

(d) *Diseases specific to radiation-exposed veterans.* (1) The diseases listed in paragraph (d)(2) of this section shall be service-connected if they become manifest in a radiation-exposed veteran as defined in paragraph (d)(3) of this section, provided the rebuttable presumption provisions of §3.307 of this part are also satisfied.

(2) The diseases referred to in paragraph (d)(1) of this section are the following:

- (i) Leukemia (other than chronic lymphocytic leukemia).
- (ii) Cancer of the thyroid.
- (iii) Cancer of the breast.
- (iv) Cancer of the pharynx.
- (v) Cancer of the esophagus.
- (vi) Cancer of the stomach.
- (vii) Cancer of the small intestine.
- (viii) Cancer of the pancreas.
- (ix) Multiple myeloma.
- (x) Lymphomas (except Hodgkin's disease).
- (xi) Cancer of the bile ducts.
- (xii) Cancer of the gall bladder.
- (xiii) Primary liver cancer (except if cirrhosis or hepatitis B is indicated).
- (xiv) Cancer of the salivary gland.
- (xv) Cancer of the urinary tract.
- (xvi) Bronchiolo-alveolar carcinoma.
- (xvii) Cancer of the bone.
- (xviii) Cancer of the brain.
- (xix) Cancer of the colon.
- (xx) Cancer of the lung.

(xxi) Cancer of the ovary.

Note: For the purposes of this section, the term “urinary tract” means the kidneys, renal pelves, ureters, urinary bladder, and urethra.

(Authority: 38 U.S.C. 1112(c)(2))

(3) For purposes of this section:

(i) The term *radiation-exposed veteran* means either a veteran who while serving on active duty, or an individual who while a member of a reserve component of the Armed Forces during a period of active duty for training or inactive duty training, participated in a radiation-risk activity.

(ii) The term *radiation-risk activity* means:

(A) Onsite participation in a test involving the atmospheric detonation of a nuclear device.

(B) The occupation of Hiroshima or Nagasaki, Japan, by United States forces during the period beginning on August 6, 1945, and ending on July 1, 1946.

(C) Internment as a prisoner of war in Japan (or service on active duty in Japan immediately following such internment) during World War II which resulted in an opportunity for exposure to ionizing radiation comparable to that of the United States occupation forces in Hiroshima or Nagasaki, Japan, during the period beginning on August 6, 1945, and ending on July 1, 1946.

(D)( 1 ) Service in which the service member was, as part of his or her official military duties, present during a total of at least 250 days before February 1, 1992, on the grounds of a gaseous diffusion plant located in Paducah, Kentucky, Portsmouth, Ohio, or the area identified as K25 at Oak Ridge, Tennessee, if, during such service the veteran:

( i ) Was monitored for each of the 250 days of such service through the use of dosimetry badges for exposure at the plant of the external parts of veteran's body to radiation; or

( ii ) Served for each of the 250 days of such service in a position that had exposures comparable to a job that is or was monitored through the use of dosimetry badges; or

( 2 ) Service before January 1, 1974, on Amchitka Island, Alaska, if, during such service, the veteran was exposed to ionizing radiation in the performance of duty related to the Long Shot, Milrow, or Cannikin underground nuclear tests.

( 3 ) For purposes of paragraph (d)(3)(ii)(D)(1) of this section, the term “day” refers to all or any portion of a calendar day.

(E) Service in a capacity which, if performed as an employee of the Department of Energy, would qualify the individual for inclusion as a member of the Special Exposure Cohort under section 3621(14) of the Energy Employees Occupational Illness Compensation Program Act of 2000 (42 U.S.C. 7384l(14)).

(iii) The term *atmospheric detonation* includes underwater nuclear detonations.

(iv) The term *onsite participation* means:

(A) During the official operational period of an atmospheric nuclear test, presence at the test site, or performance of official military duties in connection with ships, aircraft or other equipment used in direct support of the nuclear test.

(B) During the six month period following the official operational period of an atmospheric nuclear test, presence at the test site or other test staging area to perform official military duties in connection with completion of projects related to the nuclear test including decontamination of equipment used during the nuclear test.

(C) Service as a member of the garrison or maintenance forces on Eniwetok during the periods June 21, 1951, through July 1, 1952, August 7, 1956, through August 7, 1957, or November 1, 1958, through April 30, 1959.

(D) Assignment to official military duties at Naval Shipyards involving the decontamination of ships that participated in Operation Crossroads.

(v) For tests conducted by the United States, the term *operational period* means:

(A) For Operation *TRINITY* the period July 16, 1945 through August 6, 1945.

(B) For Operation *CROSSROADS* the period July 1, 1946 through August 31, 1946.

(C) For Operation *SANDSTONE* the period April 15, 1948 through May 20, 1948.

(D) For Operation *RANGER* the period January 27, 1951 through February 6, 1951.

(E) For Operation *GREENHOUSE* the period April 8, 1951 through June 20, 1951.

(F) For Operation *BUSTER-JANGLE* the period October 22, 1951 through December 20, 1951.

(G) For Operation *TUMBLER-SNAPPER* the period April 1, 1952 through June 20, 1952.

(H) For Operation *IVY* the period November 1, 1952 through December 31, 1952.

(I) For Operation *UPSHOT-KNOTHOLE* the period March 17, 1953 through June 20, 1953.

(J) For Operation *CASTLE* the period March 1, 1954 through May 31, 1954.

(K) For Operation *TEAPOT* the period February 18, 1955 through June 10, 1955.

(L) For Operation *WIGWAM* the period May 14, 1955 through May 15, 1955.

(M) For Operation *REDWING* the period May 5, 1956 through August 6, 1956.

(N) For Operation *PLUMBBOB* the period May 28, 1957 through October 22, 1957.

(O) For Operation *HARDTACK I* the period April 28, 1958 through October 31, 1958.

(P) For Operation *ARGUS* the period August 27, 1958 through September 10, 1958.

(Q) For Operation *HARDTACK II* the period September 19, 1958 through October 31, 1958.

(R) For Operation *DOMINIC I* the period April 25, 1962 through December 31, 1962.

(S) For Operation *DOMINIC II/PLOWSHARE* the period July 6, 1962 through August 15, 1962.

(vi) The term “occupation of Hiroshima or Nagasaki, Japan, by United States forces” means official military duties within 10 miles of the city limits of either Hiroshima or Nagasaki, Japan, which were required to perform or support military occupation functions such as occupation of territory, control of the population, stabilization of the government, demilitarization of the Japanese military, rehabilitation of the infrastructure or deactivation and conversion of war plants or materials.

(vii) Former prisoners of war who had an opportunity for exposure to ionizing radiation comparable to that of veterans who participated in the occupation of Hiroshima or Nagasaki, Japan, by United States forces shall include those who, at any time during the period August 6, 1945, through July 1, 1946:

(A) Were interned within 75 miles of the city limits of Hiroshima or within 150 miles of the city limits of Nagasaki, or

(B) Can affirmatively show they worked within the areas set forth in paragraph (d)(3)(vii)(A) of this section although not interned within those areas, or

(C) Served immediately following internment in a capacity which satisfies the definition in paragraph (d)(3)(vi) of this section, or

(D) Were repatriated through the port of Nagasaki.