Isle of Man residue sampling results 2022

Non-compliant results are marked * , with details of subsequent investigation at the end of this document.

Red Meat

1. Bovine (collected on farm or at the meat plant)

Compound	Matrix	Number of samples
Steroid Screen	Urine	1
Thyrostats	Urine	1
Gestagens	Kidney fat and serum	2
Testosterone	Serum	2
Zeranol	Serum	2
Beta-agonists	Feed	1
Chloramphenicol	Kidney and feed	2
Antimicrobial Screen 1	Kidney	2
Antimicrobial Screen 2	Kidney	2
Antimicrobial Screen 4	Kidney	1
Avermectins	Liver	1
Anthelmintics	Liver	1
Coccidiostats	Liver	1
Pyethroids	Kidney fat	1
Sedatives	Kidney	1
NSAIDs	Kidney	1
Organochlorines/PCBs	Kidney fat	1
Organophosphates	Kidney fat	1
Metals	Kidney	1
Mycotoxins	Liver	1

2. Ovine (collected at the meat plant)

Compound	Matrix	Number of samples
Steroid Screen	Urine	1
Thyrostats	Urine	1
Gestagens	Kidney fat	1
Zeranol	Urine	1

Beta-agonists	Liver	1
Chloramphenicol	Kidney	1
Antimicrobial Screen 1	Kidney	3
Antimicrobial Screen 4	Kidney	2
Florfenicol	Kidney	1
Avermectins	Liver	1
Anthelmintics	Liver	2
Coccidiostats	Liver	1
Pyethroids	Kidney fat	1
Sedatives	Kidney	1
NSAIDs	Kidney	1
Organochlorines/PCBs	Kidney fat	1
Organophosphates	Kidney fat	1
Metals	Kidney	1 (*)
Mycotoxins	Liver	1

3. Porcine (collected on farm or at the meat plant)

Compound	Matrix	Number of samples
Steroid Screen	Urine	1
Thyrostats	Urine	1
Gestagens	Kidney fat	1
Zeranol	Urine	1
Beta-agonists	Feed	1
Methyltestosterone	Feed	1
Nitrofurans	Feed	1
Nitroimidazoles	Feed	1
Chloramphenicol	Kidney	1
Antimicrobial Screen 1	Kidney	1
Antimicrobial Screen 4	Kidney	1
Avermectins	Liver	1
Anthelmintics	Liver	2
Coccidiostats	Liver	1
Pyethroids	Kidney fat	1
Sedatives	Kidney	1
NSAIDs	Kidney	1
Glucocorticoids	Liver	1
Organochlorines/PCBs	Kidney fat	1
Organophosphates	Kidney fat	1
Metals	Kidney	1
Mycotoxins	Liver	1

Bovine Milk

Analysis Totals		Analysis Totals	
Chloramphenicol	255 (1 sample *)	OC/PCB	9
Antimicrobial Screen 1	127	Ops	11
Antimicrobial Screen 2	87	Metals	14
Antimicrobial Screen 3	128	Mycotox	11
Antimicrobial Screen 4	77		
Ceftquinome	54		
Ceftiofur	37		
Avermectins	103		
Anthelmintics	101		
NSAIDs	51		
TOTAL	**1020**	**TOTAL**	**45**

Honey

Compound	Number of Samples
Antimicrobial Screen 1	1
Antimicrobial Screen 3	1
Antimicrobial Screen 4	1
Antimicrobial Screen 5	1
Amitraz	1
Chloramphenicol	1
Metals	1
Naphthalene	1
Nitrofurans	1
Organochlorines/PCBs	1
Organophosphates	1
Pyrethroids	1

Farmed Fish

Compound	Matrix	Number of samples
Methyltestosterone	Skin and muscle	1
Nitrofurans	Skin and muscle	1
Nitroimidazoles	Skin and muscle	1
Chloramphenicol	Skin and muscle	1
AMS1	Skin and muscle	1
Dyes	Skin and muscle	1
Organochlorides/PCBs	Skin and muscle	1
Metals	Skin and muscle	1
Mycotoxins	Skin and muscle	1
Anthelmintic	Skin and muscle	1

Non-compliant results 2022

1. **Report on the investigation of raised lead levels in tissues of a lamb slaughtered at Isle of Man Meats**.

Kidney tissue from a lamb sampled at slaughter gave a result of 2.26 mg/kg Lead tissue concentration, tested at AFBI, Belfast. The lamb was sampled as part of routine surveillance for the presence of heavy metals in meat intended for human consumption. An incident is recorded where the kidney or liver lead concentrations exceed 0.5 mg/kg.

Sample Type	Analyte	Result (mg/kg)	SOP no.
Ovine Kidney	Lead	2.26	CSD 601

Although these tissue levels may not be high enough to cause clinical signs of lead poisoning, they are still important in terms of food residues and food safety. A farm visit and investigation revealed that the most likely the source of lead in this case was geochemical; associated with old lead mines present at the grazing site. The farm is located to the south of the central belt of the Isle of Man. The lamb was from a group of approx. 200 fattening lambs aged 9 -12 months. No clinical signs were reported in the lamb or any of the group. Advice was given to the owner on geochemical lead and the public health implications. The owner is planning to take steps to address the issue.

2. Report on the investigation of Florfenicol detected in a bulk milk sample

A milk sample collected on farm and tested at AFBI, Belfast produced a non-compliant result for the presence of Florfenicol. Of the sample's requested tests:

1. Chloramphenicol screen: FLORFENICOL DETECTED
    a. Action level type: PRESENCE.
    b. CCalpha (decision limit) 0.34 µg/kg.
    From https://www.sciex.com/content/dam/SCIEX/pdf/tech-notes/all/CCalpha-and-CCbeta-Automatic-Calculation-SCIEX-OS.pdf: "The decision limit CCα means the limit at and above which it can be concluded with an error probability of α (1% for substances with non-permitted limits and 5% for substances with a permitted limit such as the Maximum Residue Limit (MRL)) that a sample is non-compliant"
    c. Concentration detected 0.55 µg/kg, therefore NON-COMPLIANT.
2. Antimicrobial Screen 1: COMPLIANT
3. Cefquinome: COMPLIANT
4. Anthelmintics: COMPLIANT

Florfenicol is not authorised for use in cows producing milk for human consumption, or pregnant cows due to produce milk for human consumption. Therefore just presence of Florfenicol in milk is a non-compliance. Florfenicol is authorised for other bovine animals.

A follow up sample was taken which was compliant for Florfenicol.

An on farm investigation was undertaken which concluded that accidental administration of this drug had taken place. The farmer has now put extra precautions in place to prevent any repeat occurrence.