

**USAMMDA INFORMATION PAPER****PRODUCT: HUMAN IMMUNODEFICIENCY VIRUS (HIV) VACCINE**

**DESCRIPTION:** The HIV vaccine is designed to provide protection against infection with the HIV virus. The prime-boost vaccine approach is being used to induce both cellular and humoral immunity to the HIV virus. The vaccine consists of a prime with a recombinant canarypox virus expressing the products of three HIV-1 genes to induce a cellular immune response and a boost component containing a mixture of two recombinant HIV-1 glycoproteins to induce a humoral immune response. HIV poses a significant threat to U.S. military Forces and is a national and global security issue. Approximately 250 new cases of HIV occur annually among U.S. military personnel with potentially 30 percent of these acquired during overseas deployments. At the end of 2002, the Joint United Nations Program on HIV/AIDS (UNAIDS) estimated that HIV-1 infects 42 million people worldwide. There were an estimated 5 million people newly infected with HIV in 2002, predominantly in the less developed countries of sub-Saharan Africa, Asia and South America. According to the Central Intelligence Agency, HIV/AIDS will probably cause more deaths than any other single infectious disease worldwide by 2020 and may account for up to one-half or more of infectious disease deaths in the developing world alone. The magnitude of the spread of this disease is so great that it could destabilize foreign governments and slow economic growth worldwide.

**PROGRAM RELEVANCE to the ARMY:** This product supports both the core mission of the Army and the Army Transformation. Of the Army's core competencies, this product supports: "Shape the Security Environment," "Mobilize the Army," "Forcible Entry Operations," "Sustained Land Dominance" and "Support Civil Authorities" by protecting U.S. Forces against infection with the HIV virus. The HIV vaccine will enhance the survivability and sustainability of U.S. Forces in all regions of the world. Furthermore, in regions of the world where HIV has caused significant morbidity and mortality in the local population, the HIV vaccine will promote political, social and economic stability, thereby deterring conflict and the need for U.S. intervention. In addition, this product supports Future Operational Capability MD 97-007 (Preventive Medicine).

**ISSUES/ ACTIONS:**

- The Military HIV research and advanced development programs for FY03 were transferred to the National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health (NIH) on 1 October 2002. In FY04, Department of Defense (DoD) funding of the HIV vaccine program will be reinstated. Funding levels in FY04 and beyond are approximately \$14-15M/year less than required to conduct the phase 3 HIV vaccine trial in Thailand; NIAID will make up the shortfall.
- The Operational Requirements Document (ORD) for HIV vaccines has not yet been approved. This issue is currently under discussion at HQDA and Training and Doctrine Command (TRADOC).

**BPL #:** 389**DA PROJECT/TASK:** 643807.811HD**MAMP RANK:** Not ranked**ARMY ORD:** Pending approval**SCHEDULE:**

MS I 4QFY00

MS B TBD

MS C TBD

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