

## Drinking water administration of vaccine

**Administering live vaccine via the drinking water is a simple way to vaccinate a large number of birds simultaneously, but great attention to detail is necessary for successful immunisation.**

The two critical factors for effective drinking water vaccination are:

1. Excellent quality water to ensure the vaccine stays alive.
2. Good access to the drinkers so every bird can drink a full dose of vaccine.

### Preparation before vaccination day

1. Determine the volume of drinking water required for administration of the vaccine. Record the volume of water the birds consume in 2 - 3 hours in the morning during and / or after feeding. Guide: Less than 8 weeks of age 10 - 20 litres per 1000 birds. More than 8 weeks of age 20 - 40 litres per 1000 birds.
2. Provide enough space at the drinkers so two-thirds of the birds can drink at the same time.
3. Discontinue use of medications, disinfectants or sanitisers in the drinking water for at least 24 hours before and after vaccine administration.
4. Water used for administering live vaccine must not contain chlorine. Chlorine kills the vaccine. To make non-chlorinated water put clean chlorinated water in an open container for two to three days before vaccination so the chlorine can evaporate. Alternatively use clean non-chlorinated bore water. If water quality is poor, it may be convenient to purchase non-chlorinated bottled water.

### On vaccination day

1. In the morning, before or during feeding, flush the drinkers and water lines with fresh non-chlorinated water and drain dry.
2. Withhold water for 1 - 2 hours before vaccinating. (In a hot climate do not deprive the birds of water).
3. Ensure the only water available will be the vaccine water.
4. In a clean plastic mixing container prepare a stabilised water solution. Mix chlorine-free water and a commercial water stabiliser according to the label directions. Alternatively use fresh low-fat milk; 500 ml per 10 litres of final vaccine water volume.
5. Open the vaccine vial by removing the metal seal and rubber stopper. Dissolve the vaccine with the prepared stabilised water solution. Replace the rubber stopper and shake gently.
6. Add the dissolved vaccine to the stabilised water solution and rinse the vial and stopper in the stabilised water solution. Mix thoroughly.

7. If necessary, dilute the vaccine and stabilised water mixture in the final volume of drinking water required for administration of the vaccine. Mix thoroughly.
8. Immediately distribute the vaccine water mixture evenly amongst the drinkers.
9. Ensure all birds have an opportunity to drink the vaccine water mixture. Monitor for vaccine water delivery problems. Shift the birds or top up the drinkers as necessary.
10. In hot conditions, mix and administer half the vaccine in the first hour and the other half of the vaccine in the second hour.
11. Resume regular water administration only after all the vaccine water mixture has been consumed (approximately 2 hours).

### After vaccination

1. Document the vaccination in flock / shed records.
2. For the next 24 hours use only non-chlorinated water without medication or sanitising agents.

### N.B.

1. Follow the instructions on the package insert carefully. Do not take short cuts.
2. Never give less than one full dose of vaccine per bird - 1000 doses is for up to 1000 birds, 5000 doses is for up to 5000 birds.
3. Do not let the vaccine die. Use clean water without chlorine. After reconstitution use the vaccine immediately. Keep the vaccine away from the sun. Make sure the vaccine water is all consumed within 2 - 3 hours.

