

**Propublica article “Eight Times Agent Orange’s Biggest Defender Has Been Wrong or Misleading”, October 26, 2016**

**Mr. Ornsteing, Wei, and Hixenbaugh, the correct title should be “Eight times, Propublica got it wrong!” The headings should be what was the incomplete or misleading comments by Propublic vs What Young really said.**

**COMMENTS ON EGLIN AFB, FLORIDA**

The Eglin AFB study is considered as the “classical study” of the impact of massive quantities of phenoxy herbicides and associated TCDD on an ecosystem. When we begin the field research in 1968, only laboratory studies were available on TCDD. Our initial bioassay studies of hundreds of soil cores taken from Test Area C-52A indicated the rapid movement and disappearance of 2,4-D and 2,4,5-T, but we had no analytical method to determine if TCDD was present. Working with USDA at Beltsville, we determine that at 1 ppm, there was no TCDD, but by 1974, working with our USAF laboratory at Wright-Patterson AFB, Ohio, and under contract with Dow Chemical Company’s Interpretive Analytical Services we detected the TCDD at levels of 10 ppt concentrations. These were the first soil analytical data ever published on TCDD. Later the methods were refined to detect TCDD at 1 ppt. Thus, we now had a way to see if animals and plants were contaminated with TCDD. We never concluded that dioxin dissolved quickly, those are your words! I have attached a publication on the early years of our 15-year, \$10m ecological study at Eglin. I was the principal investigator.

## COMMENTS ON MRS. CLEARY

I have the original letter and response to Mrs. Cleary, a resident of Fort Walton, Florida Community. I answered her letter in June 1969; that is 47 years ago, likely before you were born. At that time, almost nothing was known about TCDD. Thus, the letter addressed the use of 2,4-D and 2,4,5-T. The Midwest Research Report was released two year earlier (December 1967) arriving at the same conclusions about 2,4-D and 2,4,5-T as in my letter.

What is your point in listing this as one of eight? Instead of citing CDC, you should have cited the Midwest Research Institute Report.

Please give me credit for having all my correspondence, memoranda research reports, etc. (~6,000 documents) before 1986 copied, prepared digitally, and placed in the National Agricultural Library at Beltsville. They are open to critics and supporters to cite; I ask only that you be honest.

## COMMENTS ON CACODYLIC ACID

### IOM Report, Veterans and Agent Orange, Update 2008

Arsenic exists in both inorganic and organic (methylated) forms, and is readily metabolized in human and other species. Inorganic arsenic can be converted to organic forms, but organic forms cannot be converted into inorganic forms in humans and other species. Cacodylic acid has a valence of +5 and is commonly referred to as dimethylarsenic acid (DMA<sup>V</sup>). Although there have been many toxicological studies with arsenic and with cacodylic acid, the scientific consensus is that it is the trimethylated (Arsenic<sup>III</sup>) forms of arsenic that may be responsible for the cancers observed rather than DMA<sup>V</sup>. *“In light of the significant differences in metabolism of arsenic by different species and the lack*

*of supportive data in humans, it cannot be concluded that cacodylic acid leads to an increase in cancer risks in humans.”*

## **COMMENTS ON 2,4-D AND 2,4,5-T**

### **IOM Report, Veterans and Agent Orange, Update 2010**

Numerous studies have examined the absorption, distribution, metabolism, and excretion of 2,4-D and 2,4,5-T of 2,4-D and 2,4,5-T in animals and humans. Data are consistent and support the conclusion that absorption and of oral or inhaled doses is rapid and complete. Both 2,4-D and 2,4,5-T are eliminated quickly, predominantly in unmetabolized form in urine (half-life estimated to be about 18-23 hours). *The toxicity profile for both 2,4-D and 2,4,5-T provides “evidence that supports the conclusion that neither 2,4-D nor 2,4,5-T are carcinogens.”*

## **COMMENTS ON C-123 RESERVISTS AND IOM REPORT**

Why do I considered Mr. Carter’s concerns and the IOM Report conclusions not valid? EPA Analytical Method 8290 stresses that *“all soil samples collected for dioxin and furan analysis must be placed in glass jars, wrapped in tape to prevent exposure to sunlight, and placed in a cooler for transport.”* Why not use metal containers? BECAUSE TCDD adheres to metal surfaces (EPA conclusions)! IOM Committee ignored EPA and my comments on this issue. Secondly, IOM concluded that TCDD was volatile in the aircraft; however, if they had used EPA’s data on TCDD volatility, they would have concluded that the Reservist were never exposed. My comments to IOM were ignored because after my presentation and during the break, Dr. Stellman went up to the Committee members and told them that “Dr. Young was a liar.” Contact IOM for the tapes of the meeting.

