

FACT SHEET

For More information Contact: MED-26 at 202-762-0472
<http://navymedicine.med.navy.mil/med26/>

Naval Health Research Center

San Diego, CA



NHRC Laboratory Structure

Naval Health Research Center, San Diego, CA
Naval Aerospace Medical Research Laboratory, Pensacola, FL
Naval Submarine Medical Research Laboratory, Groton, CT
NHRC Detachment (Brooks), San Antonio, TX
NHRC Detachment (Toxicology), Dayton, OH

The Naval Health Research Center (NHRC) conducts research to support the Navy and Marine Corps operational forces. The ships, submarines, aircraft, shore-based commands, and command and control facilities located in the San Diego area are critical to the execution of the NHRC's field research. Several studies focus on shipboard health care delivery and require close coordination with senior medical department representatives afloat and force medical officers ashore.

Human Performance

- Researchers focus on the measurement, maintenance, restoration, enhancement, and modeling of human performance in military operational environments

Modeling and Simulation

- Scientists study the processing of medical information, develop improved methods of medical information management, and project the effects of illness trends on combat forces

Field Medical Technologies

- Researchers focus on improving the clinical and medical information systems available to commanders, medical planners, environmental health and preventive medicine staff and field medical providers

Operational Readiness

- Scientists study musculoskeletal injury epidemiology and predictive profiles; HIV/STD epidemiology, prevention, subtyping, and diagnostics; and health promotion education and prevention focused on alcohol misuse and pregnancy/STD

DoD Center for Deployment Health Research

- Researchers conduct epidemiological studies of the health experience of deployed personnel, and the development and evaluation of health surveillance strategies. Other studies focus on the symptoms, hospitalizations, reproductive outcomes, mortality, and other health outcomes among DoD beneficiary populations

Highlights of NHRC Research Efforts

- Studies of medical supply systems, validating current and future needs, and developing a standard tool to optimize supplies in critical environments
- Investigations of body composition, bone density, and body configuration as they relate to the Navy's physical fitness standards
- Deployment of portable technologies to assist medical personnel in diagnosing and treating injuries and illnesses at the most far forward level
- Epidemiologic studies of alcohol abuse, sexually transmitted diseases, and unplanned pregnancies, with development of prevention programs
- Epidemiologic studies of Gulf War veterans' health expanded to include clinical treatment trials for chronic multi-system illnesses
- Development and assessment of injury prevention programs to ensure readiness in operational environments
- Nationwide studies of respiratory infections conducted as the Navy hub for DoD Global Emerging Infections Surveillance and Response Systems (GEIS)
- DoD Center for Deployment Health Research, with long-term epidemiologic studies tracking current and future health of deployers
- Development of a system that automates quantification of shipboard heat stress

NHRC Subordinate Laboratories

Naval Aerospace Medical Research Laboratory Pensacola, FL

Current research is directed at developing performance-based biomedical standards for Navy and Marine Corps aircrews. This includes investigating methods to enhance aircrew performance, aviation selection and assessment, and human factors engineering. Studies also focus on methods to protect personnel from environmental hazards associated with naval aviation operations.

<http://www.namrl.navy.mil/>

Naval Submarine Medical Research Laboratory Groton, CT

Research efforts include enhanced auditory and visual sonar operator performance; health and physical standards; closed-environment atmospheric monitoring; escape and rescue; special operations; diving operations; and hearing conservation. Scientific fundamentals are established for the continued expansion of the physiological limits and capabilities of man in the sea, whether in open water diving or closed-habitation environments.

<http://www.nhrc.navy.mil/nsmrl/>

Naval Health Research Center Detachment (Brooks), San Antonio, TX

As part of a tri-service electromagnetic radiation directed energy bioeffects research group, the detachment's primary mission is to conduct research, development, testing and evaluation on the biomedical effects of nonionizing electromagnetic radiation.

<http://www.brooks.af.mil/NHRC/nhrc.htm>

Naval Health Research Center Detachment (Toxicology) Dayton, OH

The detachment is part of a tri-service toxicology consortium and the Navy's sole toxicology research laboratory. Research results are used to develop predictive models for operational exposure scenarios, to develop more accurate and protective exposure limits, and to recommend medical surveillance and treatment guidelines.

<http://www.navy.al.wpafb.af.mil/>

Highlights

- Enhanced Hearing Protection
- Naval Aviation Selection Tests
- Tactile Displays and Virtual Environments
- Visual Scanning
- Index of Pilot Skill Development
- Vestibular Test Development
- Spatial Orientation and Motion Sickness
- Night Vision of Special Warfare Personnel
- LCAC Navigator Selection Tests
- Computerized Anthropometric Screening (DAVID)

- Auditory, Visual and Tactical Displays
- Bioeffects of Sound
- Color Vision Studies
- Hearing Conservation
- Special Operations Aboard Submarines
- Submarine Mortality Special Operations
- Medical Qualifications
- Submarine Atmospheres
- Submarine Escape and Rescue

- Effects of Microwave Energy on Cognitive Performance
- Safety Standards Recommendations
- Navy-developed Dosimetry Methods
- Laser Eye Protection
- Biomedical Effects of Directed Energy Weapons
- Modeling Laser Bioeffects

- Reproductive Toxicity
- Neurobehavioral Toxicology
- Cardiac Sensitization Toxicology
- Inhalation Toxicology
- Chaff Countermeasure Toxicity
- Risk Assessment