

The Infectious Disease Clinical Research Program: A Military Translational Research Center Generating Evidence for Practice

Brian Agan, MD

IDCRP Deputy Science Director, HJF



Disclosure and Disclaimer

- Dr. Agan is employed by The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. (HJF), a not-for-profit Foundation authorized by Congress to support research at the Uniformed Services University of the Health Sciences (USU) and throughout military medicine.
- The contents of this presentation are the sole responsibility of the author(s) and do not necessarily reflect the views, opinions, or policies of Uniformed Services University of the Health Sciences; Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.; National Institute of Health; the Department of War; the Departments of the Army, Navy, or Air Force; the Defense Health Agency. Mention of trade names, commercial products, or organizations does not imply endorsement by the U.S. Government..
- Speaker and co-authors have no relevant financial or non-financial relationships to disclose relating to the content of this activity. Commercial support was not received for this activity.

Co-Author Acknowledgements

Dr. David Tribble¹

LCDR Sarah A. Jenkins, MSC, USN¹

CAPT (ret) Timothy Burgess, MC, USN¹

CAPT Drake H. Tilley, Jr., MC, USN¹

¹ Infectious Disease Clinical Research Program, Department of Preventive Medicine and Biostatistics, Uniformed Services University of the Health Sciences, Bethesda, MD



Learning Objectives

1. Discuss how the IDCRP contributes to the Department of War medical research enterprise.
2. Describe the research capability and collaborative network of the IDCRP.
3. Discuss how the IDCRP generates evidence for the translation into military clinical practice or policy to improve care and outcomes among warfighters.

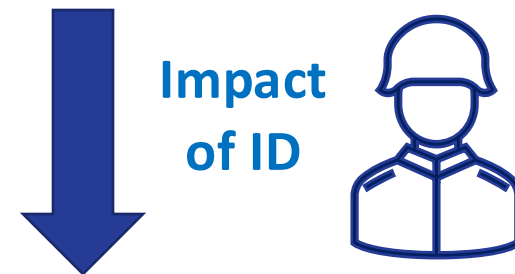
IDCRP Overview

Vision

To eliminate the impact of infectious diseases in the military population through collaborative clinical research

Mission

To conduct multicenter infectious disease clinical research, focusing on high impact cohort and interventional trials, to inform and improve care of the Warfighter



IDCRP Overview

Established in 2005: USU and National Institute Allergy & Infectious Diseases (NIAID) Interagency Agreement formed through a cooperative agreement with Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

Chartered in 2015: Assistant Secretary of War for Health Affairs (ASW(HA)) as a Tri-Service DoW research center at the Uniformed Services University (USU)

Research Areas: Focused on military-relevant infectious diseases

- **Deployment/Travel-Related Infections**
- **Respiratory & Sexually Transmitted Infections**
- **Wound Infections**

Aligned: 2025 DoD Biosurveillance Strategy, DHA Strategic Plan: MID 2024, 2023 Biodefense Posture Review, DoW ID Threat List, National Security Strategy, National Biodefense Strategy and Implementation Plan, National Defense Strategy, American Pandemic Preparedness plan

IDCRP Focused FHP Countermeasure and Capability Gaps for High Priority Threats

Deployment & Travel-Related Infections

Selected Priority Pathogen, Disease or Syndrome ^a	Understand Threat	Prepare and Protect Force	Mitigate Impact
	Detect	Prevent	Treat
Norovirus			
Acute watery diarrhea (diarrheagenic <i>E coli</i>)			
Invasive diarrhea and antibiotic resistance (Campy, Shigella)			
Dengue			
Leptospirosis			