Sadly, your assessment of Mr. Carter as the hero of your earlier report on Dr. Orange is a distortion on the truth. Mr. Carter for almost four years harassed the VA, USAF, Congress, the IOM and me in more than 700 blog articles about his view on Reservist exposures and all evils of government against veterans. He wrote numerous times to the VA's General Counsel, Secretary, and Mr. Murphy, head of Compensation Service demanding (not requesting) an evaluation of his charges. He was relentless in circulating articles to more than 20 newspapers, organizing veteran groups to write to members of Congress and VA. Fifty-seven times he "dammed" me on his blog. When the VA finally could not stand the pressure from Congress and Veteran Groups, Reporters, and such individuals as Linda Birnbaum (NIEHS), and Dr. Arnold Schecter, the Secretary sent the issue to the Institute of Medicine. During the months of planning and deliberation by IOM, Mr. Carter continued a harassment campaign against IOM, including the use of Dr. Stellman. On numerous occasions the Study Director at IOM commented to me about the political and veteran pressure exerted by Carter. He was a master at misinformation and the manipulation of the press and the Staff of Senator Burr. And Propublica considered Mr. Carter a "HERO". *The coup de grace was your note "Carter heard the words 'could have been exposed' and he knew he'd won... Carter and his wife squeezed hands, then hugged with happiness and relief..."* Congratulations, Mr. Carter manipulated you as he has with so many other reporters.

## **COMMENTS ON SOIL UPTAKE VIA THE SKIN**

My own experience of handling, without gloves, hundreds of soil samples from Eglin contaminated with TCDD potentially resulted in my serum level was 5 ppt. I shared this with pictures with the IOM Committee. I then presented the report by Kimbrough et al (attached). This report was NOT sponsored by Dow Chemical Company. Their conclusion: "In humans, handling contaminated soil resulted in

negligible contamination since the skin acted as an effective barrier to the uptake of the TCDD.” In the “cleaned” C-123s flown by reservists, the only positive samples were under the floor board or in crevices and in those locations where the matrix was a soil-oil mixture. The comments by Birnbaum “put their hands in their mouth,” did not apply.

Prior to the IOM Review, Birnbaum met with Allison Hickey, DVA Under Secretary for Benefits, and made the pitch that Reservists were heavily exposed because they sat on the same seats as pilots and co-pilots in RANCH HAND, and in the contaminated cockpits. Under Secretary Hickey pointed out that those were new seats installed after the aircraft were cleaned, as well as new instrumentation panels. Birnbaum knew little about the C-123s, only influenced by misinformation from Carter. How do I know this? I brief Hickey’s staff before and after the Birnbaum visit.

### **COMMENTS ON BLUE WATER NAVY REPORT**

With regards to my comments on Blue Water Navy, I was addressing the unscientific argument that the distilling units on ships at sea may have resulted in concentrating the TCDD in potable water.

A report by Battelle presented in 2008 at DIOXIN 2008 by Durell et al.

“A recent re-analysis of the HERBs Tape indicated that about 340,00 drums of tactical herbicides were sprayed, compared with about 356,000 deployed in Vietnam (roughly 96%). Thus, about 4% of the 130 kilograms of 2,3,7,8-TCDD from herbicides would have remained in hot spots, which is estimated at about 5 kilograms...dioxin aerially applied with Herbicide Orange would have photodegraded, but once the TCDD moved with the herbicide beneath the soil surface, as in case of spills, the TCDD would persist for decades.”

Piazza et al [Marine Pollution Bulletin, 2010] of the analyses of sediments collected from nine Central Vietnam coastal lagoons concluded: “Total concentrations of polychlorinated dibenzo-p-dioxins

and dibenzofurans are low (parts per trillion), and depth profiles show only minor changes over time in both input and composition. OCDD (not found in Agent Orange) is the prevailing congener (approximately 90%), indicating combustion as the main PCDD/F sources to these coastal systems. TCDD largely sprayed together with Agent Orange over the study area during the war (1961-1971), is absent or very low. This supports the hypothesis of strong degradation soon after spraying.”

***THUS, there is no supporting evidence that TCDD moved into the open sea, where Blue Water Navy Ships were stationed or patrolling along the coastlines of Vietnam. Common sense should tell you that there is no historical or scientific evidence to conclude that Blue Water Navy Veterans were exposed to Agent Orange-TCDD.***

As to the comments of Michalek “*The uninformed reader may wrongly interpret this unit conversion as evidence that TCDD is safe. In fact, no data is offered to indicate that TCDD is safe in any of these reports...parts per trillion concentrations...associated with adverse health in ...people.*”

Both Drs. Michalek and Birnbaum contend that 1 ppt TCDD is harmful to humans, especially to our immune system. I suggest to you that you need to be careful in accepting this hypothesis. Why? My blood concentration was 5 ppt. The average American current concentrations are between 1 and 3 ppt. If TCDD is so toxic in humans, poor us! What a wonderful justification for universal health care in the United States, not just universal health for all Vietnam veterans. RANCH HANDers had concentrations from 0.4 to 618, ppt, yet their 20-year \$120m health (AFHS) study concluded: “**The results of the Air Force Health Study did not provide evidence of disease in RANCH HAND veteran caused by their elevated levels (of TCDD) of exposure to Agent Orange.**”

I have attached for your reading the latest issue of PRIORITIES, July 2016 and the article “***Still in Good Health, 44 Years After Bathing in***

*Agent Orange*”, by Professor, Doctor, Michael Newton, Oregon State University. You should also read the comments by Hank Campbell, page 2, especially his statement: “*As a former Army Officer, I do not begrudge any soldier any benefit, but when the government begins making decisions based on the popularity of topics rather than the evidence, that is going to lead to terrible decisions.*”