

Frequent hatchery visits ensure improved vaccination quality

Vaccination in hatcheries is a common practice to protect chicks from various diseases. It helps build immunity early in their lives and contributes to healthier flocks. The process involves administering vaccines to the chicks shortly after hatching, typically through spray or injection.

by **Christo Visagie, Alba Pfaff, Mathilde Lecoupeur, Higor Cotta and Ceva Animal Health.**
www.ceva.com

This proactive measure helps prevent the spread of diseases and ensures the well-being of the birds throughout their lifespan.

Subcutaneous vaccination in day-old chicks is generally considered an effective method to administer vaccines. It allows for a controlled and precise delivery of the vaccine under the skin, where it can be easily absorbed by the chick's immune system.

This method has been widely used in the poultry industry and is known to induce a good immune response in the chicks.

However, the quality of subcutaneous



vaccination can be influenced by various factors, including the expertise of the person administering the vaccine, the quality of the vaccine itself, and the handling and storage conditions.

Proper training and experience are crucial for the person performing the vaccinations to ensure consistent and accurate delivery.

Additionally, maintaining the cold chain during vaccine storage and transportation is

essential to preserve vaccine efficacy. Vaccines that are not handled correctly or have expired can lead to reduced effectiveness and inadequate protection against diseases.

Overall, when done correctly with proper vaccines and administration, subcutaneous vaccination in day-old chicks can be an effective and reliable method to protect the birds from diseases and contribute to the overall health of the flock.

Fig. 1. Map showing countries partaking in the statistical study.



Ceva Hatchery Immunisation Control Keys (C.H.I.C.K) Program

Ceva Animal Health's C.H.I.C.K Program is a comprehensive approach to improving poultry hatchery vaccination and producing 100% immunised chicks. The program is designed to optimise vaccine storage, preparation, administration and equipment performance.

The C.H.I.C.K Program provides hatchery operators with comprehensive training and support. This includes training on best practices for vaccine storage and management, vaccine preparation and administration, equipment handling and operational control. Ceva's team of poultry specialists work closely with hatchery operators to develop customised training plans that address the specific needs of each hatchery. Through the use of innovative

Continued on page 27

Continued from page 25

technologies and management practices, the C.H.I.C.K Program has helped hatcheries around the world improve their hatchery vaccination processes. Since 2016 the C.H.I.C.K Program has been independently recognised as a quality program by Bureau Veritas.

This means all our subsidiaries provide the same quality of service to hatcheries around the globe.

One of the key pillars of the C.H.I.C.K Program Quality Recognition is that Ceva is committed to visit the hatcheries at regular intervals. Since the inception of the Bureau Veritas recognition, Ceva has performed over 40,000 hatchery vaccination evaluations by more than 180 Ceva hatchery vaccination specialists. Hatchery vaccination evaluations aims to improve vaccination storage and preparation, vaccination quality, operational control and care of equipment.

By recording results via a designated app, the Ceva C.H.I.C.K Program has a comprehensive database to ensure continuous improvement in these sections and can also advise customers on corrective actions where necessary.

Statistical study data set

For this analysis the focus has been on subcutaneous vaccination quality compared in different countries and number of vaccination evaluations per hatchery. All the data shown were collected in the Eastern European, Middle East and Africa zone during the full calendar year of 2022. A total of 1,435 hatchery vaccination evaluations done in 277 unique hatcheries, in 34 different countries were used in the study.

The countries that formed part of the study are indicated in the map in Fig. 1.

Objective

The objective was to determine which number of vaccination evaluations to a unique hatchery showed the highest scores for subcutaneous injection quality.

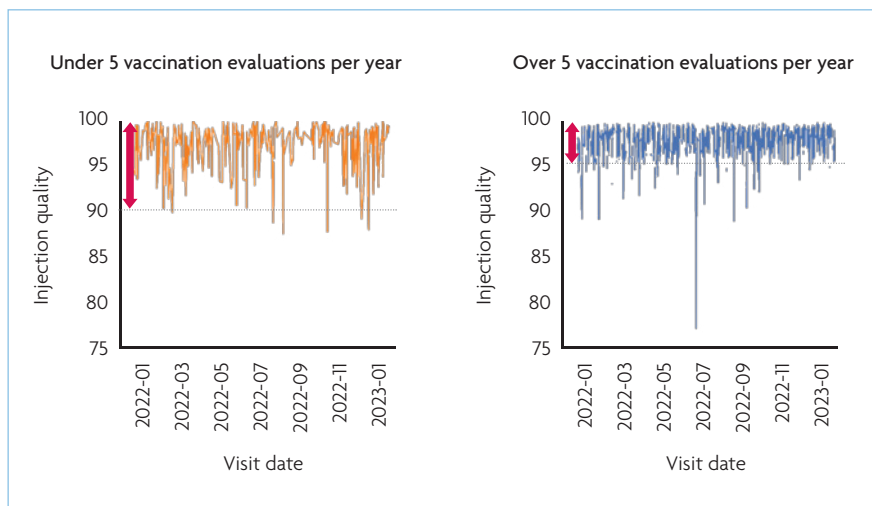


Fig. 2. Higher number of vaccination evaluations to a unique hatchery showed the highest scores for subcutaneous injection quality with lower variability.

Results

The statistics have been performed using the statistical software Python by Ceva data scientists .

According to the dataset, the ideal number of hatchery vaccination evaluations per year is minimum of five.

This in order to ensure and maintain good hatchery indicator scores. Indeed, the group with at least five evaluations in 2022 has obtained a higher injection quality average, as well as a lower variability, meaning a lower distribution (97.8 ± 1.8 vs 97.3 ± 2.6).

Consistency – obtained with a low

variability – is a key performance indicator at the hatchery, where every chick counts. It demonstrated that the process is under control, well mastered. Being in the hatchery frequently enables Ceva specialists to provide expert advise and monitor the vaccination quality.

Ceva hatchery vaccination specialists alert and advise hatcheries when ever scores below 95% are recorded.

Ceva has been advocating in the C.H.I.C.K Program for six visits per year as a minimum.

According to the analysis this number can be considered ideal. ■

Conclusion

Overall, the C.H.I.C.K Program from Ceva Animal Health represents a major step forward in poultry hatchery vaccination. By providing hatchery operators with the tools and support they need to optimise hatchery vaccination and produce immunised chicks, the program is helping to reduce disease pressure and vaccination stress of the day-old chicks.

The data proof that frequent visits are the most beneficial to ensure the best quality of vaccination for our customers. Ceva would continue our commitment of frequent hatchery vaccination evaluations done via the C.H.I.C.K Program, as every chick counts.