

Update From Federal and Other Funding Agencies Defense Health Agency

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- Brief History of Defense Health Agency
- Changing Conflict Environment
- Defining the Medical Roles of Care (ROC)
- Two Lines of Effort
- Contact Information





- On Oct. 1, 2013, DOD established the Defense Health Agency (DHA) as a one of eight Combat Support Agencies supporting joint operating forces and Combatant Commands engaged in military operations and to direct the execution of 10 joint shared services, including... research and development...
- On Oct. 1, 2015, DHA achieved full operational capability, two years after the agency was first established
- On Oct. 1, 2018, all military hospitals and clinics began to follow DHA standardized policies, procedures, and clinical and business practices
- On Oct. 1, 2023, DHA moved from 20 markets to nine Defense Health Networks
- On May 5, 2024, Military Occupational Medicine Research Program moved from USAMRDC to DHA Research & Engineering (R&E)



Funding Opportunities for Extramural Organizations



 Broad Agency Announcement (BAA) – USAMRDC's BAA is a continuously open, competitive announcement intended to solicit extramural research and development ideas. Military operational medicine-relevant proposals will route to MOMRP for consideration.

BAA Webpage: <u>https://ebrap.org/eBRAP/public/ProgramFY.htm?programFYId=635101</u>

• Medical Technology Enterprise Consortium (MTEC): The consortium focuses on the development and delivery of innovative medical technologies to improve the health and safety of U.S. military personnel, veterans, and civilians.

MTEC Webpage: <u>https://mtec-sc.org/</u>

 Defense Health Agency Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) - Competitive, awards-based programs that align innovative small businesses to meet Defense Health Agency research and development needs

DoD SBIR/STTR Website - https://www.dodsbirsttr.mil/submissions/login





- Changing conflict conditions
 - Near peer adversary
 - Larger theater
 - Limited physical and cyberspace access
- Implications
 - Longer access time
 - Changing medical focus
 - Increased demand on medics/corpsmen



Medical Roles of Care (ROC)



ROC 1



<u>Point of Injury (POI) care</u> - First-aid and immediate lifesaving measures provided by: self-aid, buddy aid, combat lifesaver (non-medical team member trained in enhanced first-aid, combat medic or corpsman trained in tactical combat casualty care (TCCC).

<u>Battalion aid station</u> - Triage, treatment, evacuation. No surgical or patient holding capacity.

ROC 2



<u>Medical Companies</u> - Basic primary care; increased medical capability over ROC 1. 100% mobile; limited inpatient bed space. May include optometry, has capability to deliver packed RBCs, limited X-ray, clinical lab, dental support, stress control, preventive medicine, and surgical capabilities when augmented with Forward Resuscitative Surgical Team (FRST). To reduce <u>acute</u> and chronic stress casualties <u>in the field</u> (from point of injury to ROC 1)

ROC 3



<u>Field Hospital</u> (FH) (248-bed) - Formerly known as Combat Support Hospital (CSH). Expanded capability over ROC 2; staffed and equipped to provide care to all categories of patients including resuscitation, initial wound surgery, damage control surgery, and postoperative treatment. Includes other Service's theater hospitals and Hospital Ships USNS *Mercy* and USNS *Comfort* (999-bed).



Fixed Medical Treatment Facilities (MTF) -CONUS-based hospitals and OCONUS-based hospitals; may include VA and other long-term care facilities



USAMRDC, Plans, Programs, Analysis and Evaluation Research, Development, and Acquisition Support Office, FortDetrick, MD Version 1.2 June2019 https://ppae.amedd.army.mil UNCLASSIFIED



Two lines of Effort



- Medic and Corpsmen training
 - In 2020 Joint Staff Surgeon instructed PHCoE to produce a guideline for forward management of acute behavioral health conditions. Guideline was published by DHA Joint Trauma System in January 2024*
 - BH GEAR: a training program developed and managed by WRAIR to prepare medics/corpsmen to serve as behavioral health extenders. Program was based on the aforementioned guideline
- Repurposing Role 1 Drugs
 - The AURORA Study
 - General findings
 - Psych health research related areas of interest

*Issa F. (Ed.) (2024) Guideline for forward management of acute behavioral health conditions by non-specialty medical personnel. Joint Trauma System. https://jts.health.mil/assets/docs/cpgs/Behavioral_Health_Jan_2024_CPG.pdf



