidance and recommendations

developed by NIDS. **NOTE:** *Based on Program alignment in VHA, requirements regarding HIV and viral hepatitis are beyond the scope of this document and the purview of NIDS. See VHA Handbook 1101.01, Patient Aligned Care Team (PACT) Handbook for additional policy related to infectious diseases PACT.* Recognizing that each VA medical facility is unique with local programs that may vary from other facilities, as part of a national system, it is the expectation that each facility must provide consistent high-quality care. In VHA, Infectious Diseases physicians, Infection Prevention and Control Professionals (IPCPs), Multi-Drug Resistant Organism (MDRO) Prevention Coordinators, Primary Care Providers, Antimicrobial Stewardship “Champions,” Occupational Health Providers, Facility Managers, front-line clinical personnel and others work as partners in prevention and management of infections toward the health and well-being of the Veteran and healthcare personnel. **NOTE:** *See Appendix B for information on Infectious Diseases and Infection Prevention and Control Programs at VA medical facilities and Appendix C for information on Multi-drug Resistant Organism (MDRO) Prevention Initiative procedural guidance.*

### 3. DEFINITIONS

**NOTE:** *Based on Program alignment in VHA, policy and staffing regarding HIV and viral hepatitis, including those related to Infectious Diseases-Patient Aligned Care Teams (ID-PACTs), are beyond the scope of this document and the purview of NIDS. See Related Issues on page T-1 of this directive.*

a. **Administrative and Clerical Support Staff.** Clerks, program support assistants, secretaries and others may be assigned to support infectious diseases and/or infection prevention and control services as part of their duties.

b. **Antimicrobial.** A substance that kills or inhibits the growth of microorganisms.

c. **Antimicrobial Stewardship.** An activity that promotes the appropriate selection of antimicrobials, dosing of antimicrobials, and route and duration of antimicrobial therapy.

d. **Antimicrobial Stewardship Program.** Antimicrobial stewardship program (ASP) refers to coordinated interventions designed to improve and measure the appropriate use of antimicrobials by promoting the selection of the optimal antimicrobial drug regimen, dose, duration of therapy, and route of administration. Antimicrobial stewardship programs seek to achieve optimal clinical outcomes related to antimicrobial use, minimize toxicity and other adverse events, reduce the costs of health care for infections, and limit the selection for antimicrobial resistant strains. See Reference a for VA ASP requirements.

e. **Biosurveillance.** The process of gathering, analyzing and interpreting information and data to achieve early detection and situational awareness of biological events, including but not limited to emerging infectious diseases.

f. **Chief, Infectious Diseases Section.** An Infectious Diseases physician (see below for definition) who has oversight of the clinical Infectious Diseases Program at the VA medical facility.

g. **Clinical Pharmacist.** A pharmacist who provides patient care, optimizes the use of medication, and promotes health, wellness and disease prevention; may have additional specialty training such as in infectious diseases and/or certification in Antimicrobial Stewardship. The clinical pharmacist includes those with a scope of practice to provide direct patient care and comprehensive medication management services as outlined in VHA Handbook 1108.11, Clinical Pharmacy Services, or subsequent policy issue.

h. **Community Living Center.** VHA Community Living Centers (CLCs) were formerly known as nursing homes, nursing home care units or long-term care units. CLCs provide care to Veterans with chronic stable conditions such as dementia, those requiring rehabilitation, or those who need comfort and care at the end of life.

i. **Contact Precautions.** Contact Precautions, when implemented, are designed to prevent the direct or indirect spread of an infectious organism. Direct spread occurs when an infectious organism is transferred from one colonized or infected person to another person without a contaminated intermediate object or person. Indirect spread involves the transfer of an infectious organism through a contaminated intermediate object or person.

j. **Epidemiology.** The study of the distribution and determinates of health conditions or events in specified populations and the application of this study to the control of health problems.

k. **Full-Time Equivalent.** Full-Time Equivalent (FTE) is a staffing parameter equal to the amount of time assigned to one full-time employee. It may be composed of several part-time employees whose total time commitment equals that of a full-time employee. One FTE is equal to 40 hours of work per week.

l. **Hand Hygiene.** Hand hygiene is a process to clean hands, and reduce the number of microorganisms on the hands. Hand hygiene is considered a primary measure in preventing healthcare-associated infections by reducing the risk of transmitting microorganisms.

m. **Healthcare-associated Infection.** Healthcare-associated Infection (HAI) is an infection acquired during the course of receiving medical care, formerly called nosocomial infection.

n. **Hospital Epidemiologist.** An individual who studies and reviews factors that can determine disease, disability or other healthcare outcomes (usually with a focus on infectious diseases and HAIs). The Hospital Epidemiologist will generally be the Chair of the Infection Prevention and Control Committee.

o. **Infection Prevention and Control Committee.** A multidisciplinary membership committee within the healthcare facility that supports the facility's infection prevention and control program to minimize HAI risk.

p. **Infection Prevention and Control Professional.** Infection Prevention and Control Professional (IPCP) is an individual with subject matter expertise in the prevention and control of HAIs. The IPCP serves as a resource person to achieve the goals of the Infection Prevention and Control Program at the facility, and promotes employee work-practices to improve patient/resident outcomes and prevent HAIs. (The IPCP is sometimes also referred to as Infection Control Practitioner or Infection Preventionist). While not required, specialty certification in Infection Prevention and Control is desirable.

q. **Infection Prevention and Control Program.** A program at each VA medical facility which supports efforts to prevent and/or reduce the transmission of infectious diseases, as well as control further transmission once acquired. It is designed to support the health of all Veterans, employees and visitors within the local VA medical facility.

r. **Infectious Disease.** A disease caused by a pathogenic microorganism (e.g., bacteria, fungi, virus, uni-or multi-cellular parasite) or agent (e.g. prion).

s. **Infectious Disease Physician.** A doctor of Internal Medicine who is qualified as an expert in the diagnosis and treatment of infectious diseases, and preferably Board-Certified in Infectious Diseases.

t. **Infectious Diseases Program.** A program that is the global framework at each VA medical facility that represents a coordinated effort to assist providers in the diagnosis and treatment of infectious diseases pathology. This differs from the Infection Prevention and Control Program which has a different focus (see definition above); however, these two typically work in concert.

u. **Infectious Diseases Section.** An organizational entity within a Service (typically Medical Service) at a VA Medical Facility, usually led by an infectious disease physician, and which employs infectious diseases physicians and providers, along with support personnel, to achieve the goals and missions of the Infectious Diseases Program. While all VA Medical Facilities are to have an Infectious Diseases Program, not all VA medical facilities are large or complex enough to sustain a fully functional and independent Infectious Diseases Section infrastructure.

v. **Multi-Drug Resistant Organism.** Multidrug resistant organisms (MDRO) are microbes able to withstand the killing or inhibitory effect of several different antimicrobial agents. The exact number and types of antimicrobial classes to which a microorganism is resistant varies depending on the pathogen.

w. **Multi-Drug Resistant Organism (MDRO) Prevention Coordinator.** Multi-Drug Resistant Organism Prevention Coordinator (MPC) is a VHA facility-level employee responsible for managing the local aspects of MDRO Prevention Initiatives. The MPC



serves as the focal point and liaison for the day-to-day operations, as well as for reporting and collecting MDRO data (e.g., methicillin-resistant *Staphylococcus aureus* [MRSA], *C. difficile*, carbapenem-resistant *Enterobacteriaceae* [CRE]). The activities of this individual are distinct from those of the IPCP, and serves as a supplement to the overall Infection Prevention and Control Program at the VA medical facility.

x. **Multi-Drug Resistant Organism Prevention Initiative.** A VA standardized program to reduce HAIs caused by multi-drug resistant and related organisms (e.g., MRSA, *Clostridium difficile*, CRE).

y. **MDRO Prevention Initiative Task Force.** The MDRO Prevention Initiative Task Force is an advisory group composed of representatives of the NIDS, facility-based clinicians who are MDRO subject matter experts, and representatives from VHA offices with a focus in reducing healthcare-associated transmission of and infection by MDROs. Further details regarding the MDRO Prevention Initiative (PI) Task Force can be found in Appendix D.

z. **National Infectious Diseases Service.** The National Infectious Diseases Service (NIDS) is a field-based service of VHA Central Office that provides primary subject matter expertise in VAVHA for infectious diseases, infection prevention and control, biosurveillance activities and antimicrobial stewardship (the latter formally in collaboration with the VA Pharmacy Benefits Management Program).

aa. **Nosocomial infection.** See item I, HAI.

bb. **Nurse Practitioner.** A Nurse Practitioner (NP) is a nurse with a graduate degree in advanced practice nursing. NPs provide a broad range of health care services and work in clinics without physician supervision or with physicians as a joint health care team. Their scope of practice and authority depends on state laws and local VA medical facility policy (e.g. prescriptive authority).

cc. **Outbreak.** An increase in the incidence of a disease, complication or event above the background rate.

dd. **Physician Assistant.** A Physician Assistant (PA) is a nationally certified and state-licensed medical professional. PAs practice medicine on health care teams with physicians and other providers by assessing, planning, implementing, documenting and evaluating patient care. They practice and prescribe medication in all 50 states, the District of Columbia and all U.S. territories, except Puerto Rico.

ee. **Program Support Assistant.** Program Support Assistants (PSAs) are necessary to initiate and maintain the Infectious Diseases, Infection Prevention and Control Program, MDRO Prevention Program and Antimicrobial Stewardship Program infrastructure. PSAs assist in scheduling and coordinating meetings, preparing and managing committee documents and/or materials, documenting meeting actions and decisions, etc.

ff. **Surveillance.** The ongoing, systematic collection, recording, analysis, interpretation and dissemination of data. When applied to disease, it may be defined as the continuing scrutiny of those aspects of the occurrence and spread of disease that are pertinent to effective control.

#### 4. POLICY

Each VA medical facility will establish and maintain an Infectious Diseases Program and Infection Prevention and Control Program to foster evidence-based practices in order to optimize patient care.

#### 5. RESPONSIBILITIES

a. **Under Secretary for Health.** The Under Secretary for Health, or designee, is responsible for ensuring overall VHA compliance with this directive.

b. **Deputy Under Secretary for Operations and Management.** The Deputy Under Secretary of Health for Operations and Management (10N), or designee, is responsible for:

(1) Communicating the contents of this directive to each of the Veterans Integrated Services Networks (VISN);

(2) Ensuring that each VISN Director has the resources required to support the fulfillment of the terms of this directive in all VA medical facilities within that VISN

(3) Confirming that each VISN has and utilizes on an ongoing basis a means for ensuring the terms of this directive are fulfilled in all the VA medical facilities of the VISN.

c. **Deputy Under Secretary for Health for Policy and Services.** The Deputy Under Secretary for Health for Policy and Services (10P) is responsible for providing policy to ensure national administrative and clinical oversight for infectious diseases and infection prevention and control programs. The policy will be used to support the Deputy Under Secretary for Health for Operations and Management's operational oversight to ensure programs are compliant with VHA requirements and standards.

d. **Director, National Infectious Diseases Service.** The Director, National Infectious Diseases Service (NIDS) is responsible for:

(1) **Program Management.** Management of the National Programs for Infectious Diseases, Infection Prevention and Control, and Multi-Drug Resistant Organism (MDRO) Prevention Initiatives. Collaborative management of other National Programs as appropriate (e.g., Antimicrobial Stewardship, biosurveillance).

(2) **Consultation and Technical Assistance.** Provides consultation on clinical care for infectious diseases, when requested and appropriate, and strategies that support reducing HAIs, developing antimicrobial stewardship programs and addressing

emerging infectious diseases issues to VA, VHA Central Office, VHA program offices and VA medical facilities.

(3) **Educational Activities.** Provision of educational activities can occur, for example, through national and regional education meetings, national conference calls, national training programs, and website resources. NIDS maintains, evaluates and routinely updates its Web site, <http://vaww.va.gov/INFECTIOUSDISEASES/>, with current information. **NOTE:** *This is an internal VA Web site that is not available to the public.*

(4) **Development of Policy and Guidance.** NIDS authors, documents, and coordinates the development and updating of policy and guidance that support the Infectious Diseases and Infection Prevention and Control Programs, Antimicrobial Stewardship, MDRO Prevention Initiatives, and other emerging infectious diseases issues nationwide. Guidance documents can be found at the NIDS Web site <http://vaww.va.gov/INFECTIOUSDISEASES/> **NOTE:** *This is an internal VA Web site that is not available to the public.*

(5) **Development of National Surveillance Criteria.** NIDS establishes national surveillance criteria for specified infectious diseases and infection prevention and control program issues, and works collaboratively on national biosurveillance issues. NIDS coordinates with other entities such as the Inpatient Evaluation Center (IPEC), the VHA Director of Biosurveillance, the Office of Informatics and Analytics, the VA Integrated Operations Center, etc., to accomplish this goal.

