



Environmental Health Registries

**Gulf War – Airborne Hazardous/Open Burn Pit – Agent Orange – Ionizing Radiation –
Depleted Uranium – Toxic Embedded Fragments**

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PACT ACT

- PACT Act is a law that was signed on August 10, 2022.
- The acronym stands for: Sergeant First Class Heath Robinson Honoring Our **Promise to Address Comprehensive Toxics** (PACT) Act of 2022
- The PACT act expands and extends eligibility for *VA health care* and *benefits* for Veterans with toxic exposure from Vietnam era, Gulf War era and Post 9/11 era.
- It has added over 20 new presumptive conditions to help Veterans connect their ailments to their service.



PACT ACT

As a general matter, there are several types of possible exposures or hazards Veterans may have experienced during military service, including:

- **AIR POLLUTANTS:** Burn pits, oil well fires, sulfur fire, sand, dust, and particulates
- **CHEMICALS:** Agent Orange or other herbicides, burn pits, Camp Lejeune water supplies, pesticides, depleted uranium, chromium, or industrial solvents
- **RADIATION:** Nuclear weapons testing, x-rays, or depleted uranium
- **WARFARE AGENTS:** Chemical warfare agents, nerve agents, mustard gas, herbicide tests, and storage
- **OCCUPATIONAL HAZARDS:** Asbestos, lead, fuels, industrial solvents, radiation, vibration, noise, special paint on military vehicles, and some coolants or insulating fluids






EVALUATIONS

- **Toxic Exposure Screening:** for all Veterans, every 5 years (clinical reminder)
- **Registry exams:** Documents service exposure and extensive review of systems (ROS) ; educate Veterans on exposure and potential follow-up by PCP
- **Compensation & Pension exams:** document disability resulting from military service; presumptives; VBA determines service connection.



WHAT'S THE DIFFERENCE?

EVALUATION TYPE	PURPOSE	DESCRIPTION
 Compensation and Pension (C&P) Exam	Part of the claim decision process to help determine service connection and rate a disability for purposes of compensation.	<ul style="list-style-type: none">» Exams administered as part of the VBA claims process but performed by VHA or contracted providers.» Enrollment in VA care is not required to receive VA benefits, but the exams may provide a basis for eligibility to enroll in VA care.
 Toxic Exposure Screening	Helps identify Veterans with exposure concerns and advises them how to connect with benefits, resources, and services. Not part of the VA benefits claims process.	<ul style="list-style-type: none">» VA must offer the toxic exposure screening to all enrolled Veterans as required by section 603 of the PACT Act.» The screening will be repeated at least once every 5 years.» Screenings will take 5-10 minutes.» If a Veteran has exposure concerns, VA staff will provide them with additional information and resources and advise them on next steps.
 Registry Evaluation	Information collected is used for research and quality improvement purposes and is not for clinical care, nor to determine eligibility for health care or benefits.	<ul style="list-style-type: none">» VA has six registries: Agent Orange, Airborne Hazards and Open Burn Pits, Depleted Uranium, Gulf War, Ionizing Radiation, and Toxic Embedded Fragments.» VA's health registry evaluations are free, voluntary medical assessments for Veterans who may have been exposed to certain environmental hazards during military service.» There is no requirement to be enrolled in VA health care or receive other VA benefits to participate in a registry.» Exams take approximately 60 minutes and are performed by a VA or military health provider. Veterans can contact the nearest local VA medical facility Environmental Health Coordinator about getting a registry evaluation.



Registry Evaluations



ENVIRONMENTAL HEALTH REGISTRY EXAMS

Congressionally Mandated Registries:

- Agent Orange
- Airborne Hazards/Open Burn Pit
- Depleted Uranium
- Gulf War
- Ionizing Radiation
- Toxic Embedded fragments

Garrison Exposures:

- Camp Lejeune contaminated water
- PFOS/PFOA contaminated water
- Mefloquine
- Chemical weapons
- Sodium dichromate – Qarmat Ali
- PFAS (firefighting foam, etc.)
- Asbestos
- Other toxic exposures

