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An Integrated Approach To Combat Canine Rabies In Southeast Asia

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Dr. Armin Wiesler, Regional Managing Director & Head of Animal Health, Regional Operating Unit ASEAN, Korea, Australia and New Zealand, Boehringer Ingelheim Breaking the rabies transmission cycle requires targeted vaccination coverage rate of 70% of dogs in a specified area.



Rabies is a neglected zoonotic disease caused by RNA virus from *Rhabdoviridae* family, potentially fatal if not treated. Over 99% of human rabies cases are transmitted by dogs, and the cases are prevalent in South East Asian countries due to the large number of unvaccinated stray dogs. Recent statistics indicate that countries such as Vietnam, Indonesia, Thailand, Philippines, Malaysia pose an increased risk of rabies virus infection. A robust national rabies control program in Singapore has eradicated canine rabies, while other countries in this subregion are not yet rabies-free. Raising awareness about risk factors and the mortality of rabies in Southeast Asian countries is necessary for effective rabies control programme planning. Considering the urgent need to increase public awareness of this potential health risk, as well as contribute to the elimination of rabies in Southeast Asia, **Dr. Armin Wiesler, Regional Managing Director and Head of Animal Health (ASEAN, Korea, Australia and New Zealand) at Boehringer Ingelheim** shares additional insights.

- **How is the Southeast Asia region addressing rabies vaccination challenges? Is Southeast Asia on track to achieve the 'Zero by 30' global goal?**

Rabies is a neglected tropical disease that is endemic in eight of the 10 countries in the Association of Southeast Asian Nations (ASEAN) Member States. Challenges such as a large population of free-roaming dogs, low vaccination coverage and cross-border transmission in Southeast Asia are putting more than 600 million people at potential risk of rabies exposure, especially those in marginalized and remote areas.

Guided by the ASEAN Rabies Elimination Strategy, the aspiration is to vaccinate at least 70% of the dog population, to achieve herd immunity and control. Yet, this target is not reached in most settings presently. Reaching herd immunity has been a challenge, due to the high volume of free-roaming dogs in the region, a lack of resources and competing health

priorities.

Multi-disciplinary collaboration across various levels of society is and will be crucial to rabies prevention and the region's progress towards achieving the joint World Health Organization (WHO), World Organization for Animal Health (WOAH), Food and Agriculture Organization of the United Nations (FAO) and Global Alliance for Rabies Control (GARC)*Zero by 30* global goal.

- **How can Southeast Asian countries mitigate human rabies vaccine shortages, improve treatment affordability, and provide more equitable access to rabies vaccination?**

Varying country needs and contexts have to be regarded. While ensuring immunization is available and accessible, education and awareness about the disease is equally important. Under-resourced communities are generally more vulnerable to rabies infection because they do not seek timely treatment due to a lack of understanding about the disease. In addition, though post-exposure prophylaxis (PEP) vaccine is free of charge in Vietnam for vulnerable communities and in government-run clinics in the Philippines, travel costs to and from the clinics which administer the vaccine is often a hindrance to vaccine access.

Nevertheless, vaccinating dogs against rabies must be the primary target to prevent transmission to humans. According to WHO, vaccinating dogs is the most cost-effective strategy for preventing rabies in people because it stops the transmission at its source. The prevention of animal disease benefits human and environmental health too.

- **How should the legislative frameworks shape canine rabies elimination around compliance, resource mobilization and policy enforcement?**

A holistic rabies control program that involves legislation involvement has seen favorable outcomes, such as in Mexico. Home to an estimated 26 million free-roaming dogs, Mexico became the first country to receive validation from the WHO for eliminating dog-mediated human rabies in November 2019. Besides a One Health approach to guide efforts to control rabies in Mexico, rabies was made a priority in national budgets. In addition, pet animal travel restrictions were enforced to prevent rabies from spreading across borders, and the government maintains a variety of alliances with different actors.

Exploring similar legislative techniques could be considered in the region. Thus far, mandatory pet registration or licensing policies have been in place in most Southeast Asian countries for years and the majority of countries across Southeast Asia also have a national strategy for rabies control. Most recently, due to the increasing number of rabies deaths and people undergoing rabies preventive treatment, the Vietnamese government directed to impose tough fines on owners who breach the regulations in raising and managing dogs and cats, including declaring vaccination status and not allowing them to roam freely.

Controlling and preventing rabies is a shared responsibility. Collaboration between health authorities, veterinarians, dog owners and local communities, cross-border cooperation in data sharing, education and mass vaccination, especially in at-risk areas, are also crucial for progress.

- **How can regional response capacities synergize with global stakeholders in an effort to promote international frameworks and multi-sectoral collaborations in Southeast Asia?**

Given Southeast Asia is a diverse region with varying contexts and capacities, it is essential to customize the approach to rabies elimination by acclimatizing to unique cultural nuances and population sub-groups, to effectively address the regional and local challenges.

Global bodies such as the United Against Rabies Forum provide a platform for rabies stakeholders to work together more efficiently, leveraging shared tools, expertise and data in a coordinated manner to advance the collective efforts in achieving *Zero by 30*.

Building on our experience in rabies prevention and management, Boehringer Ingelheim contributes by sharing our STOP Rabies program's best practices for dog vaccination campaigns, collaborating with GARC, and involving local rabies community stakeholders across the region.

- **How should be the ideal canine vaccination campaigns to break the transmission cycle? Can partnership-driven and community-led initiatives be an effective and sustainable drive in rabies prevention?**

Breaking the rabies transmission cycle requires targeted vaccination coverage rate of 70% of dogs in a specified area. For rabies control programs to be sustainable, local communities need to be engaged in the mission to prevent the disease and take ownership of the strategy, besides ensuring ready vaccine supply.

In the Philippines, Boehringer Ingelheim consulted with the National Rabies Prevention and Control Committee (NRPCC) to identify a beneficiary at-risk community. Since 2022, we have been supporting the Puerto Galera local government unit's efforts to vaccinate and neuter dogs in the community, and run responsible pet ownership campaigns, towards a rabies-free declaration.

Likewise in Vietnam's Long An province, together with key local authorities, university partners and other private sector companies, we have raised the vaccination coverage rate beyond 70%, to more than 6,000 dogs and cats in 11 villages to date, while organizing rabies awareness events to keep people engaged about the disease.

- **What is Boehringer Ingelheim's integrated approach to combat canine rabies in Southeast Asia?**

The rise in rabies cases across Southeast Asia calls for regional attention and local action to manage this preventable disease through dog vaccination, education and surveillance solutions. Only when communities are engaged in the mission can we unite to improve the health of humans and animals.

With more than 30 years of experience working in rabies prevention and management, Boehringer Ingelheim has a responsibility to contribute to elimination efforts and support communities that are most affected by rabies. Our STOP Rabies program aims to work in partnership with governmental and non-governmental organizations, health authorities, veterinarians, people who own or care for dogs, and other interested parties, to deliver on-the-ground solutions across three key pillars – **vaccination, education, and surveillance**.

Through tailored solutions that are partnership-driven and community-led, we can complement and contribute to the important efforts already taking place around the world.

By Hithaishi Bhaskar