

Veterinary Residues Committee 2014 Annual Report

Report on Surveillance for Veterinary Residues in Food in the UK



Welcome to the 2014 Annual Report of the Veterinary Residues Committee (VRC)

This report contains highlights of the veterinary residues surveillance results for 2014 and a description of the work of the VRC during this period. We hope you find the report interesting and informative.

This is the last Annual Report published by the VRC as the Committee has been closed down (see page 4 - "The VRC is disbanded").

What Surveillance is there for Veterinary Residues?

Two surveillance schemes, managed by the Veterinary Medicines Directorate (VMD), were overseen by the VRC. The larger one is the Statutory Surveillance Scheme. This is funded by the livestock industry and tests food from UK animals. All EU countries have a legal requirement to test their produce for residues of veterinary medicines, a smaller number of pesticides and heavy metals.

The smaller Non-Statutory Surveillance Scheme (NSS), funded by Defra, concentrated on testing imported foods for the presence of prohibited substances.

Sampling of imported food also takes place at Border Inspection Posts under the Veterinary Checks Directive (Directive 97/78/EC) as part of the UK National Monitoring Plan (NMP). The VRC saw

UK SURVEILLANCE – HEADLINE RESULTS

UK Produce

- 35,057 samples were collected and used for 38,240 analyses.
- 127 residues above the Maximum Residue Limit (MRL) or other action limit were detected in 122 samples.
- 39 samples (0.1%) contained residues of the pharmacologically active substance(s) for which they were tested.

Imported Produce

- 501 Non-Statutory Surveillance (NSS) samples were collected and used for 1,240 analyses.
- 6 residues above the MRL or other action limit were detected in 6 samples (1.1%).
- 204 National Monitoring Plan (NMP) samples were collected.
- 5 residues above the MRL or other action limit were detected in 5 samples (2.5%).

summaries of these results and again requested results of any residues surveillance carried out by retailers and manufacturers as part of their 'due diligence' responsibilities. None were supplied.

UK Produce – headline results

In the Statutory Surveillance Scheme 35,057 samples were collected and used for 38,240 analyses. There were 127 residues detected in excess of statutory or other action limits in 122 samples. Of these, 88 were either environmental contaminants or substances which occur naturally in animals. 39 samples (0.1%) contained residues of the pharmacologically active substance(s) for which they were tested.

Key Issues in 2014

Seeking assurance that there will be robust surveillance of third country imports following the end of the NSS

Matrix Ranking – Review and further development (including EFSA guidance on establishing Reference Points for Action).

Increased communications with stakeholders

Continued monitoring of phenylbutazone in horses submitted for slaughter

UK Produce 2014 Non-compliant samples

Species	Substance			Total Residues
	Veterinary Medicine	Naturally Occurring	Other	
Cattle	4	46	3	53
Sheep	8	32	4	44
Calves	9	0	0	9
Eggs	1	0	0	1
Milk	2	0	0	2
Poultry	4	0	0	4
Pigs	6	0	0	6
Horses	0	0	1	1
Game	3	0	2	5
Fish	0	0	2	2

What were the residues of concern?

Follow up investigations were carried out. Two samples were found to contain ibuprofen although in one of these cases it was concluded that the sample had been contaminated by the sampling officer who was taking medication. Two samples were found to contain leucomalachite green. Movement restrictions were placed on both farms until the situations were resolved.

What is the significance of the results?

As in previous years, the VRC was reassured that, very few results of concern to consumer health were detected. Overall, the Statutory Surveillance Scheme results demonstrate

that when used as directed, veterinary medicinal products did not result in residues of human health concern in 2014, and that consumers can continue to have confidence in purchasing UK produced foodstuffs of animal origin.

Trends

The Committee requested a report on any trends in non-compliant results from the 2011–2013 UK surveillance programmes. This showed a fairly consistent picture – a sizable percentage arose from the presence of naturally occurring hormones in animals and contaminants such as lead and cadmium. A very small percentage (consistently around 0.1%) was owing to the presence of residues of the

authorised substance(s) for which a sample was tested.

Study of the reasons for the latter cause showed that some producers did not observe the required withdrawal periods and some had incomplete medicine records. This was the subject of our September letter to the Veterinary Record.

Imported Produce (NSS) – headline results

In the NSS 501 samples were collected and 1,240 analyses carried out in 2014. The analyses revealed 6 results of residues above action limits (1.1%).

What is the significance of the results?