(6) **Collaboration.** For each of the above responsibilities, NIDS collaborates with other VA and VHA stakeholders such as the Office of the Deputy Under Secretary for Health for Policy and Services, specifically Pharmacy Benefits Management; Office of Specialty Care Services; Office of Informatics and Analytics; Office of Clinical Operations; Office of Administrative Operations; Office of Quality, Safety and Value; National Center for Patient Safety; Environmental Programs Service; National Center for Health Promotion and Disease Prevention; HIV, Hepatitis, and Related Conditions Program; Office of Operations, Security and Preparedness, etc. Additionally, NIDS collaborates/participates with non-VA organizations and other federal agencies as it relates to infectious diseases, infection prevention and control, and infectious diseases biosurveillance.

e. **Chairs, Field Advisory Committees (FACs) and Task Forces.**

(1) There are several FACs and/or Task Forces that advise the Director, NIDS:

(a) Infectious Diseases Field Advisory Committee (IDFAC)

(b) Infection Prevention and Control Field Advisory Committee (IPCFAC)

(c) MDRO Prevention Initiative Task Force; and

(d) Antimicrobial Stewardship Task Force.

(2) New FACs or Task Forces that advise the Director, NIDS, may be established at the discretion of VA/VHA leadership. Responsibilities of the FAC and Task Force Chairs are as follows:

(a) Field Advisory Committees (FACs) Chairs are responsible for advising the Director, NIDS on issues pertinent to infectious diseases and infection prevention and control. Some of the areas in which the FACs might make recommendations include, but are not limited to, work force, policies, and recommendations on educational needs.

(b) Task Force Chairs are responsible for implementing the charge from VA and VHA Central Office leadership which have specific missions and functions assigned as part of that charge. A task force may be time limited in nature or long-standing. The initial responsibilities of each task force are determined at the time of establishment of the charge.

f. **Veterans Integrated Service Network (VISN) Director.** The VISN Director is responsible for:

(1) Ensuring comprehensive, evidence-based Infectious Diseases and Infection Prevention and Control Programs are implemented at all VA medical facilities and settings, including but not limited to, acute care, long-term care/rehabilitation, ambulatory care, outpatient surgery, VA clinics, and community-based outpatient clinics (CBOCs), and that all program requirements set forth in policy and guidance documents are in place and sustained. **NOTE:** See Appendix B for information on Infectious Diseases and Infection Prevention and Control Programs at VA medical facilities.

(2) Ensuring all VA medical facilities in the VISN are responsible for complying with policy documents developed to support Infectious Diseases and Infection Prevention and Control Programs, MDRO Prevention Initiative, Antimicrobial Stewardship Program and biosurveillance activities. **NOTE:** Policy and guidance documents established by NIDS can be found at the <http://vaww.va.gov/INFECTIOUSDISEASES/>. **NOTE:** This is an internal VA We site that is not available to the public.

(3) Facilitating partnerships or consultative arrangements within the VISN for VA medical facilities that do not have sufficient infectious diseases staffing.

(4) Ensuring that adequate resources (e.g., personnel, training, space, equipment, supplies, information technology needs) are provided at all VA medical facilities and are secured in order to meet the requirements set forth in Appendix B, as defined in paragraphs 5 and 6.

(5) Participating in and completing periodic assessments coordinated through NIDS and the Office of the Deputy Under Secretary of Health for Operations and Management, including, but not being limited to, an annual infectious diseases and infection prevention and control census of resources, activities, programmatic needs, and occurrence of select infectious diseases agents and/or entities, as appropriate.

(6) Providing leadership and support for key issues as identified by local experts in infectious diseases and infection prevention and control.

(7) Ensures that medical facility Directors report diseases designated as reportable to entities legally authorized to receive such reports, according to Infectious Disease Reporting requirements established in Appendix E.

g. **VA Medical Facility Director.** The VA medical facility Director is responsible for:

(1) Ensuring that the medical facility complies with policy documents developed to support infectious diseases and infection prevention and control programs, MDRO prevention, antimicrobial stewardship and biosurveillance activities. **NOTE:** See *Appendix B for information on Infectious Diseases and Infection Prevention and Control Programs at VA medical facilities, Appendix C for information on Multi-drug Resistant Organism (MDRO) Prevention Initiative procedural guidance, and Appendix F for MRSA prevention. Policy and guidance documents established by NIDS can be found at the NIDS Web site <http://vaww.va.gov/INFECTIOUSDISEASES../>* **NOTE:** This is an internal VA Web site that is not available to the public.

(2) Establishing effective Infectious Diseases and Infection Prevention and Control Programs, as defined in Appendix B, paragraphs 1 and 2, at the facility.

(3) Ensuring adequate staffing and resources, as defined in Appendix B, paragraphs 5 and 6, and Appendix F to implement effective infectious diseases and infection prevention and control (including infection prevention and control surveillance), MDRO prevention, antimicrobial stewardship and biosurveillance activities as well as to ensure adequate functioning and staffing for the Infectious Diseases. **NOTE:** *The model defined in Appendix B does not specifically address ID-PACT, HIV, or viral hepatitis staffing needs as these are beyond the scope of this document and purview of NIDS.* These activities will be conducted in accordance with VA requirements, other federal agency requirements [e.g. Occupational Health and Safety Administration (OSHA)], and other external oversight bodies' standards and requirements [e.g. The Joint Commission].

(4) Ensuring that Service leadership reinforces implementation of and compliance with infection prevention and control policies.

(5) Establishing partnerships or consultative arrangements to have access to an Infectious Diseases physician in another VA medical facility (e.g., within the VISN or with telehealth) or have an arrangement with a local infectious diseases physician to provide these services, if the facility does not have sufficient infectious diseases staffing.

(6) Integration of the Infectious Diseases Section and the Infection Prevention and Control Program and the Antimicrobial Stewardship Program that is promoted by an organizational structure where both parties are viewed as partners in the delivery of patient/resident care. **NOTE:** *The exact organizational structure is determined locally.*

(7) Reporting infectious diseases designated as reportable to the public health entities legally authorized to receive such reports and in accordance with VHA policy and laws on the disclosure of VHA data to outside entities (see Appendix E).

(8) Defining the personnel reporting structure that reflects staff and patient/resident care needs and considerations for integrated care models. **NOTE:** *This needs to be determined at the facility level. It is suggested that the personnel in Infection Prevention and Control fall under the Infectious Diseases Section that reports to the Chief of Medicine. However, this may be assigned differently based on local needs and considerations.*

(9) Ensuring that educational resources as related to infectious diseases, infection prevention and control, antimicrobial stewardship and biosurveillance are in place and available for patients/residents, visitors, employees, and others identified by local needs.

## 6. REFERENCES

a. VHA Handbook 1004.01, Informed Consent for Clinical Treatments and Procedures. August 14, 2009 (revised September 20th 2017).

b. VHA Directive 1016, Tracking System for Patients Identified in the Creutzfeldt-Jakob Disease (CJ) Lookback Notification Initiative, dated July 10, 2014, or subsequent policy.

c. VHA Directive 1031, Antimicrobial Stewardship Programs (ASP), dated January 22, 2014, or subsequent policy.

d. VHA Directive 1061, Prevention of Healthcare-Associated Legionella Disease and Scald Injury from Potable Water Distribution Systems, dated August 13, 2014, or subsequent policy.

e. VHA Directive 1065, Productivity and Staffing Guidance for Specialty Provider Group Practice, dated May 4, 2015, or subsequent policy.

f. VHA Directive 1300.01, National Viral Hepatitis Program, dated February 22, 2013, or subsequent policy.

g. VHA Directive 1304, National Human Immunodeficiency Virus (HIV) Program, dated November 24, 2014, or subsequent policy.

h. VHA Directive 1605.01, Privacy and Release of Information, dated August 31, 2016, or subsequent policy.

i. VHA Directive 7715, Safety and Health During Construction, dated April 6, 2017, or subsequent policy.

j. VHA Handbook 1101.10(1), Patient Aligned Care Team (PACT) Handbook, dated February 5, 2014, or subsequent policy.

k. VHA Handbook 1605.02, Minimum Necessary Standard for Protected Health Information, dated January 23, 2013, or subsequent policy.

l. Revised Guideline for Implementation of the Veterans Health Administration (VHA) Methicillin-Resistant *Staphylococcus aureus* (MRSA) Prevention Initiative in Community Living Centers (CLC) August 10, 2016.

m. Department of Veterans Affairs Memorandum, dated March 18, 2003. From the Deputy Under Secretary for Health to the Program Director for Infectious Diseases. Subject: National Bioterrorism Surveillance.

n. Department of Veterans Affairs Memorandum, dated April 8, 2010. From the Deputy Under Secretary for Health for Operations and Management to the Network Directors, VACO Chief Officers and Medical Center Directors. Subject: Protected Time for Research Guidance.

o. Department of Veterans Affairs Memorandum. October 31, 2006. From the Acting Under Secretary for Health to the Acting Principal Under Secretary for Health, Chief Patient Care Service Officer, and Office of the Medical Inspector. Subject: Charge Memorandum for Executing Recommendations in OMI Report: VA Nursing Home Care Unit Infection Surveillance: Point Prevalence Survey.

p. [Should I Take the MRSA Test?](#), May 2018

q. American College of Surgeons and Surgical Infection Society: Surgical Site Infection Guidelines, 2016. *Journal of American College of Surgeons*, (2017) 224 (1), pp. 59-74.

r. Association for Professionals in Infection Control and Epidemiology. *APIC Text of Infection Control and Epidemiology*. 4<sup>th</sup> Edition. The Association for Professionals Infection Control & Epidemiology, Washington, DC, 2014.

s. Centers for Disease Control and Prevention (CDC) Web site, <https://www.cdc.gov/>.

t. CDC. Guidelines for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings 2007  
<https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>

u. CDC. Healthcare Infection Control Practices Advisory Committee  
<https://www.cdc.gov/hicpac/index.html>.

v. CDC. Methicillin-resistant *Staphylococcus aureus*. Information for Inpatient Clinicians and Administrators (pathogenicity, limited treatment options, and transmissibility) accessed June 25, 2019 at  
<https://www.cdc.gov/mrsa/healthcare/clinicians/index.html>.

w. CDC. Self-Study Lessons in epidemiology. *Principles of Epidemiology in Public Health Practice: An Introduction to Applied Epidemiology and Biostatistics*. 3<sup>rd</sup> Edition, <https://www.cdc.gov/ophss/csels/dsepd/ss1978/index.html>.

x. CDC. Methicillin-resistant *Staphylococcus aureus* (MRSA). Information for Inpatient Clinicians and Administrators. <https://www.cdc.gov/mrsa/healthcare/clinicians/index.html>

y. Eight years of decreased methicillin-resistant *Staphylococcus aureus* health care associated infections associated with a Veterans Affairs prevention initiative. *Am J Infect Control*. 2017 Jan 1;45(1):13-16. doi: 10.1016/j.ajic.2016.08.010.

z. Infectious Diseases Society of America (IDSA) Clinical Practice Guidelines, [https://mymembership.force.com/CPBase\\_custom\\_login?site=a0Uj0000006SrqPEAS&retUrl=%2Fidp%2Flogin%3Fapp%3D0spj0000000Gnp2%26RelayState=/Templates/Landing.aspx?id=23622320151](https://mymembership.force.com/CPBase_custom_login?site=a0Uj0000006SrqPEAS&retUrl=%2Fidp%2Flogin%3Fapp%3D0spj0000000Gnp2%26RelayState=/Templates/Landing.aspx?id=23622320151). **NOTE:** *This link is external to VA and other federal government Web sites, and may not be fully compliant with Section 508 of the Rehabilitation Act.*

aa. National Infectious Diseases Service (NIDS) Web site, <http://vaww.va.gov/INFECTIOUSDISEASES/>. **NOTE:** *This is an internal VA Web site that is not available to the public.*

bb. United States General Accounting Office. Infection Control: VA Programs Are Comparable to Nonfederal Program but Can Be Enhanced. GAO/HRD-90-27. <http://vaww.va.gov/INFECTIOUSDISEASES/>; January 1990

cc. American Society of Health-System Pharmacists (ASHP) Therapeutic Guidelines. Clinical Practice Guidelines for Antimicrobial Prophylaxis in Surgery 2013, pp. 667-669, 689. [ASHP Therapeutic Guidelines](#).



## BACKGROUND OF THE NATIONAL INFECTIOUS DISEASES SERVICE

The VHA National Infectious Diseases Service (NIDS), formerly known as the Infectious Diseases Program Office (IDPO) is a field-based unit of VHA Central Office within the Office of Specialty Care Services (SCS). NIDS is comprised of three distinct programs that serve the needs of VA and VHA.

### 1. Clinical Management Services

a. **Infectious Diseases.** In 1988, the IDPO (now known as NIDS) was founded as a stand-alone central office function within VHA Central Office to provide primary subject matter expertise within VA about matters of infectious diseases. The Clinical Management Services portion of NIDS is focused on providing consultation and guidance for clinical matters related to infectious diseases. ***NOTE: Requirements and responsibilities regarding HIV and hepatitis are under the National HIV Program and the National Viral Hepatitis Program in the HIV, Hepatitis, and Related Conditions Program within the Office of Specialty Care Services and are beyond the scope of this document and the purview of NIDS. For more information about these programs visit: [www.hiv.va.gov](http://www.hiv.va.gov) and [www.hepatitis.va.gov](http://www.hepatitis.va.gov).***

b. **Antimicrobial Stewardship Initiative.** In 2011, VHA Deputy Under Secretary of Health for Policy and Services chartered the Antimicrobial Stewardship Task Force to develop, deploy and monitor a national-level strategic plan for improvements in antimicrobial therapy management. Additional information about the Antimicrobial Stewardship Initiative can be found in VHA Directive 1031 (see Reference 6.b.).

