



National Residue Survey 2015–16

Kangaroo and wild boar



The National Residue Survey (NRS) is an essential part of Australia's system for monitoring the levels of, and associated risks from, pesticides, environmental contaminants and veterinary medicine residues in Australian food products.

Residue monitoring programmes run by the NRS are vital in facilitating and encouraging ongoing access to domestic and export markets. They support Australia's food industry and primary producers who provide quality animal, grain and horticulture products for export.

The kangaroo programme and wild boar programme

The kangaroo and wild boar programmes involve the testing of animal tissue samples for a range of pesticides and environmental contaminants. They are funded by the NRS component of the relevant industry transaction levies.

The programmes:

- ensure that kangaroo and wild boar exports satisfy Australian export certification and importing country requirements
- support industry quality assurance initiatives
- enable domestic meat processing facilities to satisfy state and territory government regulatory authority licensing requirements.

Key points

- Australian kangaroo and wild boar industries continue to demonstrate a high degree of compliance with Australian Standards.
- The compliance rate in 2015–16 was 100 per cent for both industries.
- National Residue Survey is certified to ISO 9001 Quality Management System.

Chemical screen

Chemical screens are developed in consultation with wild game industries and take into account Australian registered chemicals, chemical residue profiles and overseas market requirements. The chemical screens vary slightly between programmes, however, the samples are screened for a range of agricultural chemicals, animal treatments and environmental contaminants, as outlined in Table 1.

Samples are collected at export abattoirs by authorised government officers and at domestic abattoirs by quality control staff from animals randomly selected along the slaughter chain. Once collected, the samples are frozen and sent directly to the NRS receipt and dispatch facility, where they are sorted into batches. They are then sent to a contract laboratory for analysis.

TABLE 1 Chemical screens for the 2015–16 kangaroo and wild boar programmes

Chemical screen	Chemical group	Analytes
Agricultural chemicals, animal treatments and environmental contaminants	Fungicides, environmental contaminants herbicides and insecticides	Approximately 72 analytes including carbamates, fungicides, herbicides, insecticides, organochlorines, organophosphates, persistent organic pollutants and pyrethroids
	Metals	Approximately 5 analytes including antimony, arsenic, cadmium, lead and mercury

Sample collection

The number of samples collected is based on Australian production levels and/or overseas export market requirements.

The NRS sends sample collection requests to abattoirs specifying the matrix required for collection, and the period during which it has to be taken. Generally the matrix selected for analysis is the one that is expected to contain the highest concentration of a chemical residue. The matrix may be inedible, and does not necessarily represent the part most likely to be eaten.



Results

Kangaroo

In 2015–16, a total of 50 kangaroo samples were collected and analysed, and results were compared with relevant Australian standards. The compliance rates are shown in Table 2. In 2015–16, the overall compliance rate was 100 per cent.

TABLE 2 The overall compliance rates for the kangaroo programme over the past five years

Year	Samples collected	Compliance rates (%)
2011–12	53	100.0
2012–13	50	100.0
2013–14	50	100.0
2014–15	50	100.0
2015–16	50	100.0

Wild Boar

In 2015–16, a total of 50 wild boar samples were collected and analysed, and results were compared with relevant Australian standards. The compliance rates are shown in Table 3. In 2015–16, the overall compliance rate was 100 per cent.

TABLE 3 The overall compliance rates for the wild boar programme over the past five years

Year	Samples collected	Compliance rates (%)
2011–12	52	100.0
2012–13	12	91.7
2013–14	50	98.0
2014–15	50	96.0
2015–16	50	100.0

Laboratory selection and performance

The NRS contracts laboratories to analyse meat samples for chemical residues and environmental contaminants. Laboratories are selected through the Australian Government tendering process on the basis of their proficiency, accreditation against international standards (ISO/IEC 17025) and value for money.

Contracted laboratories are proficiency tested by the NRS to ensure the validity of their analytical results and technical competence. The NRS has been accredited by the National Association of Testing Authorities as a proficiency test provider since July 2005.

International export markets

The NRS maintains a database of international MRLs for countries that are major export markets for Australian animal and plant products.

All wild game results are checked for compliance with Australian standards and relevant international MRLs. The database can be accessed at <https://www.edaff.gov.au/NRSMRLExternal/Public/Disclaimer.aspx>.

National Residue Survey

The NRS is an operational unit within the Australian Government Department of Agriculture and Water Resources, and since 1992 has been funded by industries through levies or contracted by direct funding.

NRS programmes demonstrate the long term integrity of Australian food producers in compliance with legislation, chemical use guidelines and international standards. They comply with an ISO 9001:2008 quality management system and form part of a national pesticide and veterinary medicine residue management framework.



These programmes assist primary industries to identify potential residue issues such as compliance with international standards and good agricultural practice, and can indicate where follow-up action is needed to maintain Australia's reputation as a supplier of clean produce.



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