

Imperfect vaccines may be making viruses stronger

The vaccines widely used by humans today — especially those used to protect children against mumps, measles, and other potentially deadly ailments — are what we'd call “perfect” vaccines. But new research suggests that “imperfect” or “leaky” vaccines — ones that don't make their hosts totally immune to the disease and incapable of spreading it to others — might have a surprising downside. For now, this so-called leakiness only exists in vaccines used to treat farm animals. But researchers warn that as humankind tackles bigger, badder diseases, we should keep the potential danger of leaky vaccines in mind.

[In a study published in PLOS Biology](#), researchers led by [Andrew Read](#), the Evan Pugh Professor of Biology and Entomology and Eberly Professor in Biotechnology at Penn State University and [Venugopal Nair](#), the Head of the Avian Viral Diseases program at The Pirbright Institute studied [Marek's disease](#) — a herpes virus that infects chickens.

Highly contagious, Marek's disease didn't used to be deadly. But now chicken farmers see increasingly virulent strains in their broods. The vaccine keeps chickens from getting sick, but unvaccinated chickens are getting sicker than they used to.

Read and his colleagues don't know whether the vaccines for the disease actually caused more virulent strains of the illness to develop. It's not a clean-cut evolutionary partnership the likes of antibiotics and antibiotic resistant bacteria.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [‘Leaky’ vaccines could make viruses more deadly, study suggests](#)