

Northern Ireland 2009 Milk Results

Group of substances	Compounds	Matrix	MRL µg/kg	Planned Numbers	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
A6	Chloramphenicol	Milk	Not set	94	92	92	-	-	
B1	Antimicrobial screen	Milk	Various	59	59	59	-	-	
B1	Cephalosporins	Milk	Various	41	59	59	-	-	
B1	Quinolones	Milk	100	53	59	59	-	-	
B1	Sulphonamides	Milk	100µg/l	26	25	25	-	-	
B2a	Avermectins	Milk	Not set	43	41	41	-	-	
B2a	Benzimidazoles	Milk	Various	11	13	13	-	-	
B2a	Levamisole	Milk	Not set	11	12	12	-	-	
B2e	Phenylbutazone	Milk	Not Set	29	31	31	-	-	
B2e	Flunixin	Milk	40	10	10	10	-	-	
B3a	Organochlorines/ PCBs	Milk	Not set	6	5	5	-	-	
B3b	Organophosphates	Milk	Not set	5	4	4	-	-	
B3c	Cadmium/Lead	Milk	20	5	5	5	-	-	
B3d	Aflatoxins	Milk	0.05 (M ₁)	14	16	16	-	-	
Total Samples									
Total Analyses					407				

Northern Ireland 2009 Fish Results

Group of substances	Compounds	Species	Matrix	MRL µg/kg	Planned Numbers	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
B3e	Dyes	Trout	skin+muscle	Not Set	5	5	5	-	-	
B3e	Dyes	Salmon	skin+muscle	Not Set	0	0	-	-	-	1

1	No salmon processed in NI due to jellyfish kill during 2007.									
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Northern Ireland 2009 Poultry Results On farm

Group of substances	Compounds	Species	Matrix	MRL µg/kg	Planned Numbers	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
A5	Beta-agonists	Broilers	Feed	Not set	24	19	19			
A5	Beta-agonists	Turkeys			1	1	1			
A6	Dimetridazole	Broilers	Feed	Not set	24	21	21			
A6	Dimetridazole	Turkeys			1	0	0			
A6	Nitrofurans	Broilers	Feed	Not set	25	19	19			
A6	Nitrofurans	Turkeys			2	1	0			
Total Samples					77					

Northern Ireland 2009 Poultry Results Slaughterhouse

Group of substances	Compounds	Species	Material	MRL µg/kg	Nos Samples Northern Ireland	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
A1	DES	Broilers	Liver/serum	Not set	18	40	40			
A1	DES	Turkeys	Liver/serum	Not set	1	2	2			
A3	Trenbolone	Broilers	Liver/serum	Not set	18	20	20			
A3	Trenbolone	Turkeys	Liver/serum	Not set	1	1	1			
A4	Zeranol	Broilers	Liver/serum	Not set	24	40	40			
A4	Zeranol	Turkeys	Liver/serum	Not set	1	2	2			
A5	B-agonists	Broilers	Liver	Not set	51	54	54			
A6	B-agonists	Hens	Liver	Not set	1	0	0			
A5	B-agonists	Turkeys	Liver	Not set	2	0	0			
A6	Chloramphenicol	Broilers	Muscle	Not Set	49	54	54			
A6	Chloramphenicol	Hens	Muscle	Not Set	1	1	1			
A6	Chloramphenicol	Turkeys	Muscle	Not Set	2	3	3			
A6	Nitroimidazoles	Broilers	Liver	Not Set	84	86	86			
A6	Nitroimidazoles	Hens	Liver	Not Set	1	1	1			
A6	Nitroimidazoles	Turkeys	Liver	Not Set	4	4	4			
A6	Nitrofurans	Broilers	Muscle	Not Set	49	50	50			
A6	Nitrofurans	Hens	Muscle	Not Set	1	1	1			
A6	Nitrofurans	Turkeys	Muscle	Not Set	5	5	5			
B1	Antimicrobial Screen	Broilers	Muscle	Various	133	223	223			
B1	Antimicrobial Screen	Hens	Muscle	Various	1	1	1			
B1	Antimicrobial Screen	Turkeys	Muscle	Various	6	7	7			
B1	Sulphonamides	Broilers	Muscle	100	33	35	35			
B2	Sulphonamides	Hens	Muscle	100	1	1	1			
B1	Sulphonamides	Turkeys	Muscle	100	2	2	2			
B2a	Benzimidazoles	Broilers	Liver	400*	10	38	38			
B2a	Benzimidazoles	Hens	Liver	400*	1	1	1			
B2a	Benzimidazoles	Turkeys	Liver	400*	5	2	2			
B2a	Levamisole	Broilers	Liver	100	10	37	37			
B2a	Levamisole	Hens	Liver	100	1	1	1			
B2a	Levamisole	Turkeys	Liver	100	0	2	0			
B2b	Nicarbazin	Broilers	Muscle/Liver	Not Set	35	39	38		214	1

