

The Devastation of Agent Orange:

Vietnamese Victims of the War's Enduring Legacy

In certain pockets of Vietnam, many children are born without eyes or with deformations so rare that it is difficult to fathom its cause. Most of these children are condemned to live as pariahs. They are the hapless third generation of victims suffering from a military operation that went awry and the invisible yet potent residue left in its wake. The culprit? Agent Orange. Agent Orange is an herbicide developed for military use during the Vietnam War. Operation Ranch Hand (originally coined Operation Hades, but subsequently changed due to the sinister reference to the god of Hell) was a US military operation that was to defoliate large areas of South Vietnam in order to deny their enemies cover.

The herbicide is a 50-50 mix of 2,4-D (2,4-dichlorophenoxyacetic acid) and 2,4,5-T (2,4,5-trichlorophenoxyacetic acid) which creates a by-product, TCDD, or dioxin, a class I human carcinogen, according to the US Environmental Protection Agency. It is the most toxic chemical known to humankind, causing a myriad of diseases (to see a list of diseases that are currently recognised as related to herbicide exposure go to

http://www.hatfieldgroup.com/files/Diseases_Related_to_Herbicide_Exposure.pdf).

Furthermore, it is difficult to remove from the environment and almost completely insoluble in water, but soluble in oils. It therefore concentrates in the fatty tissue of animals or people who ingest it. Men have no way to get rid of dioxin other than to let it break down in their bodies according to its chemical half-lives. For women, on the other hand, there are two ways in which dioxin can exit their bodies: by crossing the placenta into a growing infant in the womb, contaminating the unborn child, or through the fatty breast milk, contaminating the born child.

It has been estimated that over 80 million litres of herbicide were released in the environment of South Vietnam during the war, 60% of it Agent Orange. This 60% has translated into 2.1 to 4.8 million Vietnamese being directly exposed to Agent Orange between 1961 and 1971. To put the deadly nature of this quantity into perspective, it has been said that one person should not be exposed to more than 1 picogram of dioxin per day, that is a millionth of a millionth of a gram. Normally, herbicides for domestic use are highly diluted with water and oil and measured in parts per trillion. In Vietnam the herbicides contained up to 50 times the concentration suggested by manufacturers. The alleged amount of dioxin sprayed varies according to the source, however, in a recent study by American scientists,ⁱ it has been proven that use of Agent Orange in Vietnam was substantially underestimated and, furthermore, the concentration of dioxin in Agent Orange is significantly higher than originally thought. In historical terms, as proclaimed at a 2002 conference in Yale University, it was the “largest chemical warfare campaign in history”ⁱⁱ.

The human face of this tragedy can be seen throughout Vietnam, and it is a face that is often all too discernable. A face with black, scaly patches, or without retinas or lenses, or simply empty eye sockets; a body with 2 elbows on each arm, or without arms at all. This is because dioxin not only causes cancer and brain damage, but also deformities. In an international conference on dioxin held in Ho Chi Minh City in 1983, it was found that in the south, there is a higher frequency of five congenital malformations rare in other countries, as well as nervous system malformations, deformed limbs, deformed eyes, ears, noses, cleft lips, cleft palates, and conjoined twins. According to Dr. Nguyen Viet Nhan, who studies child health in areas sprayed with Agent Orange, children in sprayed areas are three times as likely

to have extra fingers and toes, have cleft palates, or be mentally retarded and eight times as likely to suffer hernias. In Quang Tri province, in cases where a child's parents lived in areas heavily sprayed with Agent Orange, there is a 2.4% rate of birth defects, where the national average stands at 0.6%. Here, local officials still warn inhabitants against eating fish oils and fat. There are so many third generation Vietnam War victims that a network of special schools, "peace villages", has been created to look after surviving child victims of Agent Orange.

Faced with this calamitous human suffering, US reaction has been one of apathy and, when the time calls, denial. At the time of the spraying, the US military command in Vietnam insisted that the defoliation programme was successful and had few adverse effects on the economy or health of the people in Vietnam. When rumours and reports began to emerge of chemical warfare and Agent Orange in Vietnam, the presidential advisor, William Bundy claimed that the herbicide was a not chemical weapon and all accusations to the contrary were simply the work of communist propagandists. However, according to scientists involved in Operation Ranch Hand and documents uncovered in the US National Archives, it appears this counter-accusation was not merely a fabrication borne of ignorance, but a suppression of what they already knew to be true. These documents show that military officials were aware as early as 1967 of the long-term health risks of the frequent spraying and subsequently sought to censor relevant news reports. And in 1988, a military scientist, Dr. James Clary, admitted that military scientists knew that Agent Orange was contaminated with dioxin and that it was harmful but "because the material was to be used on the enemy, none of us were overly concerned."ⁱⁱⁱ The herbicide manufacturers were also aware of, and conducting studies on, the toxic effects of Agent Orange. They chose to suppress the information, fearing the public reaction

amidst an atmosphere of discontent over the increasingly unpopular war. Moreover, military records show that, although the chemical toxin was successful in stripping forest cover and ravaging crops, defoliation was ineffectual as a military strategy. Despite knowledge of its lethality and futility, the spraying continued.

