to the required degree, followed without unreasonable time lapse by definite diagnosis. Symptomatology shown in the prescribed period may have no particular significance when first observed, but in the light of subsequent developments it may gain considerable significance. Cases in which a chronic condition is shown to exist within a short time following the applicable presumptive period, but without evidence of manifestations within the period, should be developed to determine whether there was symptomatology which in retrospect may be identified and evaluated as manifestation of the chronic disease to the required 10-percent degree.

(d) **Rebuttal of service incurrence or aggravation.** (1) Evidence which may be considered in rebuttal of service incurrence of a disease listed in § 3.309 will be any evidence of a nature usually accepted as competent to indicate the time of existence or inception of disease, and medical judgment will be exercised in making determinations relative to the effect of intercurrent injury or disease. The expression “affirmative evidence to the contrary” will not be taken to require a conclusive showing, but such showing as would, in sound medical reasoning and in the consideration of all evidence of record, support a conclusion that the disease was not incurred in service. As to tropical diseases the fact that the veteran had no service in a locality having a high incidence of the disease may be considered as evidence to rebut the presumption, as may residence during the period in question in a region where the particular disease is endemic. The known incubation periods of tropical diseases should be used as a factor in rebuttal of presumptive service connection as showing inception before or after service.

(2) The presumption of aggravation provided in this section may be rebutted by affirmative evidence that the preexisting condition was not aggravated by service, which may include affirmative evidence that any increase in disability was due to an intercurrent disease or injury suffered after separation from service or evidence sufficient, under § 3.306 of this part, to show that the increase in disability was due to the natural progress of the preexisting condition.

(Authority: 38 U.S.C. 1113 and 1153)

§ 3.309 **Disease subject to presumptive service connection; peacetime service before January 1, 1947.**

(a) **Chronic diseases.** There is no provision for presumptive service connection for chronic disease as distinguished from tropical diseases referred to in paragraph (b) of this section based on peacetime service before January 1, 1947.

(b) **Tropical disease.** In claims based on peacetime service before January 1, 1947, a veteran of 6 months or more service who contracts a tropical disease listed in § 3.309(b) or a resultant disorder or disease originating because of therapy administered in connection with a tropical disease or as a preventative, will be considered to have incurred such disability in service when it is shown to exist to the degree of 10 percent or more within 1 year after separation from active service, or at a time when standard and accepted treatises indicate that the incubation period commenced during active service unless shown by clear and unmistakable evidence not to have been of service origin. The requirement of 6 months or more service means active, continuous service, during one or more enlistment periods.

(Authority: 38 U.S.C. 1133)

[39 FR 34530, Sept. 26, 1974]
service on or after January 1, 1947, provided the rebuttable presumption provisions of §3.307 are also satisfied.

Anemia, primary.
Arteriosclerosis.
Arthritis.
Atrophy, progressive muscular.
Brain hemorrhage.
Brain thrombosis.
Bronchiectasis.
Calculi of the kidney, bladder, or gallbladder.
Cardiovascular-renal disease, including hypertension. (This term applies to combination involvement of the type of arteriosclerosis, nephritis, and organic heart disease, and since hypertension is an early symptom long preceding the development of those diseases in their more obvious forms, a disabling hypertension within the 1-year period will be given the same benefit of service connection as any of the chronic diseases listed.)

Cirrhosis of the liver.
Coccidioidomycosis.
Diabetes mellitus.
Encephalitis lethargica residuals.
Endocarditis. (This term covers all forms of valvular heart disease.)
Endocrinopathies.
Epilepsies.
Hansen's disease.
Hodgkin's disease.
Leukemia.
Lupus erythematosus, systemic.
Myasthenia gravis.
Myelitis.
Myocarditis.
Nephritis.
Other organic diseases of the nervous system.
Osteitis deformans (Paget's disease).
Osteomalacia.
Palay, bulbar.
Paralysis agitans.
Psychoses.
Purpura idiopathic, hemorrhagic.
Raynaud's disease.
Sarcoidosis.
Scleroderma.
Sclerosis, amyotrophic lateral.
Sclerosis, multiple.
Syringomyelia.
Thromboangitis obliterans (Buerger's disease).
Tuberculosis, active.
Tumors, malignant, or of the brain or spinal cord or peripheral nerves.
Ulcers, peptic (gastric or duodenal) (A proper diagnosis of gastric or duodenal ulcer (peptic ulcer) is to be considered established if it represents a medically sound interpretation of sufficient clinical findings warranting such diagnosis and provides an adequate basis for a differential diagnosis from other conditions with like symptomatology; in short, where the preponderance of evidence indicates gastric or duodenal ulcer (peptic ulcer). Whenever possible, of course, laboratory findings should be used in corroboration of the clinical data.