Environmental Health Registry Evaluation for Veterans

Period of Military Service	Agent Orange	Airborne Hazards and Open Burn Pit	Depleted Uranium Follow-up	Gulf War	Ionizing Radiation	Toxic Embedded Fragments
1940s-1950s					●	
1960s	●				●	
1970s	●					
1990s		●	●	●		
2000s-Present		●	●	●		●



WHAT IS A VA REGISTRY

- The VA Environmental Health Registry is a free, voluntary medical assessment for Veterans who may have been exposed to environmental toxins during military service.
 - History and physical exam with special attention to symptoms/concerns related to exposures
 - Labs, imaging, diagnostic procedures, Pulmonary Functionality Test (PFTs), specialty referrals
 - Clinical data collection
- Evaluations alert Veterans to possible long-term health problems that may be related to toxic exposures.
- Helps VA understand and respond to health problems



Veterans do not need to be eligible or enrolled in VA

Separate from filing a claim for disability benefits



AIRBORNE HAZARDOUS/OPEN BURN PIT - LOCATIONS

Southwest Asia theater of operations:

(on or after August 2, 1990)

- Iraq
- Kuwait
- Saudi Arabia
- Bahrain
- Qatar
- The United Arab Emirates (U.A.E.)
- Oman
- **Egypt***
- The neutral zone between Iraq and Saudi Arabia
- Gulf of Aden
- Gulf of Oman
- Waters of the Persian Gulf, Arabian Sea, and Red Sea
- The airspace above these locations

Other Countries:

(on or after September 11, 2001)

- Afghanistan
- Djibouti
- **Uzbekistan***
- **Syria***



****Additional locations added in the PACT Act***

Only registry that requires Veteran to self-register online & fill out questionnaire prior to clinical assessment



AIRBORNE HAZARDS/OPEN BURN PIT REGISTRY

- Airborne Hazards – potential contaminant/toxic substances in the air
 - Open Burn Pits – smoke and fumes
 - Common waste disposal practice at military sites outside of the U.S.
 - Air pollution common in certain countries
 - Dust, sand, and particulate matter
 - Fuel, aircraft exhaust, and other mechanical fumes
 - Smoke from oil well fires



www.publichealth.va.gov/exposures/burnpits



AIRBORNE HAZARDOUS/OPEN BURN PIT PRESUMPTIVES

Served on or after Sept. 11, 2001 in Afghanistan, Djibouti, Egypt, Jordan, Lebanon, Syria, Uzbekistan, or Yemen or if you served in the *Southwest Asia theater of operations, or Somalia, on or after Aug. 2, 1990,

Asthma that was diagnosed after service	Chronic sinusitis
Chronic rhinitis	Chronic bronchitis
Chronic obstructive pulmonary disease (COPD)	Pleuritis
Brain cancer	Bronchiolitis
Glioblastoma	Emphysema
Respiratory cancer of any type	Granulomatous disease
Gastrointestinal cancer of any type	Interstitial lung disease (ILD)
Head cancer of any type	Pulmonary fibrosis
Lymphoma of any type	Sarcoidosis
Lymphatic cancer of any type	Kidney cancer
Neck cancer	Melanoma
Pancreatic cancer	Reproductive cancer of any type



GULF WAR REGISTRY

- Gulf War service in Southwest Asia theater of operations from August 2, 1990 to present
- Medically unexplained illnesses – “Gulf War Syndrome”
- Presumptive conditions examples:
 - Chronic Fatigue Syndrome/Myalgic Encephalomyelitis
 - Fibromyalgia
 - Functional gastrointestinal disorders
 - Undiagnosed illnesses
 - Abnormal weight loss, fatigue, cardiovascular disease, joint pain, headaches, menstrual disorders, sleep disturbances, respiratory conditions, dizziness, skin conditions, memory problems

www.publichealth.va.gov/exposures/gulfwar





GULF WAR AND POST 9/11 VETERAN PRESUMPTIVE

Presumptive conditions depend on where/when the Veteran served

Served in the Southwest Asia theater of operations, Afghanistan, Israel, Egypt, Turkey, Syria, or Jordan, during the Persian Gulf War

- Medically unexplained chronic multi-symptom illness for >6mo.