Respiratory and Sexually Transmitted Infections

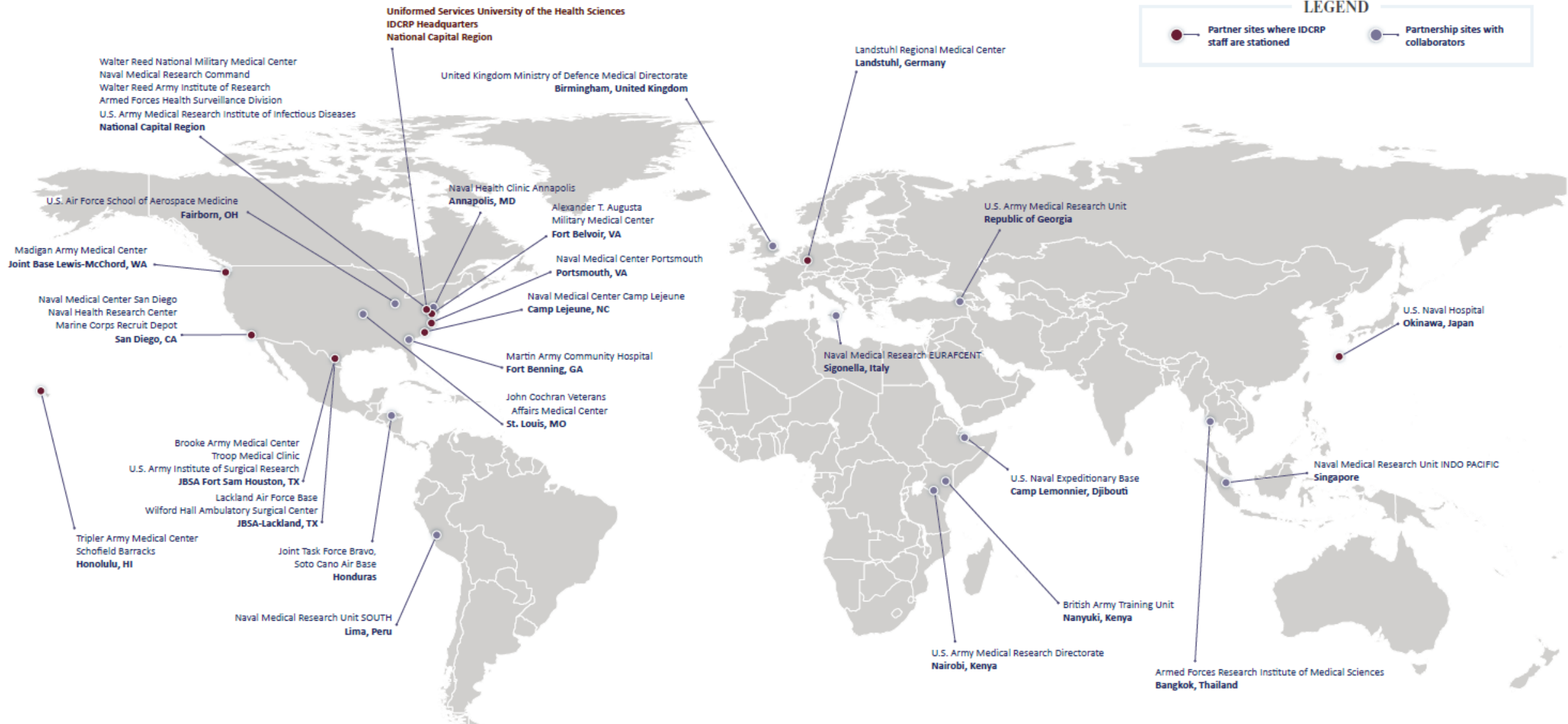
Priority Pathogen, Disease or Syndrome	Understand Threat	Prepare and Protect Force	Mitigate Impact
	Detect	Prevent	Treat
SARS-CoV-2			
Influenza, seasonal			
Influenza, pandemic			
Adenovirus			
Virus X (e.g. novel coronavirus)			
HIV			
Gonorrhea			
<i>C.trachomatis</i>			
Syphilis			

Wound Infections

Threat	Understand Threat		Prepare and Protect Force		Mitigate Impact	
	Detect		Prevent		Treat	
	Roles 1-3	Roles ≥4	Roles 1-3	Roles ≥4	Roles 1-3	Roles ≥4
Battlefield wound infections ²						
IFIs ³						
Community-associated SSTIs ⁴						

Legend	
	Little-to-no clinically available medical countermeasure/capability
	Medical countermeasure exists but limited or at-risk effectiveness and/or implementation gap exists
	Clinical capability/medical countermeasure exists and is widely implemented

IDCRP Partner Network



IDCRP Strategic Plan

STRATEGIC PLAN

Approved by the IDCRP Executive Steering Committee members December 18, 2015

Executive Steering Committee:

Dr. Charles L. Rice, M.D., President, Uniformed Services University of the Health Sciences

Dr. H. Clifford Lane, M.D., Clinical Director, National Institute Allergy & Infectious Diseases (NIAID)/NIH

Dr. Sean Biggerstaff, Ph.D. Interim Director, Research, Development, and Acquisitions, Defense Health Agency



