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105TH CONGRESS, 2d Session | SENATE | REPORT 105–343

# JUSTICE FOR ATOMIC VETERANS ACT OF 1998

SEPTEMBER 22, 1998.—Ordered to be printed

Mr. SPECTER, from the Committee on Veterans' Affairs, submitted the following

## REPORT

[To accompany S. 1385]

The Committee on Veterans' Affairs, to which was referred the bill (S. 1385) to expand the list of diseases presumed to be service connected with respect to radiation-exposed veterans, having considered the same, reports favorably thereon with an amendment in the form of a substitute, and recommends that the bill, as amended, do pass.

### COMMITTEE AMENDMENT

The amendments are as follows:

Strike out all after the enacting clause as follows:

**[SECTION 1. SHORT TITLE.**

[This Act may be cited as the "Justice for Atomic Veterans Act of 1997".

**[SEC. 2. EXPANSION OF LIST OF DISEASES PRESUMED TO BE SERVICE CONNECTED FOR RADIATION-EXPOSED VETERANS.**

[Section 1112(c)(2) of title 38, United States Code, is amended by adding at the end the following:

[“(P) Lung cancer.
[“(Q) Bone cancer.
[“(R) Skin cancer.
[“(S) Colon cancer.
[“(T) Posterior subcapsular cataracts.
[“(U) Non-malignant thyroid nodular disease.
[“(V) Ovarian cancer.
[“(W) Parathyroid adenoma.
[“(X) Tumors of the brain and central nervous system.
[“(Y) Rectal cancer.”.]

Insert in lieu thereof the following:

**SECTION 1. SHORT TITLE.**

This Act may be cited as the "Justice for Atomic Veterans Act of 1998".

59–010

**SEC. 2. EXPANSION OF LIST OF DISEASES PRESUMED TO BE SERVICE CONNECTED FOR RADIATION-EXPOSED VETERANS.**

Section 1112(c)(2) of title 38, United States Code, is amended by adding at the end the following:

"(P) Lung cancer.

"(Q) Ovarian cancer.

"(R) Tumors of the brain and central nervous system.".

## INTRODUCTION

On November 6, 1997, Committee Member Paul Wellstone introduced S. 1385, the "Justice for Atomic Veterans Act of 1997." As introduced, S. 1385 would have expanded the list of diseases presumed to be service connected with respect to radiation-exposed veterans to include the following diseases: lung cancer; bone cancer; skin cancer; colon cancer; posterior subcapsular cataracts; nonmalignant thyroid nodular disease; ovarian cancer; parathyroid adenoma; tumors of the brain and central nervous system; and rectal cancer.

On April 21, 1998, the Committee held a hearing to receive testimony on pending legislation, including S. 1385. Testimony was received from the Honorable Kenneth W. Kizer, M.D., M.P.H., Under Secretary for Health, Department of Veterans Affairs (VA); the Honorable Joseph Thompson, Under Secretary for Benefits, VA; Ms. Joan Ma Pierre, Director for Electronics and Systems, Defense Special Weapons Agency, U.S. Department of Defense; Captain Richard L. LaFontaine, USN, U.S. Navy Bureau of Medicine and Surgery; Rosalie Bertell, Ph.D., International Institute of Concern for Public Health, Toronto, Canada; Mr. William J. Brady, Health Physicist; Otto Raabe, Ph.D., University of California, Davis; Richard B. Setlow, Ph.D., Brookhaven National Laboratory; Steve Wing, Ph.D., University of North Carolina; Mr. Tidoro A. Garcia; Mr. James J. Garrity; and Mr. Albert G. Parrish.

## COMMITTEE MEETING

After carefully reviewing the testimony from the foregoing hearing, the Committee met in open session on July 28, 1998, and voted unanimously to report S. 1385 with an amendment in the nature of a substitute.

## SUMMARY OF S. 1385 AS REPORTED

S. 1385 as reported (hereinafter referred to as the "Committee bill") contains amendments to title 38, United States Code, that would add to the statutory listing of diseases presumed to be service connected with respect to radiation-exposed veterans the following three diseases: lung cancer; ovarian cancer; and tumors of the brain and central nervous system.

## DISCUSSION

### *Background*

The Department of Veterans Affairs affords priority access to health care services and pays compensation to veterans who have sustained service-connected diseases or disabilities. See 38 U.S.C. chapters 11 and 17. Generally, veterans will be deemed to be "serv-

ice-connected" if they can show that there is a causal link between their military, naval or air service and their disease or disability. Alternatively, they will be presumed to be "service-connected," even though they cannot demonstrate such a causal link, if they meet requirements established with respect to various statutory presumptions. For example, various chronic and tropical diseases will be presumed to be service-connected if they manifest within 1 year after the veteran's separation from service, and tuberculosis will be presumed to be service-connected if it manifests within 3 years after the veteran's separation from service. 38 U.S.C. § 1112(a).

