

**Food Safety Index - Report**

Farm **Carkin Moor Farm 736 LF 2598**

Date **07/02/2019**

Attendees **Tori Charlton**

Elanco Representatives **None**

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| Executive Summary |

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|  | Food Safety Index | **58%** |

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| Section |  | Risk Free Percentage |
|  | Analysis of external farm protection |  |
| 1.1 | Farm Protection | **57%** |
| 1.2 | General area | **50%** |
| 1.3 | Separation between general and specific areas | **72%** |

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|  | Analysis of the internal farm protection |  |
| 2.1 | Management | **100%** |
| 2.2 | Cleaning and disinfection, pest control | **0%** |
| 2.3 | Climate control | **70%** |

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|  | Analysis of health and production parameters |  |
| 3.1 | Health and production parameters | **72%** |

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| Management System | **Free Range** | Number of Staff | **No staff all family- 4 members** |
| Number of Houses | **2** | Shed Age | **New build** |
| Number of Birds | **32000** | Age of birds at assessment | **17 weeks. 1 day** |

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| **Comments:** |

Introduction

The control of salmonella on farm requires a holistic approach. There are many interventions that can be done to reduce the risk of contracting salmonella. The Food Safety Index (FSI) is a score that has been developed to determine the relative risk of salmonella on a farm. By facilitating measurement of risk factors, the FSI can be used to guide interventions to minimise the risk of salmonella to a flock.

The FSI algorithm was developed by the Elanco/Lohmann team in conjunction with many producers and veterinary professionals. Using questions and a farm walk, the responses and their relative impact determines the index score. The index is presented as a percentage; the higher the percentage, the lower the risk.

The report that follows breaks down all sections and highlights the critical control points that significantly impacted the risk assessment. Explanations are included for greater detail and recommendations will be made from your regional manager where applicable. A follow up assessment is recommended to monitor the progression and impact of interventions.

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# **Analysis of external farm protection**

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| 1.1 | Farm Protection | Result | **57%** |

Farm protection can improve. Although good documentation and processes are in place with relevant actions help to reduce the potential for contamination of salmonella, there several area that require attention to reduce this risk category.

Areas that reduce the FSI include:

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| Birds are housed close to noticeable infection sources  Salmonella vaccination documentation of the pullets from the rearer is insufficient  Farm fencing has breaks or access by the public  The frequency of salmonella testing can be increased above the Lion Code requirements |

Explanations:

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| Infection sources can be anything from slurry pits to areas that encourage rodent or wildlife presence such as grain-stores. Being aware of high risk infection sources is important to ensure attention is focused on all other controllable aspects of risk reduction. Keeping birds away from such sources may be impractical but ensuring all interventions needed to minimise the impact of this risk must be taken.  If correct documentation does not demonstrate appropriate salmonella vaccination then this should be raised with the pullet rearer and the BEIC  Any break in fencing is a potential for birds to become exposed to uncontrolled sources of disease. Broken fences should be repaired whilst any public access should be restricted.  Whilst the Lion Code directs a minimum testing frequency, infections can occur in between official samples. More frequent testing allows for greater control over the environment and thus reduces risk for Salmonella. |

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| 1.2 | Black area/General Area | Result | **50%** |

The black/general area concerns the farm areas that are outside of the houses. Your index score is influenced by:

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| Distances between houses are very close  Insufficient paved or concreted areas around the poultry houses  Carcass storage has some deficiencies  Emptying of the carcass storage is too infrequent |

Explanations:

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| Close houses encourage areas to develop that may attract rodents or wildlife. Whilst the placement of buildings may not be able to be changed, the risk is nonetheless present. It is essential that focused efforts on ensuring the space between buildings is kept clear and well protected from rodents.  Concrete is much easier to keep clean and reduces the dirt, or other materials, being brought into service sheds. Clear walkways also reduce areas needed to be disinfected should concern be raised about biosecurity.  Carcasses both attract rodents or can culture bacteria such as salmonella. Weekly emptying, sealed storage and ensuring the bin is away from any feed areas helps reduce the risk for cross contamination of the live birds with the dead birds.  Emptying the dead bin at least weekly will allow regular disinfection and cleaning. Leaving carcasses longer increases the risk of rodents and other scavengers becoming attracted to the site. |

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| 1.3 | Separation between general and specific areas | Result | **72%** |

The interface between the external area of the sheds (black/general area) and inside the shed (white/specific area) is a critically important area to help manage the flock exposure to salmonella risk.

Your identified risk factors include:

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| The birds are free range  The birds do not appear to range well and increase the contamination of particular areas  There is little protection from wild birds or predators  Ineffective protection of poultry houses against wild birds  Manure is transported through multiple sheds  Eggs travel through other sheds before reaching the packing plant  Plastic trays are used for egg packing  Infrequent bacterial assessment is carried out of the feeders |

Explanations:

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| Free range birds are at greater risk than housed birds. Whilst the management system is fixed, every effort should be made to address other risk factors so as to minimise the overall risk.  Birds failing to range is an indication of poor wellbeing in a free range flock. There are many causes for poor ranging and a detailed assessment should be made with focused efforts on rectifying the shortfalls.  Efforts should be made to net off key areas from wildlife so as to reduce the potential contact from wild birds.  Wild birds having access to the house will increase the contact between them and the laying hens. Ensuring no wildlife can access the house will help reduce the risk of contact spreading disease.  Faeces is a common means of disease and salmonella being spread. Transporting the muck from different houses through other sheds will help spread unwanted bacteria and viruses. This practice should be stopped where practical.  Eggs travelling between sheds may act to spread bacteria or other diseases around a farm. Where possible this practice should be stopped.  Plastic trays require re-washing and get re-used. Washing procedures may not be as effective as intended and soiled trays can move disease between farms. If plastic is used then procedures should be in place to assess the trays before eggs are packed and inadequacies should be fed back to the packers.  Routine bacterial swabs is the only means to assess the effectiveness of the disinfection procedures. |

# **Analysis of the internal farm protection**

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| 2.1 | Management | Result | **100%** |

General management of the farm and birds all contribute to the risk of salmonella infections establishing themselves. Good management reduces this risk significantly.