*Infectious
Disease
Clinical
Research
Program*

Strategic Aims

1. **Develop & sustain robust military clinical research to support DoD operational infectious diseases requirements**
2. **Plan, execute, and disseminate findings of clinical infectious disease (ID) research of relevance to impact the US military**
3. **Align and support**
 - ID product development for the warfighter (partnership with DHA Military Infectious Disease (MID) and Navy Advanced Development)
 - ID military public health surveillance (partnership with DHA PH/Armed Forces Health Surveillance Division (AFHSD)/other military surveillance activities)
 - DoD clinical research education [partnership with Graduate Medical Education (GME) programs]
4. **Sustain and enhance non-DoD collaborations yielding greater research impact and generalizability for the DoD, veterans, and the US civilian population:**
 - National Institute of Allergy and Infectious Diseases (NIAID)/National Institutes of Health (NIH)
 - Veterans Affairs (VA) Health Systems

Core Functions of IDCRP

Enabling
Platform: DoW
Clinical
Research
Network
[MTF/Ops]

Readiness &
Response:
Scalable
Platform for
Multi-Site
Clinical Trials

Evidence
Translation

Informs DoW
Health Policy
& Practice

Support Clinical Research Education and Training

IDCRP Oversight and Operations →

Facilitates Cross-Organizational Communications/Interface

Open Communications



Large-scale Retrospective MHS Studies

Infectious diseases
Original research

BMJ Open 2025;15:e094861.

Demographics, epidemiology, mortality and difficult-to-treat resistance patterns of bacterial bloodstream infections in the global US Military Health System from 2010 to 2019: a retrospective cohort study

Alexander C Vostal¹, Melissa Grance^{2, 3}, John H Powers 3rd⁴, Sameer S Kadri^{5, 6, 7}, Sarah Warner^{5, 6}, Uzo Chukwuma^{8, 9}, Carlos Morales^{2, 3}, Charlotte Lanteri², M Leigh Carson^{2, 3}, Beth Poitras⁸, Nicholas Seliga⁸, Dean Follmann¹⁰, Jing Wang¹¹, Edward Parmelee^{2, 3}, Katrin Mende^{2, 3, 12}

Setting Military Health System

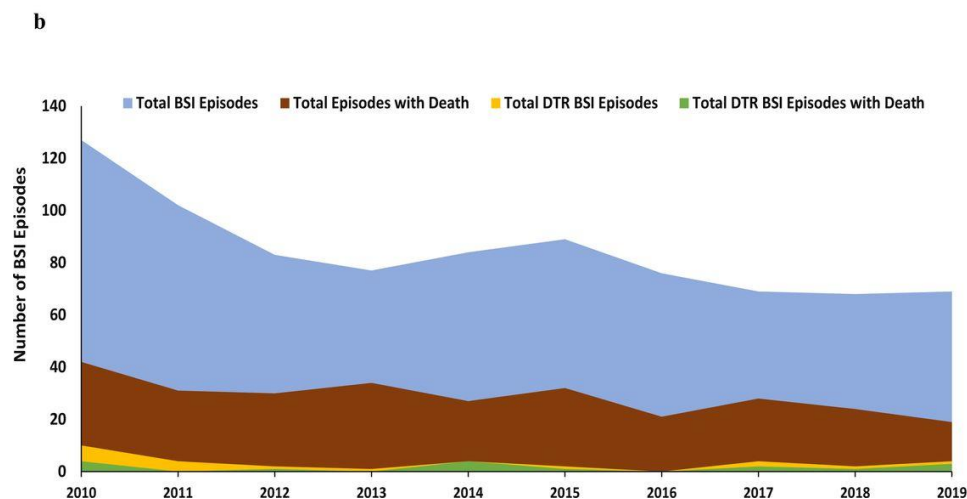
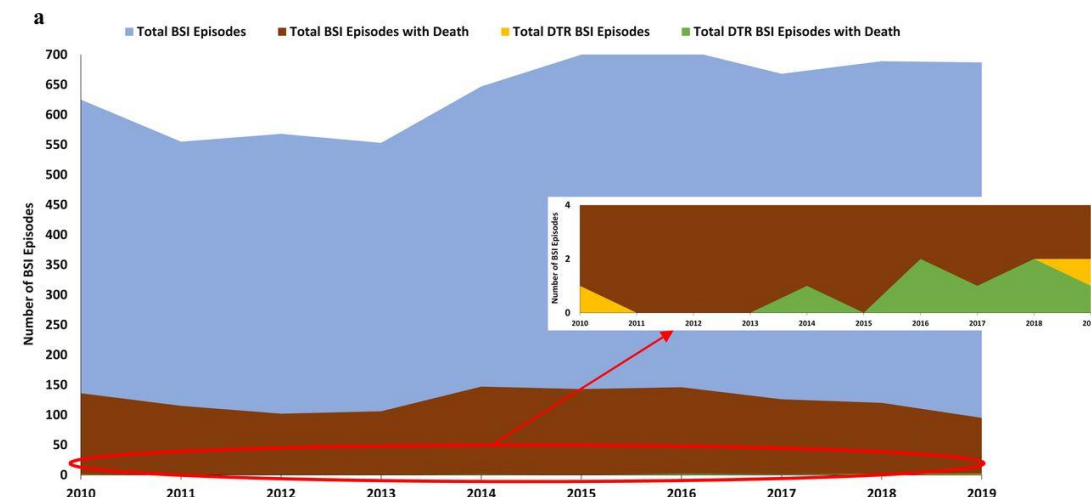
Timeframe 2010-2019