A residue of an unauthorised substance – leucomalachite green – was of concern to the VRC. We hold the view that surveillance of imported foods for residues of medicines used in countries outside of the EU must be considerably strengthened and coordinated.

The full results of both surveillance schemes are available by searching “residues results” on GOV.UK.

Key issues in 2014

Phenylbutazone in horses

Members noted from the FSA 100% testing programme for phenylbutazone in horses at abattoirs that some non-compliance came from horses accessing treated feed not meant for them. Some other non-compliant results were from horses stabled in livery yards, where passport responsibilities between owners and stables aren't watertight. Members also noted that around 2% of samples continued to be non-compliant, and urged FSA and Defra to keep a close eye on the level of non-compliance now that 100% testing has ended.

Imported Produce (NSS*, NMP**) 2014 Substances Found

Substance	Species	Country	Residues
Leucomalachite green*	Fish (farmed)	Vietnam	1
Oxytetracycline*	Fish (farmed)	Vietnam	1
Oxytetracycline*	Crustaceans	Vietnam	2
Sulfadiazine*	Fish (farmed)	China	1
Doxycycline*	Poultry muscle	Poland	1
Chloramphenicol**	Prawns	China	3
Chloramphenicol**	Prawns	Vietnam	1
Tetracyclines**	Fish (farmed)	Vietnam	1

Matrix Ranking

The VRC developed matrix ranking (MR) as a means to systematically assess substances, in order to prioritise those of greatest potential concern to human health. Both potential hazard (which is the intrinsic ability to cause harm) and estimates of exposure are taken into account and so MR is a risk-based tool.

A full review of the MR system was completed in the summer. The review re-evaluated the scoring method, the criteria used and the rationale applied when scoring substances. The Committee made use of the latest data and evidence available, took into account recent [guidance from the European Food Safety Authority \(EFSA\)](#) on establishing Reference Points for Action for prohibited and unauthorised, and a report from the Food Safety Authority of Ireland: [Risk based approach to developing the National Residue Sampling Plan](#).

The key papers explaining the revised system are on [GOV.UK](#).

Our Key Values

The work of the VRC was carried out according to the following principles:

- We aimed to report facts independently and without bias using an evidence-based approach.
- We believed veterinary medicines should be used as little as possible but as much as necessary to maintain animal health and welfare.
- We supported informed consumer choice when buying food.
- We operated a policy of openness and transparency, particularly by reporting all findings.

We trust that Defra and the FSA will uphold our values.

Communications

The VRC held meetings in March, June, September and November.

Veterinary Record

[An introductory article on the work of the Committee was published in March 2014](#) followed by an article on [medicines records and quality assurance schemes](#) in September.

BCVA poster

The VRC made small but significant improvements to the “Best Practices to prevent medicine residues in milk” poster.

Position Papers

The Committee produced a new position paper on the growing problem of liver fluke disease, the available treatment options and the implications for medicines residues, which is available on [GOV.UK](#).

Other guidance

The Committee updated its factsheet which challenges popular myths about the use of growth promoting hormones and antibiotics. This followed stories in the media in relation to the trade talks between the EU and the US.

The Committee submitted a response to the FSA’s consultation on the Commission’s proposals for

revising the Official Food and Feed Controls Regulation (882/2004/EC).

2014 Open Meeting

In September the Committee held its Open Meeting at the Animal and Plant Health Agency (APHA) near Weybridge in Surrey. Presentations included:

- What can the VRC do for you? – an introduction to the VRC, its role and objectives.
- Results/Annual Report 2013 – a review of the significant results from the 2013 surveillance programme.
- Matrix Ranking – an explanation of the method the Committee uses to assist with risk-based decision making on surveillance.
- Liver fluke – flukicides and the possible impact of flooding on residues surveillance.
- Imported food – an explanation of the surveillance work that takes place at UK border inspection posts.

Copies of the presentations are available from the VMD – k.smith@vmd.defra.gis.gov.uk

The VRC is Disbanded

Following the decision of Defra to discontinue funding the Non-Statutory Surveillance Scheme (NSS), which had been in existence for over 20 years, a review of the VRC was launched. This concluded that 'whilst scientific advice is required by Government on veterinary medicine residue issues' there was not a need for a specialist committee, and the decision was taken to close it. Following representations, the members were allowed to conclude the 2014–15 financial year as usual, giving full consideration to the 2014 surveillance results, completing communications and Matrix Ranking work and publishing this Annual Report.

What of the Future?

