



Veterinary
Medicines
Directorate

Residues of Veterinary Medicines in Food

2014 Surveillance Results

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Introduction

This document brings together the results of surveillance for residues of veterinary medicines, prohibited substances and other contaminants in food of animal origin undertaken in the UK in 2014.

All European Member States have a responsibility to monitor the use of veterinary medicines in their food-producing animals, to ensure that produce from these animals does not contain residues that could be harmful to consumers.

In England, Scotland and Wales there is a Statutory Surveillance Programme delivered by the Veterinary Medicines Directorate (VMD), an agency of the Department for the Environment, Food and Rural Affairs (Defra). A similar programme is operated in Northern Ireland by the Agri-Food & Biosciences Institute.

The VMD also operates a small-scale non-statutory (not enforced by law) surveillance programme looking for residues of veterinary medicines and prohibited substances in imported foods.

Both these programmes are overseen by an independent Scientific Advisory Committee, the Veterinary Residues Committee (VRC) which advises Defra and the Food Standards Agency (FSA).

Statutory Surveillance Programme UK Produce

Legislation

[Council Directive 96/23/EC](#) on measures to monitor certain substances and residues thereof in live animals and animal products establishes that Member States should draft a national residue monitoring plan for the groups of substances detailed in Annex I (set out below). These plans must comply with the sampling rules in Annex IV to the Directive.

Directive 96/23/EC establishes the frequencies and level of sampling and the groups of substances to be controlled for each food commodity. [Commission Decision 97/747/EC](#) provides further rules for certain animal products: milk, eggs, honey, rabbits and game meat. [Commission Decision 98/179/EC](#) of 23 February 1998 lays down detailed rules for official sampling procedures and official treatment of samples until they reach the laboratory responsible for analysis.

The [Commission Decision 2005/34/EC](#) of 11 January 2005 sets harmonized standards for the testing of certain residues in products of animal origin imported from third countries by using MRPLs (Minimum required performance limits) as action limits.

[Commission Decision 2002/657](#) lays down rules for the analytical methods to be used in the testing of official samples taken pursuant to article 15(1), second sentence, of Directive 96/23/EC and specifies common criteria for the interpretation of analytical results of official control laboratories for such samples.

Substance groups included in the statutory surveillance programme

The following substances are listed in Annex I to Directive 1996/23/EC and these form the basis of the statutory surveillance programme:

GROUP A - Substances having anabolic effect and unauthorized substances

- (1) Stilbenes, stilbene derivatives, and their salts and esters
- (2) Antithyroid agents
- (3) Steroids
- (4) Resorcylic acid lactones including zeranol
- (5) Beta-agonists
- (6) Compounds included in Table 2 (prohibited substances) of Regulation 470/2009

GROUP B - Veterinary drugs¹ and contaminants

- (1) Antibacterial substances, including sulphonamides, quinolones
- (2) Other veterinary drugs
 - (a) Anthelmintics
 - (b) Anticoccidials, including nitroimidazoles
 - (c) Carbamates and pyrethroids
 - (d) Sedatives
 - (e) Non-steroidal anti-inflammatory drugs (NSAIDs)
 - (f) Other pharmacologically active substances
- (3) Other substances and environmental contaminants
 - (a) Organochlorine compounds including PCBs
 - (b) Organophosphorus compounds
 - (d) Chemical elements

- (d) Mycotoxins
- (e) Dyes
- (f) Others

¹ *Including unlicensed substances which could be used for veterinary purposes.*

Section A: Statutory surveillance programme non-compliances - Details of residues found at or above the Reference Point in 2014

Sample	Analysed for	No. of analyses	Reference Point µg/kg/l	Concentrations above the Reference Point (more than one substance may be found in one sample)	
				No. Found	Concentration found µg/kg/l
Calf Kidney	Antimicrobial (Screen 1)	88	600	1	8500 (oxytetracycline)
Calf Kidney	Antimicrobial (Screen 4)	94	1000	3	3000, 3800, 6700 (dihydrostreptomycin)
Calf Kidney	Florfenicol	94	300	5	430, 890, 990, 5400, 7600 (florfenicol)
Cattle Kidney	Metals	76	1000	3	1300, 1500, 1500 (cadmium)
Cattle Kidney	NSAIDs	539	Presence	2	14, 190 (ibuprofen)
Cattle Liver	Anthelmintics	542	1000	1	1400 (closantel)
Cattle Plasma	NSAIDs	92	Presence	1	0.32 (phenylbutazone)
Cattle Serum	Testosterone	605	Presence	3	1.2, 1.3, 13 (beta-testosterone)
Cattle Urine	Steroids (Screen 1)	3,015	Male 0.5/Female 5	16 residues in 14 samples	0.8, 0.95, 1.4, 1.7, 1.7, 5.1, 5.3, 6.5, 11, 15 (alpha-nortestosterone) 2.1, 3.2, 54 (alpha-boldenone) 0.55, 0.55 (beta-boldenone) 0.53 (beta-nortestosterone)
Cattle Urine	Thyrostats	419	10	8	11, 13, 14, 14, 17, 18, 19, 71 (thiouracil)
Cattle Urine	Zeranol	384	Presence	18	0.79, 0.79, 0.79, 1.3, 2.2, 2.9 (taleranol) 2.01, 2.12, 2.17, 2.29, 2.69, 3, 3.51, 5, 5.8, 5.9, 7, 9.2 (taleranol & zeranol)
Pig Kidney	Antimicrobial (Screen 1)	1,408	600 600 100	5	1100 (chlortetracycline) 780 (oxytetracycline) 210, 210, 240 (sulfadiazine)
Pig Liver	Mycotoxins	65	Presence	1	2.7 (ochratoxin A)
Sheep Kidney	Antimicrobial (Screen 1)	2,576	600 100	3	770, 3500 (oxytetracycline) 220 (sulfadiazine)
Sheep Kidney	Metals	49	1000 500	4	1043 (cadmium) 840, 850, 1200 (lead)
Sheep Kidney	Nitrofurans	238	1	1	1.5 (semicarbazide)
Sheep Kidney Fat	OPs	570	700	1	860 (diazinon)
Sheep Liver	Anthelmintics	1,178	1500 500	3	1900, 2940 (closantel) 1120 (fenbendazole)
Sheep Urine	Steroids (Screen 1)	527	Presence	25 residues in 22 samples	2, 2.1, 2.3, 2.4, 2.6, 2.7, 3, 3.2, 3.3, 3.5, 4.1, 4.3, 4.6, 6.7, 7.7, 9.5, 13, 15, 19, 19 (alpha-boldenone) 1.2 (beta-boldenone) 1, 1.1, 1.5, 1.8 (beta-nortestosterone)
Sheep Urine	Thyrostats	75	10	2	13, 14 (thiouracil)
Sheep Urine	Zeranol	76	Presence	2	2.3, 2.5 (taleranol & zeranol)
Horse Kidney	Metals	1	1000	1	14000 (cadmium)
Broiler Liver	Coccidiostats	774	8 Presence	2	10 (monensin) 9 (salinomycin)
Broiler Muscle	Antimicrobial (Screen 1)	1,565	100	1	430 (chlortetracycline)
Turkey Muscle	Antimicrobial (Screen 1)	252	100	1	390 (chlortetracycline)
Deer Kidney fat	OC/PCBs	7	Presence	1	3000 (DDE-p,p')
Partridge Muscle	Metals	6	100	1	18000 (lead)

Sample	Analysed for	No. of analyses	Reference Point µg/kg/l	Concentrations above the Reference Point (more than one substance may be found in one sample)	
				No. Found	Concentration found µg/kg/l
Quail Muscle	Coccidiostats	5	5	3	20, 36, 80 (lasalocid)
Trout Muscle	Dyes	64	Presence	2	14, 38 (leucomalachite green)
Quail Egg	Coccidiostats	2	2	1	7.4 (narasin)
Cows Milk	Antimicrobial (Screen 4)	161	200	1	380 (dihydrostreptomycin)
Cows Milk	Avermectins	306	Presence	1	0.92 (ivermectin)

Section B: Full details of 2014 UK statutory surveillance programme by sector

EGGS					
Substance Group/ Analyte	Species	Matrix	No. of Analyses	No. above Action Level	Concentration where samples above MRL (Ug/Kg)
A6 Annex IV					
Chloramphenicol	Barn	Eggs	13		
	Caged	Eggs	9		
	Free Range	Eggs	117		
	Organic	Eggs	7		
	Quail	Eggs	1		
Nitrofurans	Barn	Eggs	10		
	Caged	Eggs	14		
	Free Range	Eggs	110		
	Organic	Eggs	13		
Nitroimidazoles	Barn	Eggs	13		
	Caged	Eggs	16		
	Free Range	Eggs	106		
	Organic	Eggs	11		
	Quail	Eggs	1		
B1 Antimicrobial					
AMS1	Barn	Eggs	8		
	Caged	Eggs	6		
	Free Range	Eggs	124		
	Organic	Eggs	4		
	Quail	Eggs	1		
AMS2	Barn	Eggs	12		
	Caged	Eggs	11		
	Free Range	Eggs	71		
	Organic	Eggs	8		
	Quail	Eggs	1		
AMS3	Barn	Eggs	16		
	Caged	Eggs	22		
	Free Range	Eggs	137		
	Organic	Eggs	19		
Tiamulin	Barn	Eggs	4		
	Caged	Eggs	1		
	Free Range	Eggs	5		
	Organic	Eggs	1		
B2B Coccidiostats					
Coccidiostats	Barn	Eggs	46		
	Caged	Eggs	52		
	Free Range	Eggs	438		
	Organic	Eggs	38		
	Quail	Eggs	2	1	Narasin: 7.4
B3A Pesticide Screen					
	Free Range	Eggs	61		
FISH					
Substance Group/ Analyte	Species	Matrix	No. of Analyses	No. above Action Level	Concentration where samples above MRL (Ug/Kg)
A3 Hormones					
Methyltestosterone	Trout	Muscle & Skin	9		
A6 Annex IV					
Chloramphenicol	Salmon	Muscle & Skin	186		
	Trout	Muscle & Skin	13		
Nitrofurans	Bass	Muscle & Skin	1		
	Salmon	Muscle & Skin	94		

