

VA Biorepository (VAB) Gulf War Veterans Illnesses Biorepository:
Post-Mortem Collection of Tissue from Veterans of the 1990-1991 Gulf War

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Approximately 697,000 men and women served in the 1990-1991 Gulf War and nearly a quarter have experienced illnesses in the 20 years since returning from the Gulf. These chronic multisystem illnesses, known collectively as Gulf War Veterans' Illnesses (GWVI), have affected approximately 250,000 Veterans. This pilot project is an expansion of the present VAB Amyotrophic Lateral Sclerosis (ALS) Brain Bank to develop a GWVI Biorepository to support VA's GWVI research. The VAB GWVI Biorepository will be a cooperative effort to collect high quality postmortem biological specimens linked to clinical information collected from 1990-91 Gulf War Veterans throughout the U.S.

Specifically, the VAB GWVI Biorepository will accept postmortem donations of CNS (brain and spinal cord) and non-CNS (see Table 1) tissue from any 1990-91 Gulf War Veteran who wishes to

Table 1. Non-CNS Tissue samples for banking

Toxicology

Abdominal fat

Liver (deeper area)

Diagnostics & Biomolecule Isolation

Liver (right and left lobe and deeper area)

Kidney (cortex, medulla)

Cardiac muscle (left ventricular)

Skeletal muscle (quadricep)

Peripheral nerve (anterior/posterior roots, sciatic, radial and sural nerves)

Lung (right and left lower lobe)

Bronchi (segmental, right and left primary)

Trachea (proximal, distal)

Colon (ascending, transverse, descending)

Rectum

Small intestine (duodenum, jejunum, ileum)

Stomach (upper, lower, middle)

Esophagus (proximal, distal)

Pancreas (endocrine, non-endocrine head, body, tail)

Lymph node (axillary, pelvic, hilar)

Skin (abdomen)

Bone (rib)

donate. The VAB GWVI Biorepository will be coordinated at the Massachusetts Veterans Epidemiology Research and Information Center (MAVERIC) at VA Boston Healthcare System (VABHS). Tissue will be processed, analyzed, inventoried and stored at the Southern Arizona Core Tissue Laboratory (SACTL) at the Southern Arizona VA Healthcare System (SAVAHCS). Diagnostic pathological analyses on non-CNS tissue will be conducted at SACTL. Diagnostic neuropathological analyses will be conducted at the VISN-1 Neuropathology Laboratory at the Edith Nourse Rogers Memorial Veterans Hospital in Bedford, MA (Bedford VA).

MAVERIC will be the central data coordinating center for all VAB GWVIB data. Additionally, the MAVERIC Biomedical Informatics group will support data capture and analysis of VA electronic medical record data from Veteran enrollees. MAVERIC will also work with SACTL to develop and integrate their data systems with those at MAVERIC. VA Central Office will review and approve all tissue and data requests from investigators. The activities and procedures of the VAB GWVIB will be regularly reviewed and monitored by an Executive Committee comprised of members from each VAB GWVI site and members of VACO through regular telephone conference calls and in-person meetings.