



CSI Study Newsletter

ISSUE 7 • FALL 2024

Follow us!

@CARECONSORTIUM

Facebook
Instagram
Twitter/X
LinkedIn

Questions? Contact us!

carealumni@umich.edu

We will respond to you within
48 hours

Check out our website:

CAREConsortium.net

Find links to scientific publications
and helpful resources

FRIDAY, SEPTEMBER 20 NATIONAL CONCUSSION AWARENESS DAY

National Concussion Awareness Day® is recognized by the United States Congress and was founded by Brooke Mills in 2016 after she suffered a concussion in high school. This day creates an opportunity to raise awareness of the importance in recognizing concussion symptoms, seeking appropriate medical treatment, and to support those who have been injured. To find out more information, visit nationalconcussionawarenessday.com.

CSI TIER 1 STUDY UPDATES MILITARY AND CIVILIAN COHORTS

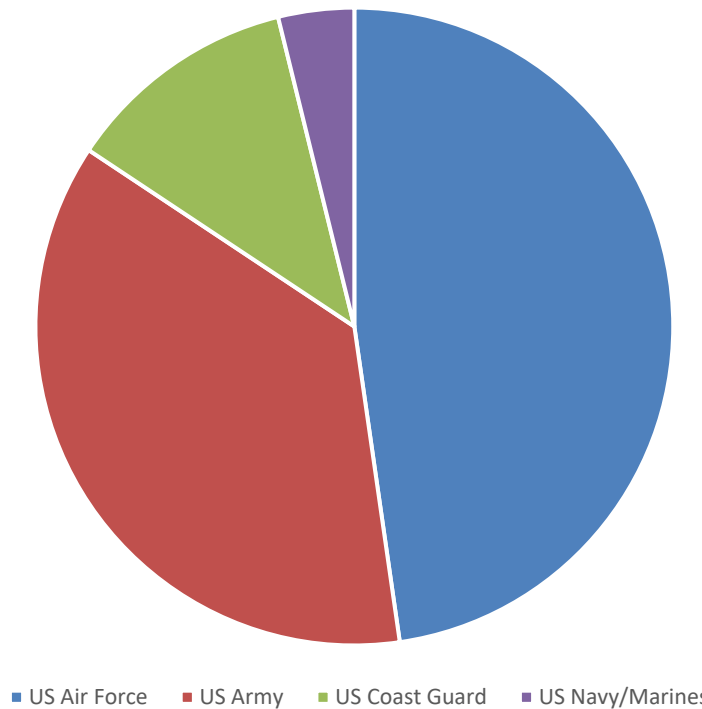
Thank you to the **over 10,000 participants** who have already completed the Tier 1 online study questionnaires. We have had a great response so far, but we still need you to reach our CSI study goals by 2026. The data you contribute to the CARE Consortium CSI Study is vital to our understanding of head impact exposures and concussion on long-term neurological health.

As a reminder, the Tier 1 study questionnaires take approximately one hour to complete online. You can stop and restart where you left off if you do not finish all the questionnaires in one session. A member of our professional interviewer team from the Institute for Social Research at the University of Michigan may be calling, emailing, or texting you to request your participation in this important study.

2023-2024 Civilian Tier 1 Completions by Collegiate Sport Category



2023-2024 Military Tier 1 Completions by Service Branch



CSI TIER 2 STUDY UPDATES CIVILIAN COHORT

The CSI Tier 2 Civilian sites which conduct full-day in-person comprehensive visits, have completed nearly 450 participant visits at Indiana University School of Medicine (IU) and the Medical College of Wisconsin (MCW), and many more are scheduled over the next few months.

In addition to the regular study protocol, the Tier 2 Civilian sites have added PET scans (Tau & Amyloid) that aim to give a more comprehensive examination of the brain. Nearly 16 individuals have completed the PET scans in addition to the regular Tier 2 study visit so far. Our goal for the next quarter of the study is to ramp up enrollment into the PET portion of the Tier 2 Civilian arm of the study. Study team members from IU and MCW will be reaching out to eligible participants, and we look forward to your continued support of this important study!

CSI EGLIN EOD STUDY UPDATES MILITARY COHORT

The CSI Explosive Ordnance Disposal (EOD) Cohort Study is taking place at Eglin Air Force Base (AFB). The Eglin site is currently working with students from all branches of service going through an eight-month pipeline at the Naval School Explosive Ordnance Disposal (NAVSCOLEOD). The school hosts approximately 1200 students per year. The pipeline consists of eight divisions, with an additional underwater division for Navy students. The recruitment goal for the Eglin site is 2000 participants, and we are well on the way to meeting that goal, with 892 currently enrolled!