The Radiation-Exposed Veterans Compensation Act of 1988, Public Law 100–321, subsequently amended by the Veterans Radiation Exposure Amendments of 1992, Public Law 102–578, established such presumptions with respect to veterans who participated in "radiation-risk activities" in service, i.e., those who participated in the occupation of Hiroshima or Nagasaki immediately after World War II or who were on site at atmospheric nuclear testing in the Pacific, Nevada, or elsewhere. See 38 U.S.C. § 1112(c). If any such veteran manifests at any time any of 15 specified cancers (leukemia, multiple myeloma, non-Hodgkin's lymphomas, or cancers of the thyroid, breast, pharynx, esophagus, stomach, small intestine, pancreas, bile ducts, gall bladder, liver, salivary gland, or urinary tract), he or she will be presumed to be service-connected. Accordingly, radiation-exposed veterans stricken with one of these presumed radiation-induced cancers will not have to prove a causal link between their service and the cancer to gain compensation and priority access to VA medical care. Radiation-exposed veterans stricken with other diseases are still eligible for compensation. They must, however, establish the causal link that is presumed with respect to radiation-exposed veterans stricken with the 15 presumptive cancers.

In specifying the rules outlined above, the Committee relied principally on 1980 and 1989 reports issued by the National Academy of Sciences (NAS) Committee on the Biological Effects of Ionizing Radiation. These reports, commonly referred to as the NAS BEIR III and BEIR V reports, addressed the scientific basis of the effects of radiation exposure on humans and encompassed a review and evaluation of scientific knowledge on the effects of radiation exposure on humans developed since the first BEIR report was issued in 1972.

BEIR III and BEIR V are now supplemented by a 1996 study by the Institute of Physics, London, titled Health Effects of Exposure to Low-Level Ionizing Radiation (HEELLIR). Of particular relevance is a chapter of HEELLIR titled "Risk Estimates for Radiation Exposures" by John D. Boice Jr., Ph.D., the former Chief of the Radiation Epidemiology Branch, National Cancer Institute, U.S. Department of Health and Human Services. Boice focuses particularly on exposures to low levels of radiation and the cancers that are associated with such exposures.

*Committee bill*

The Committee bill would add the following three cancers to the list of presumptive radiation diseases: lung cancer; ovarian cancer; and tumors of the brain and central nervous system.

In adding lung cancer, ovarian cancer, and tumors of the brain and central nervous system to the list of presumed radiation-induced cancers, the Committee relies on scientific support found in the BEIR III, BEIR V, and HEELLIR studies. Those sources indicate that lung cancer, ovarian cancer, and tumors of the brain and central nervous system have either a "convincing" or "very strong" association with low-level exposures to radiation. Specifically, BEIR V describes all three cancers as ones that are "induced by exposure to low levels of radiation." HEELLIR indicates that evidence of a connection between such exposure and ovarian cancer and tumors of the brain and central nervous system is "convincing." HEELLIR states, further, that evidence of a connection between lung cancer and low-level exposure is "very strong." Implicit in the Committee's addition of these three low level exposure cancers to the list of presumed radiation diseases is the presumption that veterans who participated in "radiation risk activities" and who were, therefore, actually on site at Hiroshima, Nagasaki, or at nuclear testing sites were exposed, at minimum, to low levels of radiation.

The Committee is less than satisfied with the Nuclear Test Personnel Review (NTPR) Program of the Department of Defense (DOD). That program attempts to "reconstruct" radiation doses to which individual veterans, or groups of veterans, were exposed in service; VA relies on such "dose reconstruction" estimates in determining whether compensation will be granted to veterans who are stricken with non-presumptive diseases. The Committee's hearing on April 21, 1998, revealed that, within the panel of scientific authorities who testified, there is still significant disagreement on the health effects of low levels of ionizing radiation. None of these experts, however, spoke favorably on the use of dose reconstruction as an instrument for determining eligibility for VA benefits. Further, a 1995 Institute of Medicine study group report cast doubt on the reliability of the dose reconstruction database on which VA has relied, stating that information is missing or changed and that individual versus group data often varied significantly, and that, therefore, such data could not be used in epidemiological research.

The Committee has requested that the General Accounting Office (GAO) conduct a thorough review to determine whether dose reconstruction can be relied on as a tool for measuring an individual claimant's past exposure to radiation. The Committee has requested, in addition, that GAO assess the proper role, if any, of DOD's dose reconstruction methods in determining whether individual veterans should be granted VA benefits.

## COST ESTIMATE

In compliance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate, the Committee, based on information supplied by the Congressional Budget Office (CBO), estimates that the costs resulting from the enactment of the Committee bill, as compared to costs under current law and as scored against the current CBO baseline for the first 5 years following enactment, would be as follows: direct spending would increase by $13 million in fiscal year 1999, and would increase by $372 million in fiscal years 1999–2003. The bill would not affect the budgets of State, local, or tribal governments.