Northern Ireland 2009 Poultry Results Slaughterhouse

Group of substances	Compounds	Species	Material	MRL µg/kg	Nos Samples Northern Ireland	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
B2b	Nicarbazin	Turkeys	Muscle/Liver	Not Set	0	1	1			
B2b	Ionophores	Broilers	Liver	Not Set	36	37	37			
B2b	Ionophores	Turkeys	Liver	Not Set	2	1	1			
B2c	Carbamates/Pyrethroids	Broilers	Liver	Not Set	7	7	7			
B2c	Carbamates/Pyrethroids	Turkeys	Liver	Not Set	1	1	1			
B3a	Organochlorines/PCBs	Broilers	Liver	Various	27	27	26	PCB 20		
B3a	Organochlorines/PCBs	Turkeys	Liver	Not set	1	1	1			
B3c	Cadmium	Broilers	Liver	500	8	8	0	20(2),25, 27, 30, 35, 40, 41		
	Lead	Broilers	Liver	500	8	8	8			
	Arsenic	Broilers	Liver		8	8	6	7, 48		
B3d	Aflatoxins	Broilers	Liver	Various	2	2	2			

Notes

1	Nicarbazin detected in the liver of one sample were above the MRL. The corresponding muscle sample were below the MRL
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Northern Ireland 2009 Cattle Results On Farm

Group of Substances	Compounds	Matrix	Species	MRL µg/kg or µg/l	Planned Numbers	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
A1	Stilbenes	Urine	Cattle (y.b.)	Not set	22	43	43			
A1	Stilbenes	Urine	Cows OTMS	Not set	6	6	6			
A2	Thyrostats	Serum/Urine	Cattle (y.b.)	Not set	22	22	19		Thiouracil 6.0, 6.5, 18	1
A2	Thyrostats	Serum/Urine	Cows OTMS	Not set	6	6	6			
A3	Trenbolone	Urine	Cattle (all)	Not set	54	132	132			
A3	Trenbolone	Urine	Cows OTMS	Not set	10	30	30			
A3	Progesterone	Urine	Cattle (m)	Not set	27	27	27			
A3	Oestradiol	Serum	Cattle (m)	Not set	53	46	46			
A3	Testosterone	Serum	Cattle(f)	Not set	36	34	34			
A3	Testosterone	Serum	Cows OTMS	Not set	14	12	12			
A3	Nortestosterone	Urine	Cattle(y.b.)	Not set	66	132	130		6.2, 33	2
A3	Methyltestosterone	Urine	Cattle (all)	Not set	54	132	132			
A3	Methyltestosterone	Urine	Cows OTMS	Not set	10	30	30			
A3	Stanozolol	Urine	Cattle (all)	Not set	54	132	132			
A3	Stanozolol	Urine	Cows OTMS	Not set	10	30	30			
A3	Gestagens	Serum	Cattle (y.b.)	Not set	36	35	35			
A3	Gestagens	Serum	Cows OTMS	Not set	14	12	12			
A3	Boldenone	Urine	Cattle (y.b.)	Not set	26	132	131		3.8	3
A3	Boldenone	Urine	Cows OTMS	Not set	11	30	30			
A4	Zeranol	Urine	Cattle (y.b.)	Not set	22	43	43			
A4	Zeranol	Urine	Cows OTMS	Not set	6	6	6			
A5	Beta agonists	Feed	Cattle (y.b.)	Not set	31	44	44			
A5	Beta agonists	Feed	Cows OTMS	Not set	14	20	20			
A5	Beta agonists	Urine	Cattle (y.b.)	Not set	27	57	56		0.2	4
A5	Beta agonists	Urine	Cows OTMS	Not set	5	15	15			
A6	Chloramphenicol	Feed/Urine	Cattle(all)	Not set	22	20	20			
A6	Chloramphenicol	Feed/Urine	Cows OTMS	Not set	20	19	19			
A6	Nitrofurans	Feed	Cattle(all)	Not set	22	22	22			
A6	Nitrofurans	Feed	Cows OTMS	Not set	6	5	5			
	Total Samples				706					

