

New global strategic plan to eliminate dog-mediated rabies by 2030



Rabies is one of the oldest and most terrifying diseases known to man. Written and pictorial records of rabies date back more than 4000 years, and today it is endemic in more than 150 countries around the world.¹ Even though the disease can be prevented, it kills an estimated 59 000 people each year,² mostly in the world's poorest and most vulnerable communities. About 40% of the victims are children younger than 15 years living in Asia and Africa. A staggering 99% of human cases are acquired via the bite of an infected dog, rather than through exposures to the many and varied wild animals that act as viral reservoirs on different continents.³

Over the past few years, many countries have acted to strengthen rabies control efforts—scaling up dog vaccination programmes, making human biologicals for post-exposure and pre-exposure prophylaxis more accessible, and engaging communities on rabies. Dog-mediated rabies has been eliminated from western Europe, Canada, the USA, and Japan. 28 of the 35 Latin American countries report no human deaths from dog transmitted rabies.⁴ Great strides have been made in reducing rabies deaths in countries such as Bangladesh, the Philippines, Sri Lanka, Tanzania, Vietnam, and South Africa, to mention a few. These experiences have generated important collective knowledge on what works, and have strengthened both the quality of rabies-related data and our arsenal of tools for the development of rabies-related control programmes, capacity building, education, and surveillance.

Until recently, the global response to rabies was fragmented and uncoordinated. Now, for the first time, WHO, the UN Food and Agriculture Organization (FAO), the World Organisation for Animal Health (OIE), and the Global Alliance for Rabies Control (GARC) are joining forces to support countries as they seek to accelerate their actions towards the elimination of dog-mediated rabies by 2030. Following extensive consultation with affected countries, we have developed and are publishing today a *Global strategic plan to end human deaths from dog-mediated rabies by 2030*.⁵ This ambitious, three-phase plan maps out the societal changes that are needed to reach this goal.

It prioritises action in a way that targets the disease reservoir in dogs and aligns the rabies response to efforts to strengthen health systems.

The Global Strategic Plan set three objectives for affected countries, development partners, and key stakeholders: (1) to effectively use vaccines, medicines, tools, and technologies that will stop dog rabies transmission and reduce the risk of human rabies deaths; (2) to generate evidence-based guidance and high-quality data to measure impact and inform policy decisions; and (3) to harness multistakeholder engagement to sustain commitment and resources.

Our new rabies-focused partnership—known as United Against Rabies—gives us a platform to mobilise resources and leverage existing tools and expertise in a coordinated way. It is fully aligned with the priorities of the Tripartite Memorandum of Understanding signed in May, 2018, between WHO, the FAO and the OIE.⁶ Through that agreement, the three organisations are intensifying their collaboration to combat critical health risks at the human-animal-environment interface—ie, challenges that require a genuine One Health approach.

To support the implementation of the Global Strategic Plan, GAVI, the Vaccine Alliance, commissioned a range of country studies to increase understanding of existing distribution and delivery systems for post-exposure prophylaxis. We look forward to the decision of the GAVI board later this year on whether rabies will be included in their next Vaccine Investment Strategy.

To achieve our 2030 dog-mediated rabies elimination goal, we need to place the global rabies response on a sustainable footing over the next 5 years. This requires a phased, multipronged strategy in all affected countries, based on close coordination between the human and veterinary sectors and the extended community of practice. It requires engaging communities and health workers to build awareness of the problem and prevent bite exposures; to prevent transmission by managing dog populations and ensure herd immunity through dog vaccination; and to provide post-exposure prophylaxis and care for exposed victims.

Eliminating dog-mediated rabies will not only save an estimated 300 000 lives within 5 years,² and

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improve living conditions for millions of people, but will contribute to improving global health security. According to our analysis, investing in rabies elimination globally will eventually free up an estimated US\$8.6 billion in economic resources each year.⁵

Implementation of recent new guidance from WHO on accelerated human vaccination schedules (including accelerated dose and cost-saving options for pre-exposure and post-exposure)⁷ and of OIE's international standards for rabies diagnosis, vaccination, and control in animals⁸ will increase feasibility and simplify programmatic delivery, allowing countries to move forwards with the implementation of the Global Strategic Plan.

We are now at a critical turning point in the fight against rabies and are ready to launch a full-scale attack on the disease. The global rabies response should be firmly embedded in national efforts to expand community and private sector engagement and to strengthen human and animal health systems, with a view to moving towards universal health coverage for all people. Global progress on rabies will serve as a key tracer of progress towards more equitable access to health care, and be an early pathfinder for the effective implementation of national One Health action plans.

Through implementation of the *Global strategic plan to end human deaths from dog-mediated rabies by 2030*,⁵ affected countries will move a significant step closer to the Sustainable Development Goal (SDG) 3 target of "ending the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases". They will also make critical progress towards SDG 3.8 on achieving universal health coverage.

Our organisations will continue to support countries to bring an end to human deaths from dog rabies, and invite others to join United Against Rabies in this historic effort.

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We declare no competing interests.

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