

Study shows observing a sick individual triggers a biological response

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It's well-known that when those around us get sick, there's a good chance

we'll catch what they have, but [new research](#) published in *Trends in Ecology & Evolution* reveals that simply observing a sick individual triggers a biological response.

Patricia Lopes, an assistant professor of biology at Chapman University, is studying how the body anticipates the possibility of infection just by witnessing someone else's symptoms. This [phenomenon](#) raises questions about the interconnectedness of individuals within a [social group](#) and how the perception of sickness can influence the health and behavior of others.

Her recent work showed that when healthy animals interacted with animals showing disease symptoms, they [activated molecular pathways related to immune responses](#) and [changed their egg composition](#). These types of [responses are also found in humans](#), as summarized in Lopes's publication in *Functional Ecology*.

"This research has helped unveil another level of the hidden ripple effects of infections, showing that when one individual falls ill, it's not just their problem—it's a complex story that can impact the health and behavior of many others," said Dr. Lopes.

Researchers don't yet understand how long these anticipatory responses last but note that they shouldn't replace [preventative measures](#) like vaccines. Lopes is currently studying how these anticipatory responses come about and whether they have any protective effect for the organisms experiencing them.

More information: Patricia C. Lopes, Responding to infection affects more than just the host, *Trends in Ecology & Evolution* (2023). [DOI: 10.1016/j.tree.2023.05.018](https://doi.org/10.1016/j.tree.2023.05.018)

Provided by Chapman University

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