

Persian Gulf Review

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Persian Gulf Registry Program Approved

In the evening of October 8, 1992, during the waning hours of the 102nd Congress, legislators gave final approval to the "Veterans Health Care Act of 1992," which among other things requires VA to establish and maintain a Persian Gulf War Veterans Health Registry.

The Registry will include the name of each individual who served in the Armed Forces in the Persian Gulf theater of operation during the Persian Gulf War and who (1) applies for health care or services from VA, files a claim for compensation from VA based on disabilities associated with Persian Gulf service; (3) dies and is survived by a spouse, child, or parent who files a claim for dependency and indemnity compensation; (4) requests a health examination; or (5) receives from the Department of Defense a health examination similar to that provided by VA and requests inclusion in the VA Registry.

Persian Gulf veterans who wish to receive the examination are urged to contact the nearest VA health facility for an appointment. Veterans will receive a basic physical examination with appropriate laboratory tests. Particular attention will be paid to occupational exposures, insect bites, and infectious diseases such as leishmaniasis, and/or chemical/biological agents, contaminated food or drink, or other environmental agents. Additional diagnostic tests and referrals to specialists will be made where indicated. Participation in this program is entirely voluntary. All veterans who receive the examination will be counseled regarding their condition.

Outreach

The legislation also requires VA to notify individuals listed in the Registry of significant developments in research on the health consequences of military service in the Persian Gulf theater of operations during the Persian Gulf War. Publication of this newsletter is a partial response to this mandate. VA has printed and distributed thousands of VA-produced posters inviting Persian Gulf veterans to contact the nearest VA medical center for information and assistance concerning the VA's Persian Gulf medical examination program. A planned mobile exhibit about the VA program should be completed in early 1993, and other outreach efforts are under consideration.

OTA Study

The legislation also directs the congressional Office of Technology Assessment to evaluate the potential utility of the VA Registry (as well as a Department of Defense Persian Gulf Registry) for scientific study and assessment of the intermediate and long-term health consequences of military service in the Persian Gulf theater of operations during the Persian Gulf War.

VA maintains similar registries for Vietnam veterans who may have been exposed to Agent Orange and veterans who may have been exposed to atomic radiation during

the occupation of Japan at the close of World War II or during nuclear weapons testings. Approximately 220,000 Vietnam veterans have participated in the Agent Orange Registry.

VA officials have concluded that such registries are not well suited for use in scientific studies because they are based on self-referrals. On the other hand, patterns of health complaints eventually could suggest avenues for controlled research.

NAS Review of Health Consequences

In addition to the OTA study, the legislation requires VA and DOD to jointly seek to enter into an agreement with the National Academy of Sciences for the Medical Follow-Up Agency of the Institute of Medicine of the Academy to review existing scientific, medical and other information on the health consequences of military service in the Persian Gulf theater of operations during the Persian Gulf War.

Coordination of Government Activities

The legislation also requires the President to designate the head of an appropriate department or agency to coordinate all research undertaken or funded by the Executive Branch of the Federal Government on the health consequences of military service in the Persian Gulf theater of operations during the Persian Gulf War.

Report Requirements

The Legislation stipulates reporting requirements for the OTA, NAS, and the coordinator of Executive Branch research.

VA Initiative

The VA Persian Gulf Registry program was contained in proposed legislation submitted to Congress on July 14, 1992, by Edward J. Derwinski, then Secretary of Veterans Affairs. "This health surveillance initiative should not be viewed as a response to urgent medical risks," Derwinski said. "Instead, our purpose is to reassure veterans that VA will keep ahead of the science and remain committed to long-term monitoring through a tracking program."

"One of the lessons of Agent Orange and the Vietnam experience is that we must be prepared for veterans' concerns and the evolution of scientific knowledge," Derwinski added.

Registry Goals

The Persian Gulf Registry envisioned by Derwinski was designed to accomplish two primary goals. First, it would provide VA with baseline health data on each veteran who is concerned that his or her health was impaired as a result of the Gulf War experience. More importantly, it would respond to the fears and concerns of veterans who served in the Gulf, since the medical evaluation and follow-up examinations would clearly document any findings of adverse health effects resulting from military service.

The Registry would give VA a foundation for a fast response should future scientific findings dictate medical advisories or other VA announcements. It could also provide indefinite, long-term surveillance of Desert Storm veterans.