This March, the study team was able to work with the Eglin AFB EOD shop for recruitment. The unit is one of two in the local area and holds approximately 35 operating EOD techs. Recruitment at the unit will occur annually to invite any new personnel to enroll into the study.

In May of 2024, the Eglin site began monthly recruitment at the Advanced Improvised Explosive Device Division. This division is unique because it is only available to current EOD techs who are operating in the field and are prior service; approximately 160 students enter the course annually.

EOD Cohort study participants are eligible to enroll in further CSI studies. Participants will be invited to enroll in CSI Tier 1, the online assessment study, one year after completing the EOD Cohort study. And all participants are eligible to enroll in CSI Tier 3, the military health record integration project, at any time. Look out for an email from the CSI study team inviting you to participate!

CSI TIER 2 STUDY UPDATES MILITARY COHORT

The CSI Tier 2 Military study is up and running at all four military sites: the National Intrepid Center of Excellence (NICoE) at Walter Reed National Military Medical Center (WRNMMC) in Bethesda, MD; and the Intrepid Spirit Centers at Fort Liberty, NC; Fort Cavazos, TX; and Joint Base Lewis-McChord (JBLM), WA; with research coordination support from the study team at the Uniformed Services University of the Health Sciences (USUHS). The Tier 2 sites are recruiting individuals that previously participated in CARE or SALTOS studies at any of the United States Military Service Academies for a comprehensive in-person research evaluation. All participants are also eligible to enroll in CSI Tier 3, the military health record integration project. Talk with your study coordinator or look out for an email from the CSI study team inviting you to participate!

CSI TIER 2 STUDY UPDATES AT NICoE

The National Intrepid Center of Excellence (NICoE) site, located at Walter Reed National Military Medical Center (WRNMMC), had their first participant in January 2024, and the team has completed 16 participant visits to date. Recruitment has been active and consistent, with increasing eligibility screenings and 7 new subjects scheduled in the next couple of months. NICoE has shipped its first batch of blood samples to the Indiana University Biobank. Additionally, the NICoE study team successfully passed their first monitoring site visit in July.

NICoE is the lead site for brain imaging on the military side, and participants at NICoE have completed MRI scans since the study began. NICoE's imaging specialists and MR physicist have worked closely with the imaging team at Medical College of Wisconsin (MCW) to develop the scan protocols, confirm data quality, and ensure that imaging results are comparable across the different CSI sites.

The MRI session can take up to 90 minutes to complete, but there is a good reason - these sessions allow CSI researchers to collect data on a number of neurological features, including neuroanatomy, potential TBI pathology, and white matter integrity, as well as functional measures of intrinsic functional connectivity and task-related brain function using a working memory task. While participants have noted that the MRI session is indeed long, they enjoy learning about the different aspects of brain structure and function the team is studying and getting to see an image of their own brain!

Individuals interested in participating in Tier 2 at NICoE can reach out to the study team at csi_wrnmmc-ggg@usuhs.edu.

CSI TIER 2 STUDY UPDATES AT FORT CAVAZOS

The Fort Cavazos site accepted our first participant in April 2024; since then we have completed 16 study participants. The team consisting of Dr. Scot Engel, LaTonya Locklear, and Dr. Franchesca Scott successfully completed our initial site monitoring visit, and we have implemented an effective QA/QC process that is centered around timely data entry.

The Fort Cavazos site continues to strengthen our alliance with the military community on base, as we partner with the Fisher House to lodge out of state participants. We have received positive feedback from the Fisher House, and, most importantly, the participants really enjoy their stay. The team is excited to report that we received our upgraded imaging equipment, which has already been installed. We are looking forward to starting MRI data collection soon! Previous CSI Tier 2 participants at Fort Cavazos will be invited back to complete their MRI - look out for a call from the study team!

Mr. Goffney, the CRDAMC imaging specialist, is engaging and continues to support the study. We also continue to have a strong working relationship with the lab team, they have been accommodating with ensuring we have timely and successful blood draws.

Dr. Scot Engel, our site PI, selected the CSI Tier II team to participate in the Intrepid Spirit Center open house and highlight our study. As such, the group prepared handouts and briefed community partners on the research. The Fort Cavazos team also attended the Intrepid Outpatient Program (IOP) graduation, a memorable experience which helped the group to further understand the long-term impact of traumatic brain injury and the importance of our longitudinal study.

