

# Protocol for Drinking-Water Vaccination of Layer 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 the night before vaccination.

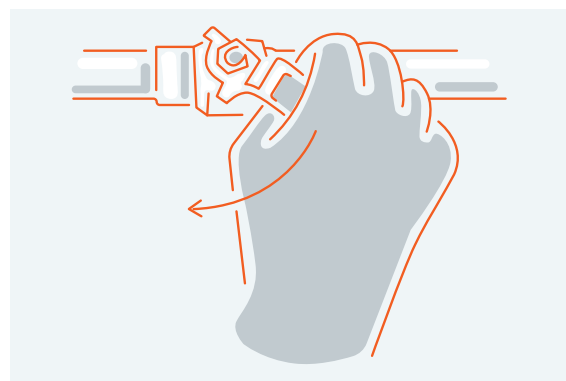
## 2 Vaccine preparation and administration

### 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. Monitor average water consumption over the previous 7 days and calculate the stock solution volume needed based on an average.
- ☐ 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.

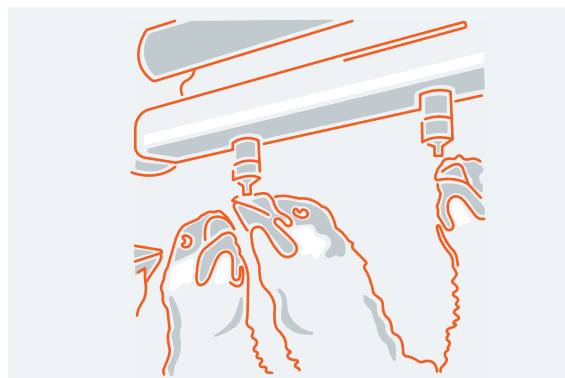
### If using a pump and barrel:

- ☐ 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. Monitor average water consumption over the previous 7 days and calculate the stock solution volume needed based on an average.



*Turn off water the night before vaccination.*

- ☐ 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.



*Charge the waterlines with vaccine mix prior to turning the lights on.*

### 3 Filling the waterlines

- ☐ Complete the following steps during dark hours, prior to turning the lights on.
- ☐ 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.



*To encourage birds to consume the vaccine, walk the aisles 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, turn the lights on.
- ☐ 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.