



Defense Health Agency

ADMINISTRATIVE INSTRUCTION

NUMBER 6025.28

October 5, 2023

DAD-MA

SUBJECT: Defense Health Agency Program for Antimicrobial Stewardship in Support of the National Action Plan for Combating Antibiotic-Resistant Bacteria

References: See Enclosure 1

1. PURPOSE. This Defense Health Agency-Administrative Instruction (DHA-AI), based on the authority of References (a) and (b), and in accordance with the guidance of References (c) through (t), establishes the Defense Health Agency's (DHA) procedures for the development, implementation, and review of the DHA Antimicrobial Stewardship Program (ASP). This DHA-AI:

a. Provides development and coordination processes for enterprise-wide procedural and technical guidance, regulations, and instructions to support the Assistant Secretary of Defense for Health Affairs in administration of the DHA ASP.

b. Establishes educational programs that will be available for provider and support staff-level learning regarding antimicrobial stewardship in accordance with References (g) through (j).

2. APPLICABILITY. This DHA-AI applies to the DHA Enterprise (components and activities under the authority, direction, and control of the DHA) to include: assigned, attached, allotted, or detailed personnel.

3. POLICY IMPLEMENTATION. It is DHA's instruction, pursuant to References (d) through (t), that:

a. Slowing the emergence of resistant bacteria and preventing the spread of resistant infections through the DHA ASP will enhance optimal use, patient safety, accountability, prescribing practices, quality improvement, treatment guidelines, and antibiograms.

b. Standards will be in place for implementing and maintaining quality in the delivery of antimicrobial stewardship in military medical treatment facilities (MTF) (inpatient and outpatient facilities).

c. Administrative and clinical leadership commitment and support will be provided for the DHA ASP by the DHA, Defense Health Networks, and MTFs to include personnel and information technology resources.

4. CANCELED DOCUMENTS. This DHA-AI cancels DHA-PI 6025.09, “DoD Program for Combating Antibiotic-Resistant Bacteria (CARB),” October 2, 2018.

5. RESPONSIBILITIES. See Enclosure 2.

6. PROCEDURES. See Enclosure 3.

7. PROPONENT AND WAIVERS. The proponent of this publication is the Deputy Assistant Director (DAD), Medical Affairs (MA). When components and activities are unable to comply with this publication, the activity may request a waiver that must include a justification, including an analysis of the risk associated with not granting the waiver. The activity director or senior leader will submit the waiver request through their supervisory chain to the DAD-MA to determine if the waiver may be granted by the Director, DHA or their designee.

8. RELEASABILITY. **Cleared for public release**. This DHA-AI is available on the Internet from the Health.mil site at: <https://health.mil/Reference-Center/Policies> and is also available to authorized users from the DHA SharePoint site at: [https://info.health.mil/cos/admin/pubs/SitePages/DHA%20Publications%20System%20Office%20\(PSO\).aspx](https://info.health.mil/cos/admin/pubs/SitePages/DHA%20Publications%20System%20Office%20(PSO).aspx).

9. EFFECTIVE DATE. This DHA-AI:

a. Is effective upon signature.

b. Will expire 10 years from the date of signature if it has not been reissued or canceled before this date in accordance with Reference (c).

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ITA.1017383040 Date: 2023.10.05 14:21:58 -04'00'
TELITA CROSLAND
LTG, USA
Director

Enclosures

1. References
2. Responsibilities
3. Procedure and Criteria for Submission of Isolates and Data to the Multidrug-resistant Organism Repository and Surveillance Network