(b) Tropical diseases. The following diseases shall be granted service connection as a result of tropical service, although not otherwise established as incurred in service if manifested to a compensable degree within the applicable time limits under §3.307 or §3.308 following service in a period of war or following peacetime service, provided the rebuttable presumption provisions of §3.307 are also satisfied.

Amebiasis.
Blackwater fever.
Cholera.
Dracontiasis.
Dysentery.
Filariasis.
Leishmaniasis, including kala-azar.
Loiasis.
Malaria.
Onchocerciasis.
Oroya fever.
Pinta.
Plague.
Sarcoidosis.
Scleroderma.
Sclerosis, amyotrophic lateral.
Sclerosis, multiple.
Syringomyelia.
Thromboangitis obliterans (Buerger's disease).
Tuberculosis, active.
Tumors, malignant, or of the brain or spinal cord or peripheral nerves.
Ulcers, peptic (gastric or duodenal) (A proper diagnosis of gastric or duodenal ulcer (peptic ulcer) is to be considered established if it represents a medically sound interpretation of sufficient clinical findings warranting such diagnosis and provides an adequate basis for a differential diagnosis from other conditions with like symptomatology; in short, where the preponderance of evidence indicates gastric or duodenal ulcer (peptic ulcer). Whenever possible, of course, laboratory findings should be used in corroboration of the clinical data.

(c) Diseases specific as to former prisoners of war. (1) If a veteran is a former prisoner of war, the following diseases shall be service connected if manifested to a degree of disability of 10 percent or more at any time after discharge or release from active military, naval, or air service even though there is no record of such disease during service, provided the rebuttable presumption provisions of §3.307 are also satisfied.

Psychosis.
Any of the anxiety states.
Dysthmic disorder (or depressive neurosis).
Organic residuals of frostbite, if it is determined that the veteran was interned in climatic conditions consistent with the occurrence of frostbite.
Post-traumatic osteoarthritis.
Atherosclerotic heart disease or hypertensive vascular disease (including hypertensive heart disease) and their complications (including myocardial infarction, congestive heart failure, arrhythmia). Stroke and its complications.

On or after October 10, 2008, Osteoporosis, if the Secretary determines that the veteran has posttraumatic stress disorder (PTSD).

(2) If the veteran:
   (i) Is a former prisoner of war and;
   (ii) Was interned or detained for not less than 30 days, the following diseases shall be service connected if manifest to a degree of 10 percent or more at any time after discharge or release from active military, naval, or air service even though there is no record of such disease during service, provided the rebuttable presumption provisions of § 3.307 are also satisfied.

   (A) Avitaminosis.
   (B) Beriberi (including beriberi heart disease).
   (C) Chronic dysentery.
   (D) Helminthiasis.
   (E) Malnutrition (including optic atrophy associated with malnutrition).
   (F) Pellagra.
   (G) Any other nutritional deficiency.
   (H) Irritable bowel syndrome.
   (I) Peptic ulcer disease.
   (J) Peripheral neuropathy except where directly related to infectious causes.
   (K) Cirrhosis of the liver.

On or after September 28, 2009, Osteoporosis.

(Authority: 38 U.S.C. 1112(b))

(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.

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

(3) For purposes of this section:

   (A) 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.

