**Disease-specific cross-sectoral technical projects**

**Tripartite Four-Way Linking Project for HPAI H5N1**

This Tripartite project builds and improves processes and infrastructure in countries for data sharing and communication by improving linkages among four information streams (epidemiology and virology from animal health and public health sectors) from the field to the ministries and establishing mechanisms for joint risk assessment within governmental structures. The project uses H5N1 avian influenza as a model and the two main activities - a review mission including a mapping of information and communication pathways, and a scenario based risk assessment and planning workshop, have been implemented in Egypt and Viet Nam. Planning for implementation of the project in two more H5N1-affected countries in Southeast Asia has been initiated.

- More on the Four-Way linking project

**Viral haemorrhagic fevers**

The viral haemorrhagic fevers (VHF) are a group of viral diseases with different etiologies and epidemiological characteristics, which produce a similar severe clinical syndrome in humans, associated with fever and bleeding. Outbreaks of VHFs (including Lassa fever, Crimean-Congo haemorrhagic fever, Rift Valley Fever/RVF, Ebola and Marburg viral haemorrhagic fevers, Yellow fever, and Dengue haemorrhagic fever, among others) often cause serious problems for national public health services because of their epidemic potential, the often high human case-fatality ratio and difficulties in their treatment and prevention. Some VHFs have epidemiological links with animal populations, making collaboration and coordination among national and international animal health partners crucial for reducing public health risks. Lack of timely laboratory diagnosis and functional epidemiological surveillance, poor infection control practices at health-care facilities, inadequate communication with affected human populations and weak vector control programs often result in prolonged outbreaks and human suffering. WHO has provided documentation to help disease investigation and control, including the results of a joint FAO-WHO expert consultation on forecasting of RVF published in 2009. WHO is also intensively supporting VHF surveillance, diagnostic capacity and outbreak response activities in affected areas, together with country offices and international partners, including FAO and other animal health partners at the national, regional and country levels.

- More on viral haemorrhagic fevers
- More on Rift Valley fever outbreaks forecasting
The Global Leptospirosis Environmental Action Network

In response to the many unanswered questions and the increasing problem of leptospirosis, WHO and the Health Climate Foundation developed a multi-disciplinary, technical framework to approach the risk factors for disease and the public health challenges surrounding leptospirosis. Launched in 2010, The Global Leptospirosis Environmental Action Network (GLEAN), gathers representatives from international organizations and foundations, such as the World Meteorological Organization (WMO), the European Joint Research Centers (JRC), and UNANGO, as well as researchers from academia, to mitigate the impact of the leptospirosis outbreaks linked to natural disasters through sustainable and innovative collaborative projects. It offers an opportunity to strengthen current public health strategies, identify populations at high risk for disease, creates a forum to develop new advocacy and funding opportunities for leptospirosis, and offers further support for capacity building, training and technology transfer, as needed.

Estimating the Burden of Human Leptospirosis

WHO convened as an advisory group, the Leptospirosis Burden Epidemiology Reference Group (LERG), to estimate the burden of Human leptospirosis and to summarize epidemiological and disease burden estimates of morbidity, mortality and disability, and compute disability-adjusted life years (DALYs) based on systematic literature review and modeling. Preliminary results show that the number of annual cases is more than 500,000 and there are more than 55000 annual deaths (not counting the significant under-reporting due to the lack of laboratory confirmation).

The efforts of this WHO initiative will ultimately enable policy makers and other stakeholders to translate knowledge into policy by setting appropriate evidence based priorities in the area of Leptospirosis disease control and prevention.

- [More on leptospirosis](#)

Increasing resilience to vector-borne diseases under climate change conditions in Africa project

Research groups and consortia from African national institutions are identifying population health vulnerabilities in dryland socio-ecological systems due to diseases transmitted by vectors such as mosquitoes, flies and snails. The multidisciplinary research explores how state-of-the-art control tools and strategies can be used more effectively to reach remote or otherwise marginalized populations (especially women and children), and strengthen their adaptation and resilience strategies to climate, environmental, socio-economic and demographic change. TDR, the Special Programme for Research and Training in Tropical Diseases, is implementing the research programme with funding support from Canada’s International Development Research Centre (IDRC), in technical collaboration with WHO’s Department of Public Health and Environment, WHO’s Regional Office for Africa (AFRO) -- notably its Programme for the Protection of the Human Environment -- and the International Research Institute for Climate and Society (IRI), Columbia University, New York, USA. A workshop is planned for November 2012, where shortlisted research teams will develop full proposals which will then be reviewed and final selection of funding support decided.

- [More on vector-borne diseases and climate change](#)