Glossary

ENCLOSURE 1

REFERENCES

- (a) DoD Directive 5136.01, “Assistant Secretary of Defense for Health Affairs (ASD(HA)),” September 30, 2013, as amended
- (b) DoD Directive 5136.13, “Defense Health Agency (DHA),” September 30, 2013, as amended
- (c) DHA-Procedural Instruction 5025.01, “Publication System,” April 1, 2022
- (d) Executive Order 13676, “Combating Antibiotic-Resistant Bacteria,” September 18, 2014
- (e) Public Law 113-291, section 727 of the Carl Levin and Howard P. ‘Buck’ McKeon National Defense Authorization Act for Fiscal Year 2015, December 19, 2014
- (f) DoD Instruction 6025.26, “DoD Program for Combating Antibiotic-Resistant Bacteria (CARB),” October 31, 2017
- (g) Centers for Disease Control and Prevention. “The core elements of hospital antibiotic stewardship programs, 2019.”¹
- (h) Centers for Disease Control and Prevention. “The core elements of outpatient antibiotic stewardship program.”²
- (i) The Joint Commission. “Comprehensive accreditation manual for hospitals,” current edition³
- (j) The Joint Commission. “Comprehensive accreditation manual for ambulatory health care,” Current edition⁴
- (k) Executive Office of the President: President’s Council of Advisors on Science and Technology, “Report to the President on Combating Antibiotic Resistance,” September 2014
- (l) The White House, “National Strategy for Combating Antibiotic-Resistant Bacteria,” September 2014
- (m) The White House, “National Action Plan for Combating Antibiotic-Resistant Bacteria,” March 2015
- (n) Federal Task Force on Combating Antibiotic-Resistant Bacteria, “National Action Plan for Combating Antibiotic-Resistant Bacteria 2020-2025,” October 2020
- (o) DoD Manual 6440.02, “Clinical Laboratory Improvement Program (CLIP) Procedures,” May 29, 2014, as amended
- (p) Code of Federal Regulations, Title 42, Part 493
- (q) Manning, Mary Lou, Edward Septimus, Elizabeth Ashley, Sara Cosgrove, Mohamad Fakhri, Steve Schweon, Frank Myers, and Julia Moody. 2018. “Antimicrobial stewardship and infection prevention-leveraging the synergy: A position paper update.” *American Journal of Infection Control* 46(4): 364-368. doi: 10.1016/j.ajic.2018.01.001.

¹ This reference can be found at: <https://www.cdc.gov/antibiotic-use/core-elements/hospital.html>

² This reference can be found at: <https://www.cdc.gov/antibiotic-use/core-elements/outpatient.html>

³ This reference can be found by contacting the Antimicrobial Stewardship Programs Working Group at: dha.ncr.j-3.mbx.aspwg@health.mil.

⁴ This reference can be found by contacting the Antimicrobial Stewardship Programs Working Group at: dha.ncr.j-3.mbx.aspwg@health.mil.

- (r) Barlam, Tamar, Sara Cosgrove, Lilian Abbo, Conan MacDougall, Audrey Schuetz, Edward Septimus, Arjun Srinivasan, et al. 2016. “Implementing an Antibiotic Stewardship Program: Guidelines by the Infectious Disease Society of America and the Society for Healthcare Epidemiology of America.” *Clinical Infectious Diseases* 62; no. 10 (May): e51-e77. doi.org/10.1093/cid/ciw118
- (s) Centers for Disease Control and Prevention. “National Healthcare Safety Network Antimicrobial Use and Resistance Module.” January 2023⁵
- (t) Centers for Disease Control and Prevention. “National Healthcare Safety Network Multidrug-Resistant Organism & *Clostridioides difficile* Infection (MDRO/CDI) Module.” January 2023⁶
- (t) Magiorakos, A-P, A Srinivasan, R B Carey, Y Carmeli, M E Falagas, C G Giske, S Harbarth, et al. 2012. “Multidrug-resistant, extensively drug-resistant and pan-drug resistant bacteria: an international expert proposal for interim standard definitions for acquired resistance.” *Clinical microbiology and infection: the official publication of the European Society of Clinical Microbiology and Infectious Diseases* 18(3): 268-81. doi:10.1111/j.1469-0691.2011.03570.x

⁵This reference can be found at: <https://www.cdc.gov/nhsn/pdfs/pscmanual/11pscscurrent.pdf>

⁶This reference can be found at: https://www.cdc.gov/nhsn/pdfs/pscmanual/12pscmdro_cdadcurrent.pdf

ENCLOSURE 2
RESPONSIBILITIES

1. DIRECTOR, DHA. The Director, DHA, will:
 - a. Ensure that an ASP Committee (ASPC) is established in the DHA to manage a comprehensive ASP plan across the enterprise.
 - b. Ensure needed resources are provided to support the DHA ASP including, but not limited to, personnel and information technology support as outlined in this DHA-AI.