Many veterans are concerned about having breathed smoke from oil well fires in Kuwait, and some have been treated for respiratory conditions. Surveys have shown significant stress levels among some Persian Gulf returnees.

VA Personnel Sensitized

Some of the problems and concerns expressed by Persian Gulf veterans are different from those expressed by veterans of other military conflicts. Policy-makers and physicians at VA headquarters in Washington have initiated programs to sensitize physicians, other medical staff, and administrative personnel at VA field facilities throughout the Nation, to the special needs of Persian Gulf veterans. This has been accomplished by a series of nationwide conference calls or "hotlines" between VA Central Office and the VA field facilities, an extensive (ongoing) mailout program, and an interactive satellite television broadcast held on September 14, 1992. Among other things, VA physicians were sent a scientific advisory on leishmaniasis, a parasitic infection transmitted through sand fly bites. On August 19, 1992, a draft operational manual for the Persian Gulf program was distributed to all VA medical centers.

Legislative Action

As noted above, on July 14, 1992, VA sent draft legislation to Congress to authorize establishment of a Persian Gulf Registry for all Persian Gulf veterans concerned about the possible long-term health consequences of environmental hazards encountered during their military service. On August 11, 1992, then Secretary Derwinski wrote to Congress to reiterate his "strong support" and emphasize the importance of "prompt action" on this legislation. He wrote that "with the authority to create the Persian Gulf registry, VA will be able to get a current assessment of the health of Gulf veterans, will be able to collect and document a body of baseline health data on Gulf veterans, and will be able to take advantage of the opportunity to lay the groundwork for making sound decisions in the future on diseases and disabilities experienced by Gulf veterans."

The VA proposal and several other measures designed to accomplish similar purposes were introduced in Congress during the last two months. On September 16, 1992, the Subcommittee on Hospitals and Health Care of the House Committee On Veterans' Affairs held a hearing to gather information on, and review Federal efforts to address questions concerning, potential adverse health effects related to service in the Persian Gulf. The hearing also focused on H.R. 5864, a bill introduced by House Committee on Veterans' Affairs Chairman G.V. (Sonny) Montgomery on August 12, 1992. An article concerning this hearing appears elsewhere in the "Review."

As a result of extensive negotiations between the House and Senate Committees on Veterans' Affairs, the various related Persian Gulf Registry proposals were considered, modified, and incorporated in the broad based "Veterans Health Act of 1992." The President is expected to sign this legislation into law in mid-October.

About the "Review"...

The "Persian Gulf Review" is prepared by VA's Environmental Agents Service (EAS). The "Review" is published periodically to provide information about the concerns of Persian Gulf veterans, their families, and others interested in the possible long-term health implications of exposure to various potential environmental hazards during military service during the Persian Gulf conflict. The "Review" describes actions by VA and others to respond to these concerns. This is the initial issue of the newsletter. Additional issues will be prepared when warranted by significant developments. EAS anticipates publication 2-3 times annually.

The "Review" was written in late September 1992/early October 1992 and does not include developments that occurred after the first part of October, 1992.

Comments or questions about the content of the "Review" are encouraged. Suggestions and ideas for future issues of the newsletter should be sent to Donald J. Rosenblum, Writer/Editor, Persian Gulf Review, Environmental Agents Service (116A), VA Central Office, 810 Vermont Avenue, NW, Washington, DC 20420. Requests for additional copies of this issue, should also be directed to Mr. Rosenblum. Please specify the number of copies requested.

Questions about the Persian Gulf Registry examination program should be directed to the Environmental Physician or Persian Gulf Coordinator at the nearest VA medical center. Questions regarding VA benefit programs, including disability compensation, should be referred to a veterans benefits counselor at the nearest VA facility. The telephone numbers can be found in the telephone directory under the "U.S. Government" listings.

VA Establishes Special Environmental Medicine Referral Centers for Unusual Problems

On August 18, 1992, VA announced the establishment of three Environmental Medicine Referral Centers to deal with Persian Gulf veterans whose symptoms defy explanation through the usual diagnostic and therapeutic endeavors of a local VA medical center.