The cost estimate provided by CBO, setting forth a detailed breakdown of costs, follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
*Washington, DC, September 17, 1998.*

Hon. ARLEN SPECTER,
*Chairman, Committee on Veterans' Affairs*
*U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 1385, the Justice for Atomic Veterans Act of 1998.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Charles Riemann.

Sincerely,

JUNE E. O'NEILL, *Director.*

Enclosure.

*S. 1385—Justice for Atomic Veterans Act of 1998*

Summary: S. 1385 would add lung cancer, ovarian cancer, and tumors of the brain and central nervous system to the list of 15 diseases currently presumed to be connected to military service for certain veterans who were exposed to nuclear radiation. CBO estimates that enacting the bill would increase direct spending by $13 million in 1999 and by $372 million over the 1999–2003 period. In addition, it would increase discretionary spending by $1 million in 1999 and by $14 million over the five-year period, assuming appropriation of the necessary amounts. Because the bill would affect direct spending, pay-as-you-go procedures would apply.

The bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would not have any significant effect on the budgets of state, local, or tribal governments.

Estimated Cost to The Federal Government: The estimated budgetary impact of S. 1385 is shown in the following table. Direct spending costs would stem from payments for disability compensation and dependency and indemnity compensation (DIC). Discretionary spending would increase because of the provision of additional medical care services, assuming appropriation of the necessary amounts. The costs of this bill fall within budget function 700 (veterans' affairs).

| | By fiscal year, in millions of dollars— | | | | | |
|---|---|---|---|---|---|---|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| CHANGES IN DIRECT SPENDING | | | | | | |
| Spending under current law for disability compensation: | | | | | | |
| Estimated budget authority | 17,115 | 18,271 | 19,296 | 20,784 | 22,193 | 23,587 |
| Estimated outlays | 17,039 | 18,164 | 19,252 | 20,741 | 22,158 | 23,554 |
| Proposed changes: | | | | | | |
| Estimated budget authority | 0 | 14 | 58 | 91 | 106 | 111 |
| Estimated outlays | 0 | 13 | 55 | 88 | 105 | 111 |
| Spending under S. 1385 for disability compensation: | | | | | | |
| Estimated budget authority | 17,115 | 18,285 | 19,354 | 20,875 | 22,299 | 23,698 |
| Estimated outlays | 17,039 | 18,177 | 19,307 | 20,829 | 22,263 | 23,665 |

| | By fiscal year, in millions of dollars— | | | | | |
|---|---|---|---|---|---|---|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| SPENDING SUBJECT TO APPROPRIATION | | | | | | |
| Spending under current law for veterans' medical care: | | | | | | |
| Estimated authorization level [1] | 17,739 | 17,739 | 17,739 | 17,739 | 17,739 | 17,739 |
| Estimated outlays | 17,615 | 18,122 | 17,763 | 17,739 | 17,739 | 17,739 |
| Proposed changes: | | | | | | |
| Estimated authorization level | 0 | 1 | 2 | 3 | 4 | 4 |
| Estimated outlays | 0 | 1 | 2 | 3 | 4 | 4 |
| Spending under S. 1385 for veterans' medical care: | | | | | | |
| Estimated authorization level [1] | 17,739 | 17,740 | 17,741 | 17,742 | 17,743 | 17,744 |
| Estimated outlays | 17,615 | 18,123 | 17,765 | 17,742 | 17,743 | 17,744 |

[1] The 1998 level is the amount appropriated for that year. The current law amounts for 1999–2003 assume that appropriations remain at the 1998 level. If they are adjusted for inflation, the base amounts would rise by about $600 million a year, but the estimated changes would remain as shown.

Disability Compensation.—The Radiation-Exposed Veterans Compensation Act of 1988 (Public Law 100–321) established presumptions of service connection for 13 cancers for veterans who participated on-site in an atmospheric nuclear weapons test or in the occupation of Hiroshima and Nagasaki. That act was amended in 1992 by Public Law 102–578, which added two cancers to the list of presumed service-connected diseases. S. 1385 would add lung cancer, ovarian cancer, and tumors of the brain and central nervous system to that list. By requiring a presumption that, for certain veterans, the three illnesses are service-connected, the bill would add to the number of radiation-exposed veterans who are eligible for disability compensation or whose spouses are eligible for DIC benefits. CBO estimates that enactment of S. 1385 would increase direct spending by about $13 million in 1999 and by about $372 million over the 1999–2003 period.

Data from the Defense Special Weapons Agency (DSWA), formerly the Defense Nuclear Agency, indicate that approximately 210,000 military, civilian, and contract personnel employed by the Department of Defense (DoD) participated in atmospheric nuclear tests. In addition, approximately 200,000 DoD personnel participated in the post-war occupation of Hiroshima and Nagasaki, Japan. CBO estimates that about 200,000 of these veterans are alive today, assuming that the average participant was 24 years old.