2. DAD-MA. The DAD-MA will:
 - a. Ensure the Directors, Defense Health Networks, assign responsibilities to implement ASP efforts as outlined in this DHA-AI to ensure consistent application across the DHA.
 - b. Provide clarifying guidance to the Defense Health Networks and MTFs on issues related to implementation of ASP responsibilities and accreditation requirements, when requested.
 - c. Provide governance structure. The ASPC will be situated within the DHA Clinical Quality Management Board (CQMB).

3. DAD, HEALTH INFORMATICS (DAD-HI). The DAD-HI will:
 - a. Provide information technology resources to support antimicrobial stewardship initiatives. Information technology support must include optimization of the electronic health record (including, but not limited to, clinical decision support and documentation capabilities) and access to antimicrobial stewardship data as outlined in this DHA-AI.
 - b. Collaborate with the DHA ASPC to ensure that HI needs relating to inpatient and outpatient antimicrobial stewardship are supported.

4. CHAIR, DHA ASPC. The Chair, DHA ASPC will:
 - a. Serve as the oversight entity for Defense Health Network and MTF issues pertaining to ASP, including data trending and feedback to MTFs. The DHA ASPC is a collaborative group that falls within the CQMB with responsibilities for providing oversight, direction, and guidance to improve and maintain the effective and judicious use of antimicrobials in the DHA. Membership includes representatives from DHA and various subject matter experts, including Infectious Disease physicians, pharmacists, microbiologists, and epidemiologists.

- b. Facilitate partnerships with the Defense Health Networks and MTFs to obtain additional information on addressing challenges and spreading successes within the enterprise.
- c. Provide guidance on the development, implementation, and monitoring of MTF ASP efforts and initiatives.
- d. Disseminate applicable DHA-level information to Defense Health Networks, and MTFs, as applicable.
- e. Maintain DHA-level guidelines and protocols pertaining to the judicious use of antimicrobials as a resource for MTF ASP teams.
- f. Facilitate DHA's participation in national reporting collaboratives, such as the required information from the Centers for Disease Control and Prevention's (CDC) National Healthcare Safety Network (NHSN) Antimicrobial Use and Resistance (AUR) module for eligible inpatient MTFs, as well as adherence to practices known to be associated with the judicious use of antimicrobials for acute-care and outpatient facilities within the DHA.
- g. Develop and manage measurable inpatient and outpatient antimicrobial stewardship metrics and collaborate with the Patient Safety Center for Data Integration (PS CDI) and Defense Centers for Public Health – Portsmouth (DCPH-P) to prepare reports for use by MTF ASP teams to identify trends and prioritize risks. The metrics and reports must include inpatient NHSN AUR data.
- h. Collaborate with DAD-HI to optimize the electronic health record for antimicrobial stewardship purposes. This includes optimization of clinical decision support tools (such as the "Pharmacy Clinical Surveillance Worklist" in MHS GENESIS) as well as development and optimization of antimicrobial use reports and/or dashboards. The reports/dashboards must include antimicrobial prescription information (drug, dose, duration, date, prescriber) and diagnosis data, which may be utilized by MTF ASP teams to assess appropriateness of antimicrobial prescribing based on indication.
- i. Collect, analyze, and evaluate enterprise-level inpatient and outpatient antimicrobial stewardship data to include reports developed by the PS CDI and DCPH-P. These data should be used to determine any positive impact, areas for enhanced impact, and/or recommended guideline modification for ASP.
- j. Develop recommended competencies for ASP leaders and medical staff and provide guidance to Defense Health Networks and MTFs for meeting educational standards in accordance with DHA recommendations, The Joint Commission (TJC) standards, and CDC Core Elements. This may include review of publicly available programs for relevance, such as the CDC's Antibiotic Stewardship Training Series.
- k. Provide consultative guidance to Defense Health Networks and MTF ASP leaders in the judicious use of antimicrobials or complex ASP efforts, upon request.

l. Coordinate with other groups affected by antimicrobial stewardship activities.