   (B) The term radiation-risk activity means:

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

      (ii) 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)(I) 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 ex-
posures comparable to a job that is or
was monitored through the use of do-
simetry 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 perfor-
ance of duty related to the Long Shot,
Milrow, or Cannikin underground nu-
clear 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 De-
partment of Energy, would qualify the
individual for inclusion as a member of
the Special Exposure Cohort under sec-
tion 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 perfor-
ance of official military duties in con-
nexion with ships, aircraft or other
equipment used in direct support of the
nuclear test.
(B) During the six month period fol-
lowing the official operational period
of an atmospheric nuclear test, pres-
ence at the test site or other test stag-
ing area to perform official military
duties in connection with completion of
projects related to the nuclear test in-
cluding decontamination of equip-
ment used during the nuclear test.
(C) Service as a member of the garri-
son 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 par-
ticipated in Operation Crossroads.
(v) For tests conducted by the United
States, the term operational period
means:
(A) For Operation TRINITY the pe-
riod 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 pe-
riod 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 De-
cember 20, 1951.
(G) For Operation TUMBLER-SNAP-
PER the period April 1, 1952 through
June 20, 1952.
(H) For Operation IVY the period No-
vember 1, 1952 through December 31,
1952.
(I) For Operation UPSHOT-KNOT-
HOLE the period March 17, 1953
through June 20, 1953.
(J) For Operation CASTLE the period
(K) For Operation TEAPOT the period
(L) For Operation WIGWAM the pe-
(M) For Operation REDWING the pe-
riod May 5, 1956 through August 6, 1956.
(N) For Operation PLUMBBOB the
period May 28, 1957 through October 22,
1957.
(O) For Operation HARBERT I the pe-
riod April 28, 1958 through October
31, 1958.
(P) For Operation ARGUS the period
August 27, 1958 through September 10,
1958.
(Q) For Operation HARBERT II the pe-
riod September 19, 1958 through Oc-
tober 31, 1958.
(R) For Operation DOMINIC I the pe-
riod April 25, 1962 through December 31,
1962.
(S) For Operation DOMINIC II/PLOW-
SHARE the period July 6, 1962 through
(vi) The term “occupation of Hiro-
shima or Nagasaki, Japan, by United
States forces” means official military
§ 3.309

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.

(Authority: 38 U.S.C. 1110, 1112, 1131)

(e) Disease associated with exposure to certain herbicide agents. If a veteran was exposed to an herbicide agent during active military, naval, or air service, the following diseases shall be service-connected if the requirements of § 3.307(a)(6) are met even though there is no record of such disease during service, provided further that the rebuttable presumption provisions of § 3.307(d) are also satisfied.

AL amyloidosis
Chloracne or other acneform disease consistent with chloracne
Hodgkin’s disease
Ischemic heart disease (including, but not limited to, acute, subacute, and old myocardial infarction; atherosclerotic cardiovascular disease including coronary artery disease (including coronary spasm) and coronary bypass surgery; and stable, unstable and Prinzmetal’s angina)
All chronic B-cell leukemias (including, but not limited to, hairy-cell leukemia and chronic lymphocytic leukemia)
Multiple myeloma
Non-Hodgkin’s lymphoma
Parkinson’s disease
Acute and subacute peripheral neuropathy
Porphyria cutanea tarda
Prostate cancer
Respiratory cancers (cancer of the lung, bronchus, larynx, or trachea)
Soft-tissue sarcoma (other than osteosarcoma, chondrosarcoma, Kaposi’s sarcoma, or mesothelioma)

Note 1: The term “soft-tissue sarcoma” includes the following:
Adult fibrosarcoma
Dermatofibrosarcoma protuberans
Malignant fibrous histiocytoma
Liposarcoma
Leiomyosarcoma
Epithelioid leiomyosarcoma (malignant leiomyoblastoma)
Rhabdomyosarcoma
Ectomesenchymoma
Angiosarcoma (hemangiosarcoma and lymphangiosarcoma)
Proliferating (systemic) angioendotheliomatosis
Malignant glomus tumor
Malignant hemangiopericytoma
Synovial sarcoma (malignant synoviatoma)
Malignant giant cell tumor of tendon sheath
Malignant schwannoma, including malignant schwannoma with rhabdomyoblastic differentiation (malignant Triton tumor), glial and epithelioid malignant schwannomas
Malignant mesenchymoma
Malignant granular cell tumor
Alveolar soft part sarcoma
Epithelioid sarcoma
Clear cell sarcoma of tendons and aponeuroses
Extraskeletal Ewing’s sarcoma
Congenital and infantile fibrosarcoma
Malignant ganglioneuroma

