

UNIVAX-BD[®]

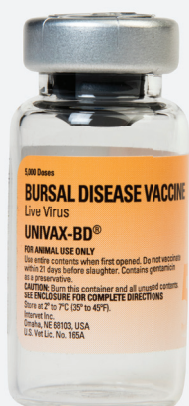
Bursal Disease Vaccine

(Live Virus, Chicken Tissue Culture Origin)

For vaccination of healthy chickens one day of age or older and to 18 to 19 day embryonated eggs as an aid in the prevention of infectious bursal disease (IBD).

ADVANTAGES:

- Produces broad protection against subclinical challenge without destroying future immunization capabilities
- Approved for *in ovo* use in 18 to 19 day embryonated eggs
- Approved for day of age by subcutaneous route of administration or by drinking water to birds 1 week of age or older
- Highly antigenic, mild reacting, plaque-purified virus for consistent protection
- Ideal product for *in ovo* or day of age application



Univax-BD[®] vaccine is a live virus vaccine containing a carefully selected mild strain of bursal disease virus grown in chicken tissue culture and combined with stabilizing agents. The product is supplied as a lyophilized vaccine contained in vials sealed under vacuum.

10 x 1,000 doses
10 x 5,000 doses



UNIVAX-BD[®]

Bursal Disease Vaccine

(Live Virus, Chicken Tissue Culture Origin)



For Animal Use Only.

Description

Univax-BD[®] vaccine is a live virus vaccine containing a carefully selected mild strain of bursal disease (IBD) virus grown in tissue culture and combined with stabilizing agents. The product is supplied as a lyophilized vaccine contained in vials sealed under vacuum. For use in 18 to 19 day old embryonated chicken eggs or chickens at 1 day of age by subcutaneous route of administration and/or by drinking water at 1 week or older as an aid in preventing IBD.

When to Vaccinate

Vaccinate 18 to 19 day old embryonated chicken eggs by the *in ovo* route or subcutaneously at 1 day of age and/or by drinking water at 1 week or older. Use only healthy embryonated eggs for the *in ovo* route. Good management practices should be followed to reduce exposure of birds to virulent infectious bursal disease virus during the first several weeks of life.

Your Vaccination Program

The development of a durable, strong protection depends upon the use of an effective vaccination program as well as many circumstances such as administration techniques, environment and flock health at time of vaccination. Also, the immune response to one vaccination under field conditions is seldom complete for all animals within a given flock. Even when vaccination is successful, the protection stimulated in individual animals against different diseases may not be lifelong. Therefore, under certain circumstances revaccination may be necessary.

Preparation of the Vaccine

IN OVO ROUTE OF ADMINISTRATION

To avoid personal injury and embryonic mortality read thoroughly and follow the *in ovo* operator's manual before attempting any *in ovo* vaccination. Sanitize the *in ovo* system according to the operator's manual.

1. Do not open and mix the vaccine until ready for use.
2. Mix only 1 vial at a time and use entire contents within 2 hours.
3. Lift up top of seal on vaccine vial to expose rubber stopper. Using sterile needle and 5 or 10 mL syringe, remove a small amount (5 mL) of diluent from the diluent bottle and transfer this to the vaccine vial. Vacuum in the vaccine vial will readily pull in the diluent. Release the vacuum remaining in the vial.
4. Vigorously shake vaccine vial with transferred diluent to rehydrate the vaccine.
5. Using the same sterile needle and syringe, completely transfer the rehydrated vaccine to remaining diluent in diluent bottle. Rinse syringe and vaccine vial by withdrawing additional diluent and repeating the process.
6. Vigorously shake final rehydrated vaccine for 20-30 seconds to mix thoroughly.
7. The vaccine is now ready for use.

SUBCUTANEOUS ROUTE OF ADMINISTRATION

1. Do not open and mix the vaccine until ready for use.
2. Mix only 1 vial at a time and use entire contents within 2 hours.
3. Lift up top of seal on vaccine vial to expose rubber stopper. Using sterile needle and 5 or 10 mL syringe, remove a small amount (5 mL) of diluent from the diluent bottle and transfer this to the vaccine vial. Vacuum in the vaccine vial will readily pull in the diluent. Release the vacuum remaining in the vial.
4. Vigorously shake vaccine vial with transferred diluent to rehydrate the vaccine.
5. Using the same sterile needle and syringe, completely transfer the rehydrated vaccine to remaining diluent in the diluent bottle. Rinse syringe and vaccine vial by withdrawing additional diluent and repeating the process.
6. Vigorously shake final rehydrated vaccine for 20-30 seconds to mix thoroughly.
7. The vaccine is now ready for use.