- (1) Infection Prevention and Control Standardization Group
- (2) CQMB
- (3) Pharmacy Operations Division
- (4) Clinical Communities
- (5) Chief Medical Information Officer
- (6) Clinical Measures Working Group
- (7) Center for Laboratory Medicine Services

m. Communicate critical antimicrobial stewardship resource needs to appropriate DHA leadership (e.g., education and training, software access, personnel).

n. Maintain knowledge of the current standard of practice for antimicrobial stewardship based on Infectious Diseases Society of America (IDSA) guidelines, CDC Core Elements, and TJC standards.

o. Provide consultation, on request, to the TRICARE Health Plan on efforts to reduce inappropriate antibiotic usage.

p. Collaborate with TRICARE Health Plan as needed to improve quality and safety across the spectrum in the DHA.

5. ANTIMICROBIAL UTILIZATION LEAD, DHA PS CDI. The antimicrobial utilization lead, DHA PS CDI, will:

a. Serve as the liaison between PS CDI and all ASP-related stakeholders to provide data support for inpatient and outpatient antimicrobial prescribing and utilization.

b. Collaborate with the ASPC to review, synthesize, and disseminate relevant findings with key Defense Health Network and MTF stakeholders engaged in antimicrobial stewardship efforts.

c. Continuously enable best antimicrobial stewardship practices by providing data-driven feedback, identifying and discussing emerging patterns within the data, and discussing opportunities for improvement with the DHA ASPC and relevant MTF ASP Leaders.

d. Support DHA and national initiatives aimed at curbing antimicrobial resistance (AR) by participating in the CDC NHSN activities and monitoring DHA-specific antimicrobial

benchmarks in accordance with Reference (n).

e. Acquire monthly data feeds on inpatient antimicrobial use in conjunction with information technology and local pharmacy and infectious disease assets and upload aggregated data to the NHSN portal in accordance with Reference (s).

f. Continuously liaise with MTF and Defense Health Networks leads to ensure inpatient tracked antimicrobial use and units are specified accordingly to the latest AUR modules.

g. Extract and compile quarterly outpatient antibiotic prescribing data and link to the likely diagnosis codes based on encounter data. The PS CDI will use the aggregated data to maintain a dashboard to assess trends in antimicrobial prescribing stratified by diagnosis.

h. Generate routine inpatient and outpatient antibiotic report to be published on CarePoint and presented to ASPC and additional ASP Stakeholders for broader dissemination.

i. Develop parameters for studying DHA antibiotic use to include inputs, methodologies for analyzing the data, outputs, report format, and report recipients.

j. Collaborate with the DHA ASPC to ensure that data needs relating to inpatient, and outpatient antimicrobial use are supported.

6. AR LEAD, DCPH-P. The AR Lead, DCPH-P will:

a. Serve as the NHSN AR Data Manager.

b. Ensure all eligible MTFs with microbiological identification and susceptibility capabilities are supported in their participation in the CDC NHSN AR module and multidrug-resistant organism (MDRO) and *Clostridioides difficile* infection laboratory-identified event reporting module through coordination with DCPH-P and Multidrug-Resistant Organism Repository and Surveillance Network (MRSN), in accordance with requirements in Reference (n).

c. Coordinate with all eligible MTFs to register for the NHSN AR and MDRO/*Clostridioides difficile* infection laboratory-identified event reporting modules, confer administrative rights in NHSN to DCPH-P, and establish monthly plan and map clinic locations.

d. Ensure monthly AR data uploads to the NHSN and Antimicrobial Stewardship, Hospital Infections, and Patient Safety (ASHIPS) dashboard are completed, including updated results from the MRSN, by collaborating with an approved vendor to submit NHSN AR data for all eligible DHA facilities on a monthly basis, in accordance with References (s) and (t).

