



## TECHNOLOGY

# Improved Live Attenuated Newcastle Disease Vaccine

## OVERVIEW

Newcastle disease virus (NDV) causes highly contagious and fatal disease affecting all species of birds. Vaccination against the disease has been widely used to protect birds from contracting Newcastle disease. The most commonly used method of vaccination involves exposure of chickens to low virulence strains of NDV. The main disadvantage of the live Newcastle disease vaccines is that they can cause disease and lead to mortality. Thus the development of a completely apathogenic NDV vaccine would be beneficial to the poultry industry. At present, however, there is no method to directly manipulate the genome of NDV to achieve a desired level of attenuation. Another limitation of the currently used live attenuated vaccine is their reversion to virulence.

An inventor in the College of Veterinary Medicine, at the University of Maryland, using recent technological advances has developed a technique that makes it possible to design a genetically engineered live attenuated vaccine for NDV infections. Also, the vaccine virus seed can be stored as cDNAs and thus production of uniform vaccines will be possible.

The university is currently seeking an industrial partner for collaboration. A patent is pending for this technology. For additional information please contact the Office of Technology Commercialization, University of Maryland, College Park, MD 20742. Phone 301-405-3947. E-mail: [otc@umd.edu](mailto:otc@umd.edu)

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## Additional Information

### INSTITUTION

University of Maryland, College Park

### PATENT STATUS

Patent(s) pending

### LICENSE STATUS

Contact OTC for licensing information

### CATEGORIES

- Vaccines

## EXTERNAL RESOURCES

- [US Patent 7,244,558](#)

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