Northern Ireland 2009 Cattle Results Slaughter House

Group of Substances	Compounds	Matrix	Species	MRL µg/kg or µg/l	Planned Numbers	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
A1	Stilbenes	Urine	Cattle (y.b)	Not Set	22	32	32			
A1	Stilbenes	Urine	Cows OTMS	Not Set	7	16	16			
A2	Thyrostats	Urine	Cattle (y.b.)	Not Set	22	22	22			
A2	Thyrostats	Urine	Cows OTMS	Not Set	7	6	6			
A3	Trenbolone	Urine	Cattle (all)	Not set	53	136	136			
A3	Trenbolone	Urine	Cows OTMS	Not Set	11	20	20			
A3	Progesterone	Urine	Cattle (m)	Not set	27	24	23		10	5
A3	Oestradiol	Serum	Cattle (m)	Not set	33	31	31			
A3	Testosterone	Serum	Cattle(f)	Not set	33	32	32			
A3	Testosterone	Serum	Cows OTMS	Not Set	14	12	12			
A3	Nortestosterone	Urine	Cattle (all)	Not set	53	136	135		0.74	6
A3	Methyltestosterone	Urine	Cattle (all)	Not set	53	136	16			
A3	Methyltestosterone	Urine	Cows OTMS	Not set	11	20	20			
A3	Stanozolol	Urine	Cattle (all)	Not set	53	136	136			
A3	Stanozolol	Urine	Cows OTMS	Not set	11	20	20			
A3	Gestagens	Kidney fat	Cattle (y.b.)	Not set	33	32	32			
A3	Gestagens	Kidney fat	Cows OTMS	Not Set	14	12	12			
A3	Boldenone	Urine	Cattle (y.b)	Not set	29	136	136			
A3	Boldenone	Urine	Cows OTMS	Not Set	11	20	20			
A4	Zeranol	Urine	Cattle (y.b)	Not Set	29	31	29		0.6, 0.9	7
	Taleranol	Urine	Cattle (y.b)	Not Set	29	31	30		1.7	
A4	Zeranol	Urine	Cows OTMS	Not Set	6	8	8			
A5	Beta agonists	Liver/retina	Cattle (y.b)	Not Set	81	83	83			
A5	Beta agonists	Liver/retina	Cows OTMS	Not Set	14	15	15			
A6	Chloramphenicol	Kidney	Cattle (y.b)	Not set	22	22	22			
A6	Chloramphenicol	Kidney	Cows OTMS	Not set	21	18	18			
A6	Dimetridazole	Kidney	Cattle (y.b)	Not set	17	17	17			

A6	Nitrofurans	Kidney	Cattle	Not set	22	22	22			
A6	Nitrofurans	Kidney	Cows OTMS	Not set	7	7	7			
B1	Antibacterial substances	Kidney	Cattle	Various	177	220	220			
B1	Antibacterial substances		Cows OTMS	Various	65	65	65			
B1	Sulphonamides	Kidney	Cattle	100	34	43	43			
B2a	Benzimidazoles	Liver	Cattle (all)	Various	57	81	81			
B2a	Avermectins	Liver	Cattle (all)	Various	41	57	57			
B2a	Levamisole	Liver	Cattle (all)	100	57	81	81			
B2b	Ionophores	Liver	Calves	Not Set	0	0	0			
B2c	Pyrethroids	Kidney fat	Cattle	Various	5	5	5			
B2d	Sedatives/ betablockers	Liver/kidney	Cattle	Not Set	8	8	8			
B2e	Carprofen/vedaprofen	Kidney/Liver	Cattle	Not set	87	88	88			
B2e	Carprofen/vedaprofen	Kidney/Liver	Cows OTMS	Not Set	20	20	20			
B2e	Phenylbutazone	Plasma	Cattle	Not set	87	89	87		Presence confirmed & 7.7	8
B2e	Phenylbutazone	Plasma	Cows OTMS	Not Set	20	23	23			
B2e	Flunixin	Liver	Cattle	300		88	88			
B2f	Dexamethazone/beta methazone	Liver/Urine	Cattle	2	18	18	18			
B2f	Dexamethazone/beta methazone	Liver/Urine	Cows OTMS	2	33	32	32		13	9
B3a	Organochlorines/PCBs	Kidney fat	Cattle	Various	13	14	14			
B3a	Organochlorines/PCBs	Kidney fat	Cows OTMS	Various		0	0			
B3b	Organophos-phorus compounds	Kidney fat	Cattle	Various	36	39	39			
B3b	Organophos-phorus compounds	Kidney fat	Cows OTMS	Various	3	3	3			
B3c	Cadmium	Kidney	Cows OTMS	1000	8	7	0	340, 640, 860, 371, 161, 154	1680	10
	Lead Arsnec			500		7 7	7 1	11, 23, 13, 30, 7, 32		
	Cadmium Lead Arsnec	Muscle	Cows OTMS	50	8	7	7			
				100		7	7	10, 12		
B3d	Aflatoxins	Liver	Cattle	Not set	5	5	5			