Influencing factors include:

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| Well done statement number 4 |

Explanations:

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| 2.2 | Cleaning and disinfection, pest control | Result | **0%** |

Cleaning and disinfection policies and practices are a key factor in minimising the risk of succumbing to and sustaining a salmonella infection.

Influences on the risk score include:

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| Excessive damage to floor surfaces of the poultry house  No structured cleaning and disinfection protocol  Cleaning and disinfection is too infrequent or of low quality  Insufficient time is allowed between cleaning and disinfection and restocking  The short service period is likely to compromise the quality of the clean-out  Infrequent cleaning and disinfection of the feeding systems  Infrequent cleaning and disinfection of the drinking lines  Low quality post cleaning and disinfection assessment  Insufficient swabs are taken to assess the effectiveness of cleaning and disinfection  Incomplete documentation of all house cleaning and disinfection procedures  Poor monitoring of rodents and wildlife in the houses  Incomplete records of rodent control procedures  Evidence of rodents within the poultry house  Poor control of insects within the poultry house  Inadequate documentation for insect control procedures  Evidence of insect infestation, including redmite |

Explanations:

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| Cracks and poor floor condition make effective cleaning and disinfection more challenging. Such areas can protect bacteria from coming into contact with appropriate disinfectants rendering the effect inadequate.  A clear cleaning and disinfection protocol helps to ensure a set standard of cleaning and disinfection is achieved.  Cleaning and disinfection is the first line of defence against any disease. An external consultant can help educate and plan an effective protocol to help improve this risk factor.  Allowing enough time for effective cleaning and disinfection is vital to ensure a good clean is achieved. Excessive pressure on turnaround times will be a false economy in the long run should established diseases from previous flocks be carried over into the new production cycle.  Allowing enough time for effective cleaning and disinfection is vital to ensure a good clean is achieved. Excessive pressure on turnaround times will be a false economy in the long run should established diseases from previous flocks be carried over into the new production cycle.  Poorly cleaned feeding systems can attract rodents, allow bacteria to grow on feed build up and risks carrying bacteria or disease throughout the flock. Regular assessment of all areas such as feed bins, hoppers, tracks and augers together with effective cleaning is essential to prevent this risk.  Drinker lines can harbour biofilm that protects the bacterial populations within it. Effective cleaning and monitoring during the entire flock production cycle is important so interventions can be made as quickly as possible should a biofilm, or other debris be detected.  Bacterial swabs and visual inspections following cleaning and disinfection is important to ensure and effective cleaning and disinfection job is being carried out. Documentation of the procedures helps record actions and identify accountability for the job.  More swabs should be taken to ensure the effectiveness the disinfectants of removing and reducing bacterial loads. Monitoring high risk areas, such as drinker lines, fans and feeding systems will help focus the cleaning and disinfection process.  Records are vital to aid in assessment and diagnosis of potential problems. Poorly kept records means it is more challenging to relate current concerns to historical indicators.  Rodents are a significant risk for introducing and propagating salmonella on farm. Effective monitoring is a vital first step in their control. Consideration should be given to using an external party to carry this out.  Records are vital to aid in assessment and diagnosis of potential problems. Poorly kept records means it is more challenging to relate current concerns to historical indicators.  Rodents are a significant cause in causing and propagating salmonella on farm. Even small indications of rodent activity indicates the presence of rodents on farm. This in turn suggests the current intervention measures are not effective. Consideration should be given to using an external party to carry this out.  Redmite, litter beetles and other insects can carry salmonella and also infect birds with the disease. Effective insect control is important in the prevention of salmonella on farm.  Records are vital to aid in assessment and diagnosis of potential problems. Poorly kept records means it is more challenging to relate current concerns to historical indicators.  The presence of insects on farm suggests current management and interventions are not as effective as intended. Consider seeking external advice on management and implementing their recommendations. |

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| 2.3 | Climate control | Result | **70%** |

The climate the birds are kept in can add to the stressors experienced by the birds. Poor climate control will increase the risk of salmonella and other diseases establishing an infection.

Factors influencing the score include:

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| Ammonia levels are not monitored sufficiently |

Explanations:

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| Ammonia occurs as a result of poor litter conditions. Monitoring levels may help to pick up problems earlier than visual inspection and thus allow for pre-emptive interventions to be included. |

# **Analysis of the health and production parameters**

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| 3.1 | Health and production parameters | Result | **72%** |

Sick animals are more susceptible to salmonella infections. The current production parameters and other measures can indicate the health of the flock.

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| Excessive mortality and culls compared to breed predicted performance |

Explanations:

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| Investigation into the cause of mortality or excessive culls should be carried out with the vet. Undiagnosed diseases will increase the potential for salmonella to become established should it be brought onto the farm. |