DRINKING WATER METHOD

1. Assemble the vaccine and equipment needed to vaccinate the entire flock at one time.
2. Remove the tear-off aluminum seal from the vaccine vial without disturbing the rubber stopper.
3. Use cool, clean, non-chlorinated tap water to which powdered milk has been added as directed under How to Vaccinate.
4. Holding vial submerged in a pail of water or under a running stream of water, lift the lip of the rubber stopper so that the water (milk added) is sucked into the vial.
5. Reseat the stopper and shake the vial to thoroughly dissolve the vaccine.

How to Vaccinate

BY IN OVO ROUTE OF ADMINISTRATION

Follow the *in ovo* operator's manual before attempting any *in ovo* vaccination. Sanitize the *in ovo* system according to the operator's manual. The *in ovo* system should be calibrated accurately to deliver 0.05 mL or 0.10 mL into each embryonated egg.

BY SUBCUTANEOUS ROUTE OF ADMINISTRATION

Insert a filling tube (large, sharpened transfer tube) into the bottle of vaccine. Connect the filling tube by means of rubber or plastic tubing to an automatic vaccinator fitted with a 22-gauge 1/2 inch needle. The automatic vaccinator should be calibrated accurately ahead of time to deliver 0.2 mL.

BY DRINKING WATER METHOD

Do not mix the vaccine into the drinking water until ready for use. Drinking water for vaccination should be mixed with powdered milk to prevent inactivation from chlorine or other water additives and also to stabilize the vaccine virus. The powdered milk should be added to the water at the rate of 3 grams per 11 liters (1 heaped teaspoon per 3 U.S. gallons); or 90 grams per 300 liters (1 heaped cupful per 80 U.S. gallons). Withhold water for several hours before vaccinating so the birds are thirsty. Thoroughly clean and rinse all watering containers so that no residual disinfectants remain. Dilute the vaccine immediately before use with cool, clean, non-chlorinated water (milk added). Pour the dissolved vaccine material into the following amounts of water and mix thoroughly.

Each 1000 Birds	U.S. Gallons	Metric Liters
1 Week	1.75	6.5
2 to 4 Weeks	2.5	10
4 to 8 Weeks	5	20
Over 8 Weeks	10	40

Distribute diluted vaccine so that all birds are able to drink within a 1 hour period and do not add any more water until the vaccine is consumed. Avoid placing water in direct sunlight.

Caution

1. Use the *in ovo* system for the *in ovo* vaccination into 18 to 19 day old healthy embryonated chicken eggs. For subcutaneous use only in day old birds. For use by drinking water in birds 1 week or older.
2. All birds within a house should be vaccinated on the same day. Isolate other susceptible birds on the premises from the birds being vaccinated.
3. Vaccinate only healthy birds. Although disease may not be evident, coccidiosis, chronic respiratory disease, *Mycoplasma* infection, lymphoid leukosis, Marek's disease, or other disease conditions may cause serious complications or reduce protection.
4. In outbreak situations, vaccinate healthy birds first, progressing toward outbreak areas in order to vaccinate diseased birds last.
5. Do not spill or spatter the vaccine. Use entire contents of vial when first opened. Burn empty bottles, caps and all unused vaccine and accessories.
6. Wash hands thoroughly after using the vaccine.
7. Do not dilute the vaccine or otherwise stretch the dosage.
8. Store at 2° to 7° C (35° to 45° F).
9. Do not vaccinate within 21 days before slaughter.
10. Use only in states (U.S.) where permitted and on premises with a history of bursal disease.

This product is not hazardous when used according to directions supplied. A safety data sheet (SDS) is available upon request. This and any other consumer information can be obtained by calling Merck Animal Health Customer Service at 1-800-211-3573.

Records

Keep a record of vaccine type, quantity, serial number, expiration date, and place of purchase; the date and time of vaccination; the number, age, breed, and location of the birds; names of operators performing the vaccination and any observed reactions.

This vaccine contains gentamicin as a preservative. The use of this vaccine is subject to state laws wherever applicable.

Contact our sales or technical services representatives to help design a custom vaccination program.