Chronic fatigue syndrome	Irritable bowel syndrome
Fibromyalgia	

- Diagnosed or undiagnosed illness that warrants presumption, determined by SecVA
- Signs or symptoms of an undiagnosed illness include:

Fatigue	Symptoms involving upper or lower respiratory system
Skin symptoms	Sleep disturbance
Headaches	Gastrointestinal symptoms
Muscle pain	Cardiovascular symptoms
Joint pain	Weight loss
Neurological or neuropsychological symptoms	Menstrual disorders

Served in the Southwest Asia theater of operations or in Afghanistan on or after September 19, 2001

- Manifest one of the following infectious diseases to a degree of >10% within 1 year of separation:

Brucellosis	Shigella
Campylobacter jejuni	West Nile virus
Coxiella burnetii (Q fever)	Malaria
Nontyphoid Salmonella	Visceral leishmaniasis



AGENT ORANGE

- Tactical herbicide used by the US military for control of vegetation, sprayed during Vietnam War
- Veterans who served in Vietnam, Korean Demilitarized Zone, Laos, Cambodia, Guam and Thai Air Force Bases, flew/worked on C-123 Aircrafts
- Presumptive conditions for Veterans
 - Birth defects in children of Vietnam Veterans (Spina Bifida)
 - Amyotrophic Lateral Sclerosis (ALS) – “Lou Gehrig’s Disease” for all Veterans with 90+ days of continuous military service



www.publichealth.va.gov/exposures/agentorange



VIETNAM VETERANS - PRESUMPTIVES

Vietnam Veterans (Agent Orange and other tactical herbicides)

Hypertension	Monoclonal gammopathy of undetermined significance (MGUS)
AL Amyloidosis	Non-Hodgkin's Lymphoma
Bladder Cancer	Parkinsonism
Chronic B-cell Leukemias	Parkinson's Disease
Chloracne or similar acneform disease*	Peripheral Neuropathy, early-onset*
Diabetes Mellitus type 2	Porphyria Cutanea Tarda*
Hodgkin's Disease	Prostate Cancer
Hypothyroidism	Respiratory Cancers
Ischemic Heart Disease	Soft Tissue Sarcomas
Multiple Myeloma	Chronic lymphocytic leukemia

**presumed, if condition becomes >10% debilitating w/in 1 year of exposure*

Veterans Agent Orange Exposure Equity Act – “covered service” means active military, naval, air or space service

- Expands **Thailand** Military bases “without regard to where on the base the Veteran was located or what military job specialty the Veteran performed”
- Adds **Laos** from Dec 1, 1965, to Sept 30, 1969
- Adds **Cambodia** at Mimot or Krek, Kampong Cham Province, April 16, 1969 to April 30, 1969
- Adds **Guam** and **American Samoa**, and territorial waters thereof, from Jan 9, 1962, to July 31, 1980; or service on **Johnston Atoll** or on a ship that called at Johnston Atoll from Jan 1, 1972, to Sept 30, 1



IONIZING RADIATION REGISTRY

- Veterans involved with nuclear weapons testing
- Participation in the occupation of Hiroshima or Nagasaki (Aug 6, 1954 - Jul 1, 1946)
- Receipt of nasopharyngeal (NP) – nose and throat- radium irradiation treatment while in the military
- Involvement in “radiation-risk activities”
 - Service at Department of Energy gaseous diffusion plants at Paducah, KY, Portsmouth, OH, or the K25 area at Oar Ridge, TN for 250+ days before Feb 1, 1992
 - Proximity to “Longshot”, “Milrow”, or “Cannikin” underground nuclear tests at Amchitka Island, before Jan 1, 1974