Population 8,145,778 individuals per year (Avg)

Outcome 15,261 individuals had 18,508 BSI episodes

- Mortality burden a/w BSI was substantial (1 in 4 at 1 year)
- First-line treatment options remained available for 99.7% of BSIs

Total number of (a) lactose-fermenting and (b) non-lactose-fermenting Gram-negative bacilli bloodstream infection (BSI) episodes and deaths



Observational Epi/Surveillance Studies

Open Forum Infectious Diseases

MAJOR ARTICLE

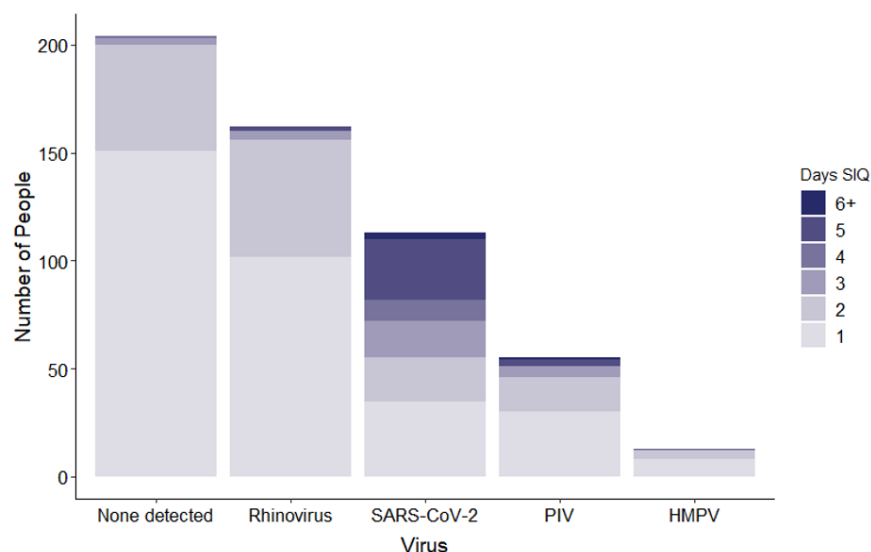


The Molecular Epidemiology and Congregate Transmission Dynamics of Medically Attended Acute Respiratory Infections at the United States Naval Academy During Plebe Summer

Emily Hone,^{1,2} Stephanie A. Richard,^{1,2,3} Kat Schmidt,^{1,2,3} Jennifer Rothenberg,^{1,2,3} Rezalina Tant,^{1,2,3} Michele Wayman,^{1,2} Chantele Friend,^{1,2} Kamala Thapa,^{1,2} Vivian Hogan,^{1,2} Timothy H. Burgess,^{1,3} Robert J. O'Connell,^{1,3} Mark P. Simons,^{1,3} Anthony C. Fries,^{3,4} Drake H. Tilley,^{1,4,5} Simon D. Pollett,^{1,2} and Rhonda E. Colombo^{1,2,5,6}