To estimate the caseload of veterans having each disease, CBO used disease and age-specific incidence and mortality rates from the National Cancer Institute (NCI). (CBO has no basis for estimating different incidence and mortality rates for this particular population.) Based on this analysis, CBO estimates that about 3,500 of these veterans and about 9,000 spouses of deceased veterans would be eligible for benefits in 1999. The estimate assumes that approximately 20,000 of these veterans died from the three diseases during the 1945–1998 period, that two-thirds of the deceased veterans had spouses, and that 20 percent of those spouses remarried, making them ineligible for DIC.

For the 1999–2003 period, CBO estimates benefit payments based on the incidence of the three diseases, expected mortality rates among veterans and survivors, the number of potential beneficiaries at the start of 1999, and assumptions about annual participation. CBO projects that, of the 12,500 veterans and survivors

who would be eligible for benefits in 1999, about 2,400 would receive benefits in that year. Recognizing that a small number of affected veterans and survivors may draw benefits under current law and that not all potential new beneficiaries would participate, this estimate assumes that, ultimately, 50 percent of all eligible survivors at the end of 1998 would apply for benefits and 75 percent of all veterans and post-1998 survivors would participate in the program. The estimate also assumes that it would take about three years to reach the full estimated participation rate. CBO anticipates that in 2003 about 8,500 veterans and survivors would receive benefits as a result of the bill.

CBO used data from VA that was specific to the three diseases to calculate the average compensation payment to veterans. Average annual benefits for veterans with the three diseases are approximately $16,000 for brain cancer, $15,300 for lung cancer, and $5,000 for ovarian cancer, reflecting the differing disability ratings of veterans currently receiving benefits for these illnesses. However, those benefit levels also include payments to veterans for additional disabilities, and thus incremental benefits under S. 1385 would be less than those averages. CBO has no information as to what portions of those averages stem from disabilities other than those covered by the bill. We assume that incremental compensation benefits would fall below those averages by about $2,000. For DIC recipients, the estimated benefit is approximately $11,000 annually for all survivors. This estimate also assumes that beneficiaries would receive annual cost-of-living adjustments.

Medical Care.—VA provides medical care to veterans based on priorities established in law. The highest priorities are given to veterans with service-connected disabilities, but VA also has a program under current law to provide health care to veterans with potentially radiogenic diseases, but only for treatment of those diseases. Under S. 1385 certain veterans with lung, brain, and ovarian cancer would receive the highest priorities because their diseases would be presumed to be service-connected. By requiring this presumption of service connection, the bill would probably draw a greater number of veterans to VA for care. It might also lead some veterans who currently receive care from VA to have a greater share of their needs taken care of by VA.

CBO estimates that the bill would raise the costs of veterans' medical care by about $1 million in 1999 and by about $14 million over the 1999–2003 period, assuming appropriation of the necessary amounts. The CBO estimate depends primarily on assumptions about how many of the affected veterans already enjoy the highest priorities, how many veterans the bill would attract to the VA health system, and how many current patients would receive a greater range of care. The key assumptions are as follows:

Roughly one-third of these veterans would already have high priority access based on other compensable service-connected disabilities or income, as allowed under current law. (This figure is based on CBO's estimate of the proportion of World War II veterans with such status in 1996.)

Similarly, about one-third of the veterans who gain a higher priority would use VA medical services. CBO estimates that VA would spend about $21,000 annually per new patient, which is roughly

five times VA's average annual cost per user. This cost factor is based on a recent study showing a comparable difference between Medicare's average annual cost per beneficiary with certain types of cancer, including lung cancer, and all beneficiaries who receive medical care.

One-fourth of the veterans who would use priority care under this bill would already be receiving cancer treatment from VA, based on data from the 1992 Survey of Veterans. CBO estimates that VA would spend an additional $900 annually for these veterans, based on VA's per capita spending in 1997 for veterans at the third priority level compared to veterans in the sixth priority level.

Pay-As-You-Go Considerations: Section 252 of the Balanced Budget and Emergency Deficit Control Act sets up pay-as-you-go procedures for legislation affecting direct spending or receipts. The net changes in outlays and governmental receipts that are subject to pay-as-you-go procedures are shown in the following table. For the purposes of enforcing pay-as-you-go procedures, only the effects in the current year, the budget year, and the succeeding four years are counted.

| | By fiscal year, in millions of dollars— | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Changes in outlays | 13 | 55 | 88 | 105 | 111 | 117 | 123 | 128 | 133 | 136 |
| Changes in receipts | Not Applicable | | | | | | | | | |

Intergovernmental and private-sector impact: The bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would not have any significant effect on the budgets of state, local, or tribal governments.

Estimate prepared by: Federal costs: Charles Riemann (compensation) and Shawn Bishop (medical care); Impact on State, local, and tribal governments: Marc Nicole; Impact on the private sector: Rachel Schmidt.

Estimate approved by: Robert A. Sunshine, Deputy Assistant Director for Budget Analysis.

## Regulatory Impact Statement

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee on Veterans' Affairs has made an evaluation of the regulatory impact which would be incurred in carrying out the Committee bill. The Committee finds that the Committee bill would not entail any significant regulation of individuals or businesses or result in any significant impact on the personal privacy of any individuals, and that the paperwork resulting from enactment would be minimal.