Our understanding is that consideration of any Statutory Scheme non-compliant results of concern (from home-produced foods of animal origin) collected under the requirements of Council Directive 96/23 will pass to the Committee on Toxicity, although this has not been confirmed. We trust there will be independent scrutiny of results from both home produced and imported foodstuffs in some form. We consider it is the independent Committee system within Government which is largely responsible for the UK consumers' confidence in their food.

Looking further ahead, as work on the revision of the Directive is completed within Europe over the next couple of years, we hope our Matrix Ranking model may provide a model for sensible risk-based and cost-effective revision to ensure consumer protection and value for money for the industry sectors paying for the programme.

In respect of imported foodstuffs, finishing the NSS marked the end of a tradition of Government funding for this programme, which the VRC decided from 2002 should mostly look for the presence of prohibited substances in popular imports such as red meat, poultry meat, farmed fish, crustaceans and honey. There were a number of important results in the early years when funding and sampling numbers were at their highest, leading to EU pressure on several third countries to improve the safety of their exported foodstuffs to Europe. Some countries have risen to the challenge but it is a concern to see so many non-compliant results in recent years from China and Vietnam in particular from very small sample numbers.

The Food Standards Agency (FSA) undertakes a relatively small programme of sampling and analysis under the EU Vet Checks Directive 97/78/EC (the National Monitoring Plan – NMP). This is currently directed largely towards prohibited substances. We can only hope that the FSA will see the importance of looking also for 'unknown unknowns', which could potentially cause problems, using the newest range of analytical techniques developed in recent years. We hope that the VRC's Matrix Ranking system will be used by the FSA as a useful tool alongside their Emerging Risks programme.

Much of our food (around 60% and rising) is imported. Products of animal origin is a significant proportion of this, so there remains a need for increased residues surveillance and better coordination in this area, including obtaining results from retailer testing of food of animal origin. This is a point that previous Annual Reports have made. The current very limited random testing is showing non-compliance around 2.5%, which is unacceptably high. The VRC has consistently expressed concerns about the ability of such limited sampling to detect the full extent of potential risks to human health now and in the future. We also hope other Member States will be vigilant in their scrutiny of third country imports.

The review of the VRC also stated that a better level of cooperation should be developed between the VMD and the FSA. We consider it essential that both organisations have clear ideas of their responsibilities and seek to identify and close any gaps.

Web Access to VRC material

The abolition of the VRC coincided with the movement of all Government department websites to the Gov.uk site. VRC members considered it essential that recent VRC Annual Reports, the Matrix Ranking paper and other Position Papers remain easily available within the VMD section of GOV.UK but recognise the constraints on the system. Therefore, the most recent material is on GOV.UK which are an explanation of Matrix Ranking and the flukicides position paper. Older material, including all previous Annual Reports and our position papers on important issues such as phenylbutazone in horses, remain available within the Government Archives site, which is accessible

through [GOV.UK](http://gov.uk). All of our work was carried out using government funding – tax payers' money – and should be available for information and use.

And finally,

We would wish to pay tribute to our excellent Secretariat team within the Surveillance section at the VMD, most ably led by Eric Crutcher (Head of Residues Surveillance Unit). The VRC has been supported by professional and enthusiastic staff for whom no job has been impossible.

Membership of the VRC during 2014

Chairman – Mrs Dorothy Craig MBE, JP – BSc

***Mark Atherton–Ranson – BSc(Hons.), MSc, MIFST**

Jon Averbs – MSc, FCIEH

**Tim Brigstocke MBE – MPhil, DipFarmMan, CEnv,
FIAgrM, FRAgS, CBiol, FSB**

Dr Gill Clare – BSc, PhD

Susan Knox OBE – BA

John Points – BSc, MRSC

Declan O'Rourke – MVB, DipM, MBA, FRCVS

David Alan Ralph – BSc Hons

Professor Michael Roberts CBE – PhD, CBiol, FSB, MIEEM

Professor Shirley Price – BSc, MSc, PhD, FILT, FBTS, FSB, ERT

Jonathan Statham – MA, VetMB, DCHP, MRCVS

Dr Stella Walsh – BEd, MEd, PG CERT RM, PhD

Food Retail Sector

Local Authority

Agriculture Industry

Food Chemical Safety/Risk
Assessment

Consumer

Analytical Chemist

Pharmaceutical Industry

Agriculture & Feed Industry

Food Industry

Eurotox Registered Toxicologist

Veterinary Surgeon

Consumer

*Mark Atherton–Ranson resigned from the Committee at the end of June.