"While we have not seen any patterns of unusual health problems, we recognize that many of the service members who served in the Persian Gulf conflict still are on active duty, meaning VA's responsibility for any related care is a matter of time," noted then VA Secretary Edward J. Derwinski announcing the establishment of the referral centers. "Just as VA's contingency planning in our DoD backup role in Desert Storm galvanized resources to prepare for potential waves of casualties that thankfully never appeared, VA hopes our planning for these new referral centers also will prove to be a precaution that brings us only limited numbers of patients in the future," Derwinski declared.

Currently, health complaints of Persian Gulf veterans involve a series of apparently unrelated symptoms which members of the news media and some veterans are attributing to "petrochemical poisoning." However, from the little clinical information available, there is no unifying diagnosis at this time to explain the symptoms, the most common of which seems to be fatigue.

VA has asked facilities to streamline access for Persian Gulf veterans who may have service-related problems, exercising special authority to give them immediate

review in the VA medical system whether or not any illness has been pre-determined to be service-connected. "We cannot await upcoming congressional hearings or deliberations on our proposed legislative authority for a Persian Gulf Registry to reassure our veterans," Derwinski said.

It is clear that some Desert Storm veterans are incapacitated and have symptoms which elude explanation despite thorough work-ups. For these veterans, it makes sense to provide an inpatient stay to allow for observation, multidisciplinary consultations, and lengthy occupational and exposure history with an opportunity to re-examine them. The local VA medical centers will make arrangements for the transfer of eligible veterans to the referral centers. It is anticipated that most veterans who report to their local VA medical center will be successfully treated there and that the number of veterans that require transfer to the referral centers will be quite small. A decision to send a veteran to a referral center will be made by the medical center in consultation with the referral center.

The referral center locations were selected based on availability of clinical and academic expertise in such areas as pulmonary and infectious diseases, immunology, neuropsychology and access to toxicologic expertise. The centers will have an emphasis on specific symptom complexes, such as fevers of unknown origin compounded by unexplained weight loss. The centers are located at the VA medical centers in West Los Angeles, Houston, and Washington, DC. Additional centers will be added if needed.

Deputy Secretary Principi Testifies at Congressional Hearing

On September 16, 1992, then VA Deputy Secretary Anthony J. Principi testified before the Subcommittee on Hospitals and Health Care of the House Committee on Veterans' Affairs during a hearing on the potential adverse health effects related to military service in the Persian Gulf. (Principi was designed Acting Secretary of Veterans Affairs at the end of September when then Secretary Derwinski resigned.)

The hearing focused on concerns related to the unique environmental factors, as well as health risks particular to the Persian Gulf region, which confronted U.S. troops during the military conflict with Iraq. The hearing also dealt with legislation that would authorize VA to establish and maintain a Persian Gulf Registry.

Excerpts of the Principi's prepared statement are contained below:

We are vigorously pursuing answers to the complex medical and scientific questions being raised regarding the possible effects of environmental conditions on the men and women who served during the Gulf War.

We are treating Persian Gulf veterans who are currently ill.

We will continue to work closely with the Department of Defense and the Department of Health and Human Services to identify the types and severity of environmental exposures, to develop both environmental and personnel databases, to formulate treatment modalities, and to determine and initiate appropriate research.

We are now treating all Persian Gulf veterans who seek care for disorders they believe are related to exposure to environmental or chemical contaminants.

We should not allow the legitimate concern for scientific answers to interfere with timely, compassionate and tangible assistance for those who represented this Nation so nobly during the Persian Gulf War. While we currently lack scientific evidence that the health problems experienced by Persian Gulf theatre veterans are related to their exposure to environmental or chemical contaminants, we believe the prudent and appropriate course of action is to move forward with the registry and to provide treatment to veterans whose symptoms may have resulted from exposure.

Principi was accompanied by James W. Holsinger, M.D., then Chief Medical Director (now Under Secretary for Health); Susan H. Mather, M.D., M.P.H., Assistant Chief Medical Director for Environmental Medicine and Public Health; and James A. Endicott, General Counsel.

The Subcommittee also received testimony from officials of the Department of Defense, Department of Health and Human Services, and Environmental Protection Agency as well as several members of Congress. Widespread support was expressed for the establishment of a VA Persian Gulf registry program and the current VA response to the concerns of Persian Gulf veterans.

Army Researchers Find No Epidemic Among Persian Gulf Servicemembers.

According to Brigadier General Ronald R. Blanck, Director of Professional Services, Office of the Army Surgeon General, far fewer infections and other diseases are found during and after Desert Shield and Desert Storm than had been predicted before the conflict. General Blanck made this observation during the September 16, 1992 hearing of the Subcommittee on Hospitals and Health Care of the House Committee on Veterans' Affairs.