## Tabulation of Votes Cast in Committee

In compliance with paragraph 7 of rule XXVI of the Standing Rules of the Senate, the following is a tabulation of votes cast in person or by proxy by members of the Committee on Veterans' Affairs at its July 28, 1998, meeting. On that date, the Committee, by unanimous voice vote, ordered S. 1385, as amended, reported favorably to the Senate.

## AGENCY REPORT

On April 21, 1998, the Committee held a hearing to receive testimony on pending legislation, including S. 1385. Testimony was received from the Honorable Kenneth W. Kizer, M.D., M.P.H., Under Secretary for Health, Department of Veterans' Affairs, and the Honorable Joseph Thompson, Under Secretary for Benefits, Department of Veterans' Affairs. An excerpt from that testimony is reprinted below:

### STATEMENT OF DEPARTMENT OF VETERANS AFFAIRS, APRIL 21, 1998

Mr. Chairman, and Members of the Committee, we are pleased to be here this morning to discuss a number of issues concerning radiation-exposed, or "atomic" veterans. Your invitation letter of April 10, 1998, indicated that today's hearing would focus on the following items or issues: (1) S. 1385, a bill to amend title 38, United States Code, to expand the number of diseases presumed to be service connected with respect to radiation-exposed veterans, introduced by Senator Wellstone; (2) S. 1822, a bill to amend title 38, United States Code, to authorize provision of care to veterans treated with nasopharyngeal radium irradiation, introduced by the Chairman at VA's request; (3) current "dose reconstruction" policies that govern claims for service connection of radiation-related disabilities, and (4) the Federal government's response to the needs of atomic veterans.

Adjudication of Claims for Service Connection of Disabilities or Deaths Associated With Exposure to Ionizing Radiation

First, Mr. Chairman, we believe it would be beneficial to review how the Department of Veterans Affairs (VA) has responded to the needs of atomic veterans and to describe the process by which VA adjudicates claims for service connection of disabilities or deaths associated with exposure to ionizing radiation.

Approximately 195,000 U.S. servicemen were involved in the occupation of Hiroshima and Nagasaki during World War II. Another 205,000 participated at U.S. tests of atmospheric nuclear devices between 1945 and 1962. As more became known about the long-term health effects of exposure to radiation, these "atomic veterans" raised legitimate concerns about possible adverse consequences to their health. While there are still areas of uncertainty surrounding the long-term health effects of exposure, it is now generally agreed that many forms of cancer can be induced by ionizing radiation but may not actually become manifest until many years after exposure.

There have also been concerns raised about the accuracy of dose estimates provided from official military records. For example, many believe that the film badges issued in connection with atmospheric testing provide an incomplete measurement of exposure.

On October 24, 1984, the Veterans' Dioxin and Radiation Exposure Compensation Standards Act, Pub. L. No. 98–542, was enacted to ensure compensation to veterans and their survivors for disabilities or deaths related to exposure to ionizing radiation during atmospheric nuclear testing or the occupation of Hiroshima and Nagasaki. The law instructed VA to prescribe regulations setting forth specific guidelines, standards, and criteria for adjudicating compensation claims based on radiation exposure. (Pub. L. No. 98–542 also made similar provisions regarding Vietnam veterans exposed to herbicides containing dioxin, but Pub. L. No. 102–4, the Agent Orange Act of 1991, removed those provisions and substituted the requirements and procedures now codified at 38 U.S.C. § 1116.)

On September 25, 1985, VA published 38 C.F.R § 3.311b (now designated § 3.311) to implement the radiation provisions of Pub. L. No. 98–542. This regulation contains standards and criteria under which service connection is to be considered for diseases first appearing after service in radiation-exposed veterans.

A disability may be considered to be service connected if it results from injury or disease incurred or aggravated in line of duty during active military service. In the case of certain chronic diseases, disability may be considered to be service connected on a presumptive basis if the disease appears within a specific time period following active service. Under VA regulations, direct service connection may be established for disability from a disease first manifesting itself after active service, but not during any applicable presumptive period, when all evidence establishes that the disease is related to an in-service event. Section 3.311 is intended to assist veterans whose claims for compensation fall under this latter provision. Although the regulation does not provide presumptive service connection, its procedures offer the veteran a detailed, multilevel review.

Under section 3.311, several factors are taken into consideration in determining whether a veteran's disease resulted from exposure to ionizing radiation during service:

(1) the probable radiation dose, including type, rate, and duration;

(2) the relative sensitivity of the tissue involved to induction of the disease by ionizing radiation;

(3) the veteran's gender and pertinent family history;

(4) the veteran's age at time of exposure;

(5) the time lapse between exposure and onset of the disease; and

(6) the extent to which exposure to radiation or other carcinogens outside of military service might have contributed to development of the disease.

