

Call for Expressions of Interest and Proposal

VN#007 An entity to implement the "*One Health Model for Early Detection of Animal Rabies Outbreaks Based on Data from Human Exposures Seeking Post-Exposure Rabies Vaccination*" in Nghe An

1. Background

Rabies is an acute viral infection of the central nervous system, transmitted from animals to humans primarily through saliva of rabid animals via bites, scratches, or licking. Once clinical symptoms appear, rabies is almost invariably fatal in both animals and humans.

Rabies remains endemic in most provinces and cities of Vietnam, with Nghe An consistently identified as a hotspot. Since 2018, the province has recorded 46 human rabies deaths, hundreds of rabies outbreaks in animals, and over 50,000 individuals receiving rabies vaccination and rabies immune globulin following animal bites - causing substantial socio-economic impact.

In response, the People's Committee of Nghe An issued the Rabies Prevention and Control Plan for 2022–2030, aiming to control rabies in both humans and animals and eliminate human rabies cases in the province by 2030.

In rabies and other zoonotic disease prevention and control, intersectoral collaboration between the health and animal sectors in surveillance, prevention and outbreak response plays a decisive role. However, rabies surveillance in animals faces major challenges due to a large dog population and wide geographic distribution. Therefore, utilizing technology to identify high-risk areas and prioritize resources for targeted surveillance, prevention and early detection of rabies cases and outbreaks is essential to improve the effectiveness of disease control responses.

Against this background, WHO Viet Nam is recruiting an entity to implement the "One Health Model for Early Detection of Animal Rabies Outbreaks Based on Data from Human Exposures Seeking Post-Exposure Rabies Vaccination" project in Nghe An province.

2. Work to be performed

Task 1: Develop the model and guidelines to finalize the surveillance protocol and the associated implementation guidance documents.

Task 2: Collect and compile essential baseline data (geographic coordinates, human population, total dog population at the village level throughout Nghe An province)

- Screen titles, abstracts, and full texts according to predefined eligibility criteria to ensure inclusion of relevant studies on climate-sensitive infectious diseases and health impacts in Viet Nam, and in the Asia-Pacific region when relevant.
- Number of exposure cases (persons receiving vaccine/immunoglobulin) by hamlet/village, vaccination date.
- Number of human and animal rabies cases by location, date of detection.
- Population and total dog herd size by commune/ward.
- Geographic data (coordinates of common meeting or living places in hamlets/ villages/ residential groups) formatted to WGS-84 standard; open-source basemap (GADM).

Task 3: Organize training for human and animal health staff in Nghe An

- Hold a training session for medical and veterinary staff and vaccination rooms in Nghe An province on the new surveillance protocol.

- The lecturers/facilitators will be NIHE and DAPH staff.
- The one-day training is scheduled in Nghe An.

Task 4: Collect data on human exposures receiving rabies PEP

- Design online data collection system.
- Vaccination clinics daily update PEP vaccination data from exposed individuals in 9 months.
- Nghe An provincial CDC summarize and daily send warning signals to veterinary authorities.

Task 5: Conduct scan statistics to identify high-risk areas and send alerts twice a week

- Retrospective: Use data from July 2025 to June 2026 to identify past clusters.
- Prospective: From July 2026 to March 2027, update weekly to detect statistically significant exposure clusters.
- High-risk exposure cases (exposure to animals with abnormal behavior).
- Statistically significant exposure clusters are considered potential warning signs of animal outbreaks.
- Warning signs will be recorded using the “Warning Sign Recording Form” developed by the National Institute of Hygiene and Epidemiology and sent to the Nghe An Provincial Center for Disease Control and the Nghe An Provincial Sub-Department of Livestock Production and Animal Health for coordinated verification.