e. Provide routine NHSN AR reports to the DHA, Defense Health Networks, and MTF ASP teams.

f. Collaborate with the DHA, Defense Health Networks, and MTF ASP teams to establish

routine reports generated from Health Level 7 (HL7) data and NHSN AR data for review of AR trends. DCPH-P will routinely update reports contained within the ASHIPS dashboard.

g. Develop algorithms to identify emerging MDROs at all MTFs using HL7-formatted microbiology data, monitor the data for emerging MDROs, track targeted MDROs, facilitate submission of duplicate isolate of target organism to MRSN through email reminders, and coordinate reporting compliance to MRSN.

h. Identify AR target MDROs at all MTFs using HL7 data, report resistance data monthly to NHSN and the ASHIPS surveillance dashboard, and update resistance data informed by molecular testing from the MRSN.

i. Provide MRSN with any missing demographic data from isolates submitted by hospital facilities.

j. Collaborate with the DHA ASPC to ensure that data needs relating to inpatient, and outpatient AR are supported.

7. DIRECTOR, MRSN. The Director, MRSN will:

a. Receive, fully characterize, and then archive isolates of specific MDROs of interest from the DHA in accordance with Enclosure (3). MDROs include methicillin-resistant *Staphylococcus aureus*, vancomycin-resistant *Enterococci*, multidrug-resistant strains of *Klebsiella* spp., *Escherichia coli*, *Acinetobacter* spp., *Enterobacter* spp., *Pseudomonas aeruginosa*, certain carbapenem-resistant Gram-negative rods including *Serratia* spp. and *Proteus* spp., *Candida auris*, and other isolates of clinical or public health interest.

b. Provide feedback to submitting MTFs, DHA stakeholders, and other relevant agencies regarding resistance patterns, genetic relatedness of isolates (e.g., outbreak investigations, possible nosocomial transmission events) and/or other specific findings.

c. Maintain secure cloud-based repository database containing all testing and related clinical and demographic data associated with each isolate.

d. Provide reports to DCPH-P regarding confirmation of carbapenemase-producing isolates for tracking and reporting purposes.

8. DIRECTOR, DHA CENTER FOR LABORATORY MEDICINE SERVICES. The Director, DHA Center for Laboratory Medicine Services will ensure MTFs with microbiological identification and susceptibility capabilities are submitting MDROs to the MRSN in accordance with Enclosure (3).

9. DIRECTORS, DEFENSE HEALTH NETWORKS. The Directors, Defense Health Network

will designate a pharmacist or physician Network-level ASP leader who will facilitate communication between the DHA ASPC and MTF staff.

10. ASP LEADERS, DEFENSE HEALTH NETWORKS. The ASP leaders, Defense Health Networks will:

- a. Maintain the roster of ASP leaders for MTFs aligned to the Defense Health Networks.
- b. Assist in actively setting Defense Health Network-level ASP priorities and new initiatives in collaboration with the DHA ASPC.
- c. Require local ASP leaders to actively manage program adherence goals.
- d. Facilitate timely communication between DHA and MTF ASP staff.
- e. Disseminate ASP-related information to MTF ASP leaders, including Lessons Learned and antimicrobial stewardship process improvement initiatives, and provide updates to DHA ASPC, as requested.
- f. Be available to MTFs within the Defense Health Networks for virtual assistance and consultation regarding ASP-related initiatives, as needed.
- g. Ensure that MTF ASP leaders maintain antimicrobial stewardship competency, which can be accomplished by participating in training programs recommended by the ASPC and antimicrobial stewardship-related continuing education opportunities.
- h. Communicate education and training needs to DHA ASPC for consideration of inclusion in new and existing training platforms.
- i. Maintain knowledge of the current standard of practice for antimicrobial stewardship based on IDSA guidelines, CDC Core Elements, and TJC standards.