	Trout	Muscle & Skin	11		
Nitroimidazoles	Bass	Muscle & Skin	2		
	Salmon	Muscle & Skin	165		
	Trout	Muscle & Skin	12		
B1 Antimicrobial					
AMS1	Salmon	Muscle & Skin	86		
	Trout	Muscle & Skin	4		
AMS2	Salmon	Muscle & Skin	10		
AMS3	Salmon	Muscle & Skin	198		
	Trout	Muscle & Skin	4		
Florfenicol	Salmon	Muscle & Skin	88		
B2A Anthelmintics					
Anthelmintics	Salmon	Muscle & Skin	97		
	Trout	Muscle & Skin	7		
Avermectins	Salmon	Muscle & Skin	89		
	Trout	Muscle & Skin	8		
B2C Pesticide Screen					
Pyrethroids	Salmon	Muscle & Skin	117		
B3A Pesticide Screen					
	Salmon	Muscle & Skin	10		
	Trout	Muscle & Skin	4		
B3B Pesticide Screen					
OPs	Salmon	Muscle & Skin	35		
B3C Heavy Metals					
Metals	Salmon	Muscle & Skin	21		
	Trout	Muscle & Skin	4		
B3D Mycotoxins					
Mycotoxins	Salmon	Muscle & Skin	8		
	Trout	Muscle & Skin	5		
B3E Dyes					
Dyes	Salmon	Muscle & Skin	132		
	Trout	Muscle & Skin	64	2	Leucomalachite Green: 14, 38
HONEY					
Substance Group/ Analyte	Species	Matrix	No. of Analyses	No. above Action Level	Concentration where samples above MRL (Ug/Kg)
A6 Annex IV					
Chloramphenicol	Bees	Honey	10		
Nitrofurans	Bees	Honey	10		
B1 Antimicrobial					
AMS1	Bees	Honey	20		
AMS3	Bees	Honey	20		
AMS4	Bees	Honey	20		
AMS5	Bees	Honey	20		
B2C Pesticide Screen					
Pyrethroids	Bees	Honey	11		
B3A Pesticide Screen					
	Bees	Honey	10		
	Bees	Honey	12		
B3B Pesticide Screen					
OPs	Bees	Honey	14		
B3C Heavy Metals					
Metals	Bees	Honey	14		
MILK					
Substance Group/ Analyte	Species	Matrix	No. of Analyses	No. above Action Level	Concentration where samples above MRL (Ug/Kg)
A6 Annex IV					
Chloramphenicol	Cattle	Milk	625		

	Goats	Milk	12		
	Sheep	Milk	8		
B1 Antimicrobial					
AMS1	Cattle	Milk	606		
	Goats	Milk	15		
	Sheep	Milk	3		
AMS2	Cattle	Milk	191		
	Goats	Milk	4		
	Sheep	Milk	2		
AMS3	Cattle	Milk	190		
	Goats	Milk	5		
	Sheep	Milk	3		
AMS4	Cattle	Milk	161	1	Dihydrostreptomycin: 380
	Goats	Milk	5		
	Sheep	Milk	3		
Cefquinome	Cattle	Milk	226		
	Goats	Milk	2		
	Sheep	Milk	3		
Ceftiofur	Cattle	Milk	93		
	Goats	Milk	3		
	Sheep	Milk	2		
B2A Anthelmintics					
Anthelmintics	Cattle	Milk	268		
	Goats	Milk	8		
	Sheep	Milk	2		
Avermectins	Cattle	Milk	368	1	Ivermectin: 0.92
	Goats	Milk	10		
	Sheep	Milk	4		
Nitroxylin	Cattle	Milk	149		
	Goats	Milk	2		
B2E NSAIDs					
	Cattle	Milk	207		
	Goats	Milk	7		
	Sheep	Milk	2		
B3A Pesticide Screen					
	Cattle	Milk	47		
	Goats	Milk	2		
B3B Pesticide Screen					
OPs	Cattle	Milk	37		
	Goats	Milk	1		
B3C Heavy Metals					
Metals	Cattle	Milk	23		
	Sheep	Milk	1		
B3D Mycotoxins					
Mycotoxins	Cattle	Milk	32		
	Goats	Milk	1		
	Sheep	Milk	1		
POULTRY					
Substance Group/ Analyte	Species	Matrix	No. of Analyses	No. above Action Level	Concentration where samples above MRL (Ug/Kg)
A1 Stilbenes					
	Broilers	Liver/serum	21		
	Turkeys	Liver/serum	1		
A3 Hormones					
Steroid screen 2	Broilers	Liver	517		
	Ducks	Liver	9		
	Hens	Liver	17		
	Turkeys	Liver	89		
A4 Zeranol					

	Broilers	Liver	25		
	Turkeys	Liver	1		
A5 Beta-Agonists					
	Broilers	Feed	163		
	Broilers	Liver	340		
	Ducks	Feed	5		
	Ducks	Liver	15		
	Hens	Feed	9		
	Hens	Liver	20		
	Turkeys	Feed	30		
	Turkeys	Liver	55		
A6 Annex IV					
Chloramphenicol	Broilers	Muscle	591		
	Ducks	Muscle	11		
	Hens	Muscle	16		
	Turkeys	Muscle	88		
Nitrofurans	Broilers	Feed	258		
	Broilers	Muscle	494		
	Ducks	Feed	8		
	Ducks	Muscle	11		
	Hens	Feed	10		
	Hens	Muscle	16		
	Turkeys	Feed	31		
	Turkeys	Muscle	54		
Nitroimidazoles	Broilers	Feed	262		
	Broilers	Liver	98		
	Broilers	Serum	757		
	Ducks	Feed	5		
	Ducks	Serum	17		
	Hens	Feed	9		
	Hens	Serum	33		
	Turkeys	Feed	31		
	Turkeys	Liver	5		
	Turkeys	Serum	84		
B1 Antimicrobial					
AMS1	Broilers	Muscle	1565	1	Chlortetracycline: 430
	Ducks	Muscle	31		
	Geese	Muscle	6		
	Hens	Muscle	66		
	Turkeys	Muscle	252	1	Chlortetracycline: 390
AMS2	Broilers	Muscle	482		
	Ducks	Muscle	6		
	Geese	Muscle	2		
	Hens	Muscle	19		
	Turkeys	Muscle	61		
Tiamulin	Broilers	Muscle	10		
B2A Anthelmintics					
Anthelmintics	Broilers	Liver	310		
	Ducks	Liver	20		
	Hens	Liver	17		
	Turkeys	Liver	57		
B2B Coccidiostats					
Coccidiostats	Broilers	Liver	774	2	Salinomycin: 9 Monensin: 10
	Hens	Liver	11		
	Turkeys	Liver	35		
B2C Pesticide Screen					
Pyrethroids + Carbamates	Broilers	Liver	75		
	Ducks	Liver	2		
	Hens	Liver	3		
	Turkeys	Liver	19		

B2E NSAIDs					
	Broilers	Liver	5		
	Ducks	Liver	5		
	Hens	Liver	5		
	Turkeys	Liver	5		
B3A Pesticide Screen					
	Broilers	Liver	261		
	Ducks	Liver	3		
	Hens	Liver	6		
	Turkeys	Liver	27		
B3C Heavy Metals					
Metals	Broilers	Muscle	91		
	Ducks	Muscle	2		
	Hens	Muscle	3		
	Turkeys	Muscle	10		
B3D Mycotoxins					
Mycotoxins	Broilers	Liver	15		
	Hens	Liver	1		
	Turkeys	Liver	1		
RED MEAT					
Substance Group/ Analyte	Species	Matrix	No. of Analyses	No. above Action Level	Concentration where samples above MRL (Ug/Kg)
A1 Stilbenes					
	Cattle	Urine	38		
	Fattening cattle	Urine	26		
	Pigs	Urine	15		
	Sheep	Urine	4		
A2 Thyrostats					
Thyrostats	Cattle	Urine	167	6	Thiouracil: 11, 13, 14, 14, 18, 19
	Fattening cattle	Urine	252	2	Thiouracil: 17, 71
	Horses	Urine	1		
	Pigs	Urine	98		
	Sheep	Urine	75	2	Thiouracil: 13, 14
A3 Hormones					
Gestagens	Cattle	Kidney fat	301		
	Fattening cattle	Serum	301		
	Pigs	Kidney fat	113		
	Sheep	Kidney fat	83		
Methyltestosterone	Pigs	Feed	26		
Oestradiol	Cattle	Serum	193		
	Fattening cattle	Serum	325		
Steroid screen 1	Cattle	Urine	1369	8	a-boldenone: 54 a-nortestosterone: 0.8, 0.95, 1.7, 5.1, 5.3, 6.5 a-nortestosterone + b- nortestosterone: 1.93
	Fattening cattle	Urine	1646	6	a-boldenone: 3.2 b-boldenone: 0.55 a-boldenone + b-boldenone 2.65 a-nortestosterone: 1.7, 11, 15
	Horses	Urine	2		
	Pigs	Urine	376		

