

Statement - 3rd International Conference on Neglected Zoonotic Diseases: community-based interventions for prevention and control of neglected tropical diseases

WHO HQ, Geneva, Switzerland, 23–24 November 2010

This third international conference on neglected zoonotic diseases (NZDs) builds on the outcomes of the successful joint meeting held with the World Health Organization (WHO) and APH/DFID on “Zoonoses control: a route to poverty alleviation” (WHO headquarters, Switzerland, 2005) and the meeting on “Integrated control of NZDs in Africa” organized in Nairobi in November 2007.

Today, NZDs are an important component of WHO’s Department of Neglected Tropical Diseases (HTM/NTD). Zoonotic diseases are included in the first WHO report on “Working to overcome the global impact of neglected tropical diseases” launched by the Director-General Dr Margaret Chan on 14 October 2010. During her opening remarks the Director-General acknowledged the importance of NZDs and veterinary public health (that is, applying veterinary sciences to ensure the health and well-being of humans) as one of the five public-health strategies for the prevention and control of NTDs.

This third WHO conference would not have been possible without the support of many partners including, DFID supported project "Research in Use" (RiU), "ICONZ" (Integrated Control of Neglected Zoonoses in Africa), the Research Directorate of the European Commission, Stamp out Sleeping Sickness (SOS) in the University of Edinburgh, TDR (the special Programme for Research and Training in Tropical Diseases), the Gates Foundation, the FAO, OIE , ILRI and other partners.

The theme of the third meeting – community-based interventions – considered the involvement and contribution of communities, often supported by government services and nongovernmental organizations, in the prevention and control of NZDs. A number of countries’ successes in preventing and controlling NZDs were presented, including zoonotic trypanosomiasis (Uganda), rabies (Peru, the Philippines and Sierra Leone), fascioliasis (Peru and Viet Nam), echinococcosis (China), cysticercosis (Zambia), as well as issues of epidemic-prone NZDs such a Rift Valley fever (horn of Africa) and leptospirosis.

Approximately 100 participants from all WHO regions representing all major disciplines involved at the human–animal health interface were invited to the consultation to identify the challenges and opportunities for the long-term prevention and control of NZDs at national, regional and global levels.

1. The third consultation on neglected zoonotic diseases

Acknowledging:

1.1 The considerable progress that has been made since the first (2005) and second (2007) international conferences on NZDs in:

- assessing further the individual and collective health and/or economic burdens of NZDs including cysticercosis, echinococcosis, food-borne trematode infections, zoonotic leishmaniasis, trypanosomiasis and rabies, and initiating work on the burden of other key diseases such as bovine tuberculosis, brucellosis, toxoplasmosis and zoonotic schistosomiasis;
- establishing subregional, regional and global disease-specific networks and building public–private partnerships;
- conducting global situation analyses and identifying research priorities;

- initiating both field implementation and research and development projects with the support of major funding bodies including DFID, RiU, the European Commission, the Bill & Melinda Gates Foundation and the Wellcome Trust;
- defining the institutional framework to be established and listing activities to be carried out at national, regional and international levels for successful implementation of a global NZD programme;
- setting for the first time target dates for the elimination of human and dog rabies (one of the most important NZDs) in Latin America (by 2010) and ASEAN countries (by 2020);

1.2 The high rates of both under-reporting and misdiagnosis (clinical and laboratory-based) for NZDs in communities of poor and marginalized peoples and the substantial global burden these diseases impose on such communities especially in rural areas traditionally dependent on livestock for food, transport and draught power;

1.3 The name “neglected zoonotic diseases, or NZDs” for this group of diseases to emphasize a new approach to dealing with them. This terminology acknowledges that these diseases are not well addressed and recognizes that three key requirements should be met for successful prevention and control of NZDs: (i) that consideration be given to both the needs of communities and their livestock and to pets affected by NZDs; (ii) that integrated approaches be available to cure, prevent and control disease at the human–animal interface; and (iii) that evidence-based advocacy be used to levy resources and commitment for control from the national and international community;

1.4 NZDs as a heterogeneous group of diseases are best defined by the people and communities they mostly affect. As such, the list of NZDs is open-ended and depends on the location; it may comprise endemic as well as epidemic-prone diseases such as leptospirosis, anthrax and Rift Valley fever;

1.5 The “One Health concept” approach, which addresses the actions required to alleviate the suffering and losses caused by NZDs at the human–animal interface. Control activities need to cover people, animals and their environments, and veterinary and human medical sectors need to work collectively to ensure successful control of NZDs. Where feasible, emphasis may be placed on controlling the animal reservoirs, and activities implemented in close collaboration with key sectors involved;

1.6 The cost-effectiveness of controlling these diseases can reap a dual harvest in saving human lives and securing livelihoods by protecting livestock and other domestic animals, which in turn contributes to alleviating poverty within affected communities;

1.7 The feasibility of preventing, controlling and possibly eliminating those NZDs for which effective and workable proven solutions are available (for example, dog-mediated human rabies and zoonotic trypanosomiasis) or that are within sight and for which control packages will be available or “tool ready” within 3–5 years of conducting implementation research (for example, porcine cysticercosis, cystic echinococcosis and foodborne-trematode infections).