He attributed this result to the specific command and preventive measures designed to counter endemic diseases and environmental threats raised by service in the Persian Gulf region. The specific measures that he cited included providing for effective immunizations, adequate water, inspection of food, and control of insects.

General Blanck indicated that during Operation Desert Shield and Storm, upper respiratory infections along with nonspecific gastrointestinal infections accounted for most of the hospitalized patients. During and following the deployment, a total of 28 cases of leishmaniasis, 7 cases of malaria, 2 cases of meningococcal meningitis, and 1 case of Q fever have been diagnosed. No cases of the numerous other diseases endemic to the area were detected in U.S. service personnel. The disease non-battle injury rate (the number of service personnel hospitalized per day per one thousand service members) was substantially less than that seen in the Vietnam Conflict or World War I and II.

General Blanck concluded that by all objective measures "the health of the military force during Operation Desert Shield and Desert Storm was better than any previous conflict." He explained that since the end of the conflict the military and VA have continued to look for chronic infections, particularly leishmaniasis. In addition, the possible effects of the vaccines for anthrax and botulinum, as well as pyridostigmine bromide, a pretreatment for possible nerve agent attack, have been evaluated. These vaccines and the medication are not experimental. They are well known and have been used for many years.

The anthrax vaccine used has been licensed by the Food and Drug Administration (FDA) since 1971. The botulinum vaccine has been used in laboratory personnel for over thirty years. However, it has not been licensed by FDA because airborne botulism is very rare, and there is no ethical way to conduct the scientific trials needed to prove efficacy. Pyridostigmine bromide is licensed by FDA and has been used for 40 years in doses 5-10 times larger than that used in the desert. In the many years they have been used, there are no reports in the civilian medical community of long-term effects from any of these vaccines or medications. General Blanck indicated that military scientists similarly have been unable to document any long-term health effects.

Quick Response to Ecological Threats to Human Health

General Blanck reported that the military also has responded quickly to other ecological threats to personal health. A series of studies concerning both soil and atmospheric contamination from the Kuwait oil well spills and fires were initiated. Extensive clinical measurements were performed on personnel in a large unit before, during, and after their exposure to oil well fires in Kuwait. On August 20, 1992, the Army convened an expert civilian panel to assess the potential for chronic petrochemical toxicity. General Blanck indicated that the possible health impact of pesticide and microwave exposure has also been considered.

He also explained that the military has worked closely with VA to evaluate veterans complaining of a wide range of symptoms occurring several months after their return from the Persian Gulf. He indicated that approximately 300 cases have been identified and that some of these individuals have debilitating symptoms. They are predominantly from reservists or civilian veterans. General Blanck said that active duty units were surveyed, to include the unit studied that was exposed to the oil well fires and petrochemicals for several months. He indicated that although there were a few exceptions, generally those on active duty do not have these symptoms.

No Commonality of Exposure or Unifying Diagnosis

General Blanck reported that "extensive evaluation at Walter Reed Army Medical Center and certain VA hospitals, by the Reserve Component medical system, and thorough epidemiological investigations have failed to show any commonality of exposure or unifying diagnosis to explain these symptoms."

Various Environmental Hazards Raise Concerns for Persian Gulf Veterans

Several potential environmental hazards have surfaced in recent months as issues of concern to some Persian Gulf veterans. Three of these matters (DS-2, microwave exposure, and depleted uranium are described below. Investigators are pursuing scientific research to determine whether Persian Gulf veterans may be suffering due to these or other environmental factors.

DS-2

Decontamination Solution 2 (DS-2) is a liquid mixture used to decontaminate equipment that has been exposed to chemical warfare agents. The constituents are propylene glycol monomethyl ether (PGME) or ethylene glycol monomethyl ether (EGME), 28%; sodium hydroxide, 2%; and diethylenetriamine, 70%. Directions for use require specific safety measures, especially use of protective masks and rubber gloves.

Toxic effects include pulmonary disturbances from respiratory tract irritation associated with nausea, vomiting, and headache when vapors are inhaled. Direct eye contamination causes intense irritation and transient blindness. In contact with skin, chemical burning results, these effects are immediate and acute. Diethylaminetriamine causes skin and pulmonary sensitization. While PGME and EGME are suspected of reproductive toxicity, these are chronic effects.