### 2. Infection Prevention and Control Program

a. In 1990, the National Infection Prevention and Control Program was organizationally aligned to NIDS from the Office of Nursing Service. This was a result of a Government Accountability Office (GAO) report which recommended that a single unit in VA's central office oversee its infection prevention and control programs. In 2006, the Under Secretary for Health assigned NIDS with the collaborative responsibility for infection prevention and control surveillance in Community Living Centers (CLCs), formerly known as nursing home care units or long-term care units. The overall goal of this program is to protect patients/residents, healthcare workers, visitors, and others in the healthcare environment from the acquisition of healthcare-associated infections and other adverse infectious events that may occur.

b. **Multi-Drug Resistant Organism Prevention Initiative.** In 2007, VHA implemented the Methicillin-resistant *Staphylococcus aureus* (MRSA) Prevention Initiative and established policy implementing a nationwide program to decrease healthcare-associated MRSA infections in acute care facilities. In 2011, the MRSA Prevention Initiative was renamed the Multi-Drug Resistant Organism (MDRO) Prevention Initiative to expand to include other pathogens. Information about the MDRO Prevention Initiative can be found in Appendix C as well as at the MDRO

Prevention Initiative Web site, <http://vaww.mrsa.va.gov/>. **NOTE:** *This is an internal VA Web site that is not available to the public.*

### **3. Infectious Diseases Biosurveillance Program**

In 2003, the Director, NIDS was charged to lead VA participation in the national bioterrorism surveillance system and currently works with the VHA Director of Biosurveillance towards this purpose. Accordingly, NIDS represents VA on various committees in support of U.S. biosurveillance. In 2010, the Subject Matter Expertise Center for Biological Events (SMEC-bio) was conceptualized and begun within NIDS with the goal to collect and analyze information and data in order to provide decision support to VA and VHA leadership and stakeholders on emerging infectious diseases issues.

**INFECTIOUS DISEASES AND INFECTION PREVENTION AND CONTROL  
PROGRAMS AT VA MEDICAL FACILITIES**

This document defines the minimum Infectious Diseases Program and Infection Prevention and Control Program services that must be made available at all Department of Veterans Affairs (VA) medical facilities. The goal is to provide effective, evidence-based services at all VA medical facilities, based on local needs, assessments and considerations. **NOTE:** *Based on Program alignment in VHA, requirements regarding HIV and viral hepatitis and are under the National HIV Program and the National Viral Hepatitis Program in the HIV, Hepatitis, and Related Conditions Programs within the Office of Specialty Care Services.*

**1. INFECTIOUS DISEASES PROGRAM**

a. An Infectious Diseases (ID) Section should be a subspecialty under Medical Service, or equivalent, at VA medical facilities where it is feasible for the ID Section to carry out the activities and responsibilities of the Program. If an ID Section is not feasible, then the Program responsibilities must be assigned to an appropriate designee at the facility.

b. The functions of the Program are the following:

(1) Provide optimal patient/resident care related to infectious diseases by consultation throughout the facility. This would include the consideration of inpatient and outpatient concerns. Telehealth and/or E-consultation should be available, when appropriate, for patients not requiring examination or direct interview.

(2) Provide input to the Infection Prevention and Control Committee, including policy recommendations which would include but are not limited to:

(a) Procedures for precautions towards the prevention of infections;

(b) Environmental sanitation and disinfection;

(c) Infection surveillance;

(d) Epidemiologic reviews;

(e) Consultation on surveillance, prevention and epidemiological follow up, when appropriate, on communicable diseases or infections affecting VA staff in cooperation with Employee Occupational Health.

(3) Advise and/or participate in appropriate local facility committees (e.g., Pharmacy and Therapeutics, Research, Water Safety).

(4) Provide guidance for activities under the Infection Prevention and Control Program.

(5) Set the agenda and provide guidance for the Antimicrobial Stewardship Program.

c. The Chief, Infectious Diseases Section (or designee) should have a close liaison with Pathology and Laboratory Medicine Service (P&LMS), if feasible, and work actively with the Chief, P&LMS, on the development and implementation of programs and policies in the Microbiology Section, P&LMS, particularly with regards to staffing, space and equipment. The Chief, Infectious Diseases Section (or designee) should collaborate with appropriate members of P&LMS regarding:

(1) The collection of specimens and the establishment of priorities for collections of specimens;

(2) The establishment of priorities for cultures, susceptibility tests and new diagnostic procedures;

(3) Prompt turnaround time and rapid diagnostic testing;

(4) The compilation of laboratory data for epidemiologic evaluation;

(5) Determination of any specific internal reporting requirements for infectious diseases and infection prevention and control entities;

(6) Development and uses of antibiograms. **NOTE:** *If the microbiology laboratory is located at another site, liaison with that site is to be established for these purposes;*

(7) Packaging and shipping of infectious substances.

d. The Chief, Infectious Diseases Section (or designee) is to have substantive collaborative input with the following individuals:

(1) **Associate Chief of Staff for Education.** Maintain a program of in-service education to provide improved knowledge of infectious diseases and infection prevention and control to appropriate VA medical facility personnel;

(2) **Chief of Pharmacy.** Issues pertaining to antimicrobials and vaccines and to establish an effective Antimicrobial Stewardship Program;

(3) **Employee/Occupational Health Function.** Employee-specific infection prevention, control, and treatment issues;

(4) **Health Promotion and Disease Prevention Program Managers.** Health promotion and disease prevention initiatives that relate to infection prevention and control, including immunization outreach efforts.

e. The Chief, Infectious Diseases Section (or designee) should ensure there is a physician with specific expertise or interest in Antimicrobial Stewardship who will:

(1) Serve as a lead or co-lead physician antimicrobial stewardship champion, and serve as a subject matter expert in the design, implementation, and function of the Antimicrobial Stewardship Program.

(2) Coordinate, or co-coordinate with the facility pharmacy antimicrobial stewardship champion, a multidisciplinary antimicrobial stewardship team ideally including the Hospital Epidemiologist, Infection Prevention and Control Professional, Director of Microbiology Laboratory and Information Technology to implement the Antimicrobial Stewardship Program.

f. The Chief, Infectious Diseases Section (or designee) should, in the Decision Support System (DSS), or equivalent, verify the time of personnel allocated to the Infectious Diseases Section in proportion to the time spent on the following activities. NOTE: The Chief, Infectious Diseases Section (or designee) and the Facility DSS Coordinator (or designee) are responsible for reviewing the mapping of personnel with activities.

(1) Clinical duties must be documented in the most current work capture/productivity system (e.g. Relative Value Units [RVU]). Clinical duties can include providing outpatient specialty care to a panel of patients, inpatient hospital care, electronic consultation and/or telehealth services.

(2) Research activities.

(3) Administrative activities, including but not limited to time serving as Chairperson and/or member of the Infection Prevention and Control Committee, preparing reports, and participating in day-to-day Antimicrobial Stewardship and Hospital Epidemiology activities.

## 2. INFECTION PREVENTION AND CONTROL PROGRAM

a. Each VA medical facility will institute an Infection Prevention and Control Program. Ideally the Infection Prevention and Control Program would be under the Infectious Diseases Section of Medical Service, or medical equivalent. **NOTE:** *This needs to be determined at the facility level. It is suggested that the personnel in Infection Prevention and Control fall under the Infectious Diseases Section that reports to the Chief of Medicine. However, this may be assigned differently based on local needs and considerations.* The Infectious Diseases Section has collateral intellectual leadership of the Infection Prevention and Control Program. There should be support and collaboration provided by a multidisciplinary facility Infection Prevention and Control Committee. Evidence-based prevention and control activities directed toward healthcare-associated infections (HAIs) and other infectious conditions are integral components of the Infection Prevention and Control Program. The Infection Prevention and Control staff, as well as other facility personnel, work cooperatively to prevent and/or control infections in the health care environment. Using, at a minimum, guidance established by VA Central Office and other applicable regulatory/accreditation agencies,

it is required that each facility have the following activities in place to support an effective Infection Prevention and Control Program, including but not limited to:

- (1) Written policies and/or procedures that:
  - (a) Establish the Infection Prevention and Control Program;
  - (b) Establish the Infection Prevention and Control Committee, its activities, and its reporting structure within the institutional hierarchy;
  - (c) Define the indications for specific precautions to prevent transmission of infection;
  - (d) Give authority to the Infection Prevention and Control Professional (IPCP) and registered nurses to implement isolation precautions based on mode(s) of transmission. Situations may occur, based on local needs and assessments, which require the use of other precaution methods (e.g. Enhanced Barrier Precautions for Methicillin-resistant *Staphylococcus aureus* (MRSA) in the CLC);
  - (e) Give authority, during an outbreak or epidemic situation, to the Chairperson of the Infection Prevention and Control Committee, generally the Hospital Epidemiologist (or designee), to implement strategies for the prevention and control of disease directed towards patients/residents, visitors, employees, and others identified by local needs;
  - (f) Assure provision of infection prevention and control guidance on the handling and disposal of refuse considered by regulations, laws, or statutes to be regulated medical waste and/or infectious waste;
  - (g) Identify the role and scope of employee/occupational health for reporting infections, evaluation and intervention as appropriate for exposure of employees to a potentially communicable agent as well as prevention efforts;
  - (h) Assure provision of infection prevention and control guidance on cleaning, disinfection, decontamination and sterilization of medical equipment to Reusable Medical Equipment Coordinator, or designee, and/or Sterile Processing Service, as appropriate;
  - (i) Assure provision of infection prevention and control guidance on separation of soiled and contaminated supplies from clean and sterile supplies.

**NOTE:** *While these different policies/procedures are noted to be part of the overall Infection Prevention and Control Program, the local Program does not necessarily need to generate or have responsibility for these policies/procedures. Rather the Infection Prevention and Control Program should work in a collaborative effort with those services/sections which already have responsibility for these policies/procedures.*

(2) Overseeing the monitoring of staff compliance with specific patient care practices and/or procedures and/or policies as they relate to infection prevention and control issues;

(3) Mechanisms for facility staff to obtain consultation from persons in infection prevention and control regarding chemicals, supplies and equipment related to environment of care cleaning and disinfection in the facility;

(4) Mechanisms for facility staff to obtain consultation from persons in infection prevention and control regarding renovation and construction, water safety, and other maintenance activities that may disrupt the environment of care;

(5) Developing educational efforts directed toward infection prevention and control topics for orientation classes for new employees and in-service training for relevant employees;

(6) Managing critical data and information as it relates to surveillance of HAIs;

(7) Supporting compliance with regulations and accreditation requirements related to infection prevention and control;

(8) Collaborating with occupational health to prevent workplace-related infectious diseases in employees;

(9) Guiding interventions to prevent the transmission of infectious diseases using:

(a) Routine control measures: Prevention and control measures for HAIs or adverse infectious events that occur at the usual incidence during a specified time period. They are also called endemic control measures.

(b) Outbreak control measures: Prevention and control measures for HAIs or adverse infectious events that occur above the expected rate or when an unusual microorganism or adverse event is recognized. They are also called epidemic control measures. (See paragraph 11 of this appendix for additional information on developing a framework for outbreak response.)

b. Each VA medical facility's Infection Prevention and Control Program should include a periodic systematic review process (e.g., Risk Assessment, subsequent development of a Plan, and follow-up Evaluation). Strategies for this Risk Assessment rely upon surveillance findings and circumstances within individual facilities and in the surrounding community. The Infection Prevention and Control Program must meet current requirements from external oversight regulatory bodies and comply with written VA requirements.

c. Each VA medical facility will establish a hand hygiene program and comply with the current healthcare organization accreditation standards. The following components of a hand hygiene program are required:

(1) Implementing, at a minimum, categories IA, IB and IC of the most current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines. In addition, one may consider current recommendations from the World Health Organization (WHO). Some facilities, based on the local risk assessment, may also choose to implement some CDC category II Recommendations (i.e., if moving from a contaminated body site to another body site during care of the same patient). **NOTE:** *The CDC Guideline for Hand Hygiene in Health-Care Settings Part II Recommendations states “This guideline and its recommendations are not intended for use in food processing or food-service establishments, and are not meant to replace guidance provided by FDA’s Model Food Code.” Refer to [CDC Guideline for Hand Hygiene in Health-Care Settings](#).*

(2) Periodically monitoring and recording adherence as the number of hand-hygiene episodes performed by personnel and/or number of hand-hygiene opportunities, by ward or unit, and providing feedback to personnel regarding their performance.

(3) Establishing goals for improving adherence with hand hygiene guidelines.

