Department of Defense Combating Antimicrobial Resistance



























DoD Combating Antibiotic Resistant Bacteria (CARB)

1st A. baumannii (+) culture from a U.S. service member at WRAMC. Within 1 week, 12 more cases were reported at WRAMC. This multidrugresistant organism (MDRO) subsequently spread widely within the military healthcare system (MHS) during OIF

2009

Executive Order to Combat
Antibiotic-Resistant Bacteria
issued directing the Federal
Government to work
domestically and internationally
to detect, prevent, and control
illness and death related to
antibiotic-resistant infections

DoD directs the MRSN to expand its collection of isolates to include Army, Navy, and Air Force Military Treatment Facilities (MTFs) and GEIS formally included an AMR surveillance focus area.

May 2016: MRSN & WRNMMC identified the first human isolate (*E.coli*) in the U.S. with a plasmid-mediated mcr-1 gene encoding resistance to colistin

DHA issues DHAP-PI 6025.09 establishing procedures for the development, implementation, and review of DoD Antimicrobial Stewardship Programs (ASPs)

- ASP Working Group (ASPWG) to manage ASP across the MHS
- ARMOR program: MRSN, NMCPHC-EDC, PVC, and MTF ASP leads

The Multidrug-resistant organism (MDRO) Repository and Surveillance Network (MRSN) established by the Army to perform surveillance and analysis of MDROs within the Army Health Care System



The Task Force for CARB issues the National Action Plan to address drug-resistant threats that affect people in the U.S. and around the world

2015



DoD establishes policy and assigns responsibilities for the DoD program for CARB in DoDI 6026.26.

2017

- Antibiotic resistance monitoring and reporting by MRSN
- Antibiotic stewardship (MTFs)
- Antibiotic-use analyses (PVC)
- Compliance with NHSN (EDC)
- Maintenance of all CARB-related records

2018

FORCE HEALTH PROTECTION



Hospital Outbreaks in MHS

- Requested by healthcare professionals
- 6-8 requests/month
- Turnaround time as short as 48-72 hours

MTF MDRO Surveillance

- All MTFs send MDR bacteria to MRSN in accordance with DoD/DHA
- 500-800 bacteria/month received
- MRSN performs real time molecular epidemiology





UNITED STATES OF AMERICA

Global Antibiotic Resistance Surveillance

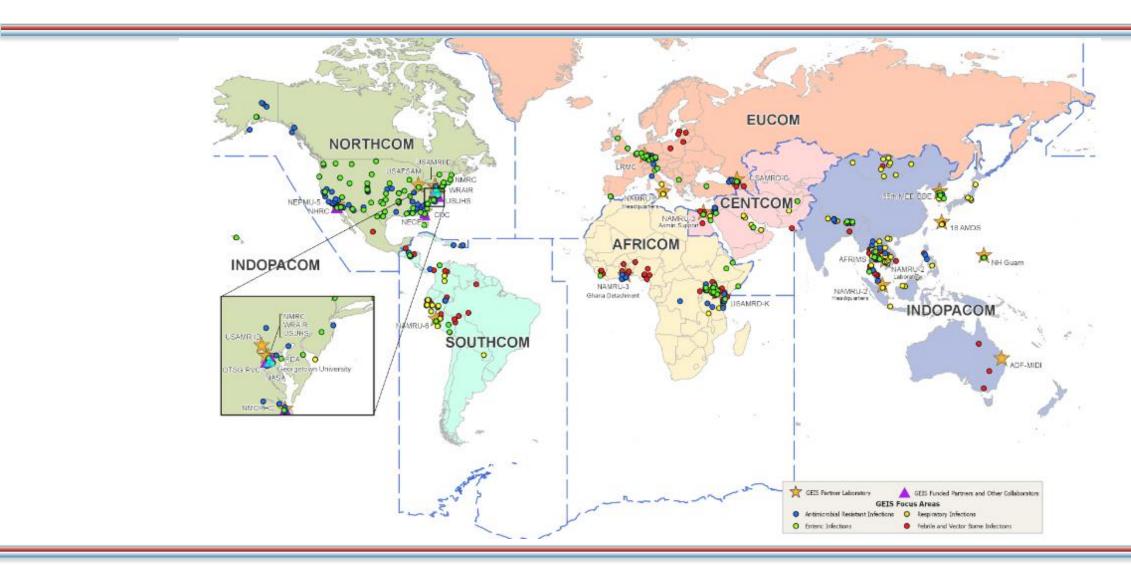
- OCONUS labs/GEIS/22 countries
- Thousands of bacteria per year
- Tracking superbugs worldwide
- Provide actionable infectious disease surveillance data to geographic Combatant Commands

Graphics courtesy of Christopher Nititham, WRAIR



GEIS Partner Laboratories and Surveillance Sites





The Federal CARB Task Force

































Office of Global Affairs

Indian Health Service







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