We created a wall in our testing space, consisting of multi-colored sticky notes and we call it our “Howdy, how did we do y’all” wall. The terms, “howdy” and “y’all” are very Texan expressions; we wanted to use a slogan that reflected our unique site and culture. The wall is a voluntary space for participants to give us their honest feedback on their experience and opportunities for improvement. We are always excited to read the feedback from our participants, and the wall has become a significant focal point in our office space. The Fort Cavazos team continues to support the other military sites by providing assistance on regulatory concerns and neuropsychological testing/scoring. Overall, we are proud of the work we are doing at our site and look forward to more participants!

Individuals interested in participating in Tier 2 at Fort Cavazos can reach out to the study team at csi_cavazos-ggg@usuhs.edu.

CSI TIER 2 STUDY UPDATES AT FORT LIBERTY

Tier 2 enrollment at Ft. Liberty has been active and steadily growing with 17 participants completed and an additional 3 who are currently scheduled in early fall! A recent modification to the recruitment criteria will further expand enrollment and allow for more participants to participate in Tier 2. Previous participants who have come back and completed the study have indicated that they were pleasantly surprised with how efficiently things moved during the appointment, and that they enjoyed their time onsite commending staff for being professional, respectful, and fun to work with.

A nice addition to the data collection piece of the project has been for the team at Ft. Liberty to open up a dialogue with the participants about topics pertaining to head injuries, including head impact exposure and blast exposure. Although this research study does not have clinical findings or implications for individuals, participants have enjoyed conversing with the study team about how concussions/TBI can have an effect on a person's memory, cognitive functioning, mood, and other aspects of their physical and psychological health and functioning. The team has also been able to exercise the Educational arm of CARE by discussing with participants what their data is contributing to, as well as the significance of the Consortium by emphasizing previous findings from the CARE Consortium and further planned research in the Tier 3 arm of the CSI Project. This arm focuses on furthering the understanding of HIE with other outcomes across time, as well as how the effective current health system is assisting individuals in regards to treatment of concussion.

It is imperative to the team that participants leave the study better informed about what their data is contributing to, as well as how their data is helpful in pursuing the consortium's mission of being the largest prospective concussion study to date. The team is excited to continue on with recruitment and get closer to their 250-participant recruitment goal!

Individuals interested in participating in Tier 2 at Fort Liberty can reach out to the study team at csi_liberty-ggg@usuhs.edu.

CSI TIER 2 STUDY UPDATES AT JBLM

The JBLM study team has been actively recruiting from November 2023, and we are pleased to be the first site to complete a study visit for a participant from the military cohort! So far, we have screened 46 subjects, consented 17, and 12 have completed their first visit. Participants often comment favorably on the ease of travel and overall study experience.

Earlier this year, JBLM installed a new 3T MRI scanner for research. Thanks to the effort of Dr. Erik Dedekam and his radiology team, we are getting ready to start the MRI portion of the study. The new scanner is expected to be fully in the fall of this year. Our study team will reach out to our former CSI-T2 participants to return and complete the MRI phase of the study - look out for a call from the study team!

We are very grateful for the strong support from the leadership of the ISC/TBI clinic, specifically Dr. Rachel Satter who, as Site PI, has been instrumental in the success of this study site. The TBICoE team continuously offer their support and have been involved in the study, we greatly appreciate their support.

Individuals interested in participating in Tier 2 at JBLM can reach out to the study team at csi_jblm-ggg@usuhs.edu.

CSI TIER 3 INTEGRATED DATA REPOSITORY

CSI Tier 3 has begun enrollment! All military-affiliated participants from any CARE Consortium study are eligible for Tier 3. Currently, the study teams are contacting Tier 2 Military participants and former EOD Cohort participants to learn about, consent, and enroll in the Tier 3 study. Recruitment efforts will roll out to former Tier 1 participants shortly - look out for an email from the CSI team!

The military health record integration project, known as Tier 3, links information from electronic health and military records and existing CARE datasets to create an integrated data repository in order to characterize and understand the relationship between concussion/repetitive head impact exposure, military performance, and long-range health outcomes. Military participants have options about which data they choose to share as part of Tier 3.

The CSI Tier 3 data repository is securely maintained by the Defense Health Agency's (DHA) Enterprise Intelligence and Data Solutions (EIDS). All military participants are eligible to join the Tier 3 portion of the study. Combining CARE data, health record data, and service record data will allow the CSI Team to conduct integrated, multivariate analyses to produce more detailed characterization of the effects of head impact exposure.

Military CARE participants interested in CSI Tier 3 are welcome to reach out to the Study Coordinator at 301-550-0350 or csi_tier3-ggg@usuhs.edu .