(4) Assuring that hand hygiene products selected by the institution have been evaluated by the Infection Prevention and Control Program and approved by the Infection Prevention and Control Committee.

d. The role of the IPCP is integral to the success of the Infection Prevention and Control Program. An IPCP should have an understanding of concepts of behavioral change, the principles of epidemiology, the ability to collect and analyze data, basic knowledge of microbiology and basic elements of patient care practice. IPCPs should preferentially have advanced training and/or certification in infection prevention and control. The IPCPs should have the ability to provide education about infection prevention and control to a variety of audiences. Additionally, the IPCP should receive ongoing training in infection surveillance, infection prevention and control, and epidemiology. The IPCP roles and responsibilities should include, at a minimum, the following:

(1) General problem identification;

(2) Data collection and analysis for infections;

(3) Development of policies and procedures for infection prevention and control;

(4) Product evaluation;

(5) Review of facility’s plan for major/minor construction and renovation projects;

(6) Collaboration with, among others, the medical facility’s Dental, Employee/Occupational Health, Facilities Management/Environmental Management Services, Nursing, Pathology & Laboratory Medicine Service, Surgery Service (including VA Surgical Quality Improvement Program [VASQIP]), Process/Quality Improvement, Sterile Processing Service, Safety Departments and Environment of Care process,



Nutrition and Food Services, Accident and Sharps Review Board, Clinical Informatics, along with CLC leadership and other clinical care programs;

(7) Consultation/facilitation in an outbreak response;

(8) Input into the educational needs for staff (including trainees and volunteers), patients/residents, and visitors.

e. The role of the Hospital Epidemiologist, or equivalent, is also important to the Infection Prevention and Control Program. This person will help guide the Program using principles of epidemiology and data analysis. The Hospital Epidemiologist will generally be the Chair of the Infection Prevention and Control Committee.

f. The role of the MDRO Prevention Coordinator (MPC) is to manage the local aspects of the MDRO Prevention Initiative. In collaboration with the Infection Prevention and Control Program, this person collects and reports data and develops and evaluates local VA medical facility procedures, among others, related to the MDRO Prevention Initiative.

g. Written infection prevention and control documents will be reviewed periodically and updated at the facility level when clinically indicated, or based on the most current written rules and regulations generated by the VA and/or valid oversight regulatory bodies.

h. Participation in VA/VHA required activities of infection prevention and control (e.g., IPEC modules, NIDS point prevalence surveys, and other activities defined by NIDS).

i. Collaborate with each VA medical setting (e.g., Acute Care, Ambulatory Care, Behavioral Health, CLC, Rehabilitation Unit, etc.) to support that infection prevention and control policies/practices are in place and to ensure that they are consistent with VA authoritative documents and guidelines recommended by accrediting agencies.

j. Collaborate with each VA medical setting (e.g., Acute Care, Ambulatory Care, Behavioral Health, CLC, Rehabilitation Unit, etc.) to support compliance with VA authoritative documents and regulations related to animals in the healthcare setting.

k. Consult and/or participate with other committees at the VA medical facility on matters relevant to infection prevention and control.

l. Collaborate with other VA medical facilities and non-VA medical facilities and public health authorities in the community regarding infectious diseases.

### **3. INFECTION PREVENTION AND CONTROL SURVEILLANCE**

a. A major goal of an Infection Prevention and Control Program is to lower the risk of HAIs. Surveillance activities have a significant influence on the infection prevention and control activities employed to achieve the goal of a lower risk for an HAI. In

addition to participating in the VA/VHA required surveillance activities noted in paragraph 2.h. of this Appendix, the VA medical facility must determine local surveillance priorities as well. **NOTE:** *Surveillance, when applied to disease, may be defined as the continuing scrutiny of those aspects of the occurrence and spread of disease that are pertinent to effective control.*

(1) Such surveillance activities, designed to establish and maintain baseline infection rates, will provide the facility an indication of its endemic infection rates. These rates represent the frequency with which a specific type of infection occurs within the total or targeted population in a facility based on past surveillance. Knowledge of the endemic rates enhances recognition of a situation to be reviewed when the infection rates rise above the endemic rates. Equally true, the drop of infection rates below the endemic rates may signify the effectiveness of infection prevention and control activities currently in place.

(2) An ongoing system of surveillance is an integral component of an Infection Prevention and Control Program. Inherent in the activities should be detection of and control of outbreaks of infections. Being mindful of the major infection sites (e.g., bloodstream, lungs, surgical wound, and urinary tract), surveillance should be so planned to provide baseline data on each infection site over a designated time period.

(3) Each facility will establish a written set of surveillance activities including, but not limited to, the following elements. **NOTE:** *There are a wide variety of surveillance activities (e.g. whole-house versus focused). The determination of type of surveillance is based upon the local evaluation of the Infection Prevention and Control Program, resource availability and high-risk patient population, in addition to VA required surveillance activities.*

(a) Definition of the events to be surveyed;

(b) Definitions of HAIs with criteria for determining presence or absence of infection;

(c) Methods for systematic collection of relevant data;

(d) Methods for tabulation of the data;

(e) Methods for qualitative and quantitative (if appropriate) analysis and interpretation of the data;

(f) Methods for preparation and dissemination of findings to individuals, groups, and/or committees, as appropriate. **NOTE:** *A critical element of the program is feedback of accumulated data to those individuals, groups, and committees who can most benefit from this information.*

b. Each VA medical facility will conduct surveillance activities based on results of a periodic (e.g., annual) infection prevention and control risk assessment conducted within each VA health care setting.

c. The determination and interpretation of rates is a key factor in the analysis portion of the surveillance system. Consistency in the use of the term and calculation of rates is a crucial issue. (See paragraph 12 of this appendix for additional information about determining rates for surveillance.)

d. VA medical facilities will report diseases to the appropriate public health authority in accordance with applicable statutes, regulations and current VHA policy for infectious disease reporting (see Appendix E), protecting personal health information, and privacy and confidentiality through a release of information process. **NOTE:** *Health Information Management Service (HIMS) is an essential partner in this process at the local level to assure that all disclosures of protected health information are tracked and recorded in accordance with appropriate statutes pertaining to the administrative aspects of the medical record.*

#### 4. VA MEDICAL FACILITY INFECTION PREVENTION AND CONTROL COMMITTEE

a. Each VA medical facility will establish an Infection Prevention and Control Committee ("Committee") through local channels for authority. The Committee will serve as a multidisciplinary body of the medical facility to provide consultative input, policy support, and subject matter expertise to the Infection Prevention and Control Program, as well as to facility leadership, with the goal of providing an optimally safe environment for patients/residents, staff and visitors.

b. The Committee should report to the medical staff Clinical Executive Board, or equivalent, from where the Infection Prevention and Control Committee should derive its authority.

c. The Committee functions as the central decision-making and policy-making body for infection prevention and control issues. The Committee often refines and ratifies the ideas of the Infection Prevention and Control Program. Committee members play a significant role in representing their discipline and disseminating the information discussed in the meeting. The Committee serves as a mechanism to obtain multidisciplinary support and collaboration for changes, interventions and actions.

d. The Committee is required to be chaired by a physician, generally the Hospital Epidemiologist, preferably trained in Infectious Diseases or Infection Prevention and Control. **NOTE:** *If the facility does not have a physician trained in Infectious Diseases then the chairperson should at least be a physician with an interest in Infectious Diseases and/or Infection Prevention and Control. The facility could also develop a partnership or consultative arrangement with another facility within the Veterans Integrated Service Network (VISN) or have a contractual agreement with a local Infectious Diseases physician to provide these services.*

e. Membership should represent the various disciplines and needs of the medical facility, as appropriate. Committee representation typically includes members of administration and clinical and ancillary staff because infection prevention and control issues and measures often cross departmental lines. Specifically:

(1) The Committee must be multidisciplinary and must include, at a minimum, representation from the following areas: Infectious Diseases (if available), Infection Prevention and Control, Pharmacy Service, MPC, Environmental Management Services, Engineering/Facilities Management, Surgery, Sterile Processing Service, Pathology and Laboratory Medicine Services (in particular Microbiology), Employee/Occupational Health, Safety/Industrial Hygiene, Community Living Center (CLC) (if the facility has a CLC) Nursing (Associate Chief, or equivalent), provider representation (both leadership and front-line) and Facility Leadership.

(2) Other stakeholders in infection prevention and control may be included on the Committee, as appropriate. Some areas for consideration include, but are not limited to: Dental, Nutrition and Food Service, Hemodialysis, Home-Based Primary Care, Respiratory Therapy, Logistics, Health Promotion and Disease Prevention Program Manager, Clinic and Nursing Unit Managers, Quality Improvement, front-line nursing staff, labor partners, etc.

f. At a minimum, routine Committee meetings must be held at least quarterly. The Committee may choose to meet more frequently based on local needs, considerations and activities at the facility and/or at the discretion of the Chairperson.

g. Routine Committee meeting topics, discussions and recommendations are disseminated to appropriate stakeholders within the medical facility.

## 5. MINIMUM RECOMMENDED STAFFING GUIDELINES FOR INFECTIOUS DISEASES AND INFECTION PREVENTION AND CONTROL FUNCTIONS

a. To have effective Infectious Diseases, Infection Prevention and Control, and Antimicrobial Stewardship Programs, adequate resources, including personnel, are required. Table in this appendix (below) provides a listing of essential individuals for such a program. Minimum recommended staffing guidelines for clinical and administrative functions are presented for VA medical facilities, based on complexity ratings; the recommended full-time equivalent (FTE) for the CLC should be added to the appropriate VA Medical Facility Complexity Level to obtain a total recommended minimum FTE for the VA medical facility. **NOTE:** *The CLC category should include consideration of special programs (e.g., spinal cord injury, polytrauma, residential inpatient psychiatry, domiciliary, blind rehabilitation) to assess staffing needs.* The staffing guidelines were developed and agreed upon by the Infectious Diseases Field Advisory Committee. If funded research is being conducted by any of the personnel involved in Infectious Diseases or Infection Prevention and Control, the portion of FTE compensated by research should be designated separately and in addition to the staffing matrix below (it should not be counted toward the staffing matrix below which only accounts for clinical and administrative functions).

b. Comprehensive staffing guidelines regarding provision of care to HIV and viral hepatitis patients are beyond the scope of this document and the purview of NIDS. Any staffing in support of HIV and viral hepatitis programs should be in addition to the staffing levels listed in Table 1 below. See VHA Handbook 1101.10, Patient Aligned

Care Team (PACT) Handbook, for further information on Infectious Diseases PACT (ID-PACT) requirements for integrated care; these requirements are also beyond the scope of this document and the purview of NIDS and should also be in addition to the staffing levels listed in Table 1.

c. Table 1 (below) provides minimum recommended staffing guidelines. Specific positions may be under multiple service lines (e.g., medical services, nursing, quality management) as determined by the VA medical facility. However, all positions are required to support the mission of robust, effective Infectious Diseases and Infection Prevention and Control Programs. Each row is considered separate and distinct from the others. The FTE recommended is dependent upon multiple factors, such as the complexity of the facility and services offered (i.e., VHA-designated Transplant Centers, polytrauma services, etc.), patient population, research commitments, and collateral duties. **NOTE:** *Additional information regarding each row in the table is provided paragraphs 5.d.(1) -(10).*

**TABLE 1: Minimum FTE by Medical Facility Complexity Level**

| <b>Position Title</b>   | <b>1a and 1b</b> | <b>1c and 2</b> | <b>3</b>                         | <b>Additional staffing for CLC</b> |
|---|------------------|-----------------|----------------------------------|------------------------------------|
| Chief, Infectious Diseases Section  | 0.25 – 0.375     | 0.25            | See Note 1 below.                | N/A                                |
| Infectious Diseases Physician   | 1.625            | 1.25            | 0.25                             | N/A                                |
| Nurse Practitioner (NP) and/or Physician Assistant (PA)                             | 1 – 2            | 1               | 0.0 – 0.50                       | N/A                                |
| Hospital Epidemiologist   | 0.50             | 0.50            | 0.25                             | 0.25                               |
| Infection Prevention and Control Professional                                       | 2 – 5            | 1 – 2           | 1                                | 1 FTE for every 150 beds           |
| MDRO Prevention Coordinator   | 1 – 2            | 1               | 1                                | 0.5 FTE for every 150 beds         |
| Program Support Assistant   | 1 – 2            | 0.5 – 1         | 0.25 – 0.375                     | See Note 1 below.                  |
| Infectious Diseases Physician – Antimicrobial Stewardship                           | 0.50             | 0.25 – 0.5      | 0.25                             | See Note 1 below.                  |
| Clinical Pharmacist – Antimicrobial Stewardship                                     | 1.5 – 4          | 1 – 2           | 0.25 – 0.50<br>See Note 3 below. | 0.0 – 0.25<br>See Note 3 below.    |
| Nurse Practitioner (NP) and/or Physician Assistant (PA) – Antimicrobial Stewardship | 0.50             | 0.50            | 0.0 – 0.25                       | See Note 1 below.                  |

**NOTE 1:** For this case, no specific recommendations were made by the Infectious Diseases Field Advisory Committee and the FTE for the positions is left to the discretion of the VA medical facility.

**NOTE 2:** Staffing guidelines regarding provision of care to HIV and hepatitis patients and ID-PACT are beyond the scope of this document.