	Sheep	Urine	527	25	b-nortestosterone: 1.5, 1.8 a-boldenone: 2, 2.1, 2.3, 2.4, 2.4, 2.6, 2.7, 2.7, 3, 3.3, 3.5, 4.1, 4.2, 4.3, 4.6, 6.7, 7.7, 9.5, 13, 15, 19 a-boldenone + b-nortestosterone: 4.3 a-boldenone + b-boldenone + b-nortestosterone: 21.2
Testosterone	Cattle	Serum	310	1	b-testosterone: 1.2
	Fattening cattle	Serum	295	2	b-testosterone: 1.3, 13
A5 Beta-Agonists					
	Calves	Liver	8		
	Cattle	Liver	560		
	Fattening cattle	Feed	199		
	Fattening cattle	Urine	230		
	Horses	Liver	7		
	Pigs	Feed	48		
	Pigs	Liver	376		
	Sheep	Liver	283		
A6 Annex IV					
Chloramphenicol	Calves	Kidney	14		
	Cattle	Kidney	262		
	Fattening cattle	Feed	282		
	Fattening cattle	Urine	53		
	Horses	Kidney	4		
	Pigs	Kidney	251		
	Sheep	Kidney	150		
Nitrofurans	Calves	Kidney	5		
	Cattle	Kidney	164		
	Fattening cattle	Feed	200		
	Horses	Kidney	3		
	Pigs	Feed	7		
	Pigs	Kidney	318		
	Sheep	Kidney	238	1	Semicarbazide: 1.5
Nitroimidazoles	Calves	Kidney	4		
	Cattle	Kidney	162		
	Horses	Kidney	6		
	Pigs	Feed	18		
	Pigs	Kidney	234		
	Sheep	Kidney	105		
B1 Antimicrobial					
AMS1	Calves	Kidney	88	1	Oxytetracycline: 8500
	Cattle	Kidney	1191		
	Horses	Kidney	14		
	Pigs	Kidney	1408	5	Sulfadiazine: 210, 210, 240 Oxytetracycline: 780 Chlortetracycline: 1100
	Sheep	Kidney	2576	3	Sulfadiazine: 220 Oxytetracycline: 770, 3500
AMS2	Cattle	Kidney	131		
	Pigs	Kidney	368		
	Sheep	Kidney	5		
AMS4	Calves	Kidney	93	3	Dihydrostreptomycin: 3000, 3800, 6700
	Cattle	Kidney	135		
	Sheep	Kidney	104		
Ceftiofur	Pigs	Kidney	110		
Florfenicol	Calves	Kidney	94	5	430, 890, 990, 5400, 7600
	Sheep	Kidney	97		
B2A Anthelmintics					
Anthelmintics	Cattle	Liver	542	1	Closantel: 1400
	Pigs	Liver	362		

	Sheep	Liver	1178	3	Closantel: 1900, 2940 Fenbendazole: 1120
Avermectins	Cattle	Liver	276		
	Horses	Liver	12		
	Pigs	Liver	169		
	Sheep	Liver	528		
B2B Coccidiostats					
Coccidiostats	Calves	Liver	20		
	Horses	Liver	2		
	Pigs	Liver	102		
	Sheep	Liver	322		
B2C Pesticide Screen					
Pyrethroids	Calves	Kidney	2		
	Calves	Kidney fat	25		
	Horses	Kidney fat	2		
	Pigs	Kidney fat	74		
	Sheep	Kidney fat	555		
B2D Sedatives					
	Breeding Boar	Liver	48		
	Cattle	Liver	23		
	Cattle	Kidney	14		
	Horses	Liver	10		
	Pigs	Liver	192		
	Pigs	Kidney	34		
	Sheep	Liver	92		
	Sheep	Kidney	5		
B2E NSAIDs					
	Cattle	Kidney	539	2	Ibuprofen: 14, 190
	Cattle	Liver	92		
	Cattle	Plasma	92	1	Phenylbutazone: 0.32
	Horses	Kidney	50		
	Pigs	Kidney	35		
	Pigs	Liver	3		
	Sheep	Kidney	47		
	Sheep	Liver	3		
B2F Glucocorticoids					
	Cattle	Liver	341		
	Horses	Liver	10		
	Pigs	Liver	67		
	Sheep	Liver	25		
B3A Pesticide Screen					
	Cattle	Kidney fat	78		
	Horses	Kidney fat	1		
	Pigs	Kidney fat	70		
	Sheep	Kidney fat	143		
B3B Pesticide Screen					
OPs	Cattle	Kidney fat	237		
	Horses	Kidney fat	1		
	Pigs	Kidney fat	149		
	Sheep	Kidney fat	570	1	Diazinon: 860
B3C Heavy Metals					
Metals	Cattle	Kidney	76	3	Cadmium: 1300, 1500, 1500
	Cattle	Muscle	27		
	Horses	Kidney	1	1	Cadmium: 14000
	Pigs	Kidney	13		
	Pigs	Muscle	3		
	Sheep	Kidney	49	4	Cadmium: 1043 Lead: 840, 850, 1200
	Sheep	Muscle	6		
B3D Mycotoxins					
Mycotoxins	Cattle	Liver	28		

	Horses	Liver	2		
	Pigs	Liver	65	1	Ochratoxin A: 2.7
	Sheep	Liver	16		
A4 Hormones					
Zeranol	Cattle	Urine	218	10	Taleranol: 0.79, 1.3, 2.2, 2.9 Taleranol + Zeranol: 2.29, 2.69, 3.51, 5.9, 7, 9.2
	Fattening cattle	Urine	166	8	Taleranol: 0.79, 0.79 Taleranol + Zeranol: 2.01, 2.12, 2.17, 3, 5, 5.8
	Horses	Urine	2		
	Pigs	Urine	188		
	Sheep	Urine	76	2	Taleranol + Zeranol: 2.3, 2.5
GAME					
Substance Group/ Analyte	Species	Matrix	No. of Analyses	No. above Action Level	Concentration where samples above MRL (Ug/Kg)
A2 Thyrostats					
Thyrostats	Deer	Liver	4		
A3 Hormones					
Steroid screen 2	Deer	Liver	10		
A5 Beta-Agonists					
	Deer	Liver	12		
A6 Annex IV					
Nitroimidazoles	Deer	Muscle	4		
B1 Antimicrobial					
AMS1	Deer	Kidney	24		
B2A Anthelmintics					
Anthelmintics	Deer	Liver	10		
	Partridge	Liver	4		
	Pheasant	Liver	6		
B2B Coccidiostats					
Coccidiostats	Partridge	Muscle	5		
	Pheasant	Muscle	5		
	Quail	Muscle	5	3	Lasalocid: 20, 36, 80
B2C Pesticide Screen					
Pyrethroids	Deer	Kidney fat	3		
B2D Sedatives					
	Deer	Liver	3		
B2E NSAIDs					
	Deer	Liver	5		
B3A Pesticide Screen					
	Deer	Kidney fat	7	1	DDE, pp'-: 3000
B3C Heavy Metals					
Metals	Deer	Muscle	5		
	Partridge	Muscle	6	1	Lead: 18000
	Pheasant	Muscle	6		
	Wild Deer	Muscle	100		

Section C: Details of follow-up investigations/actions for statutory surveillance programme – England, Scotland and Wales

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Actives	Cause of residue
Cattle				
Calf Kidney	Dihydrostreptomycin 3000 µg/kg 1437506	Pen & Strep	Dihydrostreptomycin	This calf was suffering from pneumonia and Pen & Strep had been administered but not recorded in the medicines records. Therefore, the cause of this residue is due to this animal being sent to slaughter within the withdrawal period. The farmer has been given written reminder of the requirement for accurate record keeping, using veterinary medicines correctly and observing withdrawal periods.
Calf Kidney	Dihydrostreptomycin 3800 µg/kg 1437481	Pen & Strep	Dihydrostreptomycin	This animal originated from a dairy farm where medicinal usage and withdrawal periods were common knowledge. The medicines records showed little medicinal use for calves apart from a couple of entries for Pen & Strep to treat calf diphtheria. The calf was sent to slaughter 1 day off the end of the withdrawal period, however, this alone is unlikely to be the cause of this level of concentration. It is likely that there was either an over-dose given or a poor metabolic rate contributed to the cause of this residue. The farmer has been given written reminder of the requirement for using veterinary medicines correctly and observing withdrawal periods.
Calf Kidney	Dihydrostreptomycin 6700 µg/kg 1437485	Pen & Strep	Dihydrostreptomycin	This calf was treated with Pen & Strep Suspension Injection for joint ill. The medicines records were well kept and the withdrawal period was observed. During the investigation it became apparent that the calf was given nearly twice the recommended dose with the assumption this would increase beneficial effects. This overdose coupled with suspected poor metabolic rate is more likely the cause of this residue. The farmer was given a written reminder regarding the requirements for using veterinary medicines correctly.
Calf Kidney	Florfenicol 430 µg/kg 1432828	Resflor	Florfenicol	At the time of the sale of this calf, the farmer was away on holiday leaving a farm worker in charge of medicines records and animal movements. On inspection there was no evidence of this animal having been treated in the records but Resflor was available in the medicines store. Despite the drug cabinet being lockable this was open and accessible to anyone on farm. Advice was given to ensure that this is kept locked whilst the farmer is not present. The most likely cause of this residue is from an unrecorded treatment and subsequently entering the food chain within the withdrawal period. The farmer has been given written advice on the requirement for keeping accurate medicines records and adhering to withdrawal periods. The farmers vet has also been informed.