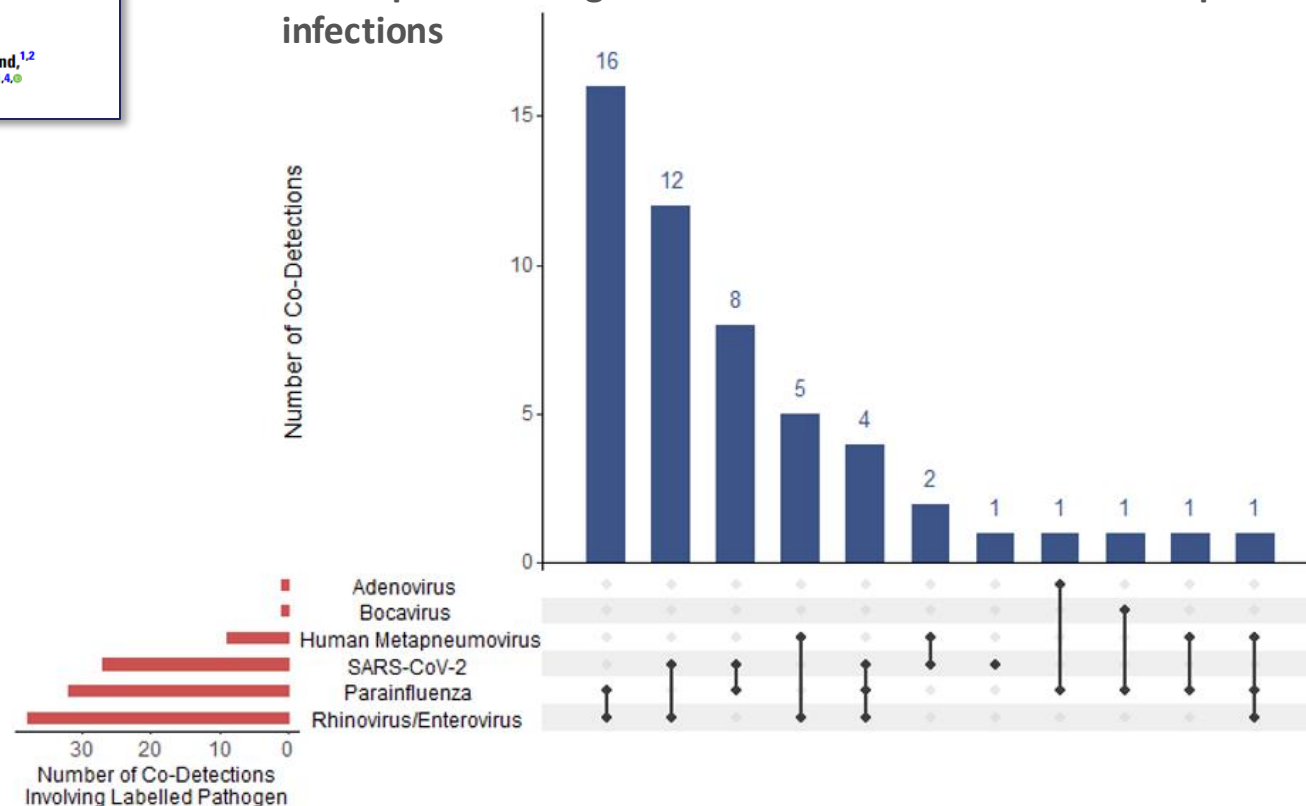
Open Forum Infect Dis. 2026 Jan 30;13(2):ofag036.

Days sick-in-quarters (SIQ) by pathogen



ARIA highlights the importance of ongoing characterization of ARIs in congregate populations to help inform mitigation strategies.

Viral co-detections in swabs collected from U.S. Naval Academy midshipmen during healthcare encounters for acute respiratory infections



Randomized Controlled Trials

Clinical Infectious Diseases

MAJOR ARTICLE



Randomized Pragmatic Trial of the Comparative Effectiveness of Chicken Egg-Based Inactivated, Mammalian Cell Culture-Based Inactivated, and Recombinant Protein Quadrivalent Seasonal Influenza Vaccines in United States Military Health System Beneficiaries

Rhonda E. Colombo,^{1,2,3,4,a} Stephanie A. Richard,^{1,2,a} Kat Schmidt,^{1,2} Christina Schofield,^{4,b} Anuradha Ganesan,^{1,2,5} Wesley Campbell,⁵ David Hmcir,^{6,7,8} Tahaniyat Lalani,^{1,2,9} Katrin Mende,^{1,2,10} Ana E. Markelz,¹⁰ Catherine M. Berjohn,^{1,3,11} Laurie Housel,^{8,12} Dorothy Becher,^{1,2} Elizabeth R. Zell,¹³ Daniel Ewing,¹⁴ Appavu K. Sundaram,¹⁴ Jitendrakumar R. Modi,¹⁵ Adam Saperstein,¹⁶ Drake H. Tilley Jr.,¹⁵ Alan Williams,¹⁶ Bruce McClenathan,^{8,12} Limone Collins,⁸ Christina Spooner,⁸ Srihari Seshadri,⁸ Anthony Fries,¹⁷ Ryan C. Maves,^{11,18} John H. Powers III,¹⁹ Robert J. O'Connell,¹ Simon D. Pollett,^{1,2} Mark P. Simons,¹ Christian L. Coles,^{1,2} and Timothy H. Burgess^{1,2}; the PAIVED Study Group^b

Clin Infect Dis. 2025 Dec 24;81(5):e454-e463. doi: 10.1093/cid/ciaf503.