Notes

1	Thiouracil detected in the urine of three samples collected on-farm. Follow-up samples collected in all cases were compliant. In one case the original non-compliant animal was resampled at follow-up and was compliant.
2	α -Nortestosterone was detected in the urine of two female bovines above the agreed VMD action level of 5 $\mu\text{g}/\text{kg}$ in on-farm samples. Female ruminants can produce α -nortestosterone during pregnancy. Follow-up investigations have been initiated and, to date, the batch of follow-up samples received was all compliant.
3	α -Boldenone was detected in an OTM female. There was insufficient sample to determine free and conjugated levels. The animal's urine also contained a high level of α -Nortestosterone (33 ppb listed above). Follow-up was initiated.
4	Clenbuterol was detected in the urine of one young female. Follow-up samples were collected and all were compliant.
5	Progesterone in serum was confirmed above the action level in one male sampled at a slaughterhouse.
6	α -Nortestosterone was detected in the urine of one male bovine above the agreed VMD action level of 0.5 $\mu\text{g}/\text{kg}$ in an abattoir sample. Male bovines can produce α -nortestosterone following injury. Follow-up samples were collected and all were compliant.
7	Zeranol and taleranol were detected in urine samples taken from two and one young bovines, respectively. A model developed in VSD to distinguish between possible abuse and natural contamination was applied. This suggested that these results were a result of naturally-occurring Fusarium toxin metabolism. No further action was requested.
8	Phenylbutazone was detected in the plasma of two bovines at slaughter. In one sample the presence was confirmed but it was not possible to quantify. Follow-up investigation was initiated. Follow-up samples from one case received and was compliant.
9	Dexamethasone was detected in the liver of a OTM female above the MRL.
10	Cadmium was detected above the MRL in the kidney of a cow. Follow-up samples were collected. All were compliant

Northern Ireland 2009 Pig Results On Farm

Group of Substances	Compounds	Material to be analysed	Species	MRL µg/kg or µg/l	Planned Numbers	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
A3	Methyltestosterone	Feed	Pigs	Not set	2	1	1			
A5	Beta agonists	Feed	Pigs	Not set	4	4	4			
A6	Nitofurans	Feed	Pigs	Not set	1	2	2			
A6	Nitroimidazoles	Feed	Pigs	Not set	1	1	1			
Total Samples					8					

Northern Ireland 2008 Pig Results Slaughter House

Group of Substances	Compounds	Material to be analysed	Species	MRL µg/kg or µg/l	Planned Numbers	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
A1	Stilbenes	Urine	Pigs (all)	Not set	13	26	26			
A2	Thyrostats	Urine	Pigs (all)	Not set	8	8	8			
A3	Altrenogest	Kidney fat	Pigs (all)	Not set	8	9	9			
A3	Methyltestosterone	Urine	Pigs (all)	Not set	8	15	15			
A3	Stanzolol	Urine	Pigs (all)	Not set	8	15	15			
A3	Trenbolone	Urine	Pigs (all)	Not set	8	15	15			
A4	Zeranol	Urine	Pigs (all)	Not set	13	26	26			
A5	Beta agonists	Liver	Pigs (all)	Not set	31	31	31			
A6	Chloramphenicol	Kidney	Pigs (all)	Not set	21	20	20			
A6	Nitroimidazoles	Kidney	Pigs (all)	Not set	20	19	19			
A6	Nitrofurans metabolites	Kidney	Pigs (all)	Not set	26	25	25			
B1	Any antimicrobial agent	Kidney	Pigs(all)	Various	73	146	146			
B1	Sulphonamides	Kidney	Pigs(all)	100	73	73	73			
B2a	Benzimidazoles	Liver	Pigs	Various	9	18	18			
	Levamisole	Liver	Pigs	100	9	18	18			
	Avermectins	Liver	Pigs	Various	18	17	17			
B2b	Ionophores	Liver	Pigs	Not Set	9	9	9			
B2c	Pyrethroids	Kidney fat	Pigs	Not Set	6	4	4			
B2c	Carbamates	Kidney fat	Pigs	Not Set	6	18	18			

