Rabies is a tripartite (WHO-OIE-FAO) priority
Collaboration between Animal and Human Health Sectors

The World Health Organization (WHO), the World Organisation for Animal Health (OIE), and the Food and Agriculture Organization of the United Nations (FAO) are sharing responsibilities and coordinating global activities to address health risks at the animal–human–ecosystem interfaces under the umbrella of the One Health concept.

The three organisations offer a coordination mechanism to better consolidate fragmented efforts at global, regional, national and sub-national levels. This approach was clarified and formalised in April 2010 with the publication of a tripartite concept note: The FAO-OIE-WHO Collaboration. Sharing responsibilities and coordinating global activities to address health risks at the animal–human–ecosystems interfaces.

The OIE organised the first Global Conference on Rabies Control (Incheon–Seoul, the Republic of Korea, September 2011). The recommendations adopted by more than 100 countries are still the basis of global rabies control policies in animals (see Bulletin, no. 2011-4, pp. 70-72).

The three international organisations are involved in collating and disseminating expertise and building technical capacity in countries. They are continually working together and recognise the importance of their collaboration in the fight against rabies. At the High-Level Technical Meeting to Address Health Risks at the Human–Animal–Ecosystems Interfaces, held in Mexico City in November 2011, the three organisations identified the following three topics – zoonotic influenza, rabies, and antimicrobial resistance – as ‘entry points’ at the country level, as priority matters and as models in which the benefits of intersectoral approaches are evident.

Rabies is an exemplary ‘One Health’ model disease, yet an intersectoral approach has not been sufficiently used to address it.


As mentioned above, rabies has been identified as a priority disease and as a model in which the benefits of an intersectoral approach in establishing functional and sustainable collaboration between national animal and human health sectors is evident. The elimination of rabies requires consistent and sustained commitment, underpinned by strong public and veterinary health systems. Today, for the first time, all major human and animal health organisations, relevant NGOs, and animal welfare stakeholders are aligning their objectives, working together in a constructive way, and dedicating their time, expertise and efforts to reduce the global burden of rabies. This is an historic commitment, which is gaining momentum.
This momentum will incentivise government mobilisation and will also offer an exemplary opportunity to reverse existing trends: the public health sector currently spends too much on rabies post-exposure prophylaxis for humans; those vaccinating children have different priorities and delivery systems from the ones required to facilitate systematic dog vaccination in endemic countries or areas; and the animal health sector has not been sufficiently engaged in dog vaccination, focusing its priorities on animals used for human consumption, instead.

WHO and the OIE, in collaboration with the FAO and the Global Alliance for Rabies Control (GARC), have recognised the global impact of rabies and have joined forces to break the cycle of transmission of this devastating disease from dogs to humans.

The most recent analyses estimate that 74,000 human deaths are caused by rabies each year around the world, with more than 95% of these deaths originating from dog bites. Although rabies is preventable and manageable, it causes more deaths annually than dengue fever and many other neglected tropical diseases. The majority of deaths (over 80%) occur in rural areas where access to post-exposure prophylaxis is limited or non-existent. Over 95% of all human rabies deaths occur in Asia and Africa, where canine rabies is least controlled; the majority of these victims (60%) are children bitten by rabid dogs.

Vaccinating at least 70% of dogs would break the cycle of transmission from dogs to humans and save the lives of several tens of thousands of children globally.

Vaccinating against rabies is now recognised as the most effective way to prevent humans dying from rabies. While human deaths from rabies can be averted by relying on early post-exposure prophylaxis for persons bitten, these actions will never result in disease elimination and their associated costs will only continue to escalate.

The highest risk of human deaths from rabies occurs in Africa and Asia where canine rabies is least controlled. In fact, rabies is still endemic in many countries in Africa despite numerous efforts targeting rabies prevention in both human and dog populations.

Research has demonstrated that the systematic culling of stray dogs alone is not effective in controlling stray dog populations nor in reducing cases of rabies in dogs. On the other hand, studies based on OIE, WHO and country data show that controlling the virus in the reservoir (dogs) is more cost effective than concentrating efforts on indefinite post-exposure prophylaxis of humans; the latter does not have any influence on changing the disease ecology nor breaking the cycle of transmission.

In the context of regional strategies, the setting up of OIE regional vaccine banks for rabies facilitates the delivery of high-quality vaccines for dog vaccination. Furthermore, they allow for economies of scale, limited physical storage of vaccines, different replenishment and procurement mechanisms, the possible delivery of small quantities adapted to field needs and different speeds of delivery. In less than two years, and with the financial support of the European Union and Australia, the OIE has delivered three million doses of rabies vaccine for dog vaccination to ten countries in Asia.