

Pig Feed Networks in the UK - Gathering information on the UK pig feed supply chain: a pilot study

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Overview

Commercial feed production is vital to pig farming, but poses biological hazards including *Salmonella* and African Swine Fever (ASF). Preventative measures and traceability are crucial throughout the entire supply chain, from raw material origin to on-farm delivery to minimise and understand disease risk pathways.

- A survey sent to around sixty-five UK pig feed manufacturers ran from May to July 2024, supported by the Agricultural Industries Confederation (AIC), to gather information on the UK pig feed supply chain and its network.
- Survey findings from eight feed mills highlighted a structured approach to hazard analysis and a high level of standardisation, likely influenced by Universal Feed Assurance Scheme (UFAS) membership.
- Improvements to record-keeping, communication, and accessibility of farm health status information, are recommended to strengthen biosecurity and disease preparedness in the UK pig feed sector.
- While expansion of microbiological testing of feed to include viruses is desirable, it is currently impractical to deploy at-scale testing for viruses such as ASF and porcine epidemic diarrhoea (PED).

Objectives

The purpose of this work is to characterise the UK pig feed supply chain and its organisation. The survey gathered information on the supply chain's dimensions, interconnections, feed storage, and distribution by asking about feed mill site details, sourcing and storage, manufacturing controls, feed sales and transport.

Major findings

While the sample size of this survey may not fully represent UK pig feed mills, the results provided valuable insights into the sector. The following findings are based on the mills that responded.

- **Biosecurity Measures:** Most mills have current biosecurity plans, and all report conducting routine microbiological testing for *Salmonella*, *Enterobacteriaceae*, and mycotoxins.
- **Feed Manufacturing and Storage:** Mills use a variety of feed forms (e.g., pelleted, meal, mash) and employ manual and automated processes for the addition of additives. Most store ingredients in bins, silos, or tanks, and some conduct routine cleaning and disinfection between batches.
- **Record-Keeping and Traceability:** Electronic record-keeping is common, facilitating traceability in the event of an outbreak. However, the retrievability and interoperability of these records for outbreak investigations remain areas for improvement.
- **Risk Management:** An outbreak response group exists to coordinate the industries response for ASF and PED outbreaks. One large operator uses a tool to assess risk of disease introduction based on source of feed ingredients.

Take-home messages

To strengthen farm-level preparedness and enhance efficiency of disease outbreak investigations, feed mills and policymakers should work together to:

- Investigate the level of access feed mills have to farm health status and how this information can be used to optimize biosecurity practices.
- Improve retrievability and interoperability of electronic records for outbreak investigations.
- Understand the role of communications and engage with the feed industry disease response group for coordinated outbreak response.

Next steps

In conversation with Scottish Government, it has been suggested to conduct in-person visits to five key pig feed mills in Scotland as a way to validate and assess the survey findings, and how these manifest practically on site. Further discussions with Scottish Government and industry stakeholders are expected.