

Mortality and deployment in a large cohort of Australian Defence Force personnel

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Three current military and veterans' health studies, focusing on deployments to the Solomon Islands (SI), East Timor (EM) and Bougainville (BV), aim to collect self-report and Defence health data from deployed and non-deployed serving personnel and exposure data relating to each deployment. These three studies will serve to recruit participants to a larger cohort, the Near North Area of Influence (NNAI) cohort of over 40,000, as part of the Deployment Health Surveillance Program (DHSP) in the Centre for Military and Veterans' Health. The NNAI cohort will be involved in retrospective, cross-sectional and longitudinal studies allowing for analysis of the effects of deployment on health status of military personnel and veterans. The large cohort has been formed using data from the relevant nominal rolls for deployed personnel and frequency-matching on the basis of age, service and gender to non-deployed personnel. Data collection has begun for the Solomon Islands project and will be completed for EM and BV studies in 2007 and 2008. An important part of these health studies is the availability of mortality and cause of death data for the entire NNAI cohort from the National Death Index from the Australian Institute of Health and Welfare. We compare death rates in the NNAI cohort with death rates in the general population. We discuss mortality findings in the context of the "healthy soldier effect", a special case of the healthy worker effect in studies of military personnel. We describe patterns of mortality in the NNAI cohort according to each of the specific deployments, the general nature of each deployment, and the number and combinations of deployments versus no deployment.

Key Words

health surveillance, military, veterans, cohort, mortality