



## On-Farm Vaccination Techniques

- Always store vaccines according to manufacturer's directions on the label (2-7 degrees Celsius for most poultry vaccines). Storage in an alarmed fridge is ideal.
- Never use a vaccine that has been frozen (warning: this can sometimes occur when vaccines are stored at the back of your fridge!).
- Transport vaccines to the farm in a cooler with ice packs to keep the temperature constant.
- Do not expose vaccines to direct sunlight at any time.
- Do NOT vaccinate sick or stressed chickens or vaccinate on days of predicted stress (**hot weather**, etc).
- Use serology (blood samples) to monitor the success of your vaccine administration techniques (and for routine flock health monitoring).

### Coarse Spray Vaccination

- For small flocks, a small pump sprayer can be used. For larger flocks, a larger backpack sprayer should be used.
  - **Any equipment used for vaccination should be dedicated to vaccination only and not used for other purposes.**
- Wear protective clothing while vaccinating (coveralls, mask, goggles, gloves).
- Before starting, spray 4L of water through the sprayer and adjust the spray nozzle to a coarse spray that settles quickly over the birds (not a mist that hangs in the air).
- **Use distilled water** for coarse spray vaccination.
  - To calculate the amount of distilled water you will need to mix with the vaccine, do a 'trial run' through the barn using water only and note how much water you use to uniformly cover the flock.
  - A general guideline is 8L of distilled water per 10,000 birds.
- Remove vaccine from fridge or cooler and remove metal seal/rubber stopper. Fill vial half-full with distilled water/diluent, then replace the rubber stopper and gently invert the vial several times to mix/reconstitute.
  - Pour the reconstituted vaccine into the clean sprayer.
  - Rinse the vaccine vial again a few times with distilled water (if you forget this step, you will lose a significant percentage of your doses that are left stuck in the 'empty' vial).
  - Gently swirl the spray tank to mix the vaccine thoroughly with the distilled water.
  - **Mix only enough vaccine to vaccinate one barn at a time.**
- Before vaccinating, minimize ventilation and dim the lights.
- Walk slowly through the barn to uniformly cover the flock with vaccine.
  - Direct the nozzle approximately 1m above the birds
- Turn on proper ventilation after the vaccination procedure is completed.
- After vaccination is completed, record details including the flock ID and the number of chickens/doses vaccinated. Record the name of the vaccine, serial number and expiry date. Make note of any problems that may have occurred.
- Rinse the outside of the sprayer thoroughly with hot water and allow it to air dry. Run 4 L of hot water through the sprayer.

## Drinking Water Vaccination

- Discontinue the use of any medications, sanitizers, etc. 48 hours prior to vaccinating. Only resume medications/sanitizers 48 hours after completion of vaccinating or per the vaccine manufacturer's directions.
- For pullets on feeding schedules, make sure to vaccinate on a 'feed day'.
- Ensure there is no chlorine in the water (chlorine will kill the vaccine!)
  - Use a product like 'Bluefarm®' (1 sachet per 100L of water) to neutralize chlorine, stabilize the vaccine and to dye the water so that vaccine uptake can be monitored
- Deprive birds of water for 1-2 hours prior to vaccination (shorten time in hot weather). Early morning vaccination is ideal. Flush lines prior to vaccinating.
- Remove vaccine from fridge or cooler and remove metal seal/rubber stopper. Fill vial half-full with chlorine-free water/diluent, then replace the rubber stopper and gently invert the vial several times to mix/reconstitute.
  - Pour the reconstituted vaccine into the designated bucket or water tank
  - Rinse the vaccine vial again a few times with chlorine-free water (if you forget this step, you will lose a significant percentage of your doses that are left stuck in the 'empty' vial).
- **Proportioner administration:**
  - Calculate the average water consumption for the previous 4 days, to obtain the amount of water used by the proportioner.
  - Calculate 30% of the volume of water used by the proportioner (to be consumed in 1-2 hours) and use this amount as a stock solution to mix with vaccine and stabilizer/dye in a clean bucket.
  - Stir using a clean utensil.
- **Pump administration:**
  - Calculate the amount of water that is needed for vaccine to be consumed within 1-2 hours (approximately 30% of daily intake).
  - Mix vaccine into a container(s) large enough to hold the required volume of mixed vaccine, including stabilizer/dye).
  - Open the end of the line to charge the line.
  - Close the line and lower drinking line when blue dye is seen at the end of the line.
- Walk the birds 2-3 times during vaccine administration to encourage consumption by all birds in the barn.
- **Birds should drink all vaccine solution within 1-2 hours.**
- After vaccination is completed, record details including the flock ID and the number of chickens/doses vaccinated. Record the name of the vaccine, serial number and expiry date. Make note of any problems that may have occurred.