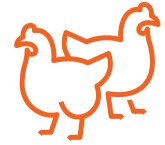


# Protocol for Drinking-Water Vaccination of Broiler Chickens



In modern poultry houses, the two most common methods for administering vaccines through drinking water are with a medicator (i.e., proportioner) or with a pump and barrel. For both methods, the goals are the same:

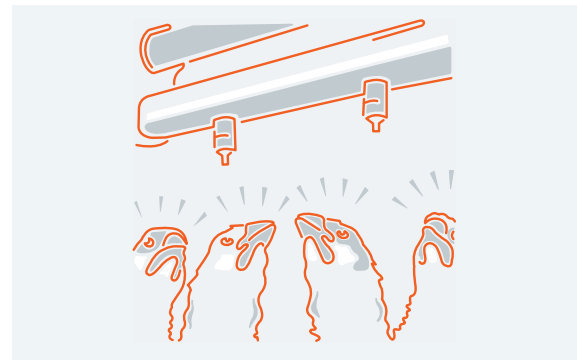
1. Deliver viable vaccine through the drinking lines.
2. The entire flock consumes the vaccine within a short time interval.

Mishandling of vaccines or mismanaging the vaccination process can compromise immunization of the flock and result in vaccine failures.

**Note: Always store vaccine according to label instructions.**

## 1 Prior to vaccination

- Turn off water treatment system 24 hours prior.
- Turn off water 4-6 hours prior.
  - For early morning vaccinations, water can be turned off the evening prior.
- Raise waterlines 2 hours prior.



Waterlines should be raised 2 hours prior to vaccination.

## 2 Vaccine preparation and administration

### If using a medicator:

- Prepare a stock solution using sterile or distilled water.
  - Target a 2-hour consumption period. The volume of stock solution needed will vary based on flock age, temperature, humidity, etc. For flocks 10-14 days of age, consider a range of 1.5 to 2.0 gallons of stock solution per 25,000 birds.
- Based on manufacturer recommendations, add stabilizer and/or dye packs.
  - Additional stabilizer and/or dye packs should be used if verifying vaccine takes post-vaccination via tongue checks — highly recommended.
- Reconstitute vaccine, add to stock solution and mix.
- Connect stock solution to the medicator and turn it on.

### If using a pump and barrel:

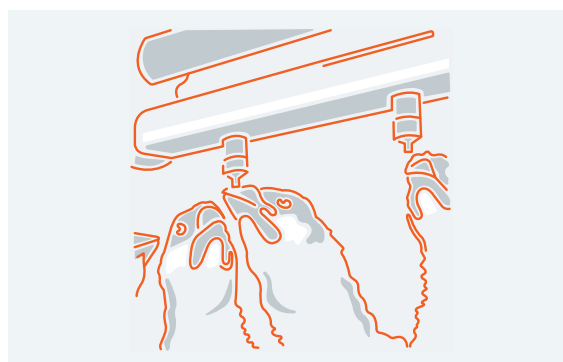
- Fill barrel to the targeted volume.
  - Target a 2-hour consumption period. The volume of stock solution needed will vary based on flock age, temperature, humidity, etc. For flocks 10-14 days of age, consider 200 gallons per 25,000 birds as a good starting point.

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- Add stabilizer packs with dye based on the manufacturer's recommendations.
- Additional stabilizer and/or dye packs should be used if verifying vaccine takes post-vaccination via tongue checks — highly recommended.
- Reconstitute vaccine, add to barrel and mix thoroughly.
- Open waterline connection.

### 3 Filling the waterlines

- Position personnel at each end of a waterline.
- Open the end of the line to allow water to drain.
- Open the flush valve at the head of the line.
- Allow water to drain until water with dye appears.
- Close the flush valve and cap the opposite end of the line.
- Proceed to the next waterline.



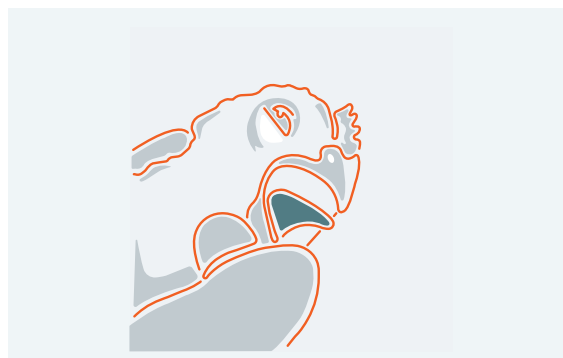
Lower waterlines to bird height after charging the lines with vaccine mix.



To encourage birds to consume the vaccine, walk the birds within the first 10 minutes and every 15-30 minutes until the vaccine is consumed.

### 4 Lowering the waterlines

- After charging all the lines with vaccine, lower them to bird height beginning with interior lines and working outward.
- Walk birds within 10 minutes and then every 15-30 minutes thereafter until vaccine is consumed.
- If checking tongues for vaccine takes, do so soon after vaccine is totally consumed. Check 50 birds per house.



Check the tongues of birds for blue dye after vaccine is totally consumed.

### 5 Wrap up

- Fill the reservoir, feeding the medicator with fresh water.
- Allow the reservoir to empty before returning the system to its normally functioning mode (i.e., medicator off with water bypassing).



**For more information on applying vaccine via water, contact your Zoetis representative.**

Note: Because each operation varies in housing and personnel, this manual provides only general guidance for proper vaccination techniques.