



**PERU**

**DHAPP**

DEPARTMENT OF DEFENSE HIV/AIDS  
PREVENTION PROGRAM

REDUCING THE INCIDENCE OF HIV/AIDS  
AMONG UNIFORMED PERSONNEL IN  
SELECTED AFRICAN NATIONS AND BEYOND

## **WINNING BATTLES IN THE WAR AGAINST HIV/AIDS**

### **BACKGROUND**

#### **Country Statistics**

The population of Peru is estimated to be 28.3 million people, with an average life expectancy of 69.8 years. Spanish is the official language of the Peru, which has an estimated literacy rate of 87.7%, unevenly distributed between men and women. Abundant mineral resources are found in the mountainous areas, and Peru's coastal waters provide excellent fishing grounds. However, overdependence on minerals and metals subjects the economy to fluctuations in world prices, and a lack of infrastructure deters trade and investment. After several years of inconsistent economic performance, the Peruvian economy grew by more than 4% per year during the period 2002-05. The gross domestic product per capita is \$6,000, with 54% of Peruvians living below the poverty line.

#### **HIV/AIDS Statistics**

The HIV prevalence rate in the Peru general population is estimated at 0.6%. It is estimated that 93,000 Peruvians are living with HIV/AIDS. Most HIV transmission occurs through sexual contact, and most cases occur among individuals aged 20–39 years. Most heterosexual HIV transmission appears to occur in women whose partners have sex with men or who have contact with commercial sex workers. HIV rates are highest in the large urban areas of the country.

#### **Military Statistics**

The Peruvian Armed Forces (Army, Navy, and Air Force) consists of approximately 115,000 active-duty personnel. The first case of AIDS in the Peruvian Armed Forces was reported in 1986; since then, 844 cases of asymptomatic infections and AIDS have occurred, among them 449 active-duty military members. A majority (73%) of them are from Lima. However, the rate of infection among military personnel in Peru is unknown.

### **PROGRAM RESPONSE**

#### **In-Country Ongoing Assistance**

The Naval Medical Research Center Detachment-Lima (NMRCD-Lima) has been an ongoing partner with the Peruvian Armed Forces in the early development and implementation of HIV prevention, care, and treatment activities in their active-duty personnel.

The Comité Central de Prevención y Control del VIH/SIDA de las Fuerzas Armadas y Policía Nacional del Perú (COPRECOS) is a governmental institution founded in 1990 for the control and prevention of HIV within the Peruvian military. It has purview over the Peruvian Navy,

Army, Air Force, and National Police. COPRECOS is currently involved in training activities for the preparation of HIV and sexually transmitted infection (STI) counselors, although some of these programs have not accomplished their mission due to lack of funding. Knowledge of the prevalence, incidence, and risk factors for HIV and STIs has been the goal of NMRCD-Lima, in order to assist COPRECOS in focusing their prevention efforts.

The goal of the fiscal year 2005 program was to determine the prevalence of HIV infection and other STIs (hepatitis B virus [HBV], hepatitis C virus [HCV], syphilis, and human T-cell lymphotropic virus type 1 [HTLV-1]) in Peruvian military personnel. A program similar to that in the US military was implemented, and HIV prevalence was determined by a mandatory screening of the units selected. This testing was completed by the NMRCD HIV virology lab, accredited by the HIV Vaccine Trials Network to have met all requirements for Clinical Laboratory Improvement Amendment (CLIA) certification. These results were reported to the Peruvian military through COPRECOS, as is the law in Peru.

## **OUTCOMES & IMPACT**

### **Prevention**

In collaboration with the COPRECOS, NMRCD-Lima planned and executed a 5-day workshop on HIV prevention, pre- and post-test counseling and antiretroviral therapy (ART). This was held during May 2006, and was attended by Peruvian health care leaders from all of the provinces of Peru. A total of 26 persons were trained, 81% of whom were from underserved provinces outside of Lima. In partnership with Pathfinder International, a well-known nongovernmental organization (NGO) in Peru, a curriculum was developed and implemented. All training materials were provided in electronic format so that each leader may train others in their area. In addition, state-of-the-art training materials were provided in non-electronic formats so that training can be accomplished in remote settings where there is limited electricity or access to computers. This course was well received by the Peruvian Armed Forces attendees, and was effective in providing updates on HIV prevention, pre- and post-test counseling, and ART. This was demonstrated by a significant increase in knowledge from the pre- to the post-test. Course topics included HIV/AIDS and its impact on the Peruvian public health system, concepts and progress in research, knowledge of rights and responsibilities regarding sexuality and reproduction, basic concepts regarding gender and violence, skills to provide HIV/AIDS counseling, and skills to conduct training sessions for adults in HIV/AIDS using innovative and participative methods.

### **Care and Treatment**

With COPRECOS, a course titled *Update Course on Medical Care of HIV Patients* was implemented during the fiscal year. This 2-day course was attended by 35 Peruvian military physicians, 69% from provinces outside of Lima. The faculty was drawn from experts within Peruvian academia, the Ministry of Health, and NGOs working in HIV/AIDS prevention, as well as internationally recognized experts from the US Navy, US National Institutes of Health, and academia (University of California San Francisco). The course covered a broad array of topics: global epidemiology of HIV infection; natural history of HIV infection; HIV infection in military populations; STIs; opportunistic infections; combined therapy for HIV and tuberculosis co-infections; VIH, HTLV-1, HCV, HBV co-infections; and HIV immunology and reconstitution syndromes. Integral to the course

was a scheduled round-table discussion between members of COPRECOS from different regions and services, during which experiences and challenges were addressed. This proved invaluable to the Peruvian military members and resulted in a clearer vision of how to proceed in the future. This course was well received by the COPRECOS members and will likely be reconstituted yearly.

In addition, 3 members of the Central COPRECOS laboratory facilities attended 2 training courses for national and international shipping (February 2006) and CLIA certification (January 2006). These courses were sponsored by and were the first regulatory courses offered to the Peruvian military.

