

PLEASE CONTACT US

International Livestock Research Institute

Dr Saskia Hendrickx
International Livestock Research Institute
PO Box 30709 – 00100, Nairobi, Kenya
Tel: +254 20 422 3435
Email: s.hendrickx@cgiar.org
www.ilri.org

FAO

Dr Joseph Domenech
Chief, Animal Health Service (AGAH)
FAO Headquarters
Viale delle Terme di Caracalla
Rome 00153, Italy
Tel: +39 06 570 53531
E-mail: joseph.domenech@fao.org
www.fao.org/ag/againfo/home/en/home.html

OIE

Dr Bernard Vallat
Director General
OIE World Organization for Animal Health
12 rue de Prony, 75017 Paris, France
Tel: +33 (0)1 44 15 18 88
Email: b.vallat@oie.int
www.oie.int

AU-IBAR

Dr Ahmed El Sawalhy
Director
African Union Inter-African Bureau for Animal Resources
PO Box 30786 – 00100 Nairobi, Kenya
Tel: +254 20 3674000
E-mail: ahmed.elsawalhy@au-ibar.org
www.au-ibar.org

Royal Veterinary College

Prof Dirk Pfeiffer
Professor of Veterinary Epidemiology
The Royal Veterinary College
University of London, Royal College Street, London
NW1 0TU, United Kingdom
Tel: +44 (0) 1707 666333
Email: pfeiffer@rvc.ac.uk
www.rvc.ac.uk

VSF-B

Robert Allport
Regional Program Manager
Vétérinaires Sans Frontières Belgium
PO Box 13986, 00800 Westlands
Nairobi, Kenya
Tel: +254 20 2734518-20
E-mail: rallport@vsfb.or.ke
www.vsf-belgium.org

VSF-C

Dr David Waltner-Toews
President, Vétérinaires Sans Frontières Canada
VWB-VSF-Canada
50 Stone Road East
Guelph, Ontario, N1G 2W1, Canada
Tel: +1 519 546 3204
Email: dwaltner@uoguelph.ca
www.vwb-vsf.ca



Participatory Epidemiology Network for Animal and Public Health

Enhancing the capacities of
organizations to control major existing
and emerging diseases





managers of innovative operational programs in surveillance and disease control. The network supports national veterinary and public health services in designing and implementing comprehensive surveillance systems that combine participatory and conventional approaches to disease surveillance and response in an integrated package that maximizes the sensitivity, specificity and timeliness of surveillance. Outcome mapping is used as a tool for planning and monitoring network activities as well as for designing, implementing and monitoring impacts of regional programs.

Policy. Participatory epidemiological programs identify forces that shape institutions and key lessons for policy reform. An important function of the network is to conduct relevant policy research, collate lessons learnt and advocate for more effective animal and public health policies.

and controlled in animals, emphasis is placed on building the capacity of veterinary and public health services and educational institutions.

CURRENT ACTIVITIES

The field of participatory epidemiology emerged in response to global livestock health problems, especially trans-boundary animal diseases. New areas being addressed by the network include public health and ecosystem health. A major outcome is the development of integrated participatory surveillance and control systems employing both qualitative and quantitative research methods to tackle livestock and human diseases.

Targeted Action Research. The network conducts operational and applied research to test and validate methods and concepts, measure the impacts of programs, explore models for integrated human and animal disease surveillance, study emerging infectious diseases and understand policy issues.

Training. The network offers training that can be tailored to specific disease and health challenges. Where value can be added by taking a regional approach, workshops are organized jointly by professionals of countries with shared epidemiological interests. Courses include short programs for partner organizations and practitioners, programs for veterinary and medical students, internships and guided fieldwork. Orientation training for managers and rapid-response practitioners from the international community are available. The network produces learning materials for students, field practitioners, veterinarians, scientists and policymakers.