Medic and Corpsman Training



<u>Behavioral Health Guidelines for Medic Assessment & Response (BH GEAR)</u>

Medics receive limited Behavioral Health (BH) training and report low confidence addressing BH concerns.^{*} An ongoing project conducted by the Walter Reed Army Institute of Research (WRAIR) aims to develop non-pharmacologic solutions for far forward BH service delivery and deliver a training that translates guidelines for forward management of acute BH conditions. It is developing, testing and validating training materials/intervention tools for medics in far forward, austere environments, and developing a train-the-trainer model for dissemination of a program called BH GEAR.

 BH GEAR is a 5 hour in-person interactive training that provides BH training for medics. It is also appropriate for other Soldiers who may be serving in a helper role within their unit.



*Mesias, G.A. et al. (2024). Combat Medics' Preparedness to Serve as Behavioral Health Extenders in Forward Environments. Military medicine, 189(Suppl 3), 332–340.

BH GEAR Content



1	Introduction	Purpose, Agenda, Objectives, Materials
2	Tools for Helping	Overarching Principles, Face-to-Face Communication Skills, BH Assessment, General & Specific Interventions Used Across Problem Areas, Management of Acute Issues
3	Commonly Experienced Problems	Acute Stress Reactions & Panic Attacks, Depression, Sleep Disruption & Deprivation, Social Stress, Anger Management
4	Less Common Problems That May Indicate a Safety Risk	Mania & Bipolar Symptoms, Psychosis, Substance Use Disorders
5	Safety Risks	Managing Suicide Risk, Managing Homicide Risk, Psychopharmacological Considerations & Interventions
6	Medevac & Help	BH Medical Evacuation, Additional Sources of Help



Repurposing Role 1 Drugs: Leveraging AURORA



<u>Advancing Understanding of Recovery After Trauma</u> (AURORA)

AURORA was a collaborative study funded by NIMH, USAMRDC, and other private foundations to collect an extensive longitudinal battery of objective bio-behavioral data from adults presenting to Emergency Departments (EDs) within 72 hours after potentially traumatic events to characterize the adverse neuropsychiatric sequelae (APNS) across traditional syndrome domains (e.g., posttraumatic stress disorder (PTSD), pain, post-concussion syndrome, posttraumatic depression). Examples of published AURORA findings:

- Future PTSD and depression symptoms may be predicted by resting-state fMRI shortly after trauma¹ and
- Failure to recover from PTSD may be predicted by sequential decreases in basolateral amygdala response to threat²

DoD continues to leverage the AURORA clinical trial infrastructure and dataset with work such as a recently completed WRAIR study that utilized the AURORA cohort baseline and post trauma data to study early detection of unresolving Acute Stress Disorder (ASD) symptoms and identify blood signatures that can be potentially tested in saliva samples.

¹ Harnett, N.G. et al. (2021). Prognostic neuroimaging biomarkers of trauma-related psychopathology: resting state fMRI shortly after trauma predicts future PTSD and depression symptoms in the AURORA study. *Neuropsychopharmacology*, 46(7), 1263–1271.

² Roeckner, A.R. et al. (2025). Sequential decreases in basolateral amygdala response to threat predict failure to recover from PTSD. Neuropsychopharmacology, 10.1038/s41386-025-02115-1.



Role 1 Drug and Device Interventions



- Lab Studies: Role 1 Compounds, Acute Stress Reactions (ASRs), and Performance
 - Ongoing WRAIR lab-based randomized control trial (RCT) to test effects of drugs (hydrocortisone, morphine or propranolol) vs. placebo on performance tasks relevant to far forward environments for 24-hours after initial drug administration under unstressed and stressed conditions in adults with spider aversion
- Efficacy Studies: Role 1 Compounds, ASRs, and Performance
 - Ongoing extramural study utilizing the AURORA ED-based clinical trial infrastructure to conduct a double-blind placebo-controlled multidose RCT of medications that pass performance testing at WRAIR to evaluate whether a single dose of the tested Role 1 medications reduce ASR symptoms and/or improve neurocognitive function vs. placebo in the 6 weeks after traumatic stress exposure
- Future Work
 - Interested in development of wearable devices for mitigating ASR/ASD (e.g., neurostimulation)





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Questions