**NOTE 3:** The National VA Antimicrobial Stewardship Task Force and Pharmacy Benefits Management (PBM) Clinical Pharmacy Practice Office (CPPO) created and validated a staffing calculator for Antimicrobial Stewardship Programs (ASP) in VHA

facilities. The facility may choose, for minimum staffing levels, to refer to the ASTF Guidance and calculator at <https://vaww.cmopnational.va.gov/cmop/PBM/pre/default/AntimicrobialMainPage/aspgeral/default.aspx>. **NOTE:** This is an internal VA Web site that is not available to the public.

d. The following information is to be considered for each position listed Table 1 above at the VA medical facility:

(1) **Chief, Infectious Diseases Section:** If no Infectious Diseases Section exists in the facility, then availability should be provided for a physician specifically trained in infectious diseases, who has taken at the minimum, one training course in hospital infection prevention and control. The responsibilities of the Chief, Infectious Diseases Section are independent of clinical workload. Funded research is encouraged but is in addition to FTE defined by clinical need in Table 1.

(2) **Infectious Diseases Physician:** The recommended FTE for this position strictly pertains to conducting infectious diseases consults or other clinical duties that are independent of the duties of the Chief, Infectious Diseases Section, Hospital Epidemiologist, or Infectious Diseases Physician - Antimicrobial Stewardship. The number of FTE is to be based on the size, complexity and the number of Infectious Diseases outpatient clinics offered by the facility. If it is not feasible to have this position available on-site, then establish partnerships or consultative arrangements to have access to an Infectious Diseases physician with another VA medical facility within the VISN. Funded research is encouraged but is in addition to FTE defined by clinical need in Table 1.

(3) **Nurse Practitioner (NP) and/or Physician Assistant (PA):** The specific duties for a Nurse Practitioner and/or Physician Assistant may vary since prescriptive authorities of the positions may differ. The FTE for these positions is dependent upon the involvement the individual is to have with patients with complex or chronic diseases. NPs/PAs may be assigned duties in infectious diseases with practice scope and reporting requirements defined by facility policy. Funded research is encouraged but is in addition to FTE defined by clinical need in Table 1.

(4) **Hospital Epidemiologist:** It is preferable that this position be an infectious diseases trained physician with additional training and interest in infection prevention and control. If it is not feasible to have this position available on-site, then establish partnerships or consultative arrangements to have access to a Hospital Epidemiologist with another VA medical facility within the VISN. The responsibilities for hospital epidemiology are independent of clinical workload. Funded research is encouraged but is in addition to FTE defined by clinical need in the Table 1.

(5) **Infection Prevention and Control Professional (IPCP):** The specific duties for the recommended FTE include routine day-to-day infection prevention and control roles and responsibilities. Duties do not include ancillary tasks (e.g., utilization review, employee/occupational health, quality management, etc.); if these duties are assigned

to the IPCP, additional FTE should be added. The number of FTE will be dependent on the complexity of health care services provided at the VA medical facility, as well as the patient/resident population (e.g. transplant program), not just population numbers alone. The highest number of FTE would be needed by large VA medical facilities or those with multiple complex sites. Funded research is encouraged but is in addition to FTE defined by clinical need in Table 1.

(6) **MDRO Prevention Coordinator (MPC):** The FTE recommended for this position includes all MDRO Prevention Initiative activities. The FTE recommended for this position should not support collateral roles and responsibilities for the VA medical facility. Duties do not include ancillary tasks (e.g., utilization review, employee/occupational health, quality management); if these duties are assigned to the MDRO Prevention Coordinator additional FTE should be added. Funded research is encouraged but is in addition to FTE defined by clinical need in Table 1.

(7) **Program Support Assistant:** The FTE recommended for this position is to support the Infectious Diseases Section, Infection Prevention and Control Program, MDRO Program and/or Antimicrobial Stewardship.

(8) **Infectious Diseases Physician – Antimicrobial Stewardship:** An Infectious Diseases physician is preferred. In facilities without an Infectious Diseases physician, the facility's designated antimicrobial stewardship provider champion would serve in this role. The responsibilities of this role are independent of clinical workload. Funded research is encouraged but is in addition to FTE defined by clinical need in Table 1.

(9) **Clinical Pharmacist – Antimicrobial Stewardship:** The FTE recommended for this position is dependent upon specific duties of the clinical pharmacist and the involvement of the individual to support Infectious Disease Section, Infection Prevention and Control Program, MDRO, and Antimicrobial Stewardship. This individual may be assigned duties in infectious diseases with practice scope and reporting requirements defined by facility policy. The clinical pharmacist includes pharmacists with a scope of practice who provide direct patient care and function at the highest level of clinical practice to provide medication management services to patients with infectious diseases. The FTE recommended for the position may not be adequate for large or highly complex facilities and more resources will be required. Funded research is encouraged but is in addition to FTE defined by clinical need in Table 1.

(10) **Nurse Practitioner (NP) and/or Physician Assistant (PA) – Antimicrobial Stewardship:** The FTE recommended for this position is to support Antimicrobial Stewardship, particularly as the initiative expands to additional patient care areas (e.g., CLCs, outpatient settings). Funded research is encouraged but is in addition to FTE defined by clinical need in Table 1.

## **6. RESOURCE REQUIREMENTS FOR THE INFECTIOUS DISEASES SECTION AND THE INFECTION PREVENTION AND CONTROL PROGRAM**



The VA medical facility will furnish the required space, equipment, office supplies and other administrative services necessary for the effective operation of the Infectious Diseases Section, Infection Prevention and Control Program, and the Infection Prevention and Control Committee. This includes:

a. **Space.** Sufficient clinical space should be available to ensure adequate access for patient care needs. The Infectious Diseases Section and the Infection Prevention and Control Program should be granted adequate office space for personnel, office equipment, storage and supplies. ***NOTE: It would be preferable for Infectious Diseases and Infection Prevention and Control personnel to be physically located in close proximity wherever feasible.*** Consideration for storage space should emphasize the needs for surveillance documentation and privacy concerns. The space provided should have the capacity to secure documents in accordance with relevant VA privacy and confidentiality statutes.

b. **Information Technology.** Quality healthcare depends on the ability of VA medical professionals to collect and access the protected health information of VHA patients in a timely manner, while safeguarding the integrity and confidentiality of that information. To achieve this goal, information technology (IT) that is necessary for patient care, education, research and administrative activities, needs to be available and must comply with VA IT requirements, regulations and policies. Examples of appropriate IT include, but are not limited to, Veterans Health Information Systems and Technology Architecture (VistA) applications, computer systems, mobile devices, and equipment to scan, send and copy pertinent medical information. This would also include access to and availability of personnel who can access basic systems within VA (e.g., run Fileman routines, access Decision Support Systems) to support infectious diseases and infection prevention and control activities. Additionally, there should be support of graphical, statistical and epidemiological software applications to perform infection prevention and control surveillance and epidemiology activities to support local, regional and national data needs, and to support access to local, regional and national data warehouse resources as apropos their programs. Adequate equipment and software need to be available for teleconferencing and telemedicine.

c. **Equipment & Supplies.** Adequate equipment and supplies are available to fulfill the mission of the Infectious Diseases Section and the Infection Prevention and Control Program. The equipment and supplies should be near where personnel from infectious disease and infection prevention and control perform their activities.

d. **Professional Development.**

(1) **Clinical Skills and Scholarly Pursuits.** To realize the patient care, research, and educational benefits of having a professionally active infectious diseases and infection prevention and control staff, individuals are encouraged to participate in clinical skills enhancement activities and scholarly pursuits. Each VA medical facility is to facilitate and accommodate the temporal and general resource needs required of active infectious diseases and infection prevention and control staff to advance professionally. Appropriate activities may include: attendance and completion of educational training

courses and programs in clinical areas; attendance at key national conferences of professional organizations; academic pursuits leading to faculty appointments; professional organization involvement with officer or committee responsibilities; pursuit of special meritorious recognition from recognized professional organizations; research and publication endeavors; training program development or responsibilities; and participation in *ad hoc* national Infectious Diseases and Infection Prevention and Control Programs responsibilities.

(2) **Continuing Education.** To keep staff current on infectious diseases knowledge and techniques and infection prevention and control procedures, the VA medical facility should typically provide support of continuing medical education (CME) and continuing education units (CEUs) for its infectious diseases and infection prevention and control staff.

(a) Funding consisting of tuition, travel, and per diem expense support is to be provided as local resources permit.

(b) Time may be granted in accordance with the most current VHA time and attendance policies, to attend CME/CEU meetings. In general, continuing education should be granted at a minimum of once a year, and could be more, depending on the needs of the Service.

(3) **Administration.**

(a) To promote development of future administrative leaders, VA medical facilities are encouraged to include active infectious diseases and infection prevention and control staff in administrative activities at the local facility or higher level.

(b) The Infectious Diseases and Infection Prevention and Control Programs participate in the development of related pertinent policies as well as adherence to VA medical facility policies.

## 7. PATHOLOGY & LABORATORY MEDICINE SERVICE

a. The laboratory should have sufficient resources (e.g., staff, reagents, supplies, equipment), based on facility size and complexity, to provide pertinent information in support of the Infection Prevention and Control Program of the VA medical facility and the clinical mission of the Infectious Diseases Program. **NOTE:** *For complex VA healthcare facilities, it is strongly recommended that the Microbiology Laboratory be led by a Doctor of Philosophy (Ph.D.) trained microbiologist, or equivalent. A physician with specific training in clinical or medical microbiology, preferably with advanced certification, and a Masters prepared technology supervisor could also be acceptable. This leader may provide support to other less complex facilities in the VISN. It is recommended that at least one Ph.D. trained microbiologist, or equivalent, be available in each VISN.*

b. Specialized immunology and microbiology testing (e.g., for determination of exposure to infectious agents and molecular typing of pathogens) should be available upon request either at the VA medical facility, a facility within the VISN, or a contract laboratory, in support of outbreak investigations. Timely testing is essential for the identification of microorganisms for surveillance and outbreak investigations.

c. There should be adequate access and resources for appropriate, evidence-based new technologies pertinent to infectious diseases and infection prevention and control, such as genomics testing, biomarkers of infection, and rapid identification of pathogens and susceptibility testing, as they become available.

d. The Chief, P&LMS, or designee, should liaise with Chief, Infectious Diseases Section, or designee, and infection prevention and control to have input regarding:

(1) The collection of specimens and the establishment of priorities for collection of specimens;

(2) The establishment of priorities for cultures, susceptibility tests, new diagnostic procedures;

(3) Prompt turnaround time and rapid diagnostic testing;

(4) The compilation of laboratory data for epidemiologic evaluation;

(5) Determination of any specific internal and external reporting requirements for infectious diseases (e.g., requirements for reporting infectious diseases to local public health in accordance with Appendix E);

(6) Other laboratory resources in support of the clinical mission of the Infectious Diseases Section and the infection prevention and control at the VA medical facility.

e. Microbiology and other laboratory reports pertinent to infectious diseases care and infection prevention and control should be easily accessible and readily available.

f. Provision of a facility (or unit-specific) antibiogram on a periodic basis (e.g. annually).

g. Representation of the Microbiology Laboratory on the Infection Prevention and Control Committee structure (see paragraph 4 of this Appendix).

## **8. QUALITY IMPROVEMENT**

The evaluation and improvement of infectious diseases and infection prevention and control services enhances the facility's overall Quality Improvement (QI) program. This includes both service-specific as well as interdisciplinary monitoring of quality indicators. The Infectious Diseases providers, IPCPs, and MPCs are responsible for assisting the effective implementation of the QI plan as it pertains to infectious diseases.

## 9. SAFETY

Infectious Diseases and Infection Prevention and Control play an integral role in the overall safety program at the VA medical facility, including in the areas of patient safety, industrial hygiene and safety, and occupational health and safety.

## 10. RESEARCH AND DEVELOPMENT

a. Research and development are integral parts of the VHA Infectious Diseases and Infection Prevention and Control Programs and should be encouraged and promoted within each VISN. Staff infectious diseases providers, residents, fellows, and students along with nursing staff, pharmacy staff and others, as appropriate, are encouraged to develop research skills and participate in research studies. Protected time for research should be provided according to the April 8, 2010 memorandum "Protected Time for Research Guidance" (or most current guidance), and is in addition to the FTEE outlined in Table 1 of this appendix for clinical and administrative duties. All research activities must be in compliance with VHA policies and other applicable Federal regulations, including being approved by all applicable VA research review committees.

b. VA has a robust Research and Development Program. Specific information regarding policies and procedures can be found in the Handbook series 1200 – 1205. Information on the Research and Development Program can be found at the public [VHA Office of Research and Development](#) Web site or at the VA [Intranet site](#). **NOTE:** *The second link is an internal VA Web site that is not available to the public.* Specific inquiries regarding programs and eligibility should be directed to the Office of Research and Development.

