

Process Evaluation for *In Ovo* Vaccination

An assessment of process points that supports vaccine integrity, efficacy and hatchery performance.

A process evaluation (PE) is an assessment performed by Zoetis for each hatchery using Embrex® *in ovo* technology to identify opportunities to help maintain best practices for *in ovo* vaccine mixing and administration, along with supporting processes that contribute to optimal results.

Following each PE, customers receive a report and summary outlining recommended corrective actions. The PE provides a current snapshot of the hatchery's *in ovo* vaccination process, detailing adherence to key process points and identifying potential process risks based on assessment results.

During a PE, the Zoetis representative provides targeted training for hatchery personnel based on real-time observations to help strengthen operational best practices. The assessment supports the integrity and reliability of the vaccination process, contributing to hatchery performance and poultry health.

PE frequency is quarterly, announced or unannounced, based on customer and hatchery needs.

Risk-based insights

PE assessment reports assign risk levels to each process point in three categories: **critical, high and moderate**, which helps focus attention on key opportunities to help optimize *in ovo* vaccination results and help reduce risk. The assessment helps identify process deviations associated with vaccine contamination, vaccine efficacy, process contamination, data integrity, and potential impact to embryos and the hatchery environment.

Many hatcheries have standard operating procedures that include a bacterial plating program and regular egg breakout analyses. The PE encourages these quality control steps, as they can provide additional insight into factors that may affect *in ovo* vaccination success. The Zoetis team is available to help hatcheries integrate these processes into operational protocols, if needed.

Risk definitions

- ☐ **Critical:** An immediate negative impact on performance should be expected.
- ☐ **High:** A negative impact on performance is likely. Severity is dependent on other factors such as environment, adjacent process deviations or other possible multipliers.
- ☐ **Moderate:** A negative impact on performance is possible. Environment and other deviations from best practices in adjacent areas could elevate risk to performance.

Risk categories

- ☐ **Vaccine contamination:** Any deviation from best practice that could lead to vaccine contamination. *Impact on customer KPI: cost, hatch, seven-day mortality, feed conversion, overall livability, processing plant performance*
- ☐ **Vaccine efficacy:** Any deviation from best practice that could decrease vaccine efficacy, limiting its ability to protect poultry from disease. *Impact on customer KPI: cost, feed conversion, overall livability, processing plant performance*
- ☐ **Process contamination:** Any deviation from best practice that could lead to embryo and/or environmental contamination. *Impact on customer KPI: cost, hatch, seven-day mortality, feed conversion, overall livability, processing plant performance*
- ☐ **Embryo impact:** Any deviation from best practice that could cause negative impact to the embryo, e.g., transfer cracks, live embryo removal. *Impact on customer KPI: cost, hatch, seven-day mortality*
- ☐ **Data integrity:** Any deviation from best practice that could lead to data loss and/or reduced accuracy. *Impact on customer KPI: cost*
- ☐ **Environmental impact:** Any deviation from best practice that could negatively impact the hatchery environment and the associated quality control. *Impact on customer KPI: cost, hatch, seven-day mortality, feed conversion, overall livability, processing plant performance*

Reported by PoultryView 360®

PoultryView 360 from Zoetis is an integrated digital data system used to store, aggregate and deploy data to support customer needs. PE reports are generated and delivered through the Zoetis PoultryView 360 digital data system.



To learn more about risk-based process evaluations, contact your Zoetis representative.