Task 6: Verify alerts: investigation, sampling of dog brains

- The Nghe An Provincial Sub-Department of Livestock Production and Animal Health will conduct investigations and collect samples from suspected rabid animals in the area of the exposure cluster. Estimated number of samples is 45 samples for 9 months (July 2026 to March 2027)
- The results of the verification investigation (Event Verification Form) will be reported by the Nghe An Provincial Sub-Department of Livestock Production and Animal Health to the Nghe An Provincial Center for Disease Control and the National Institute of Hygiene and Epidemiology via the Event Verification Form.
- Where suspected animals are not available for sampling, field investigation findings (animal behaviour history, bite severity, vaccination status, community reports) will be documented to support epidemiological assessment.
- Prepare a PowerPoint presentation in English and Vietnamese and other relevant data formats, present preliminary findings to WHO, MOH, and partners for feedback and validation.

Task 7: Prepare report, publish scientific papers

- Assess project impact in terms of prevention and detection of cases.
- Report writing.
- Prepare a PowerPoint presentation in English and Vietnamese and other relevant data formats, present final findings to WHO, MOH, and partners.
- Drafting of scientific manuscript(s).
- Manuscript submission, revision, and publication.

Task 8: Organize dissemination workshop

- Organizing a workshop to disseminate the findings from "One Health Model for Early Detection of Animal Rabies Outbreaks Based on Data from Human Exposures Seeking Post-Exposure Rabies Vaccination".
- The workshop's content will focus on presenting the results of the pilot model.

- Attendees will comprise representatives from NIHE, DAPH, NCVD1, along with leadership and personnel from the Nghe An provincial health and veterinary sectors.
- The one-day workshop will be conducted in Nghe An.

Task 9: Conduct prevention activities against rabies

- Develop communication materials for the public.

3. Deliverables:

- 3.1 Surveillance protocol and guidance documents (by 31 July 2026).
- 3.2 Essential baseline data (by 31 August 2026).
- 3.3 Report on the training for human and animal health staff in Nghe An (by 31 August 2026).
- 3.4 Communication materials for the public (by 31 August 2026).
- 3.5 Submission of technical report for 9 months including: (i) Data on human exposures receiving rabies PEP during that period, (ii) Scan statistics conducted to identify high-risk areas and alerts sent, and (iii) Alerts verified (investigations conducted and dog brains sampled) (by 31 May 2027).
- 3.6 Report on dissemination workshop (by 29 July 2027).
- 3.7 Scientific manuscript submission, revision, and publication (by 30 September 2027).
- 3.8 APW financial report (by 30 September 2027).

4. Planned timeline:

From 1 June 2026 to 30 September 2027

5. Specific requirements

- Team Leader's requirements:
 - First degree in human or veterinary medicine with graduate qualifications, preferably a PhD degree in infectious disease, epidemiology, or related fields.
 - At least 10 years of professional experience in infectious disease prevention, control and elimination, including rabies.
 - Proven experience conducting literature reviews, evidence syntheses, or research gap analyses and publication of manuscripts in peer-reviewed journals.
 - Capacity building with focus on communicable diseases.
 - Demonstrated familiarity with public health policy, data and surveillance systems in Viet Nam.
 - Experience in working with the Ministry of Health, the Ministry of Agriculture and Environment, and other relevant ministries, agencies and development partners is an advantage.
 - Strong understanding of rabies epidemiology in Viet Nam.
 - Proven skills in data analysis, report writing, and synthesis of complex information.
 - Excellent organizational and communication skills, with the ability to engage government counterparts and research institutions.
 - Excellent in writing and speaking English. Fluency in Vietnamese as a mother tongue.
- Team members' requirements:
 - At least a master's degree in a relevant field and at least 5 years' experience in rabies control/elimination activities.

6. Place of assignment

The APW can be conducted remotely; except for the training (August 2026), investigations, and dissemination workshop (July 2027), which should be conducted in Nghe An.

7. Cost

All bids will be evaluated based on the submitted proposals with detailed budget breakdown in terms of the technical requirements, timeliness, and value for money.

8. Travel

After notifying and agreeing on the specific timeline with WHO, the APW holder should arrange the required travel by themselves, with the costs included in the approved budget proposal.

Entities which are interested can reach us before/by **8 May 2026**

World Health Organization
wpvnmuhc@who.int

Subject: *Application for VN#007 (To implement a "One Health Model for Early Detection of Animal Rabies Outbreaks Based on Data from Human Exposures Seeking Post-Exposure Rabies Vaccination" in Nghe An)*