Although Pub. L. No. 98–542 mentioned only two sources of exposure, atmospheric nuclear testing and the occupation of Hiroshima and Nagasaki, the applicability of 38 C.F.R § 3.311 is not limited to these situations. The reg-

ulation's provisions cover veterans who were exposed from any source while on active duty. Hence, the claims of all veterans who were exposed occupationally or therapeutically may receive consideration under section 3.311.

For the purposes of section 3.311, a veteran is under no obligation to provide evidence establishing his or her presence at the site of exposure, so long as official military records are consistent with the claim that the veteran was present. If military records do not establish the veteran's presence or absence from the exposure site, we concede that the veteran was present.

If a veteran alleges exposure from atmospheric testing or from the occupation of Nagasaki and Hiroshima, our source for providing a dose reconstruction is the Defense Special Weapons Agency (DSWA), formerly the Defense Nuclear Agency. If other types of exposure are alleged, VA has responsibility for requesting preparation of a dose estimate from official military records. A veteran may submit an alternative dose estimate from a credible source (a person or organization certified to have the requisite scientific expertise). When it is necessary to reconcile a material difference between the dose estimate developed from official military records and that developed by a credible source, VA obtains a separate estimate prepared by an independent expert selected by the Director of the National Institutes of Health.

It should be emphasized that VA does not verify participation or provide radiation doses for atomic veterans. These are mandated responsibilities of the DSWA. Because many service personnel were not issued radiation badges and due to other problems with dose measurement, the DSWA frequently has to provide exposure estimates by dose reconstruction. It is our understanding that the DSWA philosophy is to overestimate ("high-side") doses rather than underestimate them. When the DSWA reports a dose range, VA uses the "upper bound" dose in formulating medical opinions.

Based on the information provided by DSWA, most veterans received relatively low radiation doses. The average dose for atmospheric nuclear weapons test participants was 0.6 rem and fewer than 1% participants received over 5 rem. The DSWA estimates that the maximum exposure for service personnel involved in the occupation of Hiroshima and Nagasaki was less than 1 rem.

Following the dose reconstruction development, a claim for compensation under 38 C.F.R. § 3.311 is referred by the regional office of jurisdiction to VA Central Office for review by the Director of the Compensation and Pension Service, who forwards each case for a medical opinion to the office of the Assistant Chief Medical Director for Public Health and Environmental Hazards. Upon receiving that opinion, the Director of the Compensation and Pension Service issues an advisory opinion whether it is at least as likely as not that the veteran's disease is the result of ex-

posure to ionizing radiation during military service. The regional office of jurisdiction uses this opinion in reaching a final decision. If the Director of the Compensation and Pension Service is unable to conclude whether it is at least as likely as not that the veteran's disease is the result of exposure to ionizing radiation during military service, the claim may be referred to an outside consultant for another evaluation. The outside consultant is selected by the Under Secretary for Health upon the recommendation of the Director of the National Cancer Institute.

Currently, 38 C.F.R. § 3.311 specifies 22 diseases as radiogenic. We have published a proposed amendment to this rule to add "prostate cancer" and "all other cancers" as radiogenic diseases for purposes of section 3.311. The final amendment is now under Departmental review.

Originally, a veteran must have had one of the listed radiogenic diseases before the provisions of 38 C.F.R. § 3.311 would apply. In 1994, the U.S. Court of Appeals for the Federal Circuit ruled that VA did not have the authority to adopt an exclusive list of radiogenic diseases (Combee v. Brown). In addition, section 501(b) of Pub. L. No. 103–446 amended title 38, U.S.C. to allow veterans to pursue service connection on a direct basis for any diseases not considered "radiogenic." In February 1995, we amended section 3.311 to allow consideration of diseases other than those listed as radiogenic. However, if the claimed disease is not one of the listed diseases, the veteran must cite or submit competent scientific or medical evidence showing that it is radiogenic before consideration under the regulation may be made.

VA receives advice on the relationships of various diseases to ionizing radiation from the Veterans" Advisory Committee on Environmental Hazards, which was established by Pub. L. No. 98–542. The Committee is composed of medical and scientific authorities in fields related to the health effects of ionizing radiation; individuals recognized as authorities in such fields as epidemiology and other scientific disciplines pertinent to assessing the health effects of ionizing radiation; and members of the general public, including at least one disabled veteran, with interest and experience relating to veterans' concerns about exposure to ionizing radiation.

Currently, the Committee has nine members and includes several distinguished scientists and physicians who have extensive involvement in the issues related to ionizing radiation. Three of the members recently served on the President's Advisory Committee on Human Radiation Experiments. All members, past and present, have brought with them experience and expertise that have served us well since 1985. The Committee has met 29 times since then, most recently on January 21 and 22, 1998. The next meeting is scheduled for May 20–21 of this year.

