



Bio Vet Innovator Magazine

(Fueling The Future of Science...)

Volume 3 (Issue 9) SEPTEMBER 2026



World Rabies Day – 28th September 2026

Popular Article

When Rabies Meets the Chicken Coop: Can Poultry Really Get Rabies?

Sonali D. Chandankar¹, Vaidehi D. Chandankar², Roshan M. Sarode³

¹PhD Scholar, Department of Poultry Science,

GBPUAT University, Pantnagar, Uttarakhand

²PhD Scholar, Department of Veterinary Microbiology,

ICAR-Indian Veterinary Research Institute, Bengaluru, Karnataka

³MVSc Scholar, Department of Animal Nutrition,

ICAR-Indian Veterinary Research Institute, Bareilly, Uttar Pradesh, India

*Corresponding Author: chandankarvaidehi@gmail.com

DOI: <https://doi.org/10.5281/zenodo.23123164>

Received: September 30, 2026

Published: October 03, 2026

© All rights are reserved by Vaidehi D. Chandankar

Abstract:

Rabies is predominantly a disease of mammals, making its occurrence in poultry an exceptionally unusual event. Although birds are rarely affected, documented evidence shows that rabies virus can infect avian hosts. A particularly notable case was reported in India in 2015, when a domestic fowl that had been bitten by a stray dog was confirmed to have rabies virus infection in its brain tissue. This unusual case raises an important question about the place of poultry within rabies ecology. This article explores how rabies can reach a poultry setting through infected mammals, why poultry themselves are unlikely to be a major source of transmission, and how the animal-human-environment interface makes rabies a relevant One Health concern even in an unexpected host.

The Unexpected Question: Can Rabies Enter a Poultry Farm?

Rabies is almost always associated with dogs, cats, bats and other mammals. Yet, the story of this deadly viral disease does not end with mammals. Birds, although rarely affected, can also become infected with rabies virus. Scientific literature has documented rabies infection in several bird species, including chickens, waterfowl and raptors. Such infections are unusual, but they demonstrate that the boundaries of rabies host susceptibility are not as simple as they may first appear (Greenacre 2005).

For poultry, this makes rabies an unusual but noteworthy disease concern. Rabies is still predominantly a disease of mammals, and naturally occurring infection in birds is exceptionally rare. However, the existence of documented avian infections means that poultry cannot be considered completely outside the story of rabies.

This rare intersection between rabies and poultry becomes particularly fascinating in light of a documented case from India, where a domestic fowl was naturally infected with rabies. The case provided an unusual glimpse of a virus traditionally associated with mammals appearing in an unexpected host—

Citation: Sonali D. Chandankar, Vaidehi D. Chandankar and Roshan M. Sarode. (2026). When Rabies Meets the Chicken Coop: Can Poultry Really Get Rabies? In Bio Vet Innovator Magazine (Vol. 3, Issue 9, pp. 139–141). Bio Vet Innovator Magazine. <https://doi.org/10.5281/zenodo.23123164>

and opened the door to a closer look at how such an infection could occur.

How Did Rabies Reach the Chicken?

In Kerala, India, a domestic fowl was bitten by a stray dog on its breast muscle. The wound was treated, but approximately one month later, the bird became dull, stopped feeding and eventually died. Because the dog involved was suspected to be rabid, the dead bird was investigated for possible rabies infection.

The investigation produced an unexpected finding. Examination of the chicken's brain detected rabies viral antigen using the fluorescent antibody test (FAT), while real-time PCR confirmed the presence of rabies viral RNA. Further genetic analysis identified the virus as belonging to the Indian subcontinent lineage of rabies virus.

Reported in 2015, this became the first documented case of naturally acquired rabies in a domestic fowl in India. The case provided direct evidence that, although extremely rare, rabies virus can infect an avian host following exposure to an infected mammal (Baby et al., 2015).

The Chicken Isn't the Culprit: Where Is the Real Risk?

A poultry farm may contain more than just chickens. Dogs, cats and wild animals can move around farms, feed-storage areas and surrounding fields, creating opportunities for contact between poultry, people and potentially infected mammals. In rabies-endemic regions, dogs remain the major source of rabies transmission to humans, while wildlife can also maintain and spread the virus.

For people working closely with animals, the concern is therefore not that chickens routinely spread rabies, but that an infected mammal can bring the virus into the farm environment. A bite or contact with saliva from a rabid animal can expose farm workers, veterinarians or animal handlers. This makes the poultry farm a meeting point between animal health, human health and the surrounding wildlife environment.

One Health at the Poultry Farm: Breaking the Rabies Chain

Rabies prevention does not begin only after an animal shows signs of disease. It begins by controlling the links that allow the virus to move between animals, people and their surroundings. At a poultry farm, this means keeping potentially rabid mammals away from poultry areas, avoiding contact with unfamiliar or abnormal animals, and ensuring that any suspected exposure is taken seriously.

Farm workers, poultry handlers and veterinarians are an important part of this protective chain. Awareness of rabies, responsible management of stray dogs around farms, and timely veterinary and medical attention after a suspected bite or exposure can help prevent a rare animal infection from becoming a human health risk (Acharya et al., 2021).

The unusual case of rabies in a domestic fowl therefore carries a broader message. Rabies may appear in an unexpected host, but prevention still depends on the same principle: interrupt transmission

at the animal–human–environment interface. This is where the One Health approach becomes particularly relevant—protecting animal health and human health together rather than treating them as separate problems.

Conclusion:

The occurrence of rabies in a domestic fowl demonstrates that an unusual host can occasionally become infected when exposed to a rabid mammal. However, poultry are not a recognized major source of rabies transmission. The importance of this rare event lies in what it reveals about the connections between wildlife, domestic animals and people. In a poultry-farm environment, preventing contact with potentially infected mammals and responding promptly to suspected exposures remain essential. The case therefore highlights a broader One Health lesson: even when a disease appears in an unexpected species, understanding and breaking the links between animals, humans and their shared environment remains central to rabies prevention.

References:

- Acharya, K.P., Subedi, D. and Wilson, R.T., 2021. Rabies control in South Asia requires a One Health approach. *One health*, 12, 100215.
- Baby, J., Mani, R.S., Abraham, S.S., Thankappan, A.T., Pillai, P.M., Anand, A.M., Madhusudana, S.N., Ramachandran, J. and Sreekumar, S., 2015. Natural rabies infection in a domestic fowl (*Gallus domesticus*): a report from India. *PLoS neglected tropical diseases*, 9 (7), p.e0003942.
- Greenacre, C.B., 2005. Viral diseases of companion birds. *The Veterinary Clinics of North America. Exotic Animal Practice*, 8 (1).