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Mailman School's Dr. Jeanne Stellman Participates in
Agent Orange Policy Briefing July 8

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STUDY BY MAILMAN SCHOOL RESEARCHERS INDICATES HERBICIDE SPRAYING IN VIETNAM WAS UNDERESTIMATED

NEW YORK, April 16, 2003 -- The amounts of dioxin-containing herbicide sprays, used during the Vietnam War may have been greatly underestimated, according to the latest research by Columbia University's Mailman School of Public Health. In this week's *Nature* Magazine, Jeanne Mager Stellman, professor of clinical health policy and management, and Steven D. Stellman, professor of clinical epidemiology, co-lead investigators at the Mailman School, and their colleagues confirm that continuing research shows previous approximations underestimated the quantity sprayed by 7 million liters, much of which was heavily dioxin-contaminated. The total amount of dioxin, a known carcinogen contained in some of the herbicides, is at least double prior estimates. Exposures to herbicide sprays such as Agent Orange have been associated with health problems in Vietnam veterans and their children.

"In addition, records show millions of Vietnamese and large numbers of veterans were likely to have been sprayed upon directly," says Dr. Jeanne Stellman.

The *Nature* article follows a report last month by the Mailman School investigators that they had developed a geographic information system (GIS) under a contract with the National Academy of Sciences to estimate exposures to herbicide sprays by analyzing the relationships between herbicide spraying, geography, population, and troop location. According to Dr. Jeanne Stellman, "Up to now, the lack of such a measure was a major impediment to identifying the consequences of spraying and hampered researchers' ability to identify health risks that veterans may face." With their new methodology, ecological and epidemiological studies of the herbicide spraying can now be undertaken. Says Dr. Steven Stellman, "Our research pinpoints areas likely to be hotspots, so that now additional studies on the health effects of these

exposures, which are very much needed, can be done."

Herbicides like Agent Orange were used by United States and Republic of Vietnam forces to defoliate forests and mangroves, to clear the perimeters of military installations and to destroy 'unfriendly' crops - a tactic for decreasing enemy food supplies. Spray missions were directed over carefully defined targets, many of which were sprayed repeatedly.

According to Dr. Jeanne Stellman, "In the case of exposure to herbicides in Vietnam – which began 40 years ago and ended 30 years ago – no other reliable measure is available for large scale studies. The people in Vietnam and Vietnam veterans have waited too long for scientific studies to be undertaken. We hope that our user-friendly software will help to spur additional research."

The complete findings of the study are reported in the April 17 *Nature* Magazine article, "The Extent and Patterns of Usage of Agent Orange and Other Herbicides in Vietnam." The GIS software is described in the March issue of *Environmental Health Perspectives*.

The Mailman School research in *Nature* Magazine is also the subject of an exhibit at the London Museum of Science which will run for approximately two months beginning April 17.

ABOUT THE MAILMAN SCHOOL OF PUBLIC HEALTH
The only accredited school of public health in New York City, and among the first in the nation, Columbia University's Mailman School of Public Health provides instruction and research opportunities to more than 800 graduate students in pursuit of masters and doctoral degrees. Its students and over 200 multi-disciplinary faculty engage in research and service in the city, nation, and around the world, concentrating on biostatistics, environmental health sciences, epidemiology, health policy and management, population and family health, and sociomedical sciences.

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