11. MTF DIRECTORS. The MTF Directors will:

- a. Provide oversight and program supervision of MTF and installation-level ASP monitoring and control activities, to include monitoring outcome metrics and overall facility participation.
- b. Designate a physician and a pharmacist as the MTF ASP leaders based on medical staff and pharmacy leadership recommendations. Physician and pharmacist leadership may be provided remotely, as appropriate (e.g., physician and pharmacist leaders at larger parent facilities may also be the primary leaders for associated child facilities). Physician and pharmacist leaders may also be designated at the Defense Health Network-level to provide ASP leadership remotely to one or more MTFs. If physician and pharmacist leadership is provided remotely, the MTF Directors must identify a local ASP champion who will oversee antimicrobial

stewardship activities at the MTF. Minimum recommendations for physician and pharmacist support include the following:

(1) Protected non-revenue time for pharmacist leaders of 0.3 full-time equivalent (FTE) per 100,000 TRICARE beneficiaries in the catchment area for outpatient antimicrobial stewardship activities plus 0.5 FTE per 100 beds for MTFs with inpatient services.

(2) Protected non-revenue time for physician leaders of 0.1 FTE per 100,000 TRICARE beneficiaries in the catchment area for outpatient antimicrobial stewardship activities plus 0.2 FTE per 100 beds for MTFs with inpatient services.

(3) If the designated pharmacist and/or physician provide ASP leadership to multiple MTF, it is recommended that they have dedicated time for each MTF in which they are the designated ASP leader. For example, if a pharmacist is the designated ASP leader for two outpatient MTFs that each provide services to 100,000 beneficiaries, then the recommended minimum pharmacist support would be 0.6 FTE for outpatient services (0.3 FTE for each of the two outpatient MTFs).

c. Ensure that needed resources are provided to support the ASP, including personnel, information technology support, and access to information, laboratory resources, equipment, and supplies. Information technology support includes, but is not limited to, data extraction and analysis for ASP initiatives.

d. Ensure that an MTF-level multidisciplinary ASPC is established. MTF Directors may elect to combine ASPC functions with a pre-existing committee capable of providing sufficient oversight for critical ASP components (e.g., the Executive Committee, Pharmacy & Therapeutics Committee).

e. Ensure that MTFs meet DHA and TJC or other accrediting body requirements for medical staff education for antimicrobial prescribing practices.

f. Monitor compliance with medical staff education and training requirements in accordance with DHA recommendations and TJC standards.

g. For MTFs with in-house microbiology identification and susceptibility capabilities, coordinate with the MTF clinical laboratory to ensure that:

(1) The clinical laboratory's performance is compliant with References (o) and (p). Issues regarding quality and/or safety can be addressed with the support of DHA's Center for Laboratory Medicine Services and the College of American Pathologists.

(2) Bacterial identification and antimicrobial susceptibility testing are available for non-fastidious and aerobic Gram-negative and Gram-positive organisms.

(3) A duplicate isolate of targeted MDROs isolated at the laboratory are submitted to the MRSN for further characterization and analysis in accordance with the procedures outlined

in Enclosure (3).

h. Coordinate with the MTF ASPC, PS CDI, and DCPH-P to ensure participation in the CDC NHSN AUR module to meet requirements within Reference (n). The CDC NHSN AUR module is required for facilities with functional inpatient, emergency, and 24-hour observation units only; outpatient only MTFs are not eligible for the NHSN AUR module, in accordance with Reference (s).

12. ASP LEADERS, MTF. The ASP Leaders, MTF, will:

a. Lead an MTF-level multidisciplinary ASPC that will assist the MTF leaders in carrying out all ASP functions/activities at the MTF, as appropriate.

b. Identify key personnel for membership in the MTF-level ASPC. ASPC members may include representatives from infection prevention and control, microbiology laboratory, information technology, pharmacy, various physician specialties (surgical services, critical care, internal medicine, family medicine, pediatrics), nursing, and quality improvement and patient safety, depending on the level of care of the facility.

c. Serve as the Subject Matter Experts for all ASP activities at the MTF and maintain stewardship competency in accordance with TJC requirements and CDC/IDSA/Society for Healthcare Epidemiology of America/Society of Infectious Disease Pharmacists bestpractices.

