

No more deaths from rabies

Every ten minutes someone in the world dies from rabies. This is the sad reality of the situation even today. Every year, rabies kills nearly 70 000 people, mostly children in developing countries. Over 95% of human cases are caused by the bite of a rabies-infected dog. Yet the disease could be eliminated. Indeed, unlike many other diseases, we already have all the tools needed to eradicate it. Each new victim is therefore one too many.

Rabies is still very widespread in the world and two-thirds of all countries continue to be affected. Half of the world's population lives in an endemic zone, and more than 80% of rabies deaths occur in rural areas, where access to health information campaigns and post-exposure prophylaxis is limited or non-existent. Africa and Asia are the continents with the highest risk to human life, accounting for over 95% of fatal cases of rabies in the world¹. These are also the regions where canine rabies is the least controlled.

In the vast majority of cases, rabies is transmitted to humans through the bite of an infected dog. Controlling and eradicating rabies therefore means combatting it at its source in animals. This explains why the "Tripartite Alliance", comprising the World Health organization (WHO), the OIE and the Food and Agriculture Organization of the United Nations (FAO), now considers the elimination of rabies cases caused by dogs to be a global public good.

The best way to achieve this is by mass vaccination of dogs, since it is the only way of breaking the cycle of transmission of the disease from animals to humans. It is estimated that by vaccinating 70% of the dogs in countries still infected, rabies could be eradicated in dogs and the number of human cases could be rapidly reduced to zero.

Mass vaccination of dogs is also the most economical way of protecting humans against the disease. Every year, nearly 29 million people around the world receive prophylactic treatment after having been bitten by an animal potentially infected with rabies, at a total cost of approximately 2.1 billion dollars². Yet, there are excellent canine rabies vaccines, manufactured in accordance with the standards developed by the OIE and at a tenth of the cost of the prophylactic treatment used in humans.

¹ Shwiff S, Hampson K, Anderson A. Potential economic benefits of eliminating canine rabies. *Antiviral Res.* 2013; 98(2):352-6

² Hampson K, et al. Estimating the global burden of endemic canine rabies. Submitted *PLoS Negl Trop Dis.* 2014.

The OIE has been committed to fighting the disease for decades. In addition to developing and regularly revising standards on rabies prevention and control, diagnostic methods and the production of high quality veterinary vaccines, the OIE has a twofold objective.

Firstly, the OIE seeks to ensure transparency of knowledge about rabies in animals, through the compulsory notification of the disease by the its 180 Member Countries and the collection of scientific data produced by the its global network of Reference Laboratories.

Secondly, it encourages governments and international donors to invest in rabies control programmes, including vaccination of dogs.

The financial challenge that these programmes might appear to present must be placed in perspective: about 10% of the financial resources currently used for emergency treatment of people bitten by potentially rabid dogs would probably be enough for national Veterinary Services throughout the world to eradicate rabies at its source in domestic animals, namely in dogs, and so prevent almost all human cases worldwide.

Solidarity with developing countries is essential. The OIE World Fund for Animal Health and Welfare has already enabled numerous actions to be carried out, such as the creation of a rabies vaccine bank for dogs, intended for the poorest countries of Asia.

To date, the OIE has delivered around 3 million³ doses of rabies vaccine to some ten different countries in support of their national vaccination campaigns, thanks to financial support from the European Union and Australia. In particular, the Philippines has taken advantage of the vaccine bank to develop its own programme aimed at eradicating rabies by the year 2016.

This first venture must now serve as a model for the creation of new regional vaccine banks for other regions of the world. This model ensures the availability of high-quality vaccines produced in accordance with OE standards, and their fast delivery in the field.

In addition to the OIE's own actions, an effective rabies control strategy can only be achieved through the effective coordination of partners applying the same strategies. Our Organisation works closely with FAO, WHO and GARC (Global Alliance for Rabies Control) to develop international recommendations aimed at greater intersectoral collaboration and global implementation of the most appropriate strategies.

³ Estimate of the number of doses already delivered, as of 1 July 2014

Rabies is also one of the issues identified as a priority by the OIE, WHO and FAO, within the framework of our joint “One Health” approach developed through our “Tripartite Alliance”. In this context, the FAO/OIE/WHO Global Conference on Rabies Control, held in Incheon (Seoul, Republic of Korea) in 2011, provided the opportunity to develop a joint strategy to control the disease worldwide. Priority was given to good governance regarding the distribution of public and private, local, national and international resources targeted at priority prevention actions to be taken in animals.

Veterinarians and the national Veterinary Services of OIE Member Countries have a crucial role to play in implementing these strategies at national and regional level. They must be mobilised so that the operations to be carried out can be coordinated with the public health services, local and municipal authorities, the police force, and the NGOs working in the poorest countries.

It is also essential for the Veterinary Services and all their partners to be involved in stray dog population control and public awareness campaigns.

To raise the international community’s awareness of the devastating impact of rabies and the worldwide resources that must be mobilised to control the disease, the OIE recently produced three videos to convey its key messages on rabies in a visual format. The videos are available on the rabies portal on the OIE website. Championing this cause, HRH Princess Haya Al Hussein, OIE Goodwill Ambassador, has lent her voice to the Organisation and calls on the world to realise the urgency of the situation and the existence of concrete solutions. These videos and numerous other communication tools are available⁴ for all those wishing to join the fight against this lethal yet easily controllable disease.

This concerns us all. We must act without further delay.

⁴ <http://www.oie.int/en/animal-health-in-the-world/rabies-portal/>