## 11. FRAMEWORK FOR OUTBREAK RESPONSE

a. An outbreak is defined as an increase in cases of disease in time or place that is greater than expected. If a condition is rare (e.g. measles) or has serious public health implications (e.g. bioterrorism agent), an outbreak may involve only one case. The urgency of case investigations depends on the seriousness of the disease as well as the timeframe within which control measures must be implemented. This, in turn, is dependent on the incubation period of the disease, the mode of transmission (e.g., respiratory, fecal-oral, foodborne), the mortality rate, potential for complications, and the patient/resident population affected (e.g. inpatient versus outpatient). An effective surveillance program can assist in the timely identification of an outbreak along with astute clinical observation.

b. The goals of outbreak investigation and management are to:

- (1) Decrease further transmission and mitigate the outbreak.
- (2) Understand practices and circumstances that contributed to the outbreak.
- (3) Identify areas of improvement to prevent future outbreaks.

c. A general approach to investigating an outbreak can consist of the following components. The order may vary and some may be performed simultaneously.

(1) Confirming the presence of an outbreak.

(2) Developing a case definition based on suspected or confirmed etiologic agent, location/setting, time period, exposures, etc.

(3) Developing a process to determine case finding (e.g., review laboratory reports, review of patient/resident charts for signs/symptoms).

(4) Analyzing the outbreak through the collation of data (e.g., develop a line listing, tabulate and orient data in terms of person, place and time, formulate a graphical epidemiologic curve).

(5) Formulating a hypothesis regarding mechanism of transmission.

(6) Developing, implementing and evaluating control measures.

(7) Providing (ongoing) communication to key stakeholders about outbreak investigation, response, and control. Key stakeholders might include infection prevention and control, occupational health, public affairs, facility leadership, affected patients/residents, affected staff, and external entities (e.g., accreditation organizations, local public health authorities, congressional liaisons and local media).

d. When conducting an outbreak investigation, information received, decisions made, and corrective actions taken must be documented. This information should include the appropriate levels of confidentiality. Education and communication with clinical and other staff, including facility leadership, patients/residents, and family/visitors is essential to promote and implement mitigation strategies effectively.

e. Outbreak control measures may be appropriate if there is suspicion or evidence of transmission of an epidemiologically significant pathogen or communicable disease within the health care facility rather than waiting for a fully evolved clinical outbreak.

f. Local medical facility policy should incorporate who can institute outbreak control measures beyond routine and/or endemic control measures (see paragraph 2.a.(9)(b) of this appendix.

## **12. FORMULATION OF RATES FOR INFECTION PREVENTION AND CONTROL SURVEILLANCE**

a. Surveillance is a fundamental component of an effective infection prevention and control program. It is defined as the ongoing, systematic collection, recording, analysis, interpretation and dissemination of data. Surveillance data reflect current health/disease status of a population (e.g. healthcare patients) and provides information that can be used to improve healthcare quality and outcomes. Data can be expressed using analytical statistical methodologies or other descriptive statistical methods. Below

are some basic statistical methods used in infection prevention and control surveillance that have been adapted from the CDC's "Principle of Epidemiology in Public Health" Self-Study Course. Additional information and examples can be found at [the CDC Web site](#).

b. **Rate** is a measure of the frequency with which an event occurs in a defined population over a specified period of time. Because rates put disease frequency in the perspective of the size of the population, rates are particularly useful for comparing disease frequency in different locations, at different times, or among different groups of persons with potentially different sized populations. A rate is a measure of risk. The following is the basic formula for rates:  $Rate = \frac{Numerator}{Denominator} \times Constant$

(1) Numerator = the number of times the event (e.g. infections) has occurred during a specified time interval.

(2) Denominator = a population (e.g. number of patients at risk) from which those experiencing the event were derived during the same time interval.

(3) Constant = a whole number (100, 1,000, or 10,000 is usually used). Selection of the whole number is usually made so that the smallest rate calculated has at least one digit to the left of the decimal point.

c. **Ratio** is the relative magnitude of two quantities or a comparison of any two values. It is calculated by dividing one interval- or ratio-scale variable by the other. The numerator and denominator do not need to be related. For example, one could compare apples with oranges or apples with the number of physician visits.

d. **Proportion** is the comparison of a part to the whole. It is a type of ratio in which the numerator is included in the denominator. For example, a proportion can be used to describe what fraction of clinic patients tested positive for HIV, or what percentage of the population is younger than 25 years of age. A proportion may be expressed as a decimal, a fraction, or a percentage.

e. **Incidence** is the occurrence of new cases of disease or injury in a population over a specified period of time. Although some epidemiologists use incidence to mean the number of new cases in a community, others use incidence to mean the number of new cases per unit of population.

f. **Prevalence** is the proportion of persons in a population who have a disease or attribute at a specified point in time or over a specified period of time. Prevalence differs from incidence in that prevalence includes all cases, both new and preexisting, in the population at the specified time, whereas incidence is limited only to new cases.

(1) **Point prevalence** refers to the prevalence measured at a point in time. It is the proportion of persons with a disease or attribute on a particular date.

(2) **Period prevalence** refers to prevalence measured over an interval of time. It is the proportion of persons with a disease or attribute at any time during the interval.

## MULTI-DRUG RESISTANT ORGANISM (MDRO) PREVENTION INITIATIVE PROCEDURAL GUIDANCE

The National Infectious Diseases Service (NIDS), Office of Patient Care Services (PCS) is the Veterans Health Administration (VHA) office responsible for the Multi-Drug Resistant Organism (MDRO) Prevention Initiative policy and guidance within VHA, and defines procedures for establishing new and revising existing policy and guidance designed to reduce MDRO transmission and infection in populations served by VHA. This appendix defines the procedures that shall be followed by NIDS to develop, approve, or update MDRO Prevention Initiatives (PIs), and disseminate related Implementation Guidelines that will serve as VHA policy. The goal of these procedures is to implement guidance in order to reduce MDRO transmissions and infections in populations served by VHA.

### 1. BACKGROUND

a. MDROs are microbes that cause serious infections that are difficult to treat because the organisms are not susceptible to many of the agents used for therapy. Examples of MDROs include methicillin-resistant *Staphylococcus aureus* (MRSA), Vancomycin-resistant enterococci (VRE), carbapenem-resistant *Enterobacteriaceae* (CRE), and other multi-drug resistant gram-negative bacteria. *Clostridium difficile* infection (CDI), although not considered multidrug-resistant, is often included with MDROs.

b. MDROs can cause infections in the ambulatory, acute, and long-term care settings, and are associated with increased lengths of stay, morbidity, mortality, and costs.

c. In health care settings, MDROs may be transmitted from patient to patient by health care workers or patients, or by contact with contaminated inanimate objects and environmental surfaces. Such transmission amplifies the number of patients who become colonized and are then at risk for clinical infection.

d. An organized approach to the identification and isolation of patients carrying an MDRO, along with an emphasis on good hand hygiene and a cultural transformation where infection control becomes everyone's responsibility, was associated with a significant drop in MRSA healthcare-associated infections (HAIs) in VA acute care, spinal cord injury, and long-term care settings. Similar organized approaches, including an emphasis on adherence to standardized cleaning and disinfection processes, may be beneficial for controlling HAIs due to other MDROs and *Clostridium difficile*, the most common cause of antibiotic-associated colitis.

e. The purpose of this appendix is to provide a framework for NIDS to develop and implement strategies for controlling MDROs in VHA facilities.

### 2. PROCEDURES



NIDS will use the following processes to select, develop, approve, update, and disseminate MDRO PIs and related Implementation Guidelines:

a. **Proposal of New MDRO PIs.** Proposal of new MDRO PIs and subsequent Implementation Guidelines may originate from the NIDS/MDRO Prevention Office or MDRO PI Task Force. The MDRO PI Task Force must approve new MDRO PIs.

b. **Development of Implementation Guidelines for new MDRO PIs.** The NIDS/MDRO Program develops these implementation guidelines by:

(1) Reviewing VHA policy, other VHA existing guidance, other relevant Federal agency guidance (e.g., Centers for Disease Control and Prevention, Food and Drug Administration), and scientific evidence-based literature.

(2) Inviting, as appropriate, MDRO Prevention Coordinators (MPCs), Veterans Integrated Service Network (VISN) MDRO Liaisons, VISN Chief Medical Officers, and other VHA clinical experts to review and comment on draft Implementation Guidelines.

(3) Consulting, when necessary, with additional content experts for specific MDRO PIs. Content experts who are not Federal employees may provide individual advice or may meet with VHA officials to exchange facts or information on relevant subjects, but will not be part of the MDRO PI Task Force, or take part in the decision making.

(4) Incorporating input and reaching consensus on content with the other VHA offices that provide guidance on MDRO PI Implementation Guidelines.

c. **Approval of Implementation Guidelines for new MDRO PIs.** Once consensus has been reached between NIDS/MDRO Prevention Office and other appropriate VHA Offices, the draft documents must be reviewed and approved by at least 75% percent of the voting members of the MDRO PI Task Force. Approved documents must have concurrence signature of the Chief Officer for Specialty Care Services, Deputy Under Secretary for Health for Policy and Services, and Assistant Deputy Under Secretary for Health for Clinical Operations before being sent to the Deputy Under Secretary for Health for Operations and Management for approval and dissemination to the Networks and facilities.

d. **Updating Approved Implementation Guidelines for existing MDRO PIs.**

(1) Each approved Implementation Guideline must be reviewed periodically by the NIDS/MDRO Prevention Office.

(2) When appropriate, changes to Implementation Guidelines must be reviewed and approved by other pertinent VHA offices (e.g. Office of Pathology & Laboratory Medicine Service, Office of Health Promotion and Disease Prevention, Deputy Under Secretary for Health for Operations and Management, Office of Environmental Programs Service) that provide input into a specific Implementation Guideline.

(3) Changes to Implementation Guidelines (other than minor or grammatical changes) must be reviewed and approved by at least 75% of the voting members of the MDRO PI Task Force. Approved documents must have concurrence signatures of the Chief Officer for Specialty Care Services, Deputy Under Secretary for Health for Policy and Services, and Assistant Deputy Under Secretary for Health for Clinical Operation before being sent to the Deputy Under Secretary for Health for Operations and Management for approval and dissemination.

(4) Minor or grammatical changes to Implementation Guidelines will be approved by the Director, NIDS.

**e. Dissemination of Implementation Guidelines for MDRO PIs.**

(1) Each newly approved Implementation Guideline will be disseminated to VISN leadership through the office of the Deputy Under Secretary for Health for Operations and Management (10N), and from there is distributed to VISN MDRO Liaisons, Facility Directors, facility MPCs, and other pertinent disciplines. Each document will be posted in a dedicated section of the [MDRO Prevention Office Web site](#). **NOTE:** *This is an internal VA Web site that is not available to the public.*

(2) As appropriate, educational activities such as webinars and training sessions will be made available to facilitate dissemination of the Implementation Guidelines.

## **VETERANS HEALTH ADMINISTRATION MULTI-DRUG RESISTANT ORGANISM (MDRO) PREVENTION INITIATIVE TASK FORCE**

This section describes and continues the chartered Multi-Drug Resistant Organism (MDRO) Prevention Initiative (PI) Task Force that serves as an advisory group to senior leadership in the Veterans Health Administration (VHA). The MDRO PI Task Force is an approving body for the selection of MDRO PIs and new MDRO Implementation Guidelines. The MDRO PI Task Force advises the Director, National Infectious Diseases Service (NIDS), Chief Officer Specialty Care Services (SCS), Assistant Deputy Under Secretary for Health (ADUSH) for Patient Care Services (PCS), Deputy Under Secretary for Health Policy and Services (DUSHPS), Principal Deputy Under Secretary for Health (PDUSH), the Deputy Under Secretary for Health for Operations and Management (DUSHOM), and the Under Secretary for Health (USH) on health issues affecting the development, deployment and expansion of the MDRO PI.

### **1. TASK FORCE OBJECTIVES**

The MDRO PI Task Force will be expected to accomplish the following objectives:

- a. Identify best practices and make recommendations to standardize practices, when appropriate, for national deployment.
- b. Collaborate, as needed, with other subject matter experts to develop recommendations.
- c. Review recommendations for implementation and expansion of the MDRO Prevention Initiative to ensure that clinical, operational and program practices relating to Implementation Guidelines and or other directives are deployed nationally and integrated into the full spectrum of clinical services available to patients.
- d. Identify and make recommendations regarding legislative, financial, policy, infrastructure, and resource gaps and barriers to successful national deployment of the MDRO PI.
- e. Assist in the development of quality and performance measures and program evaluation criteria; informational, educational and training materials; and budget estimates.
- f. Provide reports to the Chief Officer SCS, ADUSH PCS, DUSHPS, PDUSH, DUSHOM, and/or USH when requested.
- g. Serve as an expert advisory group on legislative, financial, and scientific matters related to MDRO prevention to the Director, NIDS, Chief Officer SCS, ADUSH PCS, DUSHPS, PDUSH, DUSHOM, and the USH when requested.

