



DEPLOYMENT HEALTH AND OPERATIONAL READINESS

The Naval Health Research Center (NHRC) conducts research to optimize and sustain the health, performance, resilience, and readiness of our warfighters. Our strategic location in San Diego with the largest Navy and Marine Corps fleet concentration makes NHRC ideally suited to conduct research in support of ship, air, subsurface, infantry, recruit training, and special warfare mission readiness.

Our team of professionals has expertise in physical therapy, kinesiology, biomechanics, biomedical engineering, software and hardware engineering, sleep physiology, neuropsychology, microbiology, molecular biology, and aerospace experimental psychology.

NHRC's research portfolio is driven by fleet requirements and addresses the physical and psychological health of our service members. Our studies also support military leaders and decision-makers by harnessing the power of our Medical Informatics Division to support operational planning and readiness.

WARFIGHTER PHYSICAL STANDARDS

Physical Readiness Testing

We conduct research, development, testing, and evaluation to support Navy and Marine Corps Physical Fitness/Combat Fitness Tests (PFT/CFT).

Combat and Occupational Fitness Tests

We research, develop, test, and evaluate occupational and operational physical standards. Two specific areas of our research focus on gender differences and the unique needs of our special forces.

Environmental Physiology

Our experts examine environmental influences and stressors on physical performance. Our specialized environmental chamber simulates conditions with temperatures ranging from -23°F to 130°F to assess the impact of extreme cold and heat on health, performance, and gear.

Fatigue and Sleep Performance

Our experts examine the effects of sleep inertia mitigation, sleep diagnostics, sleep health, and sleep technologies to optimize warfighter health and performance.

Operational Equipment Testing and Evaluation

Our capabilities include testing and evaluating the effects of new protective gear and equipment on physical performance using operator-specific tasks.

Injury Prevention, Recovery, and Rehabilitation

We study rehabilitation and recovery efforts for warfighters with lower extremity amputations or traumatic brain injuries using our Computer Assisted Rehabilitation Environment (CAREN), one of only four in the Department of Defense. Our injury prevention research examines carriage load and performance, focusing on spine kinematics and disc compression.

PSYCHOLOGICAL HEALTH AND READINESS

We study psychological and behavioral health factors that affect service members' health and readiness, including combat and operational stressors, substance abuse, sexual assault, workplace violence, suicide, social support, and resilience.

OPERATIONAL READINESS STUDIES AND ANALYSES

Military Treatment Facility (MTF) Optimization

We analyze staffing configurations, treatment protocols, specialty care, medical evacuation capabilities, and casualty clinical status/outcomes to optimize throughput.

Course of Action Assessment

Our researchers identify, analyze, and evaluate theater joint health service support through medical systems analysis, logistics analysis, and operational risk assessments.