In at least one instance a Spill of DS-2 was cleaned up by a small group of soldiers using masks and gloves. One participant has subsequently had weight loss with a poor appetite, a recurring rash with numerous papules about the face and neck as well as fatiguability, sleepiness, and loss of energy. All of the symptoms were present six months after exposure. Attempts are being made to determine whether other members of the clean-up group have similar symptoms.

DS-2 does not seem to have produced widespread problems in the Persian Gulf region and chronic effects after a single exposure are still conjectural.

Microwave Exposure

Microwaves are a form of non-ionizing radiation extremely common in most of the world. The radio frequencies of interest in the Persian Gulf extend from about 300 GHz to 30 MHz. The upper portion of this range includes the wave lengths used for radar, radio, television, microwave ovens, and diathermy.

The physical effects of microwaves on biological are primarily those of molecular agitation, that is, heat production. The heating effect is obvious, but other, less detectible biological effects have been described and debated for years. Human studies, as well as animal experiments, support an increase in cataracts after exposure to high intensity microwaves and changes in hearing have been described in experimental animals. These have been described as non-thermal effects but this idea has been challenged.

Radio and radar were intensively used before and during Desert Storm. One reserve Army unit located near another using radar and radio broadcasts reported a variety of medical difficulties which the unit members felt could be attributed to microwave exposure. Examination of the individuals found diverse symptoms without indication that they could be related to microwave exposure. There is now no evidence that microwave exposure in the Persian Gulf area has had adverse health effects for American military personnel.

Depleted Uranium

The residue after extraction of uranium-235 is called "depleted uranium" or "DU." It consists principally of uranium-238 with smaller amounts of thorium-234, protactinium-234m, protactinium 234, and uranium-234. The residue contains less than 0.2% of the highly radioactive uranium-235.

DU with its low level of radioactivity cannot be called a "nuclear weapon." It has physical properties that make it superior to lead as a penetrating projectile. American planes and ground vehicles in the Persian Gulf were armed with DU munitions.

American troops in the Persian Gulf were exposed to DU in several ways. A few were injured by "friendly fire;" more were crewmembers in relatively close contact with munitions in tanks or other vehicles; some wore amulets made with DU

munitions. U.S. soldiers may have been exposed to smoke or particulates containing DU while fighting a fire at Doha Depot or entering vehicles or bunkers hit by DU projectiles. A few personnel have retained DU shrapnel fragments.

Twenty-seven members of one reserve unit entered vehicles damaged by U.S. fire and have worried about possible health effects. To discover whether these people have retained detectible amounts of DU, VA, in cooperation with DOD is determining whole-body counts. The reservists are in good health.

VA and DOD are planning to follow the few soldiers and veterans who have retained DU fragments. These individuals have no clinical findings attributable to DU as a substance, but the plan is to detect any unsuspected chronic effects. These may be chemical and as such would resemble lead toxicity rather than having effects from the low-level radioactivity.

There seems to be no reason to suspect any acute or chronic health defects from exposure to DU in the Desert Storm operation. Both VA and DOD will continue to be alert to the possibility of chronic effects.

Where to Get Help

Active duty military personnel with questions or concerns about their service in the Persian Gulf region - contact your commanding officer.

Persian Gulf veterans with concerns about their health - contact the Persian Gulf Coordinator at the nearest VA medical center. The telephone number can be found in the local telephone directory under Department of Veterans Affairs in the "U.S. Government" listings. A Persian Gulf Registry examination will be provided to veterans with medical problems. Treatment will be provided to eligible veterans. When pending legislation is approved authorizing the establishment of a registry for all Persian Gulf veterans, such veterans without current symptoms will receive the examination.

Persian Gulf veterans in need of marital/family counseling - contact the nearest VA medical center or VA vet center.

Persian Gulf veterans seeking disability compensation for illnesses incurred or aggravated by military service - contact a veterans benefits counselor at the nearest VA regional office or health care facility.

Persian Gulf veterans interested in learning about the wide range of benefit programs administered by VA - contact a veterans benefits counselor at the nearest VA regional office or health care facility.

Note: Representative of veterans services organizations, including the American Legion, Veterans of Foreign Wars of the United States, Disabled American Veterans, etc., may also be very helpful to Persian Gulf veterans.