## **Executive summary**

The Validation Study report is the third and final volume in the Morbidity of Vietnam Veterans series. The first two volumes of the series sought the self-reported health status of all Vietnam veterans and as well as their partner(s) and children. *Volume 1: Male Vietnam Veterans Survey and Community Comparison Outcomes* (Department of Veteran's Affairs (DVA) 1998a) contains the male veteran outcomes, *while Volume 2: Female Vietnam Veterans Survey and Community Comparison Outcomes* (DVA 1998b) contains the female veteran outcomes. One of the recommendations made in Volume 1 was that some conditions (as noted below) should be subject to validation. This volume provides the results of these validations. Its findings should be considered in conjunction with the findings of the series.

Both Volume 1 (the Morbidity Study) and Volume 3 (the Validation Study) deal exclusively with male Vietnam veterans and their children. The results from the Morbidity Study suggested that a higher prevalence of certain self-reported health conditions exist in Vietnam veterans and their children than the general population.

The Morbidity Study (DVA 1998a:10) recommended that the results obtained for the following conditions in veterans be validated as a matter of urgency:

- all cancers (with the exception of non-melanocytic skin cancers)
- motor neurone disease
- multiple sclerosis.

Recommendations of the Morbidity Study (DVA 1997:11) regarding children of male Vietnam veterans were:

- that the responses which, taken together, indicate an increased level of congenital abnormalities in the veterans' children be validated as a matter of urgency;
- that the responses which, taken together, indicate increased mortality rates in the veterans' children be validated as a matter of urgency; and
- that the responses which indicate increased rates of leukaemia, Wilm's tumour and cancer of the nervous system in the veterans' children be validated as a matter of urgency.

The Validation Study aims to medically confirm selected conditions in Vietnam veterans and their children. The results of this process may then be compared with the Australian community standards used in the Morbidity Study to establish whether there is a higher prevalence of these conditions in Vietnam veterans and their children.

The Australian Institute of Health and Welfare (AIHW) ran the Validation Study under the direction of a Study Advisory Committee that included Ex-Service Organisation representatives.

A total of 6,842 veterans were surveyed about conditions they reported in the Morbidity Study that they, or their children, suffered from. From the initial survey 72% of veterans responded giving permission for the study to validate the conditions they had listed. Based on the responses concerning veterans' children, the health of 3,629 children with selected conditions was investigated. Information was provided by 67% of those children surveyed.

Sources used to validate reported conditions were clinicians, the National Death Index (NDI), National Cancer Statistics Clearing House (NCSCH), Congenital Malformations Register (CMR), DVA database, and documentation provided by the veteran or the veteran's children. Clinicians were requested to provide validation for 1,707 conditions reported by veterans and their children. The response rate from the doctors contacted was 86%. The uses of validation sources are discussed in Chapter 3.

The Validation Study has been able to provide good evidence that indicates a high prevalence of several conditions in veterans and causes of death and conditions in their children. The outcomes of the Validation Study use the community standards derived in the Morbidity Study as a basis. The results obtained depend on the quality of the Morbidity Study estimates.

The results for the veterans are as follows:

- Melanoma of the skin and prostate cancer show significantly higher prevalence in veterans than in the Australian community standard.
- Breast and eye cancer, non-Hodgkin's lymphoma and leukaemia show no significant difference in prevalence between the veterans and the Australian community standard.
- Colorectal cancer, lung cancer, soft tissue sarcoma, and testis cancer show significantly lower prevalence in veterans than the Australian community standard.
- Cancer of the head and neck, other cancers and total cancers do not have a
  corresponding community standard, and one could not be derived in a way that was
  compatible with the prevalence data, so no assessment of their significance can be
  made.
- Motor neurone disease and multiple sclerosis were not addressed in this study. A separate study will be undertaken to validate these conditions.

The results for the veterans' children show:

- Spina bifida maxima and cleft lip/palate show significantly higher prevalence in veterans' children than in the Australian community standard.
- Deaths due to accidents and deaths due to illnesses show significantly higher prevalence in veterans' children than in the Australian community standard.
- Suicides are three times more prevalent in veteran's children than the Australian community standard.
- Wilm's tumour and anencephaly show no significant difference in prevalence between the veterans' children and the Australian community standard.
- Leukaemia, cancer of the nervous system, other cancers, Down syndrome, tracheoeosophageal fistula and absent body parts all show significantly lower prevalence in veterans' children than the Australian community standard.
- Extra body parts does not have a corresponding community standard, nor could one be derived in a way that was compatible with the prevalence data, so no assessment of its significance can be made.

The results from this Validation Study show only a small part of the picture of the health of veterans and their children. The results from this study should be read in conjunction with other studies listed in the references of this document to gain an appreciation of the range of health issues confronting this group of people.

Based on the reliance of the community standards derived in the Morbidity Study, statistical analysis of the Validation Study has prompted the following recommendations. It is recommended that:

- a validation study of motor neurone disease and multiple sclerosis in Vietnam veterans be undertaken as a matter of urgency in order to complete the validation process. This recommendation was made during the life of the Validation Study and is being planned by the AIHW, in conjunction with the Department of Veterans' Affairs, for completion in 2000;
- suicide in veterans' children be further investigated and the result drawn to the attention of the Vietnam Veterans' Counselling Service;
- cancer of the adrenal gland in veterans' children be further investigated and compared to a derived community standard; and
- Morbidity Study and Validation Study data be made accessible under appropriate
  conditions for use in further studies. Provision for this access is important to further
  work in this area. Approval for further work using these data would need to be
  gained from the AIHW Ethics Committee, after liaison with the Commonwealth
  Department of Veterans' Affairs.