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AGENT ORANGE REPORT XXIX

1. "Elevated Body Burdens of 2,3,7,8-Tetrachlorodibenzodioxin in Adipose Tissue of United States Vietnam Veterans"

Arnold Schecter; Joseph Bangert et al., To be published in "Chemosphere", 1988

"This paper reports that elevated 2,3,7,8-tetrachlorodibenzodioxin (TCDD) adipose tissue levels in a subset of U.S. Vietnam veterans were found. The research is part of a Commonwealth of Massachusetts pilot study to determine if some Vietnam veterans still have elevated 2,3,7,8-TCDD tissue levels as a result of Agent Orange exposure. This pilot study reports that such veterans can be identified."

This is to be published in the journal "Chemosphere". The abstract speaks for itself. Clearly, some Agent Orange exposure can still be identified.

2. "Polychlorinated Dibenzo-p-Dioxin and Polychlorinated Dibenzofuran Levels in Human Breast Milk From Vietnam Compared With Cow's Milk and Human Breast Milk From the North American Continent"

Arnold Schecter et al., Chemosphere, vol. 16, Nos. 8/9, page 2003-2016, 1987

"PCDD's and PCDF's were determined in samples of human ^{Milk} collected in 1973 and 1985 in the south of Vietnam and the levels compared to samples taken in 1970 and present day North American samples. In the Vietnam samples from the three time periods between one-half and two-thirds were positive for 2,3,7,8-TCDD. Average levels of the positives on a lipid basis, declined from about 484 ppt in 1970, to 121 ppt in 1973 and then to 12 ppt in 1985. The latter value is higher but similar to the value of about 5 ppt presently found in North American human milk and much higher than that found in samples from the north of Vietnam where Agent Orange was not used. The average body burden of 2,3,7,8-TCDD in the nursing mothers from 1970 and 1973 has been estimated to be 3.6 and 0.98 micrograms, respectively. Such an accumulation is near the value calculated by us to produce chloracne and other symptoms in some industrial workers."

"The elevated level of 2,3,7,8-TCDD in human breast milk from samples from the south of Vietnam collected in 1970 and 1973, first reported by Baughman in the 1970's, has been confirmed and extended by us by analysis of archival specimens."

"The elevated levels of 2,3,7,8-TCDD found in human breast milk in Vietnam seem to us most likely to be due primarily to the use of Agent Orange containing 2,4,5-T contaminated with 2,3,7,8-TCDD. This is the only known source of this contaminant. Elevations of 2,3,7,8-TCDD have previously been reported in human tissues by us and others after exposure to this compound in the environment, as after industrial accidents. The persistence of this dioxin in humans is striking in that it is found in elevated levels in breast milk in some women in the south of Vietnam 10-15 years after cessation of this dioxin contamination instance."