



Questions and answers on the imported seafood survey

23 August 2007

1. Why was the survey conducted by AQIS?

The purpose of the survey was to investigate whether the current testing done under the Imported Food Inspection Scheme was up to date.

2. How was the survey conducted by AQIS?

AQIS surveyed 100 samples of imported seafood for residues of agricultural and veterinary compounds from April 2006 to March 2007.

Samples were screened for 49 agricultural compounds and 39 veterinary compounds. The full list of agricultural and veterinary compounds is in Attachment 1.

AQIS consulted with seafood importers to seek agreement to participate in this voluntary survey prior to its commencement in April 2006.

With the permission of the importer, AQIS officers took additional samples from consignments referred under the Imported Food Inspection Scheme to assess whether new compounds should be added to the existing testing regime.

3. What seafood was included in the recent AQIS survey?

Samples were taken from imported seafood declared as wild caught and farmed. The products were chilled or frozen and cooked or uncooked. It included a range of fish species, prawns/shrimp, crabs and eels.

Processed seafood products such as canned, battered or mixed seafood products were excluded from this survey.

4. Were any countries targeted in the survey?

No country was specifically targeted. The snapshot survey was designed to investigate *all* imported seafood for the presence of agricultural and veterinary compounds.

5. Was any domestically produced seafood tested?

No, AQIS only has jurisdiction over imported food at the point of entry into Australia.

Domestically produced food is the responsibility of the state and territory authorities and they have surveillance mechanisms in place to monitor the use of agricultural and veterinary compounds.

6. What is the current testing regime for imported seafood?

AQIS currently tests imported prawns for the residues of nitrofurans and chloramphenicol and tests aquaculture fish, such as basa and catfish, for malachite green. These compounds were chosen primarily on the basis of results from a 2005 survey coordinated by Food Standards Australia New Zealand (FSANZ) that detected agricultural and veterinary compounds in domestic and imported fish.

Imported seafood, from all countries, is referred to AQIS for testing at a rate of 5% of consignments. To date, imported seafood tested for veterinary compounds has shown above 95% compliance.

7. What were the results of the survey?

There were no agricultural compounds detected in any of the samples, however residues of some veterinary compounds were detected in some samples at very low levels (i.e. parts per billion).

The residues of the veterinary compounds detected in the seafood samples were from the sulphonamide, tetracycline, malachite green, penicillin, quinolone, fluoroquinolone and phenicol groups.

These residues exceeded the permissions in the Australia New Zealand Food Standards Code (the Code) because there is no Maximum Residue Limit (MRL) for these compounds.

Attachment 1 includes further information on these detections.

8. What is a Maximum Residue Limit (MRL)?

A MRL is used to indicate how an agricultural or veterinary compound has been used. This is not a safety limit and does not indicate that a food contains unsafe levels of a compound. However, it may mean that a grower/producer has not followed Good Agricultural Practice, which generally ensures the effective and safe use of agricultural and veterinary compounds.

9. What is the risk posed by the presence of the residues detected in seafood from the survey?

The survey results have been provided to [Food Standards Australia New Zealand](#) (FSANZ) for advice on the safety of the compounds detected in the survey.

FSANZ have indicated the residues are unlikely to represent a significant risk to public health and safety based on the very low levels detected in the samples.

FSANZ are in the process of undertaking a full risk assessment of the survey results.

Advice has also been sought from the [National Health and Medical Research Council](#) (NHMRC) on issues of antimicrobial resistance and prioritisation of veterinary compounds in terms of their importance to human health. Information about antimicrobial resistance can be found at <http://www.nhmrc.gov.au/about/committees/expert/eagar/aar.htm>

10. What action is AQIS proposing to take?

In addition to the current tests applied to imported seafood, AQIS will implement interim testing for veterinary compounds of the fluoroquinolone, quinolone and penicillin groups. The interim testing will be applied to all imported seafood referred to AQIS under the Imported Food Inspection Scheme and will be reviewed after advice has been received from FSANZ and the NHMRC.

Seafood subject to the interim testing will be referred to AQIS for testing at the surveillance rate of 5% and will be implemented on 3 September 2007.

11. Why are these tests only being applied at the rate of 5%?

Residues of agricultural and veterinary compounds, especially at very low levels, are not generally a medium to high risk to public health and are therefore monitored at the random surveillance rate of inspection.

The AQIS testing regime for imported food is risk based and foods are categorised as either risk or random surveillance. The categorisation of foods is determined by FSANZ. Foods are categorised as risk when they present a medium to high risk to public health.

Risk foods are sampled and tested at 100%. Once they have demonstrated a history of compliance, the inspection rate is reduced. All other foods are by default random surveillance foods on the basis that they represent a low food safety risk.

Random surveillance foods are inspected at a rate of 5% to monitor compliance with Australian standards. Where a food has failed inspection, 100% of comparable consignments are referred to AQIS and tested until compliance has been demonstrated. This requires five consecutive passes of all tests.

12. What happens to imported seafood which is found to contain residues of the veterinary compounds under the broader testing regime?

Food which is found not to comply with Australia's requirements at the border will be subject to further action.

Under the Imported Food Inspection Scheme, risk food is subject to "test and hold" inspections. Because of the high risk nature of the food, an importer must hold the food until test results have been received.