Today, the US reaction remains much the same. Despite evidence of negative health effects of Agent Orange by the victims in Vietnam, the US has reverted to Cold War rhetoric, relegating these claims to mere propaganda, and has continued to maintain the position that there is no unequivocal proof that Agent Orange is the cause of health problems in Vietnam. This is despite the study carried out by Hatfield Consultants, an independent team of Canadian environmental consultants, which concluded that, even today, dioxin remains at high concentrations in soils, foods, human blood, and human breast milk in adults and children who live in areas close to former US military installations. The study was carried out in the Aluoi valley of central Vietnam, in A So village, situated in a former military base and where Agent Orange was frequently sprayed. They found very high levels of TCDD in soil, fish fat, duck fat, pooled human blood, and breast milk samples from A So village. Instead of naturally dispersing, the dioxin has remained in the ground in concentrations 100 times above the safety levels in Canada and has passed through ponds, rivers, irrigation supplies and been introduced into the human food chain through fish that store TCDD in their fatty tissue. Samples of human blood and breast milk show that people have ingested the toxin and pregnant women have passed it through the placenta to the foetus and then through their breast milk.

Another tragic display of the dispensability of human life in Vietnam for the US authorities occurred more recently when, in light of the immeasurable suffering of millions of Vietnamese victims, three Vietnamese plaintiffs took legal action and

sought compensation from the chemical companies that manufactured the herbicide during the war, among them Monsanto and Dow Chemical. But in the end, the chemical companies were exonerated when Judge Jack Weinstein, urged by the US justice department, dismissed the case, claiming that “there is no basis for any of the claims of plaintiffs under the domestic law of any nation or state or under any form of international law.” A brief filed this January also stated that handling cases brought by former enemies would be a “dangerous threat to presidential powers to wage war.”

Yet, when US veterans from the Vietnam war who claimed to suffer from exposure to Agent Orange sued the US companies that manufactured herbicides, they won an out of court settlement of some US\$180 million, while the US government provided compensation to 1800 veterans harmed by Agent Orange. Yet, the same health conditions experienced by the Vietnamese, who continue to live in areas of high dioxin contamination, are still not recognised.

Meanwhile, any US government money in Vietnam has not been for the Vietnamese, nor even for the living. In 1992, when the US launched Joint Task Force-Full Accounting, an operation to locate 2 267 servicemen thought to be missing in action in Vietnam, Cambodia, and Laos, the US spent 10 years and US\$350 million to chase the apparitions of dead American MIA’s, making a travesty of the seemingly endless afflictions suffered of millions of Vietnamese victims.

In contrast to the indifference of the US government, many individuals and groups throughout the world, such as the Franco-Vietnamese Friendship Association, have mobilised around the issue in solidarity with the victims. Actions range from signing on-line petitions (<http://www.petitiononline.com/AOVN/>) to creating villages to foster greater understanding and cooperation. The Vietnamese Red Cross has also set up a fund to help hundreds of thousands of Agent Orange victims. (To see way in which you can contribute to the alleviation of the suffering of the victims of Agent Orange, please visit the websites below.)

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Useful Websites

Collectif Vietnam-Dioxine: www.vietnam-dioxine.org

Agent Orange website: <http://www.lewispublishing.com/orange.htm>

On-line petition: <http://www.petitiononline.com/AOVN/>

Vietnam Association for Victims of Agent Orange/Dioxin:
<http://vava.portal.vinacomm.com.vn/>

Agent Orange/Dioxin Committee: <http://vva.org/agentorange/index.htm>

Association d'Amities Franco Vietnamienne: www.aafv.org

Hatfield Group: www.hatfieldgroup.com

Vietnam Friendship Village Project: <http://www.vietnamfriendship.org/>

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ⁱStellman, Jeanne Mager, Steven D. Stellman, Richard Christlan, Tracy Weber, Carrie Tomasallo. "The extent and patterns of usage of Agent Orange and other herbicides in Vietnam". *Nature*, 422 (2003): 681-687.

ⁱⁱ Dauenhauer, Katrin. "A little bit of help, for some". *Asia Times*. 11 July, 2003

ⁱⁱⁱ Sutton, Paul L. "The History of Agent Orange Use in Vietnam: An Historical Overview from the Veteran's Perspective". Presented at the United States – Vietnam scientific conference on Human Health and Environmental Effects of Agent Orange/Dioxins. March 2002.