

Case – Increased mortalities on a Commercial Layer farm

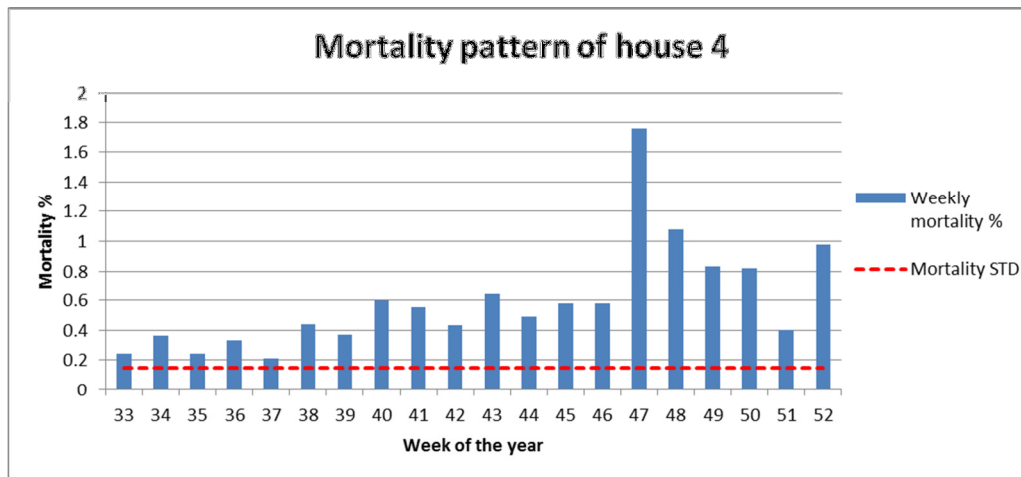
History:

Increased mortalities were noted in individual houses on this layer farm in mid-2011. This is a multi-age free range farm with 11 houses each having a capacity of between 4000-7000 hens. House 4 was noticeably more affected than the other houses with the following mortality pattern seen:

Below are the weekly mortality figures (as a % of the birds in the house) according to the week of the year (2011) for this house:

wk 33	wk 34	wk 35	wk 36	wk 37	wk 38	wk 39	wk 40	wk 41	wk 42	wk 43	wk 44	wk 45	wk 46	wk 47	wk 48	wk 49	wk 50	wk 51	wk 52
0.24	0.36	0.24	0.33	0.21	0.44	0.37	0.60	0.55	0.43	0.64	0.49	0.58	0.58	1.76	1.08	0.83	0.82	0.40	0.98

The birds were 43 weeks old in week 33. The weekly standard is taken as 0.15%.



At the end of 2011 the same pattern were observed in house 2 and 9. The problem starting round 34 weeks in house 2 and 56 weeks of age in house 9.

Clinical and Post mortem observations:

Clinically there were no significant findings. Mortalities and live birds were submitted and the following were seen:

Final Veterinary Report

Lab Report	
Sample Identification	
Flock	:
Site	:
House	: 4
Age	: 35 w
Sample Type	: Post Mortem
Result	
Identification of pathogens out of 6 2 splenomegaly out of 6 Alive: 2 out of 3 with a spleen 1 out of 3 injury.	

As above this was a typical finding seen with the splenomegaly:



Laboratory findings:

Laboratory tests were done but these are to be discussed with questions below.

Questions:

Private vet questions:

- What is your diagnosis? Note at 55 and 59 weeks of age boot swabs taken from house 4 and Salmonella was not detected. In addition to this boot swabs were taken from the whole farm in week 49 of 2011 and in none of them Salmonella were detected.
- Which organ would you sample and what test would you request?
- What further tests would you do on this farm?
- If required (depends on the diagnosis) when must this be reported to the state veterinarian?
- Why is the diagnosis of such importance on this farm – see history?
- What would be your main concern with regards to public health?
- The farmer says that the manure is sold to the neighbour who is a broiler farmer. Is this of concern?
- Comment on the use of serology in this case.
- If it was not the syndrome you think it is list 2 other DD's that can give the same post mortem picture.

State vet questions:

- What are the zoonotic implications on this farm – discuss how to control the products leaving the farm as well as the culling process?
- Suggest further tests that could be done to assist the farmer in selling eggs?
- How does one approach the issue of negative boot swabs ?
- What are the issues with high rise houses and using boot swabs?
- What are important trace back issues with respect to the source of the infection?
- What will be your requirement for the birds that are placed on the farm from now on and in general for farm monitoring?
- What will the quarantine notice look like?