Key Findings

- **15,432 participants** - influenza identified in:
 - cclIV: 87/5130 (1.7%)
 - RIV: 79/5154 (1.5%)
 - eIV: 69/5148 (1.3%)
- Comparing egg-based to non-egg-based flu vaccines:
 - **No significant differences in vaccine effectiveness (VE)**
 - Immunogenicity differences were observed
 - RIV: seroconversion more likely against all vaccine strains
 - cclIV more likely to seroconvert only against A/H3N2

Exploratory Influenza Outcomes by Vaccine Group

	eIV (N = 5148)	cclIV (N = 5130)	RIV (N = 5154)	cclIV Versus eIV (95% CI)	RIV Versus eIV (95% CI)
Influenza					
Episode duration, mean (SD)	10.6 (9.0)	11.6 (7.8)	11.9 (7.1)	1.03 (−2.04, 4.11)	1.36 (−1.56, 4.27)
N	53	65	66	...	...
Days with limited activity, mean (SD)	5.8 (5.8)	6.1 (5.9)	6.0 (5.5)	0.31 (−1.87, 2.49)	0.20 (−1.89, 2.29)
N	50	63	66	...	...
Days missed work, mean (SD)	2.0 (2.0)	2.5 (2.6)	2.0 (2.4)	0.54 (−0.36, 1.44)	0.09 (−0.76, 0.94)
N	48	58	62	...	...
Total FLU-PRO score, mean (SD)	1.6 (0.6)	1.7 (0.7)	1.5 (0.7)	0.09 (−0.18, 0.35)	0.09 (−0.36, 0.18)
N	47	60	60	...	...

Clinical Practice Guidelines



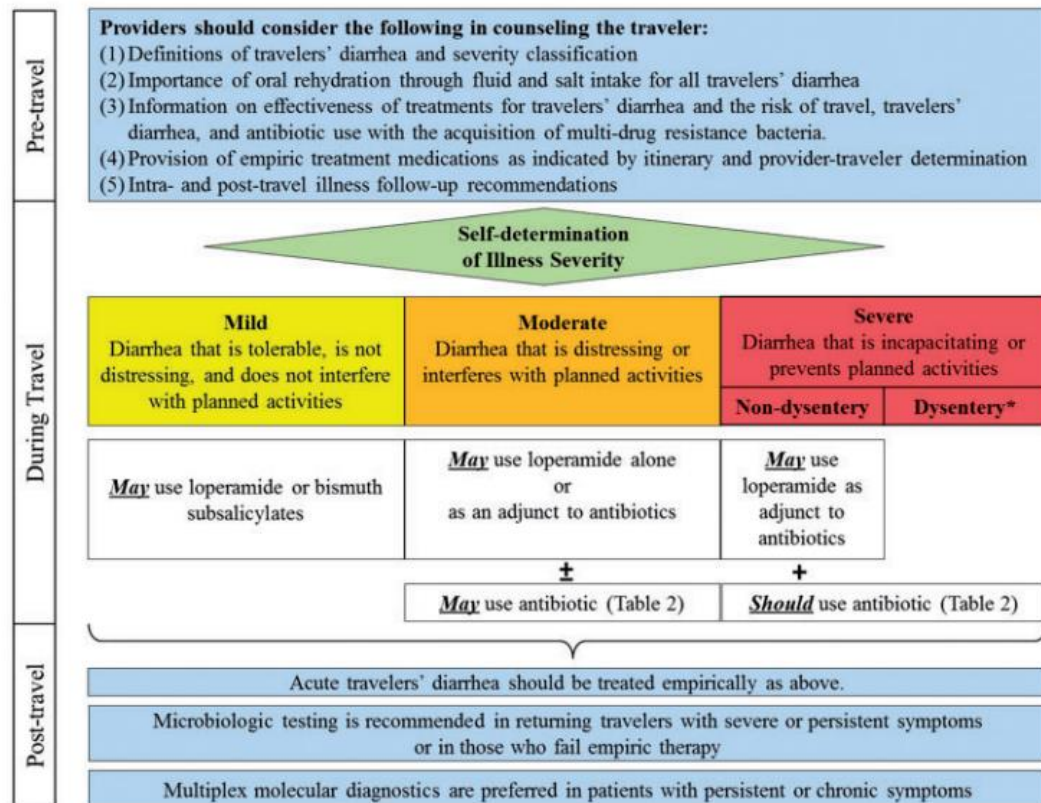
International Society of Travel Medicine
Promoting healthy travel worldwide