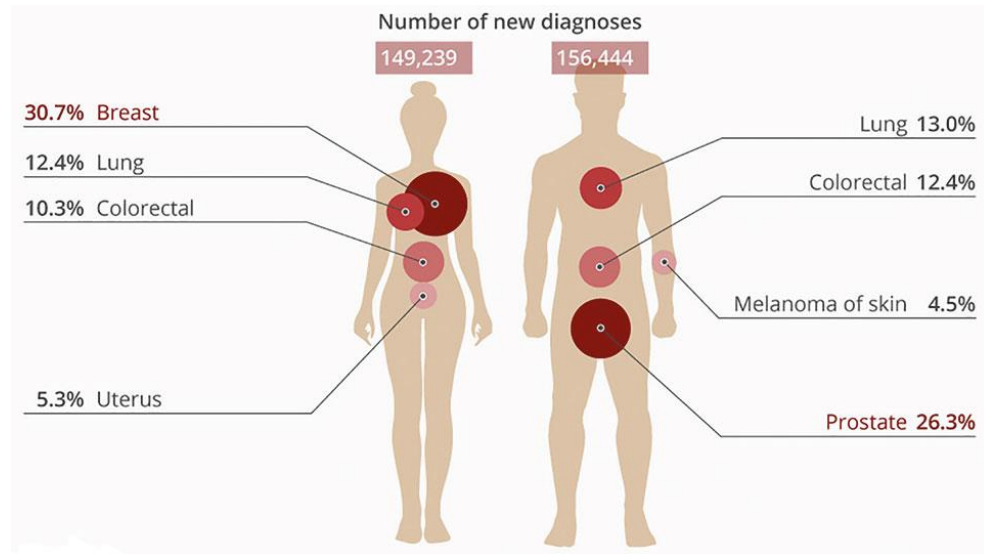
www.publichealth.va.gov/exposures/radiation





IONIZING RADIATION - PRESUMPTIVES

- All forms of leukemia, except chronic lymphocytic leukemia
- Bronchioloalveolar carcinoma
- Multiple myeloma
- Lymphomas, other than Hodgkin's disease
- Primary liver cancer, except if there are indications of cirrhosis or hepatitis B
- Cancer of the thyroid, breast, pharynx, esophagus, stomach, small intestine, pancreas, bile ducts, gall bladder, salivary gland, urinary tract, brain, bone, lung, colon or ovary





Ionizing Radiation Registry Criteria

- Participated in atmospheric nuclear testing
- Occupied/were prisoners of war in **Hiroshima** or **Nagasaki**
- Served before [Feb. 1, 1992](#), at a diffusion plant in **Paducah, Kentucky, Portsmouth, Ohio, or Oak Ridge, Tennessee**
- Served before [Jan. 1, 1974](#), at **Amchitka Island, Alaska**
- Veterans who participated in cleanup of **Eniwetok/Enewetok Atoll** as radiation-exposed Veterans ([Jan 1, 1977, to Dec 31, 1980](#))
- Veterans who participated in nuclear response near **Palomares, Spain**, ([Jan 17, 1966 - March 31, 1967](#)) or **Thule, Greenland** ([Jan 21, 1968 - Sept 25, 1968](#)) as radiation-exposed Veterans



DEPLETED URANIUM & TOXIC EMBEDDED FRAGMENTS

- Depleted Uranium Registry / DU Follow-Up Program
 - GW Era Veterans, OEF/OIF/OND, Bosnia, K2
 - DU deployed on a large-scale during GW, used for tank armor and some bullets
 - DU is a potential health hazard if it enters the body through embedded fragments, contaminated wounds, inhalation, or ingestion
- Toxic Embedded Fragment Registry / TEF Surveillance Center
 - Some Veterans have retained toxic embedded fragments in their bodies after blast injuries sustained during military service – IEDs, bombs, mines, shells
 - Toxic fragments may contain depleted uranium

www.publichealth.va.gov/exposures/depleted_uranium
www.publichealth.va.gov/exposures/toxic_fragments





OTHER ENVIRONMENTAL TOXIC EXPOSURES

- Camp Lejeune contaminated water
- PFOS/PFOA* contaminated water
- Mefloquine (Treatment for Malaria)
- Chemical weapons
- Sodium dichromate – Qarmat Ali
- PFAS (firefighting foam, etc.)
- Other toxic exposures



www.publichealth.va.gov/exposures



VBA SERVICE CONNECTION & PRESUMPTIVE CONDITIONS

- Monetary benefit for Veterans with disabilities that are the result of a disease or injury incurred in/aggravated during active military service
 - Post-service disabilities that are related/secondary to service-connected disabilities
 - Presumptive conditions
- **Presumptives** - VA presumes certain diseases or illnesses can be related to a Veteran's military service
 - Veterans don't need to prove that their service led to the condition
- All Veterans exposed to toxins should file a disability benefits claim
 - VA Form 21-526EZ Application for Disability Compensation & Related Compensation Benefits
 - VA Form 20-0095 Decision Review Request: Supplemental Claim
- VBA may consider *all* Veteran records - need to gather medical evidence, request a disability exam, or medical opinion;

