



Agent Orange Residue on Airplanes Used in the Vietnam War

Some Veterans who were crew members on C-123 Provider aircraft, formerly used to spray Agent Orange during the Vietnam War, have raised health concerns about exposure to residual amounts of herbicides on the plane surfaces.

After reviewing available scientific reports, VA has concluded the potential for long-term adverse health effects from Agent Orange residue in these planes was minimal. Even if crew exposure did occur, it is unlikely that sufficient amounts of dried Agent Orange residue could have entered the body to have caused harm.

How Veterans May Have Been Exposed



Fairchild C-123K Provider - U.S. Air Force

During the Vietnam War, C-123 aircraft were used by the U.S. Air Force to spray Agent Orange to clear jungles that provided enemy cover in Vietnam. At the end of the spraying campaign in 1971, the remaining C-123 planes were reassigned to reserve units for routine cargo and medical evacuation missions spanning the next 10 years.

Crew members had reported smelling strong odors but these odors may be attributed to various chemicals associated with aircraft. TCDD, the contaminant in Agent Orange, is odorless.

Testing for Agent Orange Residue on Planes used in Vietnam

The U.S. Air Force collected numerous samples from C-123 aircraft to test for the dioxin TCDD. Because TCDD adheres to surfaces and does not dissolve in water, a solvent (hexane) was used to dislodge any remaining residue.

Based on thorough analysis of samples taken from the planes, VA determined that it is unlikely that residual Agent Orange in the planes caused long-term adverse health effects for crew who flew or maintained these planes after the Vietnam War.

Health Effects of Agent Orange Residue

The health effects of exposure to Agent Orange and Agent Orange residue on airplanes differ from exposure by direct contact with liquid Agent Orange. In liquid or spray form, Agent Orange can enter the body by inhalation or ingestion (such as hand to mouth contact or getting into food). But in the dry form – for example, adhered to a surface – Agent Orange residue cannot be inhaled or absorbed through the skin, and would be difficult to ingest.

Harmful exposure depends on the amount and concentration of contaminated material present, as well as its ability to enter the body. After reviewing available scientific reports, VA has concluded the potential for long-term adverse health effects from Agent Orange residue in these planes was minimal. Even if crew exposure did occur, it is unlikely that sufficient amounts of dried Agent Orange residue could have entered the body to have caused harm.

Research Studies on Agent Orange

Research on the health effects of Agent Orange and TCDD continues. Many diverse populations have been studied, including herbicide sprayers and manufacturers, other Vietnam-era Veterans, and those exposed during industrial accidents.

VA Benefits

Veterans who believe they were exposed to Agent Orange or other tactical herbicide residue on C-123 aircraft must show on a factual basis that they were exposed in order to receive disability compensation for diseases associated with Agent Orange exposure.

VA does not presume by regulation that these Veterans were exposed to Agent Orange.

<http://www.publichealth.va.gov/exposures/agentorange/residue-c123-aircraft.asp>