B2d Sedatives/ betablockers	Azaperone Azaperol Propopnyl Promazine Chlorpromazine	Liver/kidney	Pigs	100 (azaperone)	15	30	30			
	Carazolol	Liver	Pigs	25	15	30	30			
B2e NSAIDS	Carprofen Vedaprofen	Kidney/Liver	Pigs	Not Set	4	4	4			
B2f Glucocorticoids	Dexamethazone B-methazone	Liver/Urine	Pigs	2	4	4	4			
B2f	Carbadox as 2-QCA Olaquinox	Liver	Pigs	Not set	25	25	25			
B3a Organochlorines/ PCBs		Kidney fat	Pigs	Various	6	5	5			
B3b Organophos- phorus compounds		Kidney fat	Pigs	Various	12	10	10			
B3c Chemical elements	Cadmium Lead Arsnec	Kidney	Pigs	1000 500	1	1	1			
					1	1	1			
					1	1	0	41		
	Cadmium Lead Arsnec	Muscle	Pigs	50 100	1	1	0	99		
					1	1	1			
						1	0	19		
B3d Mycotoxins	Aflatoxins	Liver	Pigs	Not set	6	3	3			
Total Samples					459					

* Extra samples to be targeted to Northern Ireland
Samples in blue tested for more than one substance

Northern Ireland 2009 Sheep Results Slaughter House

Group of Substances	Compounds	Material to be analysed	Species	MRL µg/kg or µg/l	Planned Numbers	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
A1 Stilbenes	DES, hexoestrol, dienooestrol	Urine	Sheep	Not set	3	6	6			
A2 Thyrostats	DMTU, MTU, PTU, PhTU, TAP, ETU, McpBzl, Thio	Urine	Sheep	Not set	3	3	3			
	α-Boldenone	Urine	Sheep	Not set	7	19	17		Free, 2.7 Conj 2.6	1
	Methyltestosterone	Urine	Sheep	Not set	4	19	19			
	α-Nortestosterone	Urine	Sheep	Not set	7	19	15		1.9, 2.0, 2.5, 2.4,	2
	β-Nortestosterone					19	18		0.3	2
	Stanozol	Urine	Sheep	Not set	7	19	19			
	Trenbolone	Urine	Sheep	Not set	7	19	19			
	Gestagens	Kidney fat	Sheep	Not set	4	4	4			
A4	Zeranol Taleranol	Urine	Sheep	Not set	3	6				
A5	Beta agonists	Liver	Sheep	Not set	11	11	11			
A6 Annex IV	Chloramphenicol	Kidney	Sheep	0.3	5	5	5			
	Nitroimidazoles	Kidney	Sheep	Not set	4	4	4			
	Nitrofurans (AOZ,AHD,SEM,AMOZ)	Kidney	Lamb	Not set	9	9	9			
B1 Antibacterial substances	Any antimicrobial agent	Kidney	Sheep	Various	109	115	115			
B1 Antibacterial substances	Sulphonamides	Kidney	Sheep	100	5	5	5			
B2a Anthelmintics	Benzimidazoles	Liver	Sheep	Various	23	33	33			
	Avermectins	Liver	Sheep	Various	23	22	22			
	Levamisole	Liver	Sheep	100	11	33	33			
B2b Coccidiostats	Ionophores	Liver	Sheep	Not Set	13	13	13			
B2c Pyrethroids		Kidney fat	Sheep	Not Set	22	22	22	-		
B2d Sedatives/ betablockers	Azaperone Azaperol Propionyl promazine Chlorpromazine	Liver/kidney	Sheep	Not Set	4	4	4			

Northern Ireland 2009 Sheep Results Slaughter House

Group of Substances	Compounds	Material to be analysed	Species	MRL µg/kg or µg/l	Planned Numbers	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level (µg/kg)	Concentration detected where samples were above the MRL/MRPL/Action Level (µg/kg)	Note
B2e NSAIDS	Carprofen Vedaprofen	Kidney/Liver	Sheep	Not set	2	2	2			
B2f Glucocorticoids	Dexamethasone Betamethasone	Liver/Urine	Sheep	Not set	1	1	1			
B3a Organochlorines/		Kidney fat	Sheep	Various	5	5	5	-		
B3b Organophosphorus		Kidney fat	Sheep	Various	24	24	24	-		
B3c Chemical elements	Cadmium	Kidney	Sheep	1000	2	2	1	77		
	Lead			500	2	2	2	-		
	Arsnec				2	2	2	-		
	Cadmium	Muscle	Sheep	50	2	2	1	19		
	Lead			100	2	2	2	-		
	Arsnec				2	2	2	-		
B3d	Aflatoxins	Liver	Sheep	Not set	0	0	0			
Grand total samples					328					