Journal of Travel Medicine, 2017, Vol 24, Suppl 1, S63–S80
doi: 10.1093/jtm/tax026
Original Article

Original Article

Guidelines for the prevention and treatment of travelers' diarrhea: a graded expert panel report

Mark S. Riddle^{1*†}, Bradley A. Connor^{2*†}, Nicholas J. Beeching³, Herbert L. DuPont⁴,
Davidson H. Hamer⁵, Phyllis Kozarsky⁶, Michael Libman⁷, Robert Steffen⁸,
David Taylor⁹, David R. Tribble¹⁰, Jordi Vila¹¹, Philipp Zanger¹², and
Charles D. Ericsson¹³



JOINT TRAUMA SYSTEM CLINICAL PRACTICE GUIDELINE (JTS CPG)



Invasive Fungal Infection in War Wounds

Provide guidance on the recognition and comprehensive management of invasive fungal infection (IFI) in war wounds.

Contributors

COL Roseanne Ressler, MC, USA
Lt Col Remealle A. How, USAF, MC
Leopoldo C. Cancio, MD, FACS
David R. Tribble, MD DrPH
CDR Shane D. Jensen, MC, USN
Kaitlin A. Pruskowski, PharmD
COL Benjamin K. Potter, MC, USA
BG Clinton K. Murray, MC, USA
COL Jennifer M. Gurney, MC, USA

Previous Contributors

CAPT Carlos J. Rodriguez, MC, USN
CDR Elliot M. Jessie, MC, USN
Surg CDR Mansoor Khan, Royal Navy
CAPT Mark E. Fleming, MC, USN
Lt Col Wade T. Gordon, USAF, MC
Col Stacy A. Shackelford, USAF, MC

First Publication Date: 01 Nov 2012

Publication Date: 17 Jul 2023

Supersedes: 04 Aug 2016

TABLE OF CONTENTS

BACKGROUND	2
EVALUATION AND TREATMENT	3
DIAGNOSIS CRITERIA	4
TOPICAL TREATMENT	4
DEBRIDEMENT AND ANTIFUNGAL THERAPY	5
BIOPSY AND TISSUE CULTURE IN OR	7
OR STAFF RESPONSIBILITIES	7
PATHOLOGY STAFF RESPONSIBILITIES	8
PERFORMANCE IMPROVMENT (PI) MONITORING	8
REFERENCES	10
APPENDIX A: EXAMPLES OF SUSPICIOUS WOUNDS	13
APPENDIX B: MD TRAUMA WOUND DEBRIDEMENT OP NOTE	15
APPENDIX C: BASTION CLASSIFICATION OF LOWER LIMB INJURY	17
APPENDIX D: TELEMEDICINE / TELECONSULTATION	18
APPENDIX E: INFORMATION REGARDING OFF-LABEL USES IN CPGS	19

IDCRP AT 20: HISTORY AND IMPACT



IMPACT DOMAINS

CONTRIBUTIONS



Clinical Research Network

- First & only MHS [MTF & Operational Medicine] Network with broad mandate to investigate priority ID threats to the military (NO comparable civilian research network)
- Enhanced Support for Tri service ID Community [GME across MHS & USU; supported KSA sustainment; IDCRP Science Symposium; AFIDS]
- DoD Leader in Deployment Infection Clinical Research & Evidence
- Established MHS-wide streamlined scientific & IRB central review [DoD Requirement]



Guideline/Policy Generation

- Decades of mission-driven clinical research in ID for CPGs and medical policies
 - HIV Natural History Study (40 years)
 - US Army policy established for Latent TB infection screening at accession
 - Trauma Infectious Disease Outcomes Study (TIDOS); JTS CPG development & refinement
 - DoD Deployment-related diarrhea management Clinical Practice Guidelines
 - Recruit training SSTI (Staph aureus) prevention guidance evidence generation
 - Influenza vaccine pragmatic effectiveness



Readiness & Response

- Unique oversight and transparency across DoW Clinical, R&D, PH Surveillance in cooperation with NIAID/NIH, VA, and NPP (HJF)
- Wartime infection surveillance & response (including combat casualty care – JTS partnership)
- Emerging ID Risks and Clinical Outcomes [Chikungunya, Zika, Ebola, STEC, Leptospirosis]
- Real-time Responses to Emerging Threats [Pandemic: H1N1, COVID]