Calf Kidney	Florfenicol 890 µg/kg 1411304	N/A	N/A	This animal originated from a dairy farm which rears their own replacers but all bull calves are sold within 1 month from birth to a dealer. The medicines records are satisfactory and kept digitally, and showed this calf having only been treated with Flunixin and Noradine. This farm is visited by the private vet twice a week for welfare and fertility checks therefore it is unlikely that florfenicol was used on this calf at this farm. Therefore it was not possible to establish the cause of this residue, however, the farmer has been given a written reminder of the importance of keeping accurate medicines records.
Calf Kidney	Florfenicol 990 µg/kg 1422248	Resflor	Florfenicol	This calf originated from a dairy farm which rears its own replacers but all bull calves are sold within 1 month at market. The medicines records appeared up to date but there was no record on this animal having been treated with any medicines. Although no longer on site, the vet had prescribed Resflor a few months prior, so the most likely cause of this residue is from an unrecorded treatment and erroneously sent to slaughter within the withdrawal period. The farmer was given written advice on the requirement for accurate record keeping and observing withdrawal periods.
Calf Kidney	Florfenicol 5400 µg/kg 1422253	Resflor	Florfenicol	This is a medium sized dairy farm which rears its own replacements with male calves usually being sold at approximately two months old. The male calf from which this sample was taken seemed to be in poor health at just one month of age and it was decided to send it to abattoir along with other barren cattle. The calf had not been marked as treated but the medicines records showed that it had been dosed with Resflor three days prior to slaughter. The medicines records were generally inadequate and written advice has been given on the requirement for accurate record keeping and observing withdrawal periods. APHA will revisit this farm to ensure that this advice has been adhered to.
Calf Kidney	Florfenicol 7600 µg/kg 1422255	N/A	N/A	This animal originated from a dairy farm which rears their own replacers but all bull calves are sold within 1 month from birth to a dealer. The medicines records are satisfactory and kept digitally, and showed this calf as having no treatments. Therefore it was not possible to establish the cause of this residue, however, the farmer has been given a written reminder of the importance of keeping accurate medicines records.
Calf Kidney	Oxytetracycline 8500 µg/kg 1429593	Occrycetin Bolus 500mg Tablets	Oxytetracycline Hydrochloride	This animal originated from a dairy farm which rears their own replacers but all bull calves are sold through the market. The medicines records appeared complete and accurate but there was no entry for medicines given to this animal. There were, however, records of two calves of a similar age that were given Occrycetin Bolus Tablets. Therefore, it is most likely that the cause of this residue is from an unrecorded treatment and erroneously sent to slaughter within the withdrawal period. The farmer was given written advice on the requirement for accurate record keeping and observing withdrawal periods.

Cattle Kidney	Cadmium 1300 µg/kg 1433184	N/A	N/A	This animal originated from a large farm which is sited close to open cast coal mines, from which a flow of residual water from the mines onto the farm. There was also evidence of fly tipping on this land including cars and industrial products. Fertilising of the premises is mostly animal manure but this farm is licensed to use human effluent and has done so until last year, which may also have contributed to the environmental contamination which is likely to have caused this residue. During the investigation, it was noted that the medicines records were not completed fully the farmer has been given written advice on the requirements for adequate record keeping.
Cattle Kidney	Cadmium 1500 µg/kg 1422535	N/A	N/A	This 10 year old animal originated from a large cattle and sheep farm and on failure to calf this cow was fattened and sent for slaughter. The feeding is mainly home-grown silage plus some bought in barley and straw and minerals are also added. Cattle are housed during the winter and graze in the summer months on land which has no obvious sources of cadmium. The silage fields are sprayed with slurry but recently had satisfactory soil analyses results undertaken by the fertiliser company. The most likely cause of this residue is from a build-up of cadmium in the kidney through diet over time.
Cattle Kidney	Cadmium 1500 µg/kg 1433176	N/A	N/A	This 13 year old cow spent its entire life at one farm, which had recently discovered that the pasture soil was low in potash and was borderline acidic. Fertiliser was applied annually but no sewage sludge which may account for the environmental contamination. The most likely cause of this residue is from a build-up of cadmium in the kidney through diet over time.
Cattle Kidney	Ibuprofen 14 µg/kg 1433698	No investigation was carried out as preliminary enquires suggest that the most likely cause of this residue is from cross contamination from the sampling officer		
Cattle Kidney	Ibuprofen 190 µg/kg 1423014	N/A	N/A	This is a mixed breed fattening herd of various ages usually bought at market and grouped according to age and size. All cattle are vaccinated and the medicines record is kept to a good standard and records show that recent prescriptions do not include ibuprofen. There was no evidence of the use of this substance on farm or by the farm staff. The sampling officer had been using medication containing ibuprofen, however, it was not possible to establish whether this was being used at the time of sampling.
Cattle Serum	Beta-testosterone 1.2 µg/l 1439042	N/A	N/A	The animal which this residue originated was a 14 year old breeding Highland cow which had been on the same farm since 4 months old. The farm demonstrated good husbandry and no evidence of the use of unauthorised substances. The cause of this residue is most likely due to natural levels.

Fattening Cattle Serum	Beta-testosterone 13 µg/l 1416810	N/A	N/A	This sample originated from a beef fattening unit which rears dairy bull calves. The calves are bought through an agent each month in groups of 25 and are kept in these groups on farm. He also buys two female calves which are kept with the bull calves until 16 weeks of age and then added to the heifers. Calves are routinely vaccinated for pneumonia and wormed if grazed. Antibiotics are only used when required and the medicines record and storage was satisfactory. Five target samples were taken, including from the original animal, all of which were compliant for testosterone. The cause of this residue is likely to be a natural level.
Fattening Cattle Urine	Alpha-boldenone 3.2 µg/l 1415392	N/A	N/A	This sample came from a 6 year old bull which was still on farm. The bull and remaining herd appeared unremarkable and the medicines use on farm was typical and well documented. The cause of this residue is most likely due to faecal contamination at the time of sampling.
Fattening Cattle Urine	Alpha-boldenone 2.1 µg/l & Beta-boldenone 0.55 µg/l 1426184	N/A	N/A	This sample came from a 13 month old Friesian bull which had never been to graze and was fed a diet of rolled barley, soya and rape minerals with some silage. The cause of this residue is most likely due to faecal contamination at the time of sampling.
Cattle Urine	Alpha-boldenone 54 µg/l 1413266	N/A	N/A	Due to the unusually high concentration, this sample was also analysed by another laboratory which confirmed the original result. The female cow from which this sample originated had a complex history of movement but was presented for slaughter from a well-run commercial beef finishing unit with approximately 1100 cattle at any one time. Cattle are kept in deep straw yards and fed a diet of fruit and vegetables and have a proactive preventative health programme. There was no evidence of the use of anabolic hormonal substances on this Assurance Scheme member's farm, therefore the most likely cause is from faecal contamination of the urine at the time of sampling.
Cattle Urine	Alpha-nortestosterone 1.4 µg/l & Beta-nortestosterone 0.53 µg/l 1434852	N/A	N/A	This mainly arable farm produces its own feed for the beef suckler herd of about 60 which are born, reared and finished on farm. Medicines record and storage check were satisfactory and there was no evidence of the use of banned substances, therefore, the cause of these residues are likely to be natural levels.
Cattle Urine	Alpha-nortestosterone 0.8 µg/l 1434697	N/A	N/A	This sample originated from a 29 month old steer which was not one of a pair of twins. The medicines records showed that the only treatment given to the herd were vaccinations and the odd pneumonia treatment. There was no evidence of the use of banned substances, therefore, the cause of this residue is likely to be a natural level.
Cattle Urine	Alpha-nortestosterone 0.95 µg/l 1438880	N/A	N/A	This sample originated from an extensive cattle and sheep farm and was not one of a pair of twins or likely to be in calf. The medicines records showed that the only routine treatments were given to the herd. There were a few minor omissions in the medicines records but otherwise it was satisfactory. There was no evidence of the use of banned substances, therefore, the cause of this residue is likely to be a natural level.

Cattle Urine	Alpha-nortestosterone 1.7 µg/l 1423941	N/A	N/A	This sample originated from a steer which was grazed in the summer and housed over winter until it was slaughtered. The medicines records showed that the only treatment given to it was a wormer and the records and storage were in good order. There was no evidence of the use of banned substances, therefore, the cause of this residue is likely to be a natural level.
Cattle Urine	Alpha-nortestosterone 5.1 µg/l 1434841	N/A	N/A	This enterprise usually sells calves as stores but due to low prices has recently kept them to sell as fat cattle. The medicines records show the use of Estrumate and Receptal on the breeding cows but there was no evidence of the use of banned substances. Therefore the most likely cause of this residue is due to natural levels.
Cattle Urine	Alpha-nortestosterone 5.3 µg/l 1434777	N/A	N/A	This sample originated from a 7 year old cow from a fattening unit where it was permanently housed. The medicines records and storage were in good order and only routine medicines were kept on farm. The timing of the slaughter could have been that this cow was in the very early stages of pregnancy but this could not be confirmed. There was no evidence of the use of banned substances, therefore, the cause of these residues are likely to be natural levels.
Cattle Urine	Alpha-nortestosterone 6.5 µg/l 1434734	N/A	N/A	This sample came from a heifer that ran with stock bulls and it is possible that this cow could have been in-calf at the time of sampling. It was not possible to inspect the medicines records during the investigation as there had been a fire which had destroyed them, but there was no evidence of the use of banned substances. Therefore the most likely cause of this residue is due to natural levels.
Fattening Cattle Urine	Alpha-nortestosterone 11 µg/l 1416613	No investigation was carried out as this animal was only 20 days old at the time of sampling. It is possible that natural levels of alpha-nortestosterone could be present from the birth.		
Fattening Cattle Urine	Alpha-nortestosterone 15 µg/l 1415245	N/A	N/A	The investigation established that this animal was in calf at the time of sampling, therefore the cause of this residue is due to natural levels.
Fattening Cattle Urine	Beta-boldenone 0.55 µg/l 1426019	N/A	N/A	This beef farm breeds their own replacements and fattens the bull calves on a year-round calving pattern. Additional calves of dairy origin are bought in to supplement the fattening stock which was fed barley with added dark grains, beans and a vitamin/mineral supplement. The medicines records and storage were satisfactory and as there was no evidence of the use of banned substances it was most likely cause by faecal contamination of the sample from natural levels.
Fattening Cattle Urine	Taleranol 0.79 µg/l 1426501	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.		
Fattening Cattle Urine	Taleranol 0.79 µg/l 1426520	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.		
Cattle Urine	Taleranol 0.79 µg/l 1435498	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.		