Mr. Chairman, the procedures established by 38 C.F.R. § 3.311 are for application regardless of either the source

or level of exposure to ionizing radiation. The regulatory criteria apply to claims in which service connection cannot be established under other provisions of law. Through application of the regulation's detailed standards in each individual case, it is our intent to establish service connection for all veterans whose diseases are shown by the scientific and medical evidence to be related to radiation exposure while on active duty.

Despite the passage of Pub. L. No. 98–542 and its implementation in 38 C.F.R § 3.311, Congress remained concerned that these measures were insufficient to compensate all deserving veterans and survivors for disabilities and deaths resulting from exposure to ionizing radiation. Therefore, further legislation was enacted.

Pub. L. No. 100–321, effective May 1, 1988, (codified at 38 U.S.C. § 1112(c)) provided compensation on a presumptive basis for radiation-exposed veterans who developed one of 13 specified diseases to a degree of 10 percent or more within 40 years following participation in a radiation risk activity. The presumptive period for one of the 13 diseases, leukemia, was set at 30 years.

The law defined a radiation-risk activity as:

(1) on-site participation at the atmospheric detonation of a nuclear device;

(2) occupation of Hiroshima and Nagasaki; and

(3) internment as a POW in Japan during World War II, resulting in an opportunity for exposure.

Pub. L. No. 100–321 is implemented by VA regulations at 38 C.F.R § 3.309(d). Subsequent legislation has expanded or modified the original provisions of this law. Pub. L. No. 102–86 (enacted August 14, 1991) increased the presumptive period for leukemia to 40 years and expanded eligibility for presumptive service connection to persons who participated in radiation-risk activities during a period of active duty for training or inactive duty for training.

Pub. L. No. 102–578 (enacted October 30, 1992) added cancers of the salivary gland and urinary tract to the list of presumptive diseases, effective October 1, 1992. VA has defined "urinary tract" as the kidneys, renal pelves, ureters, urinary bladder, and urethra. Pub. L. No. 100–578 also removed both the requirement that a disease be 10 percent disabling at the time it first appears and the 40-year presumptive period. The diseases may now appear at any time following exposure to ionizing radiation for the presumption to apply.

Section 501(a) of Pub. L. No. 103–446 (November 2, 1994) also clarified the intent of Congress that onsite participation at the atmospheric detonation of a nuclear device was not to be limited to participation in a test conducted by the United States.

The presumptive provisions in statute are more limited in their applicability than 38 C.F.R. § 3.311, affecting only those "radiation-exposed" veterans who participated in at-

mospheric nuclear testing, those involved in the occupation of Hiroshima and Nagasaki, and some who were prisoners of war in Japan. However, so long as participation in a radiation-risk activity and the existence of one of the presumptive diseases can be established, service connection can be granted. The extensive development for information and the detailed examination of the various factors required by 38 C.F.R § 3.311 are not part of the framework of 38 C.F.R. § 3.309(d).

Since 1985, we have tracked radiation claims, as well as other issues, in our Special Issue Rating System, or SIRS. This data base was established as a means of collecting information about claims that fall into categories of special interest to the Department and Congress. It was intended as a tool for identifying the number of claimants and the type of disabilities claimed in each special category. Prior to the establishment of SIRS, VA maintained information in a similar automated data base operated by an independent contractor, who was responsible for input of information from rating sheets provided by the regional offices. The data in this system served as the foundation for the records initially entered into SIRS. The following information is based on data concerning radiation cases tracked in SIRS.

As of April 14, 1998, we have received radiation-related compensation claims from 19,885 veterans and survivors. In 2,406 cases we have established service connection for at least one condition claimed to have resulted from exposure to ionizing radiation. Presumptive service connection has been established in 498 of these cases. They are broken down as follows:

Exposure from atmospheric testing—321

Exposure from Hiroshima and Nagasaki (including prisoners of war)—177

In the remaining 1,908 cases, our data base does not specify that service connection was necessarily established under the criteria of 38 C.F.R § 3.311, as opposed to other provisions of statute or regulations. However, the distribution of grants is as follows:

Exposure from atmospheric testing—1,057

Exposure from Hiroshima and Nagasaki (including prisoners of war)—351

Occupational or therapeutic exposure—300

Other types of exposure—200

SIRS was not intended to provide the level of information that is required to answer the questions that are now recurring with increasing frequency and increasing urgency. We recognize that answers to these questions could enhance the overall effectiveness of the programs we have in place to assist veterans. Therefore, we have taken steps to implement an improved version of SIRS that will allow us to provide more detailed and sophisticated information about the claims in each of the special categories.

*VHA Ionizing Radiation Program*

Mr. Chairman, we would also like to provide information about the Veterans Health Administration's (VHA) Ionizing Radiation Program. Currently the Ionizing Radiation Program is available to veterans who potentially were exposed to radiation following the atomic bombing of Hiroshima and Nagasaki, Japan, and participants of U.S. atmospheric nuclear weapons tests.

The Ionizing Radiation Program consists of two components. First, atomic veterans are eligible to participate in the Ionizing Radiation Registry Examination Program. This includes a complete medical history, physical examination, standard diagnostic tests, and additional specialized tests and consultations if needed. Approximately 22,000 Ionizing Radiation Registry examinations have been performed as of December 1997.