Previously denied claims will NOT be automatically reviewed



ENVIRONMENTAL HEALTH RESOURCES

- VA Public Health Site – Military Exposures

<https://www.publichealth.va.gov/exposures>

- Airborne Hazards and Open Burn Pit Registry

<https://veteran.mobilehealth.va.gov/AHBurnPitRegistry>

- Directory of Environmental Health Coordinators

<https://www.publichealth.va.gov/exposures/coordinators.asp>

- Provider Resources on Military Exposures

<https://www.publichealth.va.gov/exposures/providers>

- Exposure Ed VA Mobile App for Healthcare Professionals

<https://mobile.va.gov/app/exposure-ed>



AGENT ORANGE

If you were in Vietnam, Laos, Cambodia, Guam and/or Thailand from the following dates, you were possibly exposed to Agent Orange. Please notate this registry and time periods that you were present prior to being scheduled for an exam.

- **Vietnam – January 9, 1962 – May 7, 1975**
- **Korean DMZ – September 1, 1967 - August 31, 1971**
- **Thailand – January 9, 1962 – June 30, 1976**



GULF WAR

If you were in the Southwest Asia Theater from the following dates, you were possibly exposed. Please notate this registry and the time period you were present in the Southwest Asia Theater prior to being scheduled for an exam.

Iraq, Kuwait, Saudi Arabia, Bahrain, Qatar, U.A.E, Oman,

Afghanistan, Israel, Egypt, Turkey, Syria, Jordan, Waters of the

Persian Gulf, Arabian Sea and/or the Red Sea or the airspace

above these locations – August 2, 1990 to Present



AIRBORNE HAZARDS AND OPEN BURN PIT

If you were in the Southwest Asia Theater from the following dates, you were possibly exposed. Please notate this registry and the time periods you were present in the Southwest Asia Theater prior to being scheduled for an exam.

**Iraq, Kuwait, Saudi Arabia, Bahrain, Qatar, U.A.E, Oman,
Afghanistan, Egypt, Syria, Djibouti, Uzbekistan, Waters of the
Persian Gulf, Arabian Sea and/or the Red Sea or the airspace
above these locations – September 11, 2001 to Present**



IONIZING RADIATION

If you were in these areas from the following dates, you were possibly exposed to radiation. Please notate this registry and the time periods you were present prior to being scheduled for an exam.

- Participated in atmospheric nuclear testing
- Occupied/were prisoners of war in **Hiroshima** or **Nagasaki**
- Paducah, Kentucky, Portsmouth, Ohio, or Oak Ridge, Tennessee - **BEFORE** February 1, 1992
- Amchitka Island, Alaska - **BEFORE** Jan 1, 1974
- **Eniwetok/Enewetok Atoll** - (Jan 1, 1977, to Dec 31, 1980)
- **Palomares, Spain** - (Jan 17, 1966 - March 31, 1967)
- **Thule, Greenland** - (Jan 21, 1968 - Sept 25, 1968)



OTHER ENVIRONMENTAL TOXIC EXPOSURES

If you were exposed to these environmental toxic exposures, please go to the VBA located near the Patriot Store to file a claim regarding your exposure.

There is no registry here at the VA for the following exposures, but a claim can be filed at anytime with the VBA which is NOT Compensation and Pension.

- Camp Lejeune contaminated water
- PFOS/PFOA* contaminated water
- Mefloquine (Treatment for Malaria)
- Chemical weapons
- Sodium dichromate – Qarmat Ali
- PFAS (firefighting foam, etc.)
- Other toxic exposures not listed



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THANK YOU

I salute you for your loyal and unselfish
service to our great nation!!!