Cattle Urine	Taleranol 1.3 µg/l 1435464	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.
Fattening Cattle Urine	Taleranol 1.4 µg/l & Zeranol 0.61 µg/l 1415567	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.
Fattening Cattle Urine	Taleranol 1.4 µg/l & Zeranol 0.77 µg/l 1436203	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.
Fattening Cattle Urine	Taleranol 1.5 µg/l & Zeranol 0.62 µg/l 1426526	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.
Cattle Urine	Taleranol 1.7 µg/l & Zeranol 0.59 µg/l 1435466	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.
Cattle Urine	Taleranol 1.9 µg/l & Zeranol 0.79 µg/l 1435495	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.
Fattening Cattle Urine	Taleranol 1.9 µg/l & Zeranol 1.1 µg/l 1436194	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.
Cattle Urine	Taleranol 2.2 µg/l 1435500	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.
Cattle Urine	Taleranol 2.9 µg/l 1424460	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.
Cattle Urine	Taleranol 2.9 µg/l & Zeranol 0.61 µg/l 1435487	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.
Fattening Cattle Urine	Taleranol 3.4 µg/l & Zeranol 1.6 µg/l 1436197	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.

Cattle Urine	Taleranol 4.1 µg/l & Zeranol 1.7 µg/l 1436199	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.		
Cattle Urine	Taleranol 4.5 µg/l & Zeranol 1.4 µg/l 1435502	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.		
Cattle Urine	Taleranol 4.8 µg/l & Zeranol 2.2 µg/l 1413504	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.		
Cattle Urine	Taleranol 7.1 µg/l & Zeranol 2.1 µg/l 1435505	No investigation required as research has shown that low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus.		
Cattle Urine	Thiouracil 11 µg/l 1424338	N/A	N/A	This farm feeds cattle on potatoes, barley, brewer's grains and straw with two supplements. The supplement bags only listed the mineral content but it is most likely that these contain vegetable matter rich in brassicas, causing this residue.
Cattle Urine	Thiouracil 13 µg/l 1424335	N/A	N/A	This medium sized fattening farm feeds the cattle a diet of home grown grain and straw, and a purchased balancer, minerals and rumen buffer. No brassicas are fed on farm, but the protein balancer contains rapemeal, which is the likely source for this residue.
Cattle Urine	Thiouracil 14 µg/l 1413370	N/A	N/A	Identification details for this cow were incorrectly recorded on the sampling forms and therefore it was not possible to adequately determine the origin of this animal.
Cattle Urine	Thiouracil 14 µg/l 1424350	N/A	N/A	This fattening farm has a typical grass silage forage system and uses own grown barley straw with a protein pellet. The ingredients listed in the pellets include rapeseed which is most likely the cause of this residue.
Fattening Cattle Urine	Thiouracil 17 µg/l 1415529	N/A	N/A	The farm of origin is a well-run finisher unit which feed the cattle on a mixed diet of potatoes, root vegetable and exotic fruits. Additionally they have straw and a rape meal protein source added to compound feed. The most likely cause of this residue is due to the animal ingesting brassica rich feed.
Cattle Urine	Thiouracil 19 µg/l 1413379	N/A	N/A	At this well maintained and managed bull beef finishing farm they also produce their own hay, silage, cereals and rapeseed. The cattle are bedded with both rape straw and wheat straw. The most likely cause of this residue is due to a combination of the maize silage possibly contaminated with rape and the cattle eating the bedding.
Fattening Cattle Urine	Thiouracil 71 µg/l 1426433	N/A	N/A	This farmer feeds all his cattle on hay and concentrates which contain, amongst other things, palm kernel, rape meal, and vegetable oil, which is the likely source for this residue.

Pigs				
Pig Kidney	Chlortetracycline 1100 µg/kg 1420685	Chloromed 150	Chlortetracycline hydrochloride	This is a large multi-site enterprise with approximately 15 finishing sites as well as 2000 acres of arable land which supplies their own mill. Chloromed 150 was included in the sow ration due to a suspected flu outbreak. The withdrawal period for this is 6 days and it is practised that cull sows are removed one week prior to slaughter to ensure withdrawal periods are met. The feed bins are clearly numbered to avoid delivery errors and the feed is closely controlled by the farmer. However, it is most likely that cross contamination occurred on farm.
Pig Kidney	Oxytetracycline 780 µg/kg 1437315	N/A	N/A	This pig breeding unit uses routine medicines and vaccines as expected at an enterprise such as this. The farmer is the only person to administer medicines to the pigs and only uses Pen & Strep as a prophylaxis when they are close to farrowing. All animals intended for sale are only vaccinated. No in-feed medicines are used on farm therefore cross contamination is unlikely. There was no evidence to suggest that oxytetracycline was administered on farm therefore it was not possible to adequately determine the cause of this residue.
Pig Kidney	Sulfadiazine 210 µg/kg 1419642	Trimediazine BMP Premix	Sulfadiazine, Trimethoprim	The pigs on this breeder-finisher farm are fed purchased compound feed, some of which is medicated given several weeks prior to slaughter. The medicated feed includes Trimediazine BMP Premix at 2kg per tonne with a withdrawal period for meat of 5 days. Feed is stored in bulk bins which are labelled with laminated signs to indicate which type of feed is enclosed. The cause of this residue is due to the pig being slaughtered within a withdrawal period from either an error at the time of delivery putting medicated feed into a non-medicated feed bin, or less likely but possible carryover of residual feed when changing batches. The farmer was given written advice on how to avoid such residues in the future.
Pig Kidney	Sulfadiazine 210 µg/kg 1419726	N/A	Sulfadiazine, Trimethoprim	This large pig farm of approximately 17,000 pigs consists of a breeding unit with piglets being taken through to slaughter as large baconers. The accommodation is split into four distinct areas for dry sows, farrowing, nursery and finishing. The different diets are all mixed in the main mixer tank by a computerised system in no particular order and without flushing following the medicated creep diet containing Trimethoprim and Sulphadiazine. It is possible that cross contamination occurred during the mixing due to not flushing and the farmer has agreed to discuss this with the manufacturer to install a flush through cycle. The farmer has also agreed to identify the individual hoppers more clearly in separate colours to ensure that cross contamination does not occur during delivery of dry ingredients.

Pig Kidney	Sulfadiazine 240 µg/kg 1419736	N/A	Sulfadiazine, Trimethoprim	This large pig farm of approximately 17,000 pigs consists of a breeding unit with piglets being taken through to slaughter as large baconers. The accommodation is split into four distinct areas for dry sows, farrowing, nursery and finishing. The different diets are all mixed in the main mixer tank by a computerised system in no particular order and without flushing following the medicated creep diet containing Trimethoprim and Sulphadiazine. It is possible that cross contamination occurred during the mixing due to not flushing and the farmer has agreed to discuss this with the manufacturer to install a flush through cycle. The farmer has also agreed to identify the individual hoppers more clearly in separate colours to ensure that cross contamination does not occur during delivery of dry ingredients.
Pig Liver	Ochratoxin A 2.7 µg/kg 1433229	N/A	N/A	The pigs on this large breeder-finisher farm are fed mostly home grown and milled rations and finished for 6 weeks on barley, hi-pro soya and minerals. The feed grain is stored on the floor of an apparently water-tight building which has good ventilation. The finisher ration is augered from the mill to outside storage bins through a sealed system which are relatively new and inspected periodically. The feed quality was satisfactory and although there has been some sprouted grain at the delivery grid, this was not often. As there was no known problem or signs of moulded feed it was not possible to ascertain the cause of this residue. The farmer has been given written advice on how to avoid such residues occurring in the future.
Sheep				
Sheep Kidney	Lead 840 µg/kg 1411582	N/A	N/A	This animal was reared outside and grazed on grass, fodder beet and supplementary corn from a local farm. The farm is located in an area known for historical lead mining, therefore, the most likely cause of this residue is due to a gradual build up over time from environmental contaminants. During the investigation it was noted that the medicines were recorded as incomplete and the farmer has been given advice on the legal requirements for medicines record keeping.
Sheep Kidney	Lead 850 µg/kg 1411574	N/A	N/A	The owner of this animal has retired after selling all of his stock and the grazing fields used are now arable farm land. There was no obvious source of lead contamination, however, prior to the lambs being sold a pile of human effluent was stored in the field ready for spreading and ploughing into the soil. It is possible that this was the cause of this residue.
Sheep Kidney	Lead 1200 µg/kg 1411575	N/A	N/A	This sample originated from a hillside sheep farm located in an area which is littered with disused lead mines. This is also a limestone area where little grass grows resulting in the sheep grazing close to the soil. The most likely cause of this residue is due to a gradual build up over time from environmental contaminants.