d. Ensure compliance with accreditation and regulatory standards (e.g., TJC).

e. Meet the CDC's core elements for antimicrobial stewardship, as well as other federal requirements, in accordance with References (g) through (j), and relevant Centers for Medicare and Medicaid Services' conditions of participation.

f. Apprise pharmacy leadership, medical staff leadership, and MTF Directors on necessary staffing, resource, and training needs in order to implement and sustain the ASP.

g. Develop and implement a plan for educating healthcare teams about the appropriate use of antimicrobials in accordance with DHA recommendations, TJC requirements, and CDC Core Elements. This includes providing antimicrobial stewardship education and training resources to relevant healthcare staff. Education and training may include utilization of publicly available programs, such as the CDC's Antibiotic Stewardship Training Series.

h. Develop local policies, procedures, and guidelines in accordance with DHA policy, TJC or other accrediting body requirements, and CDC/IDSA/Society of Infectious Diseases Pharmacists best practices. Provide information and guidance to prescribing practitioners and other medical staff to ensure that standards and protocols are implemented and followed. Policies, procedures, and guidelines should be reviewed on a routine basis to ensure they remain current and relevant.

i. Collaborate with ASPC, Defense Health Networks, and MTF interdisciplinary experts to define optimal metrics and to optimize the effectiveness of the MTF ASP plan for judicious antimicrobial use.

j. Collect, analyze, and report measurable metrics, as well as identify trends and prioritize risks. MTF ASP teams should utilize inpatient AUR data from NHSN (for MTFs that are eligible to report to NHSN), inpatient and outpatient antimicrobial use reports developed by the PS CDI, and AR reports developed by the DCPH-P, as appropriate for the MTF-specific goals. More information regarding the reports developed by the PS CDI and DCPH-P can be found on the DHA ASP SharePoint at the following link:

<https://info.health.mil/hco/clinicsup/patientsafety/ipc/Pages/ASP.aspx>

k. Identify areas for improvement based on local ASP data and implement ASP process improvement initiatives to improve antimicrobial prescribing practices.

l. Collaborate with the MTF's clinical laboratory to complete antimicrobial stewardship process improvement initiatives that involve microbiology procedures and to address any additional laboratory issues as they relate to antimicrobial stewardship.

m. Communicate/report pertinent ASP information to MTF leadership, prescribers, and other medical staff on a routine basis and to Defense Health Networks and DHA staff upon request. Information may include AUR data, process improvement initiatives, medication use evaluations, and adherence to ASP recommendations, policies, and guidelines. MTF leadership must also be informed about necessary staffing and resource needs in order to implement, sustain, and improve the ASP.

n. Collaborate with ASPC, Defense Health Networks ASP leaders, and local command for implementation practices to reflect CDC/IDSA core strategies, such as antibiotic restriction with pharmacy/infectious disease approval for use, prospective audit and feedback, and electronic health record documentation practices.

o. Maintain knowledge of the current standard of practice for antimicrobial stewardship based on IDSA guidelines, CDC Core Elements, and TJC standards.

ENCLOSURE 3

PROCEDURE AND CRITERIA FOR SUBMISSION OF ISOLATES AND DATA TO THE
MRSN

1. LABORATORY PROCEDURES.

a. When a targeted MDRO (see #3 below) is isolated from cultures obtained as part of standard patient care or active surveillance, the performing laboratory will send a duplicate of that isolate to the MRSN. Isolates may be batched for shipping convenience but will be submitted to the MRSN at least monthly.

b. MTF laboratories with microbiological identification and susceptibility capabilities will also send the following clinical-demographic information with each isolate to the MRSN via encrypted email:

(1) Last name, first name, and middle initial of the patient, the full accession number, organism species, and antibiotic susceptibility testing results if available.