Notes

1	α -Boldenone detected above the action level in one animal. Conjugated α -boldenone > 2 ppb was detected in the urine. No evidence of abuse was found at follow-up investigation.
2	α -Nortestosterone detected in the urine of four animals, of which one also contained β -Nortestosterone

Northern Ireland 2009 Horse Results Slaughter House

Group of Substances	Compounds	Material to be analysed	Species	MRL $\mu\text{g}/\text{kg}$ or $\mu\text{g}/\text{l}$	Planned Numbers	Number analysed	Number Less than LOQ	Concentration detected where samples were below the MRL/MRPL/Action Level ($\mu\text{g}/\text{kg}$)	Concentration detected where samples were above the MRL/MRPL/Action Level ($\mu\text{g}/\text{kg}$)	Note
A5	Beta agonists	Liver	Horses	Not set	0	0				1
A6 Annex IV	Nitroimidazoles	Kidney	Horses	Not set	0	0				1
B1 Antibacterial substances	Any antimicrobial agent	Kidney	Horses	Various	0	0				1
B2a Anthelmintics	Benzimidazoles	Liver	Horses	Various	0	0				1
	Avermectins	Liver	Horses	Various	0	0				1
	Levamisole	Liver	Horses		0	0				1
B2e	Phenylbutazone	Plasma	Horses	Not set	0	0				1
B3c Chemical elements	Cadmium/Lead	Muscle	Horses	200/100	0	0				1
Total Samples					0					

Notes

1	No horses slaughtered in Northern Ireland during 2009
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2009 NI Meat inspection samples in detail

Matrix	Analyte	Number of samples analysed	Less than MRL/Action level	Concentration detected above the MRL/Action Level (µg/kg)	Note
Cattle retina SH	β-agonists	6	6	-	
Cattle urine SH	Hormones (25)	12	11	αNT 1.5	1
Cattle liver SH	Nitroxylin	8	8	-	
Cattle plasma SH	Phenylbutazone	1	1	564	2
Cattle muscle SH	Flunixin	1	1		
Cattle liver SH	NSAIDS	3	3		
Sheep liver SH	Avermectins	3	3	-	
Cattle muscle SH	AMs	1717		N/A Qualitative test	
	Penicillins	1717	1716	Pen G 364	3
	Tetracyclines	1717	1711	OTC 127, 149, 277, 387, 1272. CTC 581	4
Sheep muscle SH	AMs	7	7	N/A Qualitative test	
Pig muscle SH	AMs	103		N/A Qualitative test	
	Aminoglycosides	103	102	Dihydrostrep 128,000	5
	Quinolones	103	102	Cipro 93, Enro 1915	6

Key:

SH	Slaughterhouse
OF	On farm
(n)	Number of samples with same concentration of analyte
Bold	Samples declared positive in excess of MRL or action level
AMs	Antimicrobials
αNT	α-Nortestosterone
Dihydrostrep	Dihydrostreptomycin
CTC	Chlortetracycline
OTC	Oxytetracycline
Enro	Enrofloxacin
Cipro	Ciproflaoxcin

Notes

1	α-Nortestosterone was detected in the urine of a male following a leg injury. α-Nortestosterone can be produced naturally in male bovines following trauma.
2	Phenylbutazone detected following improper prescription. Carcase excluded from the food chain
3	Penicillin G detected above MRL. Carcases excluded from the food chain
4	Oxytetracycline detected above MRL. Carcases excluded from the food chain
5	Dihydrostreptomycin detected above the MRL. Carcase excluded from the food chain
6	Enrofloxacin detected above the MRL ciproflaoxcin also detected. Carcase excluded from the food chain