Sheep Kidney	Oxytetracycline 770 µg/kg 1420148	N/A	N/A	This sampled originated from a mixed cattle, sheep and pig enterprise but each species is considered independent and dedicated equipment and feed is used to ensure no cross contamination. The medicines records and storage were good and the only recorded treatment of oxytetracycline on sheep was for a group of ewes for foot rot. The withdrawal period for this treatment had passed before the sampled animal was slaughtered so it was unlikely that an unrecorded treatment is responsible for this residue. Misidentification at the time of sampling cannot be ruled out in this case, therefore, it was not possible to adequately determine the cause of this residue.
Sheep Kidney	Oxytetracycline 3500 µg/kg 1408924	Tetroxy LA	Oxytetracycline	This animal was from a farm with a flock of approximately 780 sheep. The farmer buys replacement and sells directly to the abattoir. The medicines records were incomplete and the most likely cause of this residue is because of an unrecorded treatment of Tetroxy LA and subsequently sent for slaughter within the withdrawal period. The farmer has been given written advice on the requirement for keeping accurate records and this case has been referred to the Rural Payments Agency for further consideration.
Sheep Kidney	Sulfadiazine 220 µg/kg 1408688	Due to tracing difficulties it was not possible to carry out an investigation into the cause of this residue.		
Sheep Kidney Fat	Diazinon 860 µg/kg 1438674	Osmonds Golden Fleece	Diazinon	<p>This large breeding unit rears lambs through to slaughter and also buys store lambs. The farmer holds a Certificate of Competence for using OP sheep dips, however, was unaware of the changes to the withdrawal period from 35 days to 70 days. There was no system in place for marking individual animals to identify whether they had been treated but was keeping records of batches. According to the medicines records, the batch of sheep from which this non-compliant sample originated was dipped 66 days prior, and although within the withdrawal period, it is unlikely that this level of residue would be found. It is most likely that this sheep was treated with another batch closer to the slaughter date but escaped and joined the earlier treated batch, undetected.</p> <p>The farmer has been given written advice regarding withdrawal periods and the necessity to better identify individual treated animals to avoid such residues occurring in future. This case has been referred to the Rural Payments Agency for further consideration.</p>
Sheep Urine	Alpha-boldenone 2 µg/l 1438993	N/A	N/A	This mixed farm has dairy cows, fattening calves and breeding ewes with the sheep grazing all year and mainly sold as fat direct to abattoirs. The medicines records were incomplete but did keep records of all purchased medicines. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination. The farmer has been given written advice about the requirements for keeping complete and accurate medicines records.

Sheep Urine	Alpha-boldenone 2.1 µg/l 1435141	N/A	N/A	This sample originated from an upland farm which had good medicines records, which showed only routine vaccines and worming as expected at a farm such as this. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.3 µg/l 1435168	N/A	N/A	This hill farm with improved pastures and mountain grazing has over 1000 ewes with the lambs being sold direct off mothers to the abattoir. The medicines records were in good order, however, only 1 year was available due to a computer crash resulting in the loss of data. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.4 µg/l 1435136	N/A	N/A	This upland farm grazes and finishes sheep and cattle. Store cattle are purchased each year and sold directly to the abattoir. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.6 µg/l 1424176	Due to tracing difficulties it was not possible to carry out an investigation into the cause of this residue.		
Sheep Urine	Alpha-boldenone 2.7 µg/l 1435119	N/A	N/A	This upland farm rears its own lambs through to fat and this year were only fed on grass. The sheep are routinely vaccinated and treated for worms and fluke and the medicines records and storage were in good order. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination.
Sheep Urine	Alpha-boldenone 3 µg/l 1435093	N/A	N/A	At this farm most of the replacements are homebred and usually sells through the market. The medicines records were in good order and showed only routine vaccines and worming as expected at a farm such as this. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination.
Sheep Urine	Alpha-boldenone 3.2 µg/l & Beta-nortestosterone 1.1 µg/l 1412964	N/A	N/A	This sample originated from a large beef and lamb farm. On inspection, the medicines storage area was not secure and contained some out of date medicines. The farmer was given advice on how to improve this and also reminded of the legal requirement to keep adequate medicines records. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to a combination of faecal contamination and natural levels.
Sheep Urine	Alpha-boldenone 3.3 µg/l 1435102	N/A	N/A	This mixed beef and sheep farm appeared to be well run and the medicines records and storage were satisfactory. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination.
Sheep Urine	Alpha-boldenone 3.5 µg/l 1435132	Due to tracing difficulties it was not possible to carry out an investigation into the cause of this residue.		

Sheep Urine	Alpha-boldenone 4.1 µg/l 1435154	N/A	N/A	This sample originated from an organic mixed cattle and sheep farm which rears its own replacers. The medicines records were in good order and showed the usual treatments expected at a farm such as this. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination.
Sheep Urine	Alpha-boldenone 4.3 µg/l 1435169	N/A	N/A	This sample originated from farm which grazes its sheep on clover based pastures and sold directly to slaughter once finished. The medicines records were in good order and showed the usual treatments expected at a farm such as this. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination.
Sheep Urine	Alpha-boldenone 4.6 µg/l 1435151	No investigation was carried out as the farmer died shortly after sampling.		
Sheep Urine	Alpha-boldenone 6.7 µg/l 1439006	N/A	N/A	This sample originated from a medium sized low land farm comprising of breeding ewes with a mix of pedigree Texels and Beltex and cross breed mules. Routine medicines are used as expected on a farm of this nature and medicines storage and records were satisfactory. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination.
Sheep Urine	Alpha-boldenone 7.7 µg/l 1439025	N/A	N/A	This sample originated from a mixed beef and sheep farm. The medicines records were satisfactory with the usual treatments to be expect on a farm such as this. There were some withdrawal period missing on a couple of entries but the date of the end of the period was given. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination. The farmer was given advice on the requirements for keeping complete and accurate records.
Sheep Urine	Alpha-boldenone 9.5 µg/l 1439003	Due to tracing difficulties it was not possible to carry out an investigation into the cause of this residue.		
Sheep Urine	Alpha-boldenone 13 µg/l 1435171	N/A	N/A	All the sheep at this farm are grazed all year which is supplemented by own grown grass silage and sugar beet in the winter. The medicines records and storage were satisfactory and there was no evidence of the use of banned substances; therefore the most likely cause of this residue is due to faecal contamination.
Sheep Urine	Alpha-boldenone 19 µg/l 1412979	N/A	N/A	This sheep at this farm are out to graze on old meadow land and are fed grass all year round with the addition of a high energy and protein supplement over the winter. The medicines records and storage were satisfactory and only the expected medicines were used on a farm such as this. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to faecal contamination.

Sheep Urine	Alpha-boldenone 19 µg/l, Beta- boldenone 1.2 µg/l & Beta-nortestosterone 1 µg/l 1439016	N/A	N/A	This farm kept exceptional records of all aspects of the animal's movements, feed and medicines. The only medicines administered were routine for this type of farm. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to a combination of faecal contamination and natural levels.
Sheep Urine	Beta-nortestosterone 1.5 µg/l 1435111	N/A	N/A	This farm kept good medicine records with few medicines onsite. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to natural levels.
Sheep Urine	Beta-nortestosterone 1.8 µg/l 1424183	N/A	N/A	This farm kept good medicine records with routine medicines associated with this type of farm. This animal was on this farm for only a short period of time prior to slaughter and would not be beneficial to administer illegal medicines. There was no evidence of the use of unauthorised substances; therefore the most likely cause of this residue is due to natural levels.
Sheep Urine	Taleranol 1 µg/l & Zeranol 1.3 µg/l 1435528	N/A	N/A	This mixed agricultural enterprise grows beef, sheep and some crops, mainly potatoes. The sheep are kept extensively and grazed on meadow grass. There is no vaccination in place for any livestock and all other medicines were as expected on a farm such as this with good medicines records. There was no obvious source for this residue and the investigation was therefore unable to establish the cause.
Sheep Urine	Taleranol 1 µg/l & Zeranol 1.5 µg/l 1435538	N/A	N/A	The usual practice at this farm is lambing in the Spring with cull ewes and lambs sold through market. The medicines record was incomplete and the farmer was given written advice on the requirements for keeping accurate medicines records. There was a wet and mouldy half eaten bale of hay in the yard which, although was not fed to the sheep, they did have access to it. This is the most likely cause of this residue and the farmer has since removed the mouldy hay and been given advice on how to avoid such residues in the future.
Sheep Urine	Thiouracil 13 µg/l 1424402	N/A	N/A	This sample originated from a medium sized mixed farm where this lamb was born. Medicines records and storage were satisfactory with no evidence of the use of this substance. The farm is surrounded by rapeseed which when harvested is transported through the areas where sheep have access. The diet supplements fed to the lambs also contains rapeseed, which is the most likely cause for this residue.
Sheep Urine	Thiouracil 14 µg/l 1424411	N/A	N/A	This lowland mixed enterprise farm has a medium sized flock of Suffolk Cross sheep and substantial arable land. The medicines records were in good order and only those medicines expected with this type of farm were used. The lambs are fed a meal of creep based on barley sugar beet and a cake, which contains rapeseed, which is the most likely cause of this residue.
Horse				
Horse Kidney	Cadmium 14000 µg/kg 1411570	N/A	N/A	This sample came from a 20 year old horse, which, since 'retirement' has had access to graze on over 11 acres. Part of this land is adjacent to the local sewerage works; therefore the most likely cause of this residue is due to an accumulation over time from potentially contaminated soil.