Noting:

2.1 The universally low ranking of NZDs on national and international health agendas despite their causing significant morbidity and mortality in the impoverished, mostly rural, livestock-dependent communities in which they exist. NZDs usually do not cross international borders and rarely affect international trade or travellers (unlike the new emerging zoonotic diseases such as avian influenza or SARS [severe acute respiratory syndrome]);

2.2 The challenges of scaling up implementation of control approaches using known strategies, testing the feasibility and cost-effectiveness of those strategies and in parallel prioritizing control of NZDs on the research agenda;

2.3 The lack of investment in prevention and control activities and of applied research on NZDs from development aid and assistance programmes within developed countries and from other sources of health funding at a time when expertise in developed and developing countries and funding for capacity strengthening in developing countries are waning. It is estimated that only 0.06 % of international global assistance for health is devoted to the control of NZDs.

2.4 The lack of veterinary public health (VPH) units bridging the gap between departments of agriculture and health and that of competent practitioners in human health and veterinary services to serve the needs of communities in developing countries in addressing NZDs;

2.5 The need to identify and mobilize in those countries most affected by NZDs internal and external funding sources to facilitate capacity-building for human and animal health staff in all aspect of surveillance, prevention and control of NZDs;

Recommending the creation of a road map to promote progress in combating NZDs where they are most prevalent that involves:

3.1 Developing a comprehensive methodology for measuring the burden of disease that is attributable to zoonotic infections, providing the evidence-base required for needs assessment and advocacy; and assessing within this methodology the local, regional and global societal burdens of NZDs in financial and non-financial terms, thus defining the priority diseases for control on a local and regional basis;

3.2 Conducting further studies to determine the costs of intervention strategies, cost-benefits and cost effectiveness. In addition to measuring the direct and indirect medical costs and benefits, such studies should also consider the economic and societal impacts of animal disease as indirect contributors to poverty through their impact on nutrition, loss of meat and milk products, and the effects on livestock as capital assets;

3.3 Scaling-up interventions for control of NZDs in selected geographical and epidemiological settings using existing innovations and research outputs that are not being used for reasons of cost, lack of policy, intersectoral collaboration, commitment of relevant government structure and awareness, together with insufficient understanding of the high value offered by interventions that simultaneously target animals and reduce the disease burden in humans. Such activities should be based on the following three principles:

3.3.1 Strengthening or consolidating intersectoral collaboration, communication and interaction using operational research and systems among key health, agricultural and environment sectors. This principle requires that guidelines on how to establish, structure and sustain VPH units be established at the national level. The contribution of VPH units to public health care should be clarified, while recognizing that the responsibilities of these units go beyond control of NZDs. Competent human and animal health services are a public good, and maintaining qualified VPH workers close to their communities should be considered an essential governmental responsibility. National intersectoral committees on zoonoses working under ministerial or a higher authority should be established or strengthened;

3.3.2 Controlling animal reservoirs as the most effective approach to combatting any animal disease, including most NZDs. This principle relies on a pool of VPH specialists working under a system of good governance. In many countries, such efforts should be carried out jointly by competent national VPH and public health services with the help and support of local and regional authorities applying the "One Health" approach;

3.3.3 Adopting or combining multi-disease and host approaches for selected NZDs in their animal reservoirs. This principle relies on effective governmental services and the contribution of other stakeholders, principally communities affected by NZDs, and NGOs to

improve animal and public health and, in parallel, ensuring environmental sanitation and providing the necessary health care education and promotion to those communities involved;

3.3.4 Community-based approaches and interventions developed to control specific diseases such as zoonotic trypanosomiasis, rabies and food-borne trematode infections should be evaluated for their applicability to other NZDs. Disease-specific and government-supported interventions may still represent a viable alternative under certain circumstances;

3.4 Initiating priority studies on short-term and longer-term packages of research to improve and sustain control of NZDs at scale. Stated priorities are grouped as disease-specific or intervention-specific (environmental health, intersectoral collaboration, epidemiological studies); these priorities relate to health education, health promotion and improved understanding of the environmental and social ecology of NZDs and their impact on both livestock production and local economies;

3.5 Strengthening advocacy within constituencies for NZDs to better inform all stakeholders, including funding agencies, about the societal burden of these diseases to create demand for control at all levels of society;

3.6 Providing resources to implement specialized training in all aspect of surveillance, prevention and control to serve national human health and national veterinary services in countries where NZDs represent a significant threat to local communities. Training in surveillance and laboratory diagnosis of NZDs is of paramount importance to improve reporting and assess their burden;

3.7 Providing affected countries with the skills to develop economically sustainable national control strategies, including economic evaluations integrating cross-sectoral costs and benefits;

3.8 Identifying priority NZDs in each WHO region and country by considering their impact on both human and animal health and the level of commitment for prevention and control from interested sectors. This approach will require budget lines from the relevant implementing ministries as well as national research commitments, stable policy and essential long-term national and international financing;

3.9 Requesting the Secretariat, in collaboration with its partners and other stakeholders, to help define priorities and achievable goals and set targets and indicators to monitor the state of implementation of this road-map in 2 years' time. An inventory of the current and potential funding landscape for NZDs and an evaluation of their cumulative burden as well as a critical review of the outcomes of previous meetings would be useful;

3.9 Requesting pharmaceutical companies to broaden the scope of their collaboration and funding to include pharmaceutical products and development of vaccines to be used in the context of interventions against NZDs;

3.10 Increasing awareness among the international funding community of the local, regional and global impacts of NZDs, and urging funding agencies to consider NZDs as an integral part of their portfolios in order to assist governments in supporting affected communities.