2009 NI Follow-up samples in detail

Matrix	Analyte	Number of samples analysed	Less than MRL/Action level	Concentration detected above the MRL/Action Level (µg/kg)	Note
Cattle serum OF	Testosterone	5	5		
Cattle serum SH	Progesterone	1	1		
Cattle Plasma OF	Phenylbutazone	1	1		
Cattle Urine OF	Thyrostats	17	17		
Cattle urine OF	α-Nortestosterone	27	27		
	β-Nortestosterone	27	27		
	Testosterone	12	12		
	Progesterone	10	10		
	α-Boldenone	10	10		
	β-Boldenone	10	10		
Cattle urine OF	β-Agonists	5	5		
Cattle urine SH	α-Nortestosterone	11	11	-	
	Testosterone	10	10	-	
	Zeranol	2	2	-	
Sheep urine SH (Male)	α-Nortestosterone	40	37	2.2, 3.4, 4.3	1
	β-Nortestosterone	40	38	0.3, 0.4	2
Poultry feed OF	Nicarbazin	4	4	-	

Key:

SH	Slaughterhouse
OF	On farm
(n)	Number of samples with same concentration of analyte

Notes

1	α-Nortestosterone was detected in the urine from 3 male sheep above the VMD Action Limits (Male, 2.0 ppb; Female, 5 ppb) sheep.
2	β-Nortestosterone was detected in one male and one female.

2009 NI Pig Testing Phase I samples in detail

Matrix	Analyte	Number of samples analysed	Less than MRL/Action level	Concentration detected above the MRL/Action Level (µg/kg)	Note
Pig bile SH	Sulphonamides	3837	3835	N/A Qualitative test	
Pig kidney SH	AMs	3841		N/A Qualitative test	
	Amoxicillin	3841	3840	141	1
	Penicillin G	3841	3839	79, 117	2
	Sulphonamides	3837	3835	SDZ 120, 426	3
	Tetracyclines	3841	3840	OTC 1139	4

Key:

SH	Slaughterhouse
(n)	Number of samples with same concentration of analyte
Bold	Samples declared positive in excess of MRL or action level
OTC	Oxytetracycline
SDZ	Sulphadiazine

Notes

1	Amoxicillin confirmed >MRL (50 µg/kg) in two kidneys. Producers placed on intensive sampling programme.
2	Penicillin G confirmed >MRL (50 µg/kg) in two kidneys. Producers placed on intensive sampling programme.
3	Sulphadiazine confirmed >MRL (100 µg/kg) in two kidneys. Producers placed on intensive sampling programme.
4	Oxytetracycline detected in one pig kidney above the MRL. Producers placed on intensive sampling programme

2009 NI Pig Testing Phase II samples in detail

Matrix	Analyte	Number of samples analysed	Less than MRL/Action level	Concentration detected above the MRL/Action Level (µg/kg)	Note
Pig bile SH	Sulphonamides	387	385	N/A Qualitative test	
Pig Muscle SH	AMs	387	385	N/A Qualitative test	1
	Sulphonamides	387	385	SDZ 114, 263	

Key:

SH	Slaughterhouse
(n)	Number of samples with same concentration of analyte
Bold	Samples declared positive in excess of MRL or action level
SDZ	Sulphadiazine

Notes

1	Two samples above the MRL for sulphadiazine. Carcasses excluded from the food chain.
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2009 NI extra testing on National Plan samples

Matrix	Analyte	No of samples analysed	Less than MRL/Action Level	Concentration detected above the MRL/Action Level (µg/kg)	
Cattle urine Young SH	Hormones (25)	198			
	Testosterone	198	188	12, 13(2), 18, 17, 20, 25, 32, 39(2)	1
	Zeranol	198	197	0.5	2
	Taleranol	198	195	1.6, 0.8, 2.4	
Cattle urine OTM SH	Hormones (25)	48	48		
	ADD	48	47	2	3
Cattle urine Young OF	Hormones (25)	184			
	α-Boldenone	43	41	Free 9.0, 27 16.4, 0.7 Conj	4
	β-Boldenone	43	41	Free 1.6, 2.2 0.6 Conj	
	ADD	184	181	2.3 1.2, 9.5 Free Conj 4.5,	5
	α-Nortestosterone	52	51	10 11	6
Cattle urine OTM OF	Hormones (25)	48			
	α-Nortestosterone	48	46	2.8, 10	7
	β-Nortestosterone	48	47	0.4	
Sheep urine SH	Hormones (25)	25	24		
	α-Boldenone	25	25		
Pig urine SH	Hormones (25)	42	42		

Key:

SH	Slaughterhouse
OF	On farm
NSS	National Surveillance Scheme sample
(n)	number of samples with same concentration of analyte
Bold	samples declared positive in excess of MRL or action level
CTC	Chlortetracycline
OTC	Oxytetracycline
PenG	Penicillin G (Benzyl-penicillin)
Enro	Enrofloxacin
SMT	Sulphamethazine
SDZ	Sulphadiazine

Notes

1	Testosterone detected in the urine of male cattle. A tentative Upper Limit of Normality has been established at 12 ppb in steer urine. Whilst concentrations above this level does not constitute proof of abuse, if the animals were castrated testosterone may have been administered. Follow-up samples were requested.
2	Zeranol was detected in the urine of one and taleranol in three young bovines on-farm. A model developed in distinguishing between possible abuse and natural contamination suggested that these results were a result of naturally-occurring Fusarium toxin metabolism.
3	Urine from a cow contained ADD a metabolite of boldenone but no boldenone was detected. Follow-up initiated.

4	<p>Boldenone was detected in the urine of two young male bovines on-farm. In the first case the levels of α-Boldenone were "suspicious", according to EU criteria. There was no indication of conjugated β-boldenone being present. In the second case, due to the uncertainty of measurement associated with the determination of conjugated α- and β- boldenone it is not possible to conclude definitively that these compounds are truly present as the estimates are based on a subtraction of free boldenone from total boldenone. Follow-ups were initiated.</p>
5	<p>ADD was detected in the urine of three young animals. ADD is a metabolite of boldenone. In one case no boldenone was detected and in the other two boldenone was present. Follow-ups were initiated.</p>
6	<p>α-Nortestosterone was detected in the urine of an on-farm young female bovine above the agreed VMD action level of 5 $\mu\text{g}/\text{kg}$. Female ruminants can produce α-nortestosterone under during pregnancy. Follow-up initiated and the follow-up sample received was compliant.</p>
7	<p>α-Nortestosterone was detected in the urine of an OTM female on-farm bovine below the agreed VMD action level of 5 $\mu\text{g}/\text{kg}$. β-Nortestosterone was also detected. Follow up sampling took place, including the original non-compliant animal. All samples were compliant, including hair samples. A further OTM female also contained α-nortestosterone above the VMD 5 ppb action level. Investigation revealed this animal to be pregnant at the time of sampling. Female ruminants can produce α-nortestosterone during pregnancy.</p>

2009 NI Bovine QA samples in detail

Matrix	Analyte	No of samples analysed	Less than MRL/Action Level	Concentration detected above the MRL/Action Level (µg/kg)	
Cattle retina SH	β-agonists	999	999	-	
Cattle urine SH	Ractopamine	999	999	-	
Cattle urine SH	Hormones (25)	181			1
	Oestradiol	181	180	216	2
	Testosterone	181	179	21, 27	3
	Zeranol	181	180	0.2	4
	Taleranol	181	178	1.3, 1.1, 1.6	
	β-Nortestosterone	181	180	1.4	5
Cattle Kidney SH	Anitmicrobials	1001	1000		
	Sulphamethazine	1	0	25,240	6

Key:

SH	Slaughterhouse
OF	On farm
NSS	National Surveillance Scheme sample
(n)	number of samples with same concentration of analyte
Bold	samples declared positive in excess of MRL or action level
CTC	Chlortetracycline
OTC	Oxytetracycline
PenG	Penicillin G (Benzyl-penicillin)
Enro	Enrofloxacin
SMT	Sulphamethazine
SDZ	Sulphadiazine

Notes

1	Samples are tested by an LC-MS/MS procedure which covers some 25 unauthorised hormonal growth promoters. The results below indicate the specific compounds detected.
2	α-Oestradiol detected in the urine of a male. A tentative Upper Limit of Normality was established at 12 ppb in steer urine. Follow-up samples were requested.
3	Testosterone detected in the urine of 2 males. A tentative Upper Limit of Normality has been established at 12.0 ppb in steer urine. Whilst concentrations above this level does not constitute proof of abuse, if the animals were castrated testosterone may have been administered. Follow-up samples were requested.
4	Zeranol and/or taleranol were detected in urine samples taken from three bovines. A model developed in VSD to distinguish between possible abuse and natural contamination was applied. This suggested that these results were a result of naturally-occurring Fusarium toxin metabolism. No further action was requested.
5	β-Nortestosterone was detected in the urine of one male bovine. Follow up samples of hair & urine were collected. All were found to be compliant.
6	Sulphamethazine was detected in the kidney of a bovine. A follow-up investigation was initiated and a prosection is being prepared.