Poultry				
Turkey Muscle	Chlortetracycline 390 µg/kg 1400934	N/A	N/A	This is a large enterprise with 10 sheds each initially containing 20,000 birds. After 6 weeks of age 13,000 are moved to another site leaving 7,000 until slaughter age. The house is served by a wooden feed bin split in two and each side holding 12 tonnes of feed which is blown into each half by clearly identified pipes. At the bin outlet there is an auger transfer box, again in two parts, and ends up in either plastic or galvanised pan feeders. Follow-up samples were taken from various stages of the feeding system e.g feed hopper, pan and above and below the incorporation slide, and were found to be non-complaint at concentrations ranging from 2200 µg/kg to 15000 µg/kg. The level of contamination in the hopper and pan could be due to in-bin mixing as the diet had recently changed to medicated from plain feed. The concentration from above and below the incorporation slide would be expected as normal dust residue but these levels were unlikely to cause significant cross-contamination. The most likely cause of this residue is from on-farm feeding practices and the farmer has undertaken to review several of its procedures including bin management.
Broiler Muscle	Chlortetracycline 430 µg/kg 1418928	Aurofac	Chlortetracycline, Hydrochloride	The farm of origin was generally well managed and the medicines records were adequate. Medicated feed usage was recorded in a different sheet from the rest of the medication useage. The farmer was advised that although the information is complete it should be included in the medicines records in future. Aurofac was given and the 2 day withdrawal period was observed, however, there was no cleaning or flushing of the feed bins between batches, therefore, the most likely cause of this residue is from this cross contamination. The farmer was also given written advice on how to avoid such residues in the future.
Broiler Liver	Monensin 10 µg/kg 1401182	N/A	N/A	The investigation into this non-complaint established that follow-up analysis of retained feed samples did not contain monensin. The mill was able to provide full traceability for all feed and there was no evidence of any errors occurring during delivery. However, records showed that this withdrawal feed batch was made directly after a medicated finisher feed batch and there was no flush between these as required by the Company's procedures. As there was not monensin in the retained samples is it not possible to adequately determine this as the cause although it is most likely that contamination occurred at the mill. The mill has been given advice on how to avoid such residues in future and preventative actions taken will be reviewed at the next scheduled inspection.
Broiler Liver	Salinomycin 9 µg/kg 1426755	Due to a significant delay from the time of sampling to analysis completion an investigation was not carried out.		

Egg				
Quail Egg	Narasin 7.4 µg/kg 1424654	N/A	N/A	This farm is a multi-species laying unit with an adjacent poultry rearing unit, which are run separately. All feed is bought from the same mill and is delivered in bulk. The quail feed is delivered to bin 10 and is then decanted into small bags and transported to the quail houses. Samples of feed taken both on farm and from the mill contained trace amounts of narasin, well below the maximum permitted level of unavoidable carryover. As the mill and on farm feed samples we similar, the most likely cause of this residues was due to cross contamination on farm, although there was not obvious source.
Game				
Farmed Deer Kidney Fat	DDE-p,p' 3000 µg/kg 1415844	No investigation required. This is a result of contamination at an old apple orchard, where pesticides have been used historically, and which was subject to an investigation into the same substance during 2012. The FSA have been informed of this incident.		
Farmed Partridge Muscle	Lead 18000 µg/kg 1439505	N/A	N/A	During initial enquiries it was noted that this Partridge was shot with lead pellets, therefore that is the most likely cause of this residue.
Farmed Quail Muscle	Lasalocid 20 µg/kg 1439506 Lasalocid 36 µg/kg 1439507 Lasalocid 80 µg/kg 1439509	N/A	N/A	All three samples originated from the same farm. The quail are fed a starter feed for the first five days of life which contains lasalocid, then fed with unmedicated quail grower until slaughter. All feed bins are emptied periodically to enable cleaning and to prevent a build-up. Follow up samples were taken from the farm and feed manufacturer which all confirm compliant for lasalocid and the samples of starter feed contained the appropriate levels of lasalocid in the composition. There was no evidence on farm that indicated mismanagement of feed storage or delivery to the incorrect bin. The mill was able to provide full traceability for all feed which supported this. It was not possible to adequately determine the cause of this residue, however, the farmer has been given written advice on how to avoid such residues in the future.
Farmed Fish				
Trout Muscle & Skin	Leucomalachite green 14 µg/kg 1414267	N/A	N/A	This farm is a medium to large enterprise made up of earth ponds, a hatchery and raceways which supplies fish to other farms for on growing and also to fisheries for restocking, not directly to the food chain. During the initial investigation, follow-up samples were taken from various ponds, 3 of which were non-compliant at concentrations of 7.1 µg/kg, 12 µg/kg and 29 µg/kg. Movement restrictions have been placed on the non-compliant ponds and it will remain in place until further analyses show that these are compliant. There was no evidence of the use of dyes on this farm, however, there was historical use prior to its ban in 2002. It is most likely that this residue is as a result of recently disturbed sediment where deposits may have remained. The farmer is arranging for independent sediment analysis to determine this.

Trout Muscle & Skin	Leucomalachite green 38 µg/kg 1414294	N/A	N/A	This restocking farm is made up of primarily earth ponds and a hatchery and it has a history on non-compliant samples for leucomalachite and malachite green, from 2005. Follow-up samples were taken during the initial investigation, 6 of which were non-compliant at various concentrations from 4.2 µg/kg through to 30 µg/kg and movement restrictions were placed on these ponds. There was no evidence of the use of dyes on this farm, however, there was decades of historical use prior to its ban in 2002. Despite this farm having carried out sediment removal following the previous incident, it is most likely that this residue is as a result of recently disturbed sediment where deposits may have remained. The farmer volunteered to cull the effected fish which were nearing sale size and movement restrictions will remain in place for the others until further analyses show that these are compliant. The farmer has also been advised to carry out additional comprehensive silt removal to avoid these residues in the future.
Milk				
Cattle Milk	Dihydrostreptomycin 380 µg/l 1425696	N/A	N/A	This sample was taken in error from a waste tank which was not intended for human consumption.
Cattle Milk	Ivermectin 0.92 µg/l 1436451			This dairy farm has a high turnover of stock as the farmer regularly buys and sells cows at auction. The medicines records appeared satisfactory although there not as much medicinal usage as would be expected on a farm of this size. There was no record of ivermectin being used in cattle but in the months leading up to the sample being take several young heifers were brought on the farm which may have been treated with ivermectin and calved earlier than expected. The cause of this residue is likely to have been because the cow was bought within the withdrawal period unknowingly. The farmer has been given written advice on how to avoid such residues in the future.

Section D: Details of follow-up investigations/actions for statutory surveillance programme – Northern Ireland

Species & Matrix	Residue detected & concentration	Products used	Actives	Cause of residue
Cattle				
Cattle Plasma	Phenylbutazone 0.32µg/kg	N/A	N/A	<p>This animal was from beef breeding herd of 120 animals. There were three horses on the farm. The owner also deals in cull cows. Movement records were not available at the time of inspection. Medicine records were available and veterinary officer noted that these were very detailed. The animal had been purchased on 114 days prior to sampling. The herd owner denied giving phenylbutazone to the positive animal. He also claimed could not have been any accidental intake of phenylbutazone horse meal by the positive animal. The herd was flagged for further sampling and an SMR10 penalty was applied.</p> <p>Two follow-up samples were collected at slaughter, one of which was compliant but the other contained phenylbutazone at 9 µg/kg. Three further animals were sampled at slaughter all were compliant.</p> <p>Further to this, 20 animals were sampled on-farm, two of which were non compliant with concentrations of 0.48 and 0.5 µg/kg. Another 41 animals were sampled on-farm and one was non compliant at 0.4 µg/kg plasma. During this visit it was discovered that the producer had been treating a pony earlier in 2014 with phenylbutazone but he was convinced that the cattle could not have been contaminated at that time.</p>
Cattle Urine	α-Nortestosterone 1.7µg/kg	N/A	N/A	<p>This animal had been recorded as a male when sampled. However, additional results obtained from the hormone screening method suggested the animal was likely to have been a pregnant female. An investigation was carried out on 01/05/2014. It was confirmed during this visit that the sampled animal was indeed a female. Pregnant females can produce α-nortestosterone naturally. The level in this sample is below the VMD/VRC threshold for follow-up.</p>
Cattle Urine	Thiouracil 18 µg/kg	N/A	N/A	<p>This animal was from a 207 head suckler beef enterprise which had been on the farm approximately 5 months before being sent for slaughter. Medicine records were available. No suspect animals were identified. Follow-up samples were collected from four beef heifers and one cow, one of which contained thiouracil at a concentration of 8.7µg/kg. Thiouracil can arise in the urine of animals fed cruciferous material in their diets.</p>

