

## Is there hope to reach the Zero by 30 target for dog-mediated human rabies?



The Zero by 30 strategy—the global plan to eliminate dog-mediated human rabies deaths by 2030<sup>1</sup>—has increased awareness of rabies throughout the world and instilled a sense of urgency in implementing control strategies. Targeted calls for action appear to be motivating policy makers and the public in rabies-endemic countries to achieve this goal. Given the impact of the disease on particularly vulnerable and marginalised communities where rabies currently causes an estimated 59 000 human deaths per year,<sup>2</sup> this trend is welcome; however, with only 7 years until 2030, many people now question whether it is still possible to reach the target of having no further human deaths due to dog-mediated rabies.

Post-exposure prophylaxis can bring down the rabies death toll swiftly if bite victims can quickly access affordable rabies biologicals (vaccines and immunoglobulins). Now that the Gavi Board of the Vaccine Alliance has approved resuming their 2018 decision to start the roll-out of human rabies vaccines for post-exposure prophylaxis<sup>3</sup> using a 1-week, three-dose regimen,<sup>4</sup> there is hope to reach or at least come close to the goal of Zero by 30. Eliminating dog-mediated human rabies will not only save an estimated 300 000 lives within 5 years, but also strengthen health systems at all levels.<sup>5</sup> The planning of the roll-out is underway. A call for the expression of interest is anticipated to be published in 2024 for eligible endemic countries.

Despite this positive development, societal and public health costs due to rabies will continue to grow if the complementary strategy of mass dog vaccination is not implemented. Vaccinating dogs—the main carriers of rabies to other animals and humans in most of Asia, Africa, and South America—is crucial to stop the transmission of this disease at its source.<sup>6</sup> This mass vaccination of dogs is possible through a strong and committed collaboration of the human and the veterinary health sectors, and would be a true example of One Health in action. Unfortunately, the systematic scaling up of mass dog vaccination is slow and was highly affected by the COVID-19 pandemic.<sup>7</sup> Many countries have developed their strategic plans, but these need to receive adequate, long-term attention and investment to be implemented.<sup>8</sup>

To support countries' efforts, the United Against Rabies initiative (a One Health collaboration launched in 2020 by the Food and Agriculture Organization of the United Nations, the World Organisation for Animal Health, and WHO to accelerate progress towards Zero by 30) has gathered a broad range of stakeholders to advocate, cooperate with, and support the implementation of national rabies control programmes that rely on awareness and education, human post-exposure prophylaxis, and mass dog vaccination.<sup>9</sup> An area of essential and urgent need is the collection of better data to guide planning and monitoring. Although human and animal rabies are notifiable diseases in many countries, rabies surveillance often remains weak. WHO and its partners have developed tools to aid countries in the collection of minimum indicators, be better able to understand where efforts are required, set aside the necessary resources, and measure progress.<sup>10</sup> With the wider uptake of more holistic approaches to addressing health issues following the COVID-19 pandemic, rabies offers an important indicator of the impact these approaches have on human and animal health, and of progress in terms of One Health operationalisation, equity, and sustainable development.

Every year on September 28, the world recognises World Rabies Day. The theme of 2023 is Rabies: All for 1, One Health for All. With relevant sectors and stakeholders locally, regionally, and internationally driving towards a common goal while lifesaving resources are becoming available for people and dogs, there is still hope to reach the target of Zero by 30 for dog-mediated human rabies.

We declare no competing interests.

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\**Deborah Nadal, Katrin Bote, Bernadette Abela*  
deborah.nadal@unive.it

Department of the Control of Neglected Tropical Diseases, WHO, Geneva, Switzerland (DN, KB, BA); Department of Humanities, Ca' Foscari University, Venice 30123, Italy (DN)

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