### **2. MDRO PI TASK FORCE MEMBERSHIP**

a. MDRO PI Task Force members are all federal employees and are appointed by the Director, National Infectious Diseases Service, in consultation with the Chief Officer SCS.

b. The facility-based MDRO PI Task Force members will serve a two-year term. There may be an option for renewal at the end of the term.

c. The MDRO PI Task Force membership shall consist of:

- (1) MDRO Prevention Office Director (co-chair, non-voting);
- (2) National Infectious Diseases Service Director (co-chair, non-voting);
- (3) Deputy Director, National Infectious Diseases Service;
- (4) Chief Officer, Office of Nursing Services (or designee);
- (5) Deputy Chief PCS Officer for Public Health (or designee);
- (6) Chief Officer, National Center for Patient Safety (or designee);
- (7) Director, Pathology & Laboratory Medicine Service (or designee);
- (8) Director, Environmental Programs Service (or designee);
- (9) Director, Health Promotion and Disease Prevention (or designee);
- (10) Chief, Geriatrics and Extended Care-Operations (or designee);
- (11) Executive Director, National Center for Ethics in Health Care (or designee);
- (12) ADUSH for Clinical Operations and Management (or designee);
- (13) Network Director (or designee);
- (14) VISN Chief Medical Officer (or designee);
- (15) Facility Chief of Staff;
- (16) Facility Nurse Executive;
- (17) Facility Hospital Epidemiologists and/or Infectious Diseases Physicians (2);
- (18) Facility Infection Prevention and Control Professionals (2);
- (19) Facility MDRO Prevention Coordinators (2);
- (20) Director, VHA National Antimicrobial Stewardship Program (or designee);

(21) Director, Inpatient Evaluation Center (IPEC) (or designee);

(22) Chief, Spinal Cord Injury/Disorders Services (or designee)

d. Ex Officio Members (non-voting):

(1) Representative, Centers for Disease Control and Prevention (2);

(2) Communications Officer, Office of the Deputy Under Secretary for Health for Policy and Services (or designee);

(3) Chair, Infection Prevention and Control Field Advisory Committee (IPCFAC);

(4) MDRO Prevention Office Program Manager;

(5) MDRO Prevention Office Clinical Program Coordinator;

(6) NIDS Clinical Programs Coordinator;

(7) NIDS Healthcare-Associated Infections Clinical Program Coordinator (2);

(8) Members of the MDRO PI Task Force will continue to consult relevant healthcare, program experts, and Information Technology specialists, as needed.

### 3. PROCEDURES

a. MDRO PI Task Force approval of MDRO PIs and Implementation Guidelines will be conducted through a vote of Task Force Members. To achieve approval, 75% or more of the full voting membership is required to vote in favor of proposed guidance. *Ex-Officio* members will not be considered voting members. Voting *in absentia* is permitted, and will be conducted electronically.

b. The MDRO PI Task Force will meet regularly, with the periodicity of meeting set at the discretion of the co-chairs, and for *ad hoc* issues as needed. Most business will be conducted via conference calls and web-based meeting.

## INFECTIOUS DISEASE REPORTING

This appendix describes Veterans Health Administration (VHA) policy requirements for the mandatory reporting of infectious diseases designated as reportable to public health authorities and territorial entities legally authorized to receive such reports.

1. VHA recognizes the importance of public health and prevention. In that regard, it is important that policy and programs emphasize improving and protecting the health of Veterans and VHA employees through the reporting of infectious diseases.
2. Each State or territorial legislature establishes a list of diseases designated as reportable to the local, district, State, or territorial entities legally authorized to receive such reports. The Centers for Disease Control and Prevention (CDC) maintains a list of notifiable diseases and requests that States report voluntarily. Local health care facilities or local health departments do not report disease occurrences directly to CDC. While, the reportable disease laws of States or territories do not apply to Federal entities, including VHA; VHA has voluntarily chosen to report reportable infectious diseases when legally permitted as a measure of sound public health practice.
3. VA medical facilities are to report on the designated reportable diseases according to the laws, regulations, and policies of States and territories and to follow VHA Directive 1605.01 and other applicable policies and laws on release of information. VHA health care facilities may disclose protected health information for the public health or safety pursuant to a standing request as outlined in VHA Directive 1605.01. The VA medical facility must account for any disclosures to public health authorities for infectious disease reporting.

**PREVENTION OF METHICILLIN-RESISTANT *STAPHYLOCOCCUS AUREUS*  
(MRSA) INFECTIONS IN VHA INPATIENT ACUTE CARE FACILITIES**

**1. PURPOSE:** To provide guidance for the identification and management of patients in VHA acute care facilities including Spinal Cord Injury Units (SCIUs) who are colonized or infected with methicillin-resistant *Staphylococcus aureus* (MRSA). The goal is to prevent and control the spread of MRSA among patients and prevent healthcare-associated infections (HAIs).

**2. BACKGROUND**

a. MRSA is a bacterium that causes serious disease, is resistant to multiple antibiotics, and is often difficult to treat. It can be detected in the nares and other body sites of patients who are colonized or infected with this organism. It can be transmitted among patients within a VA medical facility by the hands of patients and healthcare workers or by contact with inanimate objects contaminated with the organism. Such transmission amplifies the number of patients who may become colonized and are then at risk for infection.

b. Increased lengths of stay, morbidity, mortality, and costs have been associated with MRSA colonization and infection. When patients with MRSA have been compared to patients with methicillin-susceptible *S. aureus*, MRSA-colonized patients more frequently develop systemic infections including bacteremia, hospital-acquired pneumonia, and surgical site infections.

c. Since implementation of the VHA MRSA Prevention Initiative in 2007, MRSA HAI rates in VA intensive care units (ICUs) acute care non-ICUs (including SCIUs), and Community Living Centers have decreased significantly (see references).

d. A “bundle” of specific interventions has been associated with these reductions in MRSA HAIs. The MRSA bundle consists of:

- (1) Active surveillance for MRSA,
- (2) Contact precautions for patients colonized or infected with MRSA,
- (3) Hand hygiene, and

(4) An institutional culture transformation in which infection control becomes everyone’s business.

**3. PROCESSES****a. Active Surveillance Screening.**

(1) Screening tests are done to identify MRSA carriers who should be placed in Contact Precautions to prevent person-to-person transmission within the facility.

(2) On admission to the facility, regardless of a history of MRSA colonization or infection and following education and documented oral consent, patients must have both their anterior nares sampled for MRSA with a swab.

(3) In addition, all admissions (both direct and transfers) into an ICU, following education and documented oral consent, must have both their anterior nares screened for MRSA.

(4) Screening is not done for patients admitted to inpatient mental health units except under exceptional circumstances as determined by local Infection Prevention and Control Professionals or the Hospital Epidemiologist.

(5) Polymerase chain reaction (PCR) is the recommended testing method for 2 and 3 above because results can be reported quickly to ensure timely isolation precautions and improve facility access and bed flow.

(6) Screening of the nares is not required for transfers out or discharges from the ICU. Screening is not required for transfers in or out of non-ICUs or discharges from these units. However, a VA medical facility may opt to screen transfers and/or discharges for better identification of transmissions. Transmission data can be used for risk assessment and to guide further interventions as needed. Inpatient Evaluation Center (IPEC) data modules will maintain data entry fields to accommodate data collection for these purposes.

(7) Oral informed consent must be documented in the patient's electronic medical record (see "Should I Take the MRSA Test?" brochure in references). Patients who decline consent for active surveillance testing should be managed the same as patients who have a negative surveillance test, unless they have a prior positive screen/culture within the past 12 months or there are concerns, such as clusters of MRSA-infected patients, as determined by local Infection Prevention and Control Practitioners or the Hospital Epidemiologist.

**b. Contact Precautions.**

(1) Patients colonized or infected with MRSA within the past 12 months will be placed in Contact Precautions as recommended by the Centers for Disease Control and Prevention (see references).

(2) Patients with a prior history of MRSA colonization or infection do not need to be placed in Contact Precautions if their last MRSA positive tests were more than 12 months ago.

(3) Health care providers must perform hand hygiene and don gowns and gloves upon entry into the room/space of a patient placed in Contact Precautions.

(4) Patient transport and movement outside the Contact Precautions room/space should be limited to medically necessary purposes. Outside the room, the patient should not be identified as being in Contact Precautions (e.g. by wearing isolation



gowns/gloves, with signs, etc.) unless medically necessary. However, a process should be in place for notifying receiving functions (e.g. radiology, endoscopy, etc.) within the healthcare environment of the patient's Contact Precautions status when transferred. When outside their room, the patient should be encouraged to perform hand hygiene and wear clean garments. All wounds must be covered when leaving the patient's room.

(5) Contact Precautions may be discontinued under the following conditions:

(a) There must be at least one week since the last positive test for MRSA colonization or infection before surveillance tests (see (5)(b)) are collected.

(b) Two sets of surveillance tests (e.g. culture or molecular test) obtained at least 12 hours apart are negative for MRSA.

(c) Each set of surveillance tests consists of one culture or molecular test from the original site of infection/colonization (excluding blood cultures, healed wounds, and respiratory cultures from patients who are no longer on a ventilator or do not have a productive cough), AND from both anterior nares.

(d) If a patient, known to have MRSA within the past 12 months, has a negative active surveillance screening test upon admission, a second negative screen must be obtained before contact precautions can be discontinued.

(e) Patients do not have to be off systemic antibiotics to have surveillance tests performed. However, nasal screens should not be done within 48 hours of the last dose of a nasal decolonization agent.

c. **Culture Change.** It is the intent of this directive to interrupt person-to-person transmission of MRSA and thereby decrease the number of Veterans at risk for MRSA infection. All staff have a responsibility to define and implement appropriate infection prevention and control precautions for their populations to prevent transmission of organisms that can cause disease. The goal is to nurture culture change to ensure that Infection Prevention and Control is everyone's responsibility and a natural component of care at each patient encounter each day. In keeping with the tenets of culture change, staff will be actively engaged in and will work with the facility leadership, the Multidrug-Resistant Organism (MDRO) Prevention Coordinator (MPC), Infection Prevention and Control Professionals, and other staff to implement changes that prevent the transmission of MRSA. Local strategies for communicating data about MRSA transmissions and infections are to be developed as determined by local need. For example, these may include multidisciplinary unit briefings where real time data are shared with staff.

d. **Decolonization.** MRSA decolonization strategies may be considered for patients in ICUs or other high-risk units based on local risk assessment.

(1) Chlorhexidine gluconate (CHG) may be used for bathing as part of a horizontal

approach to reduce or prevent MRSA HAIs.

(2) A nasal decolonization agent may be used in combination with CHG bathing for the control of “outbreaks” or other unusual circumstances (as determined by local Infection Prevention & Control Practitioners or the Hospital Epidemiologist).

(3) Patients who have received decolonization regimens still need to meet criteria for discontinuing Contact Precautions (see 3.b.(5) above).

(4) See the American Society of Health-System Pharmacists “Clinical Practice Guidelines for Antimicrobial Prophylaxis in Surgery” (see references) or any more recent guidance from expert or oversight organizations for recommendations on pre-operative decolonization.

#### 4. RESOURCES

a. **VA Medical Facility Director.** Active leadership is required to accomplish and maintain the goals of the MRSA Prevention Initiative. Facility leadership and the critical Service Chiefs (or equivalent) must be engaged in the MRSA Prevention Initiative. The Facility Director should ensure that a MRSA/MDRO Prevention Coordinator (MPC) is appointed to fulfill the responsibilities of the position.

b. **MRSA/MDRO Prevention Coordinator (MPC).** The MPC is a VA medical facility-level employee responsible for managing the local aspects of MRSA/MDRO Prevention Initiatives in collaboration with the Infection Prevention and Control Program. The MPC serves as the focal point and liaison for day-to-day operations, as well as for reporting and collecting MDRO data (e.g., MRSA, *C. difficile*, carbapenem-resistant *Enterobacteriaceae* [CRE]). The MPC develops and evaluates local VA medical facility procedures related to the MDRO Prevention Initiative. Activities of this individual are distinct from those of the Infection Prevention and Control Practitioner, and serve as a supplement to the overall Infection Prevention and Control Program at the VA medical facility.

**PREVENTION OF METHICILLIN-RESISTANT *STAPHYLOCOCCUS AUREUS* (MRSA) INFECTIONS IN VHA COMMUNITY LIVING CENTERS**

**1. PURPOSE**

To provide guidance for the identification and management of residents in VHA Community Living Centers (CLCs), including palliative care, hospice, spinal cord injury units (SCIUs), and long-term acute care hospitals (LTACHs) who are colonized or infected with methicillin-resistant *Staphylococcus aureus* (MRSA). The goals are to prevent and control the spread of MRSA among residents and to prevent MRSA healthcare-associated infections (HAIs).

**2. BACKGROUND**

a. MRSA is a bacterium that causes serious disease, is resistant to multiple antibiotics, and is often difficult to treat. It can be detected in the nares and other body sites of residents who are colonized or infected with this organism. It can be transmitted among residents within a medical facility by the hands of residents and healthcare workers or by contact with inanimate objects contaminated with the organism. Such transmission amplifies the number of residents who may become colonized and are then at risk for infection.

b. Increased lengths of stay, morbidity, mortality, and costs have been associated with MRSA colonization and infection.

c. Since implementation of the VHA MRSA Prevention Initiative in 2007, MRSA HAI rates in VA intensive care units (ICUs), acute care non-ICUs (including SCIUs), and CLC have decreased significantly (see references).

d. A “bundle” of specific interventions has been associated with these reductions in MRSA HAIs. The MRSA bundle consists of:

- (1) Active surveillance for MRSA,
- (2) Transmission-based precautions for patients colonized or infected with MRSA,
- (3) Hand hygiene, and
- (4) An institutional culture transformation in which infection control becomes everyone’s business.

e. Providing care to CLC residents requires a balance between maintaining a home-like environment and the need to ensure resident safety. This is becoming more difficult with the increasing prevalence of multidrug-resistant organisms (MDROs) which are difficult to treat and can cause severe illness and death.