It should be emphasized that the Ionizing Radiation Registry program basically fulfills a clinical care purpose by offering atomic veterans a free health examination which potentially serves as an entry point for VA care. Because the participants are self-selected and the historical information is not verified, the registry database cannot be used for epidemiological research.

Second, these veterans now have special eligibility for treatment of the 26 diseases currently covered by "presumptive" legislation and/or recognized by VA as potentially radiogenic by regulation. Prior to the enactment of the Veterans" Health Care Eligibility Reform Act of 1996 (Pub. L. No. 104–262), atomic veterans had special eligibility for treatment of any condition except those determined to result from a cause other than the radiation exposure. Care for these conditions is provided without regard to the veteran's age, service-connected status, or ability to defray the cost of medical care, and no co-payment by the veteran is required.

In other words, even if an atomic veteran has never filed a compensation claim or if the claim has been denied, the veteran can still receive free care for potentially radiogenic diseases. In general we believe that this program is working satisfactorily. We have received a few complaints from veterans that some VA medical centers were not familiar with the special programs available to radiation-exposed veterans. The VHA's Office of Public Health and Environmental Hazards has provided additional information to medical centers throughout the VA system. Also, VA's proposal in S. 1822 (discussed below) would make veterans treated with nasopharyngeal (NP) radium irradiation during military service eligible for the VHA Ionizing Radiation Program.

*S. 1385*

Mr. Chairman, S. 1385, the "Justice for Atomic Veterans Act of 1997," would amend section 1112(c) of title 38, United States Code, by adding 10 new diseases to the list

of diseases in that section that are presumed to be service connected for radiation-exposed veterans. Currently, there are 15 cancers for which this presumption is provided: leukemia (other than chronic lymphocytic leukemia); cancer of the thyroid, breast, pharynx, esophagus, stomach, small intestine, pancreas, bile ducts, gall bladder, salivary gland, and urinary tract; multiple myeloma; lymphomas (except Hodgkin's disease); and primary liver cancer (except if cirrhosis or hepatitis B is indicated). S. 1385 would add to this list the following diseases: lung cancer, bone cancer, skin cancer, posterior subcapsular cataracts, non-malignant thyroid nodular disease, ovarian cancer, parathyroid adenoma, tumors of the brain and central nervous system, and rectal cancer. The amendment to section 1112(c) would be effective on the date of enactment of the Act.

Mr. Chairman, VA opposes this bill. VA has never advocated presumptions of service connection for radiation-related claims. The extent of exposure to ionizing radiation experienced by atomic test participants and Hiroshima/Nagasaki occupation forces has been thoroughly studied, and the results peer reviewed. The military services have documented that individual exposures were, for the most part, so low as to pose little health risk to most former members—as dose-responses are currently understood from decades of observations of exposed populations, primarily the Japanese atomic-bomb survivors. We are aware that these data are not without their critics, but if the doses were significantly higher than reported to VA or the health risks much greater from the reported doses, the effects would be observable when sizable populations of exposed veterans have been studied. Yet, studies such as the 1996 Institute of Medicine's "Mortality of Veteran Participants in the CROSSROADS Nuclear Test," which analyzed causes of death among 40,000 test participants, have not borne this out. The authors of that report determined that exposure to ionizing radiation did not contribute to increased mortality among this sizable study population.

We have concluded that, under the circumstances, blanket presumptions of service connection for cancers suffered by atomic veterans would be vastly over-inclusive, and that the more responsible policy is to afford claimants case-by-case determinations based on the individual merits of their unique cases. If evidence ever comes to light suggesting this approach poses substantial risks of causing injustices to claimants, we would, of course, rethink our position.

S. 1385 is subject to the pay-as-you-go requirement of the Omnibus Budget Reconciliation Act of 1990, and if enacted, it would increase direct spending. VA's preliminary estimate indicates that enactment of S. 1385 would result in a benefits cost of $287 million in fiscal year 1999, and a 5-year total cost, through fiscal year 2003, of $1.7 billion. We estimate further that the enactment of this bill would result in an administrative cost of approximately $6.4 million in fiscal year 1999, and a 5-year total cost of $9 million.

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Mr. Chairman, that concludes VA's testimony.

CHANGES IN EXISTING LAW MADE BY S. 1385 AS REPORTED

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the Committee bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

# TITLE 38, UNITED STATES CODE

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## PART II—GENERAL BENEFITS

### CHAPTER 11—COMPENSATION FOR SERVICE-CONNECTED DISABILITY OR DEATH

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## Subchapter II—Wartime Disability Compensation

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### § 1112. Presumptions relating to certain diseases disabilities

(a) * * *

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(c)(1) * * *

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

(A) * * *

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*(P) Lung cancer.*

*(Q) Ovarian cancer.*

*(R) Tumors of the brain and central nervous system.*

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