

# Biosecurity