**3. PROCESSES**

**NOTE:** For definitions of MRSA Precautions as described below, please visit the following link,

<https://dvagov.sharepoint.com/:w:/s/VHATS/getting2zero/EYajElHHHCpBqVw7uUQBSv0BIO4TgTeDqLaa1MLdoid1fQ?rttime=GnuwUdf41kq>. This is an internal VA Web site that is not available to the public.

#### **a. Active Surveillance Screening.**

(1) On admission to the CLC, regardless of a history of MRSA colonization or infection and following education and documented oral consent, residents will have both anterior nares sampled for MRSA with a swab.

(2) This includes residents admitted to CLC following Absent Sick In Hospital (bedhold) status who were admitted to an outside hospital and residents on pass greater than 96 hours.

(3) Persons known to be colonized with MRSA based on a screening test or clinical culture within the past 12 months must be screened on admission and placed in Enhanced Barrier or Contact Precautions (whichever is appropriate) until cleared according to the criteria in paragraph 3.d. below.

(4) Oral informed consent will be documented in the resident's electronic medical record (see "Should I Take the MRSA Test" brochure in references for resident educational materials). Residents who decline consent or for whom consent cannot be obtained for surveillance testing must be managed the same as residents who have a negative surveillance test, unless they have a prior positive screen/culture within the past 12 months or there are concerns such as local clusters of MRSA-infected residents or ongoing outbreaks of MRSA infections among residents as determined by local Infection Prevention and Control Professionals or the VA medical facility Epidemiologist.

(5) Polymerase chain reaction (PCR) is the recommended testing method for nares screening because results can be reported quickly to ensure timely isolation precautions and improve facility access and bed flow.

(6) Screening is not required for transfers in or out of the CLC, or discharges (including death) from CLC units within the facility. A facility may opt to screen unit-to-unit transfers and/or discharges for better identification of transmissions within a facility that is having an increased incidence of MRSA HAIs. Screening data can be used for risk assessment as part of a decision-making process. Inpatient Evaluation Center (IPEC) data modules will maintain data entry fields to accommodate data collection for these purposes.

(7) Periodic surveillance of residents who are negative for MRSA colonization or infection is no longer required for CLC units. As above, a facility may opt to do periodic surveillance for better identification of transmissions if the facility is having an increased incidence of MRSA HAIs. IPEC data modules will maintain data entry fields to accommodate data collection for these purposes.

#### **b. Enhanced Barrier Precautions.**

(1) Most residents who are colonized or infected with MRSA can be managed using Enhanced Barrier Precautions (see paragraph 3.c., Contact Precautions, below, for exceptions). For Enhanced Barrier Precautions:

a. Limit bedroom occupancy to a single resident whenever possible. See Appendix G-7 for recommendations on cohorting with other residents if private bedrooms are limited.

b. An Enhanced Barrier Precautions sign or equivalent must be displayed at the resident's bedroom/space entry. Signage should be creative, conducive to a home-like environment wherever possible, and showing respect for the resident's dignity.

c. When Enhanced Barrier Precautions are used, the resident must be educated about why they are necessary.

d. Hand hygiene must be performed by health care workers as detailed in Appendix B, paragraph 2.c.

e. Prior to entering the resident's bedroom, staff must determine the planned care activities and select appropriate Personal Protective Equipment (PPE), based on the anticipated degree of contact. This may need to be reevaluated if the degree of contact changes while in the resident's bedroom. **Gloves and gowns** must be worn by staff during resident care activities associated with a high risk of contamination of the healthcare provider's skin or clothing and associated risk of transmission of MRSA to other residents. Full coverage of the arms and body front, from neck to the mid-thigh or below will ensure that clothing and exposed upper body areas are protected. Examples include, but not limited to dressing wounds, dressing or transferring the resident, providing hygiene (brushing teeth, combing hair), changing linens, and changing briefs especially in residents with chronic skin breakdown (e.g. pressure ulcers). Gowns are not required during physical or occupational therapy as long as contact (other than with gloved hands) does not occur. **Gloves or hand hygiene without gowns** may be appropriate for activities in the resident's bedroom identified as low risk for transmission such as providing medications, assistance with feeding, or talking with the resident. For residents exhibiting unpredictable behaviors (e.g., combative or uncooperative) or for whom "total care" is required, it is important to note that gown and gloves may be indicated for many of the activities otherwise considered low risk. Gowns/gloves should be removed upon leaving the resident's bedroom and hand hygiene performed. Gowns/gloves must not be reused and must be changed between cohorted residents.

f. Environmental Management Service (EMS) personnel must wear gowns and gloves when cleaning the room.

g. Use disposable equipment if available or resident-dedicated equipment. If equipment is used for more than one resident (e.g. the item is Reusable Medical Equipment), clean and disinfect the item according to manufacturer's instructions between resident use.

h. Residents should be free to come and go from their bedrooms if they perform hand hygiene when exiting their room, wear clean clothing, and if wounds, drainage, and body

fluids are covered and contained. Staff should provide education and consistently encourage the resident to perform hand hygiene whenever the resident is exiting the room. If the resident is unable to perform hand hygiene, then a staff member needs to assist the resident to accomplish this before the resident leaves their bedroom to interact with others.

i. When a resident goes to other parts of the VA medical facility for clinical care or evaluation, the receiving function must be notified as required by facility procedures regarding the resident's MRSA status to assure appropriate continuity of Precautions.

(2) The resident can be taken out of Enhanced Barrier Precautions when they meet the criteria listed in paragraph 3.d. below.

### **c. Contact Precautions.**

(1) Contact Precautions as defined by the Centers for Disease Control and Prevention for acute care patients may be appropriate for residents in the CLCs with wounds that cannot be contained with dressings (e.g. large pressure ulcers), MRSA pneumonia, or other conditions deemed by local Infection Prevention and Control Professionals or the Hospital Epidemiologist to represent a high risk for transmission.

(2) Decisions about transmission-based precautions should be individualized and made by local Infection Prevention and Control Professionals or the Hospital Epidemiologist.

(3) Contact Precautions must be used only as long as necessary to prevent the transmission of infection since maintaining Contact Precautions longer than necessary may have adverse effects on the psychosocial well-being of the resident. Down-grading from Contact Precautions to Enhanced Barrier Precautions could be considered if a resident can comply with their hygiene and their wound heals and can be contained in a bandage, or there is resolution of pneumonia or other condition posing a high risk for MRSA transmission.

(4) The CLC must document the rationale for the use of Contact Precautions in the resident's medical record.

(5) The resident can be taken out of Contact Precautions when they meet the criteria noted in section 3(d) below.

### **d. Discontinuation of Enhanced Barrier or Contact Precautions.**

(1) Transmission precautions can be discontinued under the following conditions:

a. There must be at least one week since the last positive test for MRSA colonization or infection before the following surveillance tests are collected.

b. Two sets of surveillance tests (e.g. culture or molecular test) must be obtained at least 12 hours apart and be negative for MRSA.

c. Each set of surveillance tests consists of one culture or molecular test from the original site of infection/colonization (excluding blood cultures, healed wounds, and respiratory cultures from residents who are no longer on a ventilator or do not have a productive cough), AND from both anterior nares.

(2) If a resident known to have MRSA within the past 12 months has a negative active surveillance screening test upon admission, a second negative screen must be obtained before transmission precautions can be discontinued.

(3) Residents do not have to be off systemic antibiotics to have surveillance tests performed. However, nasal screens should not be done within 48 hours of the last dose of a nasal decolonization agent.

**e. Visitors and sitters.**

(1) Visitors should be encouraged to visit with residents in common areas such as the living room, dining room, or kitchen as in a typical household, rather than in the resident's bedroom.

(2) When visiting a resident in the bedroom, visitors and sitters should be instructed and encouraged to perform hand hygiene upon entry and exit to a resident's bedroom.

(3) In the resident's bedroom, visitors and sitters are generally not required to wear gloves or a gown when with the resident unless they assist in care such as bathing that requires extensive physical contact, or if they anticipate visiting other residents in their bedrooms.

(4) If a visitor or sitter is assisting in care requiring physical contact with the resident in their bedroom or intends to visit other residents in the CLC, they should be instructed on appropriate gloving and gowning (see paragraph 3.b(1)(e)). Specific recommendations may vary by CLC or household and should be determined by the level of interaction.

**f. Decolonization.** MRSA decolonization strategies can be considered for residents based on local risk assessment (e.g., if there is an increase in MRSA infection rates in the CLC or the VA medical facility as a whole).

(1) Chlorhexidine gluconate (CHG) can be used for bathing as part of a horizontal approach to reduce or prevent MRSA HAIs.

(2) A nasal decolonization agent can be used in combination with CHG bathing for the control of "outbreaks" or other unusual circumstances as determined by local Infection Prevention & Control Professionals or the Hospital Epidemiologist.

(3) Residents who have received decolonization regimens still need to meet criteria for discontinuing Contact Precautions (see section 3(d) above)

**g. Culture Change**

(1) It is the intent of this directive to interrupt the chain of transmission of MRSA and thereby decrease the number of residents at risk for MRSA infection or colonization.

(2) CLCs must implement the elements of this directive while addressing the needs of individual residents and at the same time preventing disease transmission. The goal should be to nurture culture change to assure that infection prevention and control is everyone's responsibility and a natural component of care at each resident encounter each day.

(3) In keeping with the tenets of culture change, noted as part of the MDRO Prevention Initiative, all CLC staff should work with the VA medical facility's leadership, Infection Prevention and Control and the Hospital Epidemiologist, MDRO prevention coordinators, Environmental Management, and other staff to implement changes that help prevent the transmission of MRSA.

#### **4. ROOMING FOR MRSA COLONIZED OR INFECTED RESIDENTS**

a Limiting bedroom occupancy to a single resident is preferred for all MRSA colonized or infected residents. If private bedrooms are not available, MRSA colonized and infected residents can be cohorted.

b Rooming MRSA colonized/infected residents with residents not carrying MRSA should only be done under exceptional circumstances and with the advice of local Infection Prevention and Control Professionals or the Hospital Epidemiologist. If the need arises to place a MRSA infected or colonized resident with a MRSA-negative resident, then the MRSA-negative resident should meet the following criteria:

(1) Have intact skin with no significant open wounds or breaks in skin (superficial tears or breaks in the skin such as minor scratches would be acceptable).

(2) Have no invasive devices such as indwelling vascular devices, urinary catheters, feeding tubes, or drainage devices.

(3) Not be immunocompromised (e.g., due to organ transplantation, neutropenia, serious or chronic infection, systemic steroids or chemotherapy).

c Some flexibility on a case-by-case basis is required since CLC residents may have roommates with whom they are comfortable in a home-like environment. These decisions should reflect a collaborative effort of appropriate healthcare team members including MRDO Prevention Coordinators and other representatives from Infection Prevention & Control, and both involved residents/surrogates, with appropriate consent. Other resources for guidance could include the local CLC Resident's Council or Ethics Committee.



## PREVENTION OF INFECTIONS DUE TO CARBAPENEMASE-PRODUCING GRAM-NEGATIVE ORGANISMS IN VHA FACILITIES

### 1. PURPOSE

To provide guidance for the identification and management of patients in VHA acute care facilities and residents in Community Living Centers (CLCs), including palliative care, hospice, spinal cord injury units (SCIUs), and long-term acute care hospitals (LTACHs) who are colonized or infected with carbapenemase-producing gram-negative organisms (CPOs). The goal is to prevent and control the spread of CPOs among patients and residents and prevent CPO-health care-associated infections (HAIs).

### 2. BACKGROUND

Infections due to carbapenemase-producing organisms (CPOs) such as carbapenemase-producing, carbapenem-resistant *Enterobacteriaceae* (CP-CRE), *Pseudomonas aeruginosa* (CP-CRPA), and *Acinetobacter baumannii* (CP-CRAB) are becoming more prevalent among patients and residents in U.S. medical facilities. Many of these bacteria are resistant to nearly all antibiotics available to clinicians with the result that mortality from some infections, such as bacteremia, can be as high as 50 percent. Medical facilities in several states and countries have reduced CPOs infection rates by using aggressive prevention and control measures.

### 3. PROCESSES

Recommendations for laboratory identification of CPOs, screening for carriers, infection prevention and control, and coordination with other VA medical facilities and the Centers for Disease Prevention and Control are detailed in the current Toolkit version available at

[http://vaww.mrsa.va.gov/Carbapenem\\_resistant\\_Enterobacteriaceae\\_CRE.asp](http://vaww.mrsa.va.gov/Carbapenem_resistant_Enterobacteriaceae_CRE.asp). **NOTE:** *This is an internal VA Web site that is not available to the public.*