Random surveillance foods are subject to "test and release" inspections. Because the food is low risk, it is released to the importer prior to test results being received. Upon receiving test results, if a random food is subsequently found not to comply with Australian standards, AQIS advises the relevant state or territory food regulator so they can make a decision about the food in terms of its safety.

AQIS works closely with the state and territory jurisdictions to ensure our food supply is safe and complies with requirements in food legislation. Unsafe food is destroyed, re-exported or downgraded to purposes not for human consumption.

Where non-compliant food is detected by AQIS at the border, 100% of subsequent comparable consignments will be tested and not released until a history of compliance has been demonstrated.

Veterinary compounds included in the survey

Group	Chemicals	No of tests applied	No. of detections	Comments
Malachite green	Malachite green	100	1	No MRL in the Food Standards Code for malachite green currently. Not permitted to be used in Australia with food animal production.
	Leucomalachite green	100	0	
Quinolones	Flumequine	100	6	No MRL in the Food Standards Code for flumequine currently. Not permitted to be used in Australia with food animal production.
	Oxolinic Acid	100	0	
Phenicol	Florphenicol	100	1	Florphenicol is permitted to be used in Australian animal production. Current MRLs in place for cattle and pigs in the Food Standards Code. No MRLs currently for aquaculture.
	Thiamphenicol	100	0	
Macrolides	Tylosin	100	0	
	Erythromycin	100	0	
Fluoroquinolones	Ciprofloxacin	100	1	No MRL in the Food Standards Code for ciprofloxacin or enrofloxacin and neither permitted to be used in food animal production.
	Ofloxacin	100	0	
	Gatifloxacin	100	0	
	Enrofloxacin	100	2	
	Levofloxacin	100	0	
	Moxifloxacin	100	0	
	Norfloxacin	100	0	
	Sarafloxacin	100	0	
Tetracyclines	Chlortetracycline	100	0	Oxytetracycline is permitted to be used in Australian animal production. Current MRLs for salmonids, cattle, goats, sheep, poultry, pigs and honey.
	Tetracyclines	100	0	
	Doxycycline	100	0	
	Oxytetracycline	100	7	
Sulphonamides	Sulphamerazine	100	0	No MRL in the Food Standards Code for sulphonamides in seafood.
	Sulphamethoxazole	100	5	
	Sulphadimethoxine	100	1	Some sulphonamides are permitted to be used in Australian animal production.
	Sulphachlorpyridazine	100	0	
	Sulphamethoxypyridazine	100	1	
	Sulphapyridine	100	0	
	Sulphaquinoxaline	100	0	
	Sulphadiazine	100	0	
	Sulphadoxine	100	0	
	Sulphathiazole	100	0	
	Sulphamethazine	100	1	
	Sulphatroxazole	100	0	
	Sulphisoxazole	100	0	
	Sulphameter	100	1	
Penicillin	Ampicillin	100	3	No MRL in the Food Standards Code for penicillins in seafood.
	Benzyl penicillin	100	0	
	Cloxacillin	100	0	Penicillins are permitted to be used in Australian animal production. Some MRLs for specific animals
	Amoxycillin	100	11	
Other	Trimethoprim	100	0	

MRL – Maximum residue limit

The Food Standards Code contains the permitted Maximum Residues Limit (MRLs) for agricultural and veterinary chemicals in food based solely on Australian good agricultural practices, **not** on human health and safety. As some antimicrobials are not permitted for agricultural use in Australia, no MRL for these antibiotics have been developed. FSANZ will develop MRLs if there is an application made to them to do so.

Agricultural compounds included in the survey

Chemical	No of tests applied	No of detections	Chemical	No of tests applied	No of detections
Acephate	100	0	Ethion	100	0
Aldrin	100	0	Fenamiphos	100	0
Azinphos-ethyl	100	0	Fenitrothion	100	0
Azinphos-methyl	100	0	Fenthion	100	0
BHC (alpha, beta, delta, gamma)	100	0	Fipronil	100	0
Bromophos-ethyl	100	0	Hexachlorobenzene	100	0
Carbaryl	100	0	Heptachlor	100	0
Carbophenothion	100	0	Heptachlor epoxide	100	0
Chlordane	100	0	Malathion	100	0
Chlorpyrifos	100	0	Methacrifos	100	0
Chlorpyrifos-methyl	100	0	Methamidaphos	100	0
Chlorfenvinphos (cis & tran)	100	0	Methidathion	100	0
DDD	100	0	Mevinphos	100	0
DDE	100	0	Monocrotophos	100	0
DDT	100	0	Omethoate	100	0
Demeton-S-methyl	100	0	Parathion-ethyl	100	0
Diazinon	100	0	Parathion-methyl	100	0
Dichlorvos	100	0	Phorate	100	0
Dicofol	100	0	Phosmet	100	0
Dieldrin	100	0	Pirimicarb	100	0
Dimethoate	100	0	Pirimiphos-methyl	100	0
Disulfoton	100	0	Procymidone	100	0
Endosulfan (alpha & beta)	100	0	Prothiofos	100	0
Endosulfan sulphate	100	0	Vamidathion	100	0
Ethoprophos	100	0			