

Spray administration of vaccine in sheds

Spray administration is a simple and effective method of administering live vaccines if air movement in the shed can be minimised.

The three critical factors for effective spray vaccination are:

1. Excellent quality water to ensure the vaccine stays alive.
2. Uniform delivery of the vaccine to all birds using a correctly adjusted sprayer.
3. Minimisation of air movement during vaccination and for 20 minutes afterwards.

Preparation before vaccination day

1. Use a knapsack sprayer with an adjustable spray nozzle. This sprayer should be dedicated for spraying vaccine only and not used for any other purpose.
2. Adjust the nozzle to give a spray of uniformly sized droplets that spread out evenly and quickly settle. Do not use a fine mist that hangs in the air – adjust the nozzle and / or reduce the pressure. Conversely, do not use a spray so coarse that it resembles a stream.
3. Practice the spraying technique. Use a sweeping action to uniformly cover the ground with droplets as the operator walks at a constant speed. Adjust as necessary.
4. Determine the volume of water required for administration of the vaccine. Perform a trial vaccination run with water only. Measure the amount of water required to cover the area inhabited by the chickens.
5. Water used for administering live vaccine must not contain chlorine. Chlorine kills the vaccine. It may be convenient to purchase high quality bottled water.

On vaccination day

1. Vaccinate during the coolest time of day (usually early morning).
2. Turn the lighting down and allow the birds to settle.
3. Put the required volume of cool clean water in a clean plastic mixing container.
4. Open the vaccine vial by removing the metal seal and rubber stopper. Dissolve the vaccine with the water. Replace the rubber stopper and shake gently.
5. Add the dissolved vaccine to the water and rinse the vial and stopper in the water.
6. Swirl the reconstituted vaccine to mix thoroughly.
7. Pour the reconstituted vaccine into the sprayer reservoir. Agitate to mix.
8. Turn off the ventilation fans and close the shed just before applying the vaccine.

9. Immediately start spraying the birds. A light spray over the birds is sufficient. Simply let the spray droplets settle onto the birds from a height of 500 - 600 mm.
10. Wait 20 minutes after completing vaccination. Then open the shed and turn on the ventilation fans.

After vaccination

1. Document the vaccination in flock / shed records.
2. Wash out the sprayer and rinse several times in hot clean water. Do not use detergent or sanitiser.
3. Store the sprayer in a dust free cabinet.

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.
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.
4. The operator should wear a face mask and goggles to prevent spray entering the eyes, nose or mouth.