Conclusions

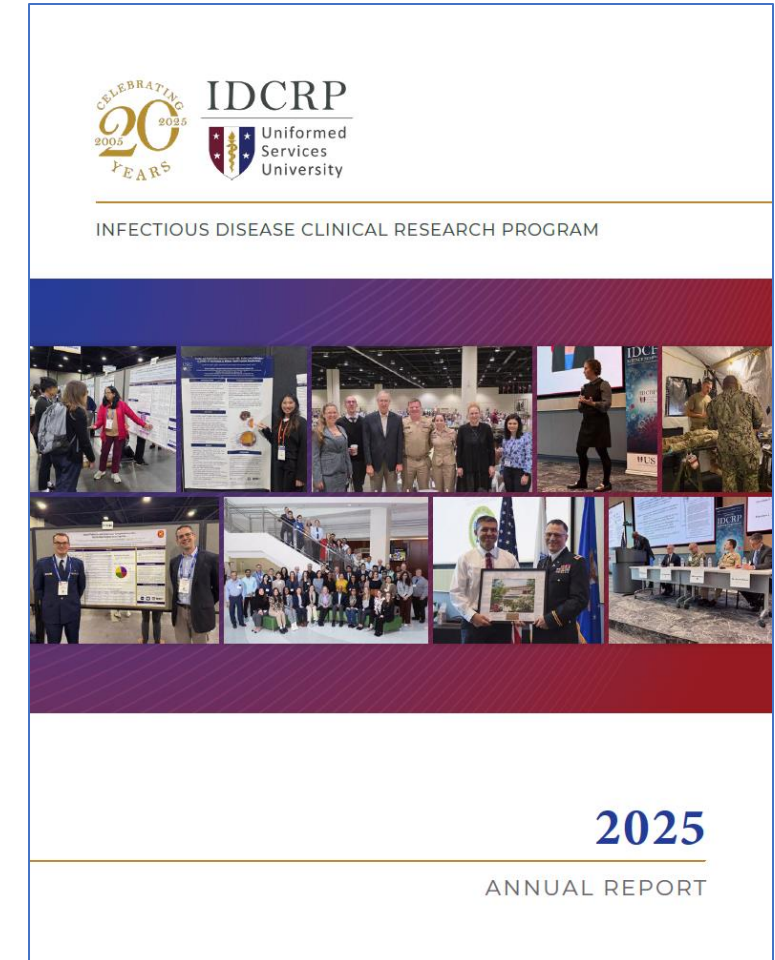
IDCRP Positively Impacts the Warfighter

- Provides ID threat evidence and expertise to military leadership and stakeholders
- Informed 31 military policy and practice changes as of March 2026
- IDCRP studies support translation of investigational new products and CPGs into practice for the management of infections.
- IDCRP investigators have supported the education of more than 80 clinical investigators who continue to advance military medicine.

The IDCRP model of tri-service, cross-organizational collaboration to identify, vet, and rigorously address priority clinical research gaps using appropriate study designs has been tested and proven effective for over 20 years.

Communication Strategy

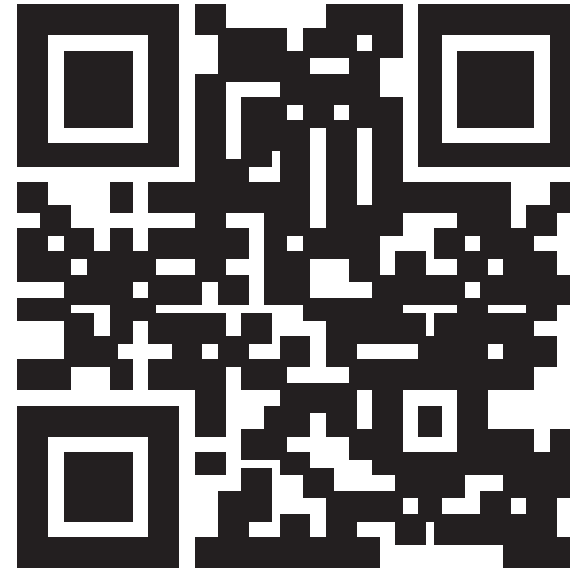
- Public Website: <https://idcrp.usuhs.edu/>
 - Email: contactus@idcrp.org
- IDCRP Strategic Plan
- IDCRP Annual Report FY25 (posted)
- **5th Annual IDCRP Science Symposium**
 - **February 22-26, 2027**
- Armed Forces Infectious Disease Society
 - USU/IDSA Chartered Society (Awaiting Approval)
- Participation at key International and MHS Conferences
 - AMSUS, MHS, MHSRS, IDWeek, ASTMH
- Development of a DNBI–JIS Public Website



Questions?



contactus@idcrp.org



idcrp.usuhs.edu

Brian Agan: brian.agan.ctr@usuhs.edu