(2) If the laboratory has transitioned to MHS GENESIS, only the Isolate Accession number and organism species needs to be sent to the MRSN.

c. The MTF laboratory is not required to submit isolates or information from cultures that are sent to a contract lab for identification and susceptibility, although they may assist in coordinating isolate submission from the contract lab to the MRSN, if feasible.

d. For questions regarding any aspect of MDRO submission to the MRSN, the performing laboratory will contact the MRSN Director. Contact information can be found on the ASP SharePoint page at the following link:
<https://info.health.mil/hco/clinicsup/patientsafety/ipc/Pages/ASP.aspx>

2. MRSN PROCEDURES. The MRSN will provide a shipping account number and shipping materials to performing laboratories to defray costs.

3. CRITERIA FOR SUBMISSION.

a. The following MDROs will be submitted to the MRSN:

(1) Carbapenem-resistant organisms. All Gram-negative organisms testing resistant to any carbapenem (ertapenem, imipenem, meropenem) AND to the 3rd and/or 4th generation cephalosporins.

(2) All *Acinetobacter* species, irrespective of antibiotic susceptibility profile.

(3) All *Enterobacter cloacae*, *Escherichia coli*, *Klebsiella pneumoniae*, *Klebsiella aerogenes*, and *Pseudomonas aeruginosa* testing resistant to one or more agents in at least three antibiotic classes, in accordance with Reference (u). See Table 1 for antibiotic classes.

(4) Methicillin-resistant *Staphylococcus aureus* = *S. aureus* testing resistant to oxacillin or cefoxitin; or positive molecular testing for the *mecA* gene and/or penicillin binding protein 2a.

(5) Vancomycin resistant *Enterococci* = All *E. faecalis* and *E. faecium* resistant to vancomycin; or positive molecular testing for the *vanA* or *vanB* gene.

(6) All suspected or confirmed *Candida auris*.

(7) MDROs collected by the MRSN may differ in the future in response to changes in conditions or emerging threats.

Table 1: Antibiotic Classes Used to Determine Multidrug-Resistant Status

Enterobacterales	<i>P. aeruginosa</i>	<i>Acinetobacter</i>
Aminoglycosides	Aminoglycosides	Aminoglycosides
Anti-methicillin-resistant <i>Staphylococcus aureus</i> cephalosporins	Antipseudomonal penicillins + β -lactamase inhibitors	Antipseudomonal penicillins + β -lactamase inhibitors
Antipseudomonal penicillins + β -lactamase inhibitors	3rd and 4th generation cephalosporins	3rd and 4th generation cephalosporins
Penicillins	Carbapenems	Carbapenems
Penicillins + β -lactamase inhibitors	Fluoroquinolones	Fluoroquinolones
Monobactams	Phosphonic acids (fosfomicin)	Folate pathway inhibitors (sulfonamides and trimethoprim)
Carbapenems	Polymyxins	Polymyxins
1st and 2nd generation cephalosporins	Monobactams	Tetracyclines
3rd and 4th generation cephalosporins		Ampicillin-sulbactam
Cephameycins		
Fluoroquinolones		
Folate pathway inhibitors		
Glycylcyclines (tigecycline)		
Phenicol (chloramphenicol)		
Phosphonic acids		
Polymyxins		
Tetracyclines		

GLOSSARY

ABBREVIATIONS AND ACRONYMS

AR	antimicrobial resistance
ASHIPS	Antimicrobial Stewardship, Hospital Infections, and Patient Safety
ASP	Antimicrobial Stewardship Program
ASPC	Antimicrobial Stewardship Program Committee
AUR	antimicrobial use and resistance
CDC	Centers for Disease Control and Prevention
CQMB	Clinical Quality Management Board
DAD	Deputy Assistant Director
DCPH-P	Defense Centers for Public Health - Portsmouth
DHA	Defense Health Agency
DHA-AI	Defense Health Agency - Administrative Instruction
FTE	full-time equivalent
HI	Health Informatics
HL7	Health Level 7
IDSA	Infectious Diseases Society of America
MA	Medical Affairs
MDRO	multidrug-resistant organism
MRSN	Multidrug-Resistant Organism Repository and Surveillance Network
MTF	military medical treatment facility
NHSN	National Healthcare Safety Network
PS CDI	Patient Safety Center for Data Integration
TJC	The Joint Commission