

## **American Public Health Association**

## **Agent Orange**

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It is estimated that between 1961 and 1971, approximately 77 million litres of herbicides, including 49.3 million litres of Agent Orange containing more than 360 kg of dioxin-contaminated defoliants, were sprayed multiple times over 5.5 million acres in South Vietnam.<sup>[1]</sup>

Research studies show elevated 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) from dioxin in the Vietnamese people, in sediment, in soil, in wildlife, and in food in some areas of South Vietnam only, thus showing Agent Orange contamination. [2,3]

Dioxins are known to be risk factors for cancer, immune deficiency, reproductive and developmental disorders, and central nervous system and peripheral nervous system effects. [4-6]

Studies conducted by the international scientific community have shown the association between exposure to the herbicides and health outcomes, including cancer, reproductive illnesses, immune deficiency, endocrine deficiencies, nervous system damage, and other ill effects and possible developmental disabilities and emotional problems in children.<sup>[5–7]</sup>

Those negatively affected may include children born to parents who were sprayed directly.<sup>[5]</sup>

Current conditions recognized by the US Veterans Administration as service connected to Agent Orange exposure include the following: soft tissue sarcoma, chloracne, Hodgkins Disease, multiple myeloma, non-Hodgkin's lymphoma, acute and subacute peripheral neuropathy, porphyria cutanea tarda, prostate cancer, respiratory cancers, chronic lymphocytic leukemia, diabetes (type 2), and spina bifida in the children of veterans.<sup>[7,8]</sup>

In 2005, the US Government Accounting Office published a study involving the payout to 160,000 veterans with the 4 most common illnesses of approximately \$1.52 billion in disability payments and \$56 million for medical costs per year. [9]

It has been estimated that at least 2.1 million, but perhaps as many as 4.8 million, people were present during the Agent Orange spraying and many more were exposed through contact with the environment and food that was contaminated. [4,6,10]

Residues from herbicides that were transported, loaded, and stored at or near US Air Force bases in Vietnam and the spraying of Agent Orange by helicopters, backpacks, and Naval spraying in other locations have led to the contamination of the environment and food in the surrounding areas, resulting in exposure to herbicides by civilians that continues today. [2,4,5]

In spite of scientific studies that correlate the incidence of illness with Agent Orange, the involved chemical companies continue to maintain that there is no scientific proof that the Agent Orange causes disease

Recognizing that since the passage in 1991 of APHA Policy Statement 91-24 titled "Continuing Consequences of the Vietnam War," progress has been made in significant areas such as ending the trade embargo of Vietnam and developing legislation to address some of the psychological and physical

health effects of war on American veterans of the Vietnam War and their families, outstanding issues still remain to be addressed.

## Therefore, APHA—

- 1. Recommends that President Bush direct the Secretary of Veterans Affairs to continue to address the enduring psychological and physical health effects of Agent Orange and dioxin on US veterans of the Vietnam War and their families.
- 2. Recommends federal support for research and active involvement of schools of public health, medicine, and dentistry for the study of the health consequences of the Vietnam War on all participants affected by Agent Orange and dioxin.
- 3. Recommends that the US government and involved chemical companies provide resources for services for the disabled in areas where dioxin victims are concentrated; provide medical services and nursing services for those harmed by Agent Orange; develop community support organizations, including health care and educational and chronic care services and medical equipment to care for American and Vietnamese people harmed; including additional services as they are identified.
- 4. Recommends continuing collegial exchange between US organizations, agencies, and organizations in both the public and private sector and their counterparts in Vietnam to improve the health of the Vietnamese people and the US Vietnam veterans and their families.
- 5. Recommends that the US government and the involved chemical companies be responsible to remediate or attempt to clean up those areas in Vietnam that still contain high levels of dioxin.

## References

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