Species & Matrix	Residue detected & concentration	Products used	Actives	Cause of residue
Cattle Liver	Closantel 1400 µg/kg	Closamectin pour on	Closantel & Ivermectin	This animal was from a 960 animal beef finishing unit. Movement and medicine records were available. The animal had been treated with Closamectin pour on slaughtered on the first day following the withdrawal period. The animal had been also treated by the previous owner with Closamectin. The manufacturer is investigating the matter and the herd keeper is co-operating with them. Twelve different batches of follow up samples (total 78 animals) were subsequently collected. Twelve animals were non-compliant and did not enter the food chain. This case has been forwarded for SMR 10 breach and the farmer has been given written advice on how to avoid such residues in future.
Cattle Serum	Testosterone 1.3 µg/l			Investigation pending
Sheep				
Sheep Liver	Closantel 2940 µg/kg	Flukiver	Closantel	Two animals from this flock had been sampled, one in the national plan and the second in RISC. These animals were from a flock of 158 animals. These animals had been born on the farm but movement and medicine records were available. It was noted that there was some omission of details of usage in the medicine records. The animals had been treated with Flukiver and the withdrawal period had been observed. The flock was flagged for follow-up sampling. SMR 10 penalty was applied and the farmer was given written advice on the requirements for accurate record keeping.
Sheep Kidney	Cadmium 1043 µg/kg	N/A	N/A	This animal was one of 6 cull ewes from a 300 animal flock. Movement and medicine records were available. There were no mine workings visible on the pasture or known to the owner. Footbaths with a zinc sulphate based product called "Goldenhoof Plus" are regularly used. No evidence of batteries being present. The muscle from this animal was also available and was compliant. Five follow-up samples were collected from this flock at slaughter and both kidney and muscle from these animals were compliant. Cadmium can accumulate in the kidney of older animals.
Sheep Urine	α-Boldenone conjugated 4.2µg/l	N/A	N/A	This animal was from a 68 animal breeding and fattening flock. In addition the flock keeper buys in animals for slaughter only keeping them a few days on the farm. This animal had only been on the premises for four days. Movement and medicine records were available. The flock was flagged for sampling at slaughter.

Species & Matrix	Residue detected & concentration	Products used	Actives	Cause of residue
Sheep Urine	α-Boldenone conjugated 2.4µg/l	N/A	N/A	This animal was from a flock of 444 sheep and had been born into the flock. Medicine and movement records were available. No suspects were identified. The flock was flagged for further sampling and follow-up samples were collected. Only three were received that had sufficient quantity for analysis but all were compliant.
Sheep Urine	α-Boldenone conjugated 15µg/l	N/A	N/A	This animal was from a 160 head flock and had been born into the flock. Movement and medicine records were available. No suspects were identified. The flock was flagged for further sampling and two follow-up samples were collected. Both were below the EU suspicious level and no suspects were identified. Two batches of five and one batch of nine follow-up samples were collected in December, all of which were compliant.
Sheep Urine	α-Boldenone conjugated 2.7µg/l	N/A	N/A	This animal was from a 1500 head sheep flock. Movement and medicine records were available. This animal was one from a batch that had been purchased from several markets over the previous three days. No treatments had been administered to any of the animals. The flock was flagged for further sampling.
Sheep Liver	Fenbendazole 1120µg/kg	Bovex 2-2.65%	Oxfendazole	This animal was from a flock of 73 animals. Movement and medicine records were available but the medicine records only show the products used since July despite the flock being registered in 2004. No records earlier than July were available. The inspecting veterinary officer did not regard the records as being reliable. The animal sampled was born on the farm and had been treated with Bovex 2-2.65% the withdrawal period appeared to have been observed. The flock was flagged for further sampling. SMR 10 penalty was applied and the farmer was given written advice on the requirements for accurate record keeping.
Sheep Kidney	Semicarbazide 1.5µg/kg	N/A	N/A	This animal was from a flock of 73 animals. Movement and medicine records were available. This animal was one of a batch of 72 lambs purchased and no drugs had been administered to it. When the batch of lambs was slaughtered on four sets of five follow-up samples were collected and all confirmed compliant. It was not possible to adequately determine the cause of this residue.
Sheep Liver	Closantel 1900 µg/kg	N/A	N/A	Initial records checks showed this holding as having 3610 animals logged against the flock keeper but he states that he has few sheep with his own tag. No medicine records were available as the flock keeper does not treat his animals and when an animal is sick he calls his Vet. Most of the sheep are bought in, mainly from markets, and kept on the farm for not more than a week before being sent for slaughter. As no ear tag was available the animal could not be traced back further, therefore it was not possible to adequately determine the cause of this residues. Follow up samples were compliant.

Non-Statutory Surveillance Programme Imported Produce

The Non-Statutory Surveillance Scheme concentrates on imported and processed foods. Imported produce was identified by the Veterinary Residues Committee (VRC) as the primary target for investigation. This is because the Committee considers that imported food represents a significant part of the food consumed in the UK and would like to know if there are any residues of concern.

The non-statutory surveillance programme, as its name suggests, does not have a legal base. Therefore, the VRC can recommend the substances and foods that should be included. The programme is funded by Defra with no contribution from the food industry. However, this means that funding is very limited and the surveillance programme is of a much smaller scale than the statutory programme.

Section E: Non-statutory surveillance programme non-compliances - Details of residues found at or above the Reference Point in 2014

Sample	Analysed for	Number of samples analysed	Reference Point (µg/kg)	Number of samples below the Reference Point, with concentration		Number of samples at or above the Reference Point, with concentration	
				No. found	µg/kg	No. found	µg/kg
Farmed Warm Water Crustaceans	Multi-residue Suite 2 Oxytetracycline	125	100 (MRL)			2	140, 820
Imported Farmed Fish	Dyes Leucomalachite Green	106	2 (MRPL – sum of malachite green and leucomalachite green)	1	1.9	1	39
	Multi-residue Suite 2 Oxytetracycline	126	100 (MRL)			1	240
	Sulfadiazine		100 (MRL) – combined total of all substances within the sulfonamide group in muscle			1	670
Imported Poultry Muscle	Multi-residue Suite 2 Doxycycline	124	100 (MRL)			1	240

Section F: Full details of 2014 non-statutory surveillance programme

Imported Raw Beef

Substance Group/analyte	No. of Analyses	No. above Action Level	Concentration where samples above MRL or at/above the MRPL/Action Level (µg/kg)	No. detected below action level	Concentration where samples below MRL/MRPL/Action Level (µg/kg)
Beta-agonists	109				
Multi-residue Suite 1	126				
Multi-residue Suite 2	126				
NSAIDs	109				
Time of Flight	17				

Imported Poultry Muscle

Substance Group/analyte	No. of Analyses	No. above Action Level	Concentration where samples above MRL or at/above the MRPL/Action Level (µg/kg)	No. detected below action level	Concentration where samples below MRL/MRPL/Action Level (µg/kg)
Multi-residue Suite 1	124				
Multi-residue Suite 2	124	1	Doxycycline: 240		
Time of Flight	20				

Imported Farmed Fish

Substance Group/analyte	No. of Analyses	No. above Action Level	Concentration where samples above MRL or at/above the MRPL/Action Level (µg/kg)	No. detected below action level	Concentration where samples below MRL/MRPL/Action Level (µg/kg)
Dyes	106	1	Leucomalachite Green: 0.39	1	Leucomalachite Green: 1.9
Multi-residue Suite 2	126	2	Oxytetracycline: 240 Sulfadiazine: 670		
Time of Flight	20				

Farmed Warm Water Crustaceans

Substance Group/analyte	No. of Analyses	No. above Action Level	Concentration where samples above MRL or at/above the MRPL/Action Level (µg/kg)	No. detected below action level	Concentration where samples below MRL/MRPL/Action Level (µg/kg)
Amphenicols	108				
Multi-residue Suite 2	125	2	Oxytetracycline: 140, 820		

Section G: Results of follow-up investigations/actions for non-statutory surveillance programme

Residue detected & concentration (µg/kg) (Sample Ref)	Sample Type	Source (Retail/BIP)	Sample Country of Origin	CVO Letter Sent (Yes/No)	RASFF Issued (Yes/No)	Actions/Outcomes
Doxycycline: 240 (14N0280)	Imported Poultry Muscle	Retail	Poland	No	No	Retailer unable to confirm which consignment the sample came from. No further information regarding this sample.
Leucomalachite Green: 39 (14N0289)	Imported Farmed Fish	Retail	Vietnam	No	No	The supplier has advised the Local Authority that the product was removed from their shops, none of their customers have returned any of the product and it seems unlikely that any of this batch remains. Even after repeated requests the importation documents were not submitted and no further action has been taken.
Oxytetracycline: 240 (14N0021)	Imported Farmed Fish	Border Inspection Post	Vietnam	Yes	No	The importer advised the Local Authority that the samples were flown to the BIP purely for testing and producing photographs for packaging; they were <u>not</u> for sale. Any products for sale and distribution are brought in by seaport.
Sulfadiazine: 670 (14N0147)	Imported Farmed Fish	Retail	China	Yes	No	The importer advised that they managed to obtain a full traceability report for the product in question and were liaising with the Local Authority to recall the product and dispose of it with their advice.
Oxytetracycline: 140 (14N0351)	Farmed Warm Water Crustaceans	BIP	Vietnam	Yes	Yes	No further information regarding this sample.
Oxytetracycline: 820 (14N0526)	Farmed Warm Water Crustaceans	Retailer	Vietnam	Yes	No	The retailer took a precautionary decision to withdraw the product from sale which was then disposed of.

Further Information

The following links will take you to websites where you can find further information relating to surveillance for veterinary residues:

Veterinary Residues Committee archived website

<http://webarchive.nationalarchives.gov.uk/20140909095303/http://vmd.defra.gov.uk/vrc/>

Veterinary Medicines Directorate website

<https://www.gov.uk/government/organisations/veterinary-medicines-directorate>

Food Standards Agency website

<http://www.food.gov.uk/>

EU guidance and information on control and monitoring of veterinary residues:

http://ec.europa.eu/food/food/chemicalsafety/residues/control_en.htm

Fera website

www.fera.co.uk