Note 2: For purposes of this section, the term acute and subacute peripheral neuropathy means transient peripheral neuropathy that appears within weeks or months of exposure to an herbicide agent and resolves within two years of the date of onset.

Note 3: For purposes of this section, the term ischemic heart disease does not include hypertension or peripheral manifestations of arteriosclerosis such as peripheral vascular disease or stroke, or any other condition that does not qualify within the generally accepted medical definition of ischemic heart disease.

(Authority: 38 U.S.C. 501(a) and 1112(b))
[41 FR 55873, Dec. 23, 1976]
§ 3.310 Disabilities that are proximately due to, or aggravated by, service-connected disease or injury.

(a) General. Except as provided in § 3.300(c), disability which is proximately due to or the result of a service-connected disease or injury shall be service connected. When service connection is thus established for a secondary condition, the secondary condition shall be considered a part of the original condition.

(b) Aggravation of nonservice-connected disabilities. Any increase in severity of a nonservice-connected disease or injury that is proximately due to or the result of a service-connected disease or injury, and not due to the natural progress of the nonservice-connected disease, will be service connected. However, VA will not concede that a nonservice-connected disease or injury was aggravated by a service-connected disease or injury unless the baseline level of severity of the nonservice-connected disease or injury is established by medical evidence created before the onset of aggravation or by the earliest medical evidence created at any time between the onset of aggravation and the receipt of medical evidence establishing the current level of severity of the nonservice-connected disease or injury. The rating activity will determine the baseline and current levels of severity under the Schedule for Rating Disabilities (38 CFR part 4) and determine the extent of aggravation by deducting the baseline level of severity, as well as any increase in severity due to the natural progress of the disease, from the current level.

(Authority: 38 U.S.C. 1110 and 1131)

(c) Cardiovascular disease. Ischemic heart disease or other cardiovascular disease developing in a veteran who has a service-connected amputation of one lower extremity at or above the knee or service-connected amputations of both lower extremities at or above the ankles, shall be held to be the proximate result of the service-connected amputation or amputations.

(Authority: 38 U.S.C. 1110 and 1131)


§ 3.311 Claims based on exposure to ionizing radiation.

(a) Determinations of exposure and dose—(1) Dose assessment. In all claims in which it is established that a radiogenic disease first became manifest after service and was not manifest to a compensable degree within any applicable presumptive period as specified in § 3.307 or § 3.309, and it is contended the disease is a result of exposure to ionizing radiation in service, an assessment will be made as to the size and nature of the radiation dose or doses. When dose estimates provided pursuant to paragraph (a)(2) of this section are reported as a range of doses to which a veteran may have been exposed, exposure at the highest level of the dose range reported will be presumed.

(Authority: 38 U.S.C. 501)

(2) Request for dose information. Where necessary pursuant to paragraph (a)(1) of this section, dose information will be requested as follows:

(i) Atmospheric nuclear weapons test participation claims. In claims based upon participation in atmospheric nuclear testing, dose data will be requested from the appropriate office of the Department of Defense.

(ii) Hiroshima and Nagasaki occupation claims. In all claims based on participation in the American occupation of Hiroshima or Nagasaki, Japan, prior to July 1, 1946, dose data will be requested from the Department of Defense.

(iii) Other exposure claims. In all other claims involving radiation exposure, a request will be made for any available records concerning the veteran’s exposure to radiation. These records normally include but may not be limited to the veteran’s Record of Occupational Exposure to Ionizing Radiation (DD Form 1141), if maintained, service medical records, and other records which may contain information pertaining to the veteran’s radiation dose