

# VAXXON<sup>®</sup>

## ND-IB-IBD-REO

**Broad Protection from  
chicken to chick**

- Effective protection against Newcastle Disease, Infectious Bronchitis, Gumboro Disease and Viral Arthritis / Tenosynovitis
- Safe and easy to use at 14 - 20 weeks of age



va  inova<sup>®</sup>

## Newcastle Disease

Newcastle Disease (ND) is caused by virulent strains of avian paramyxovirus type 1 (APMV-1) of the genus Avulavirus which belongs to the family Paramyxoviridae. The ND virus (NDV) has shown to be able to infect over 200 species of birds, but the severity of the disease produced varies with both the host and the strain of the virus. Even APMV-1 strains of low virulence may induce severe respiratory diseases when exacerbated by the presence of other organisms or by adverse environmental conditions. Since its recognition in 1926, ND is regarded as being endemic in many countries ([www.oie.int](http://www.oie.int)).

## Infectious Bronchitis

Since the first reports of Infectious Bronchitis, IBV has continued to change its appearance. Outbreaks can be explosive, with the virus spreading rapidly to involve the entire flock within only a few days. The incubation period is typically brief: 18 to 48 hours. In chicks from 1 to 4 weeks of age, virulent virus strains produce severe respiratory disease, with gasping, coughing, tracheal rales, sneezing, nasal exudate, wet eyes, respiratory distress. Occasionally, also swollen sinuses appear, just like kidney problems and negative effects on egg production. A higher mortality is also many times reported, mainly in young birds. In birds in lay, infections with IBV may cause a significant drop in egg production and/or in the quality of the eggs.

Source: [www.oie.int](http://www.oie.int)

## Infectious Bursal Disease

Infectious Bursal Disease (IBD), also known as Gumboro Disease, is caused by a virus that is a member of the genus Avibirnavirus (family Birnaviridae). The clinical disease occurs solely in chickens, usually only in chickens younger than 10 weeks.

Severe acute disease of 3- to 6-week-old birds is associated with high mortality, and signs including prostration, diarrhoea, and sudden death. Post-mortem examinations of acute IBD cases reveal a combination of muscular and proventricular haemorrhages, nephritis and bursal inflammation, with bursal oedema or haemorrhages in the first 4 days, followed by bursal atrophy later in the course of the disease.

A less acute or subclinical disease is common in birds up to 3 weeks old. This can cause secondary problems due to the effect of the virus on the bursa of Fabricius. IBD virus (IBDV) causes lymphoid depletion of the bursa, and, especially if this occurs in the first 2 weeks of life, significant depression of the humoral antibody response may result. The only lesions associated with subclinical IBD may be bursal atrophy and lesions associated with secondary

infections. The characterisation of histopathological changes associated with bursal atrophy will be of utmost importance in identifying subclinical IBD.

Together with bio security, IBD vaccines are the most valuable tool to control the disease. To prevent IBD infections, also effective vaccination of breeding stock is of great importance, to protect the progeny by the passive transfer of antibodies ([www.oie.int](http://www.oie.int)).

## Reovirus

Avian reoviruses are members of the orthoreovirus genus in the Reoviridae family. Ubiquitous in commercial poultry, they can be differentiated by antigenic configuration, pathotype, relative pathogenicity, growth in cell culture, sensitivity to trypsin, and host specificity.

Reoviruses have been isolated from a variety of tissues in chickens affected by assorted disease conditions, including viral arthritis/tenosynovitis, stunting syndrome, respiratory disease, enteric disease, immunosuppression, and malabsorption syndrome. They have frequently been found in chickens that were clinically normal. The nature of the disease that occurs following reovirus infection depends very much upon the age of the host, immune status, virus pathotype and route of exposure.

Interactions with other infectious agents have been documented and may result in differences in both the nature and severity of reovirus induced disease expression. In young meat-type chickens, economic losses related to reovirus infections are frequently associated with increased mortality, viral arthritis/tenosynovitis and a general lack of performance including diminished weight gains, poor feed conversions, uneven growth rates, and reduced marketability of affected birds.

Breeder flocks that develop viral arthritis just prior to the onset of or during egg production may in addition to lameness be characterized by increased mortality, decreased egg production, suboptimal hatchability/fertility, and vertical transmission of virus to progeny—all of which can contribute to increased costs for poultry producers.

The best defined and most readily diagnosed reovirus associated disease in chickens is viral arthritis. The disease has been recognized in virtually all major poultry-producing areas worldwide in both heavy and light chicken breeds. Other disease conditions associated with reovirus infections can be demonstrated experimentally or are inferred by isolation from clinical accessions.

SOURCE: Diseases of Poultry, Y.M Saif – 11 th Edition  
Chapter: Reovirus Infections - John K. Rosenberger



# VAXXON® ND-IB-IBD-REO - Broad Protection from chicken to chick

breeders

## Target Species

Chicken (breeders).

## Indications

VAXXON® ND-IB-IBD-REO is an inactivated viral vaccine for the active immunization against Newcastle Disease, Infectious Bronchitis, Gumboro Disease and Viral Arthritis / Tenosynovitis.

1000 ds

## Dosage

Each vial contains 1,000 ds (500 ml).

4 weeks  
before lay

## Method of administration

Inject subcutaneously (at the back of the neck) or intramuscularly (pectoral muscles).

Vaccinate 4 weeks before the onset of lay. A first vaccination with live vaccines against Newcastle Disease, Infectious Bronchitis, Gumboro Disease and Viral Arthritis/Tenosynovitis is recommended.

24  
months

## Composition

Each dose of 0.5 ml of vaccine contains sufficient:

- Inactivated Newcastle Disease virus
- Inactivated Infectious Bronchitis virus strain Massachusetts M41
- Inactivated Gumboro Disease virus
- Inactivated Reovirus

In oil emulsion.

ND-IB-  
IBD-REO

## Shelf life

The product in the original packaging can be used until 24 months from the manufacturing date.

## Storage conditions

The product must be stored at 2°C to 8°C.

Do not freeze.

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