Capacity building and institutional change. The Participatory Epidemiology Network for Animal and Public Health guides experts in becoming effective

Participatory Epidemiology Network for Animal and Public Health

Improving the control of epizootic diseases such as highly pathogenic avian influenza (HPAI) requires strengthening our capacities to rapidly detect disease outbreaks and to take appropriate actions to eliminate the causative pathogens. Such responsiveness to diseases transmitted between livestock and people depends in turn on two things. The first is high-quality cooperation between livestock owners, veterinarians, physicians and public services, all of which are involved in the early detection of zoonotic emerging infectious diseases; this early detection substantially reduces the costs of subsequently controlling or eradicating diseases. The second factor on which early detection and rapid response depend is an enabling policy environment.

Participatory epidemiology is a powerful tool in international public health because it integrates human and veterinary medicine in a one health approach. It played a defining role in the global campaign to eradicate rinderpest, one of the world's most catastrophic diseases of livestock. In Africa and Asia it is now having significant impacts controlling HPAI, one of the greatest threats to public health emerging in the early 21st century. The success of participatory epidemiology lies in the inclusion of many stakeholders in identifying problems and formulating solutions, an evidence-based approach that has proved elegantly effective in addressing one health problems thought to be intractable.

Participatory epidemiology in the animal and human health fields is an action-oriented approach to gathering epidemiological intelligence. The participatory methods are used in disease surveillance, impact assessment and control; disease recovery and prevention of re-infection; project development;

environmental monitoring and epidemiological research. In surveillance mode they encourage teamwork between farmers, private veterinarians and doctors, and governments for the early detection of disease. As participatory methods are at the cutting-edge of disease control methodologies, they require training and mentored field work not included in conventional academic programs.

The approach is well adapted to rural settings; it complements many conventional surveillance and service delivery systems. It helps countries meet disease surveillance requirements of the World Organization for Animal Health (OIE) and World Health Organization (WHO), and facilitates developing-country participation in international trade. In application, participatory epidemiology may be tailored for a given target disease and specific national, political and social contexts.

At the technical level, the participatory approach complements and balances quantitative epidemiological and economic methods, and epidemio-surveillance systems. It gives communities a direct voice in their health programs and provides researchers with contextual information that can enhance the design and interpretation of expensive and logistically complex quantitative studies. Data gained in a participatory manner also help to identify sources of bias and confounding factors in statistical analyses. Participatory approaches also suit broad-based livelihood analyses: they can help distinguish community assets – such as social, environmental – and the impacts of diseases and their control that would otherwise be difficult to quantify. Participatory epidemiology does not replace quantitative studies but rather adds value to those studies, making possible a stronger and more representative surveillance system than traditional epidemiological methods can achieve alone.

National and international stakeholders leading the fight against HPAI and other major diseases have limited expertise and training in participatory epidemiology that would enable them to adopt these tools, and to pro-actively address policies and institutional challenges that inhibit their adoption. For these reasons, a Participatory Epidemiology Network for Animal and Public Health has been established by the Africa-based International Livestock Research Institute (ILRI), a member of the Consultative Group on International Agricultural Research (CGIAR). The Food and Agriculture Organization of the United Nations (FAO), OIE, the African Union Inter-African Bureau for Animal Resources (AU-IBAR), the Royal Veterinary College (RVC), Vétérinaires Sans Frontières Belgium (VSF-B) and Veterinarians Without Borders/Vétérinaires Sans Frontières Canada (VSF-C) have partnered with ILRI to establish the network, design its strategies and implement programs for training, capacity building and institutional change.

Vision: To improve livelihoods by contributing to solve the world's most pressing health challenges.

Objective: Maintain a network for participatory epidemiology engaging diverse stakeholders in identifying and solving the world's most pressing health challenges.

Strategy: The Participatory Epidemiology Network for Animal and Public Health implements a program integrating targeted action research, policy enhancement and education. A focus for experts in participatory epidemiology from around the world, it nurtures collaborative research and diffusion of learning to speed detection of emerging or re-emerging diseases. As many diseases of public health concern are zoonoses often best detected