

## **Radiation exposure while in the service**

Many service members were exposed to radiation of some type during their service time. Some of these exposures were planned and some were the result of an accidental exposure.

When radiation energy passes into the body, either by penetrating skin or being swallowed or inhaled, it may be harmful. Whether the radiation is ionizing or non-ionizing will influence the health risks. Both of these exposures can cause serious health conditions and even death.

Ionizing radiation is the high-energy radiation that causes most of the concerns about radiation exposure during military service. Ionizing radiation contains enough energy to remove an electron (ionize) from an atom or molecule and to damage DNA in cells. Sources of ionizing radiation during military service include:

- Nuclear weapons handling and detonation
- Weapons and other military equipment made with depleted uranium
- Radioactive material
- Calibration and measurement sources
- X-rays

Non-ionizing radiation is low-energy radiation from such sources as sunlight, microwaves, radio frequencies, radar and sonar.

For veterans who participated in a radiation-risk activity during their service, the VA assumes that certain cancers are related to their exposure. These are called presumptive diseases and include:

- Cancers of the bile ducts, bone, brain, breast, colon, esophagus, gall bladder, liver (primary site, but not if cirrhosis or hepatitis B is indicated), lung (including bronchiolo-alveolar cancer), pancreas, pharynx, ovary, salivary gland, small intestine, stomach, thyroid, urinary tract (kidney/renal, pelvis, urinary bladder, and urethra)
- Leukemia (except chronic lymphocytic leukemia)
- Lymphomas (except Hodgkin's disease)
- Multiple myeloma (cancer of plasma cells)

These veterans don't have to prove a connection between these diseases and their service to be eligible for disability compensation. Surviving spouses, dependent children and dependent parents of veterans who participated in a radiation risk-activity and died as the result of one of these diseases may be eligible for survivors' benefits.

If a veteran who was exposed to radiation during military service develops one of the diseases listed below and meets other requirements, disability compensation may be provided on a case-by-case basis.

- All cancers
- Non-malignant thyroid nodular disease
- Parathyroid adenoma
- Posterior subcapsular cataracts
- Tumors of the brain and central nervous system

Eligibility depends on how much radiation the veteran received and other factors, such as the period of time between exposure to radiation and the development of the disease. Surviving spouses, dependent children and dependent parents of veterans exposed to radiation during military service and died as the result of one of these diseases may be eligible for survivors' benefits.

VA also will consider the possibility that other diseases not listed above were caused by radiation, if supported by medical or scientific evidence. To be eligible for compensation, VA must be able to establish that it is at least as likely as not that a veteran's disease was caused by radiation exposure during service. Widows of service members who died of some of the aforementioned conditions as a result of radiation exposure can apply for benefits.

Most veterans exposed to radiation during their military time will have a certificate or letter from the Department of Defense identifying them as "atomic veterans." This document will help the claim move through the VA compensation system.

If you are one of these atomic veterans or were exposed to radiation and have one of the identified conditions or any condition identified as caused by radiation exposure should come into our office and bring their documentation including the DD-214 for an evaluation.

*Ted Puntillo is director of Veteran Services for Solano County. Reach him at 784-6590 or [TEPuntillo@SolanoCounty.com](mailto:TEPuntillo@SolanoCounty.com). The Solano County Veteran Services Office, 675 Texas St. in Fairfield, is open from 9 a.m. to noon and 1 to 4 p.m. Monday through Friday.*