



An interview with
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Pullet vaccination: There's always room for improvement

Q: Pullet vaccination is essential for protecting broiler breeder health, but does it need to change along with the industry's evolving production systems?

TC: Vaccination of pullets to help them build immunity and pass on protective antibodies to broilers is important in any type of production system. I believe this is especially vital in "no antibiotics ever" systems, where optimal immunity is essential if broilers are to do well.

Q: You've been observing and evaluating pullet-vaccination crews. What do you evaluate and why?

TC: It's part of the technical support Zoetis veterinarians routinely provide. We evaluate crew safety, vaccine storage, preparation and handling, sterility, bird handling, vaccination technique and equipment maintenance. We use a scoring system, but we don't pass or flunk anyone. The results provide a platform for discussion that can lead to improvement and give producers a baseline for their own future evaluations.

Q: Have you personally observed any common vaccination problems in broiler breeder flocks?

TC: Based on my visits to poultry complexes over the years,¹ I'd say the need for speed is the leading pitfall with pullet vaccination, whether it's an in-house or contract crew. It causes some birds to be missed. Another concern is waning attention to detail as the day goes on. Like any repetitive task, vaccinating birds "gets old," and sometimes crews start taking shortcuts as quitting time approaches.

Q: Is asking vaccination crews to slow down realistic?

TC: We've all heard the expression, "time is money." That, of course, is incentive to vaccinate birds as quickly and efficiently as possible, but you can't compromise quality or, more specifically, the crew's efforts to properly and effectively vaccinate all birds. I think poultry companies have started recognizing that we need to focus more on building strong immunity.

continued

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Q: Yes, but incentives still go a long way toward ensuring compliance.

TC: You’re right. We just need to rethink what they are and how they’re measured. The layer industry, for example, has been looking at serology titers and what’s known as the coefficient of variation, or CV, for the diseases you’re vaccinating against. The CV is a statistical measure that indicates variability in a flock’s mean titer. Good serology and CV results would demonstrate the crew is doing a good job.

Q: Have you noticed any other problems with pullet vaccination?

TC: I’ve noticed a change in injection-site reactions with live cholera vaccines, which are given in the wing web. There should be some reaction because it indicates an immune response. The reactions used to be the size of a butterbean or smaller, but with today’s modern broiler breeders, they are larger and more diffuse.

I’ve also seen large weepy lesions in the wing web, which I suspect are more likely due to contamination or hitting the muscle.

Q: The environment for pullet vaccination isn’t sterile, so what can be done to prevent vaccines from getting contaminated?

TC: Common sense needs to be applied. Cover up vials when not in use and replace needles or prongs at every break. It also helps to keep bird activity down as much as possible to reduce the amount of dust flying around.

Q: Should the dosage of vaccines be reduced to minimize reactions?

TC: Absolutely not. Some poultry companies use half-doses to minimize reactions, but they very well could be sacrificing immunity. In the long run, it could backfire if flocks get sick. It is essential to use all vaccines at the recommended dose and in accordance with label specifications.

Q: What else can be done to improve pullet vaccination?

TC: I’ve struggled with ways to assess pullet vaccination in the field and have found taking slow-motion videos with a cell phone is extremely helpful. The videos can be reviewed with the vaccination crew to share tips for improving technique right there at the pullet farm.

Q: Do you have any other tips for working with vaccination crews?

TC: Vaccinating pullets is hard work and makes for long, tiring days, but producers need to emphasize over and over that pullet vaccination is important, that every bird needs to be vaccinated and that it’s crucial to vaccinate correctly. If vaccination crews understand the “whys” behind their work, they’ll do a better job.

¹ Cummings T. Pullet vaccination evaluations: the good, the bad and the ugly. Am Assoc Avian Pathol. July 2019. Washington, DC.

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