

Avian flu vaccine developed for poultry

December 7 2006

U.S. scientists say they've developed the first egg-injected vaccine to protect chickens against the avian influenza virus.

An Auburn University veterinary professor, Haroldo Toro, and researchers at Vaxin Inc. of Birmingham, Ala., say the vaccine would provide 100 percent protection once an outbreak's specific viral strain is identified.

"We have proven the principle, which is the major step in leading to commercially produced vaccine that could be vital to the poultry industry," Toro said. "When an outbreak occurs, we would determine the strain and quickly create a vaccine within three months specifically for it."

The researchers inserted a gene from a low pathogenic avian flu virus strain (H5N9) into a non-replicating human virus, a Vaxin proprietary technology, which was then injected into developing chicken embryos still in the egg.

When protection induced by the vaccine was tested against two highly pathogenic avian flu viruses -- a Vietnam H5N1 strain and a Mexican H5N2 strain -- the results showed 68 percent and 100 percent protection, in that order.

"Our results indicate that we can provide effective protection against any strain after incorporating the gene of the field strain into our vaccine construct," said Toro.

Copyright 2006 by United Press International

Citation: Avian flu vaccine developed for poultry (2006, December 7) retrieved 25 April 2024 from <https://medicalxpress.com/news/2006-12-avian-flu-vaccine-poultry.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.