



USDA-DOD Research Initiative to Protect U.S. Military

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WASHINGTON, April 23, 2004-
-The U.S. Department of
Agriculture ([USDA](#)) and the U.S.
Department of Defense ([DOD](#))
today announced a \$15-million, 5-

year research program designed to develop new technologies to protect U.S. soldiers.

The initiative, the Deployed War Fighter Protection Research Program, will fund research programs at the Agricultural Research Service, USDA's chief in-house scientific research agency, to develop novel methods to protect U.S. armed forces from insects that spread dangerous diseases. Historically, more troops sent into battle are taken out of action by insect-borne diseases than are injured in combat, according to DOD.

The ARS [National Program for Veterinary, Medical and Urban Entomology](#) guides the agency's research on the prevention of human and animal diseases carried by arthropods, such as insects and ticks. Arthropod-borne diseases, which include malaria, dengue and West Nile fever, are among the most deadly in the world and are especially difficult to control during military operations.

"This program represents the largest monetary commitment provided by DOD to ARS in the past 50 years," said ARS Acting Administrator Edward B. Knipling. "The program is designed to encourage the rapid development of products that control vector-borne diseases, and for USDA to continue using its expertise to support military preventive medicine."

DOD's Armed Forces Pest Management Board ([AFPMB](#)), located in Silver Spring, Md., will oversee the research program. An internal steering committee of ARS national program leaders will allocate the funds among several specialized laboratories within the agency, where ARS scientists work to develop innovative pest-control methods.

DOD is providing funds to ARS to further the relationship between the two departments, according to Navy Captain Gary Breeden, executive director of the AFPMB. "Since the 1940s, ARS scientists working with the U.S. military have made some of the world's most important advances," he said. "Every breakthrough product in use today that was created to control disease-carrying insects was developed as a result of the relationship between USDA and the AFPMB. These products protect the military and save millions of lives every year around the world."

ARS scientists pioneered the method of treating military uniforms and bed nets with insecticides that repel and kill disease-carrying mosquitoes. Such commercially available mosquito nets have become the most common and effective malaria-preventive method used in the world today.

ARS scientists supported by DOD recently patented a compound that is now being tested as the key ingredient in a new generation of safe insect repellents. Named SS220, it could surpass DEET, a commonly used repellent developed by ARS for the military 50 years ago. Today, DEET continues to be the most widely used insect repellent in the world, available in a number of consumer products that come in varying concentrations and forms, including gels, aerosol and pump sprays, sticks and lotions.

"The goal of both departments is to enable ARS to continue its research to control vector-borne diseases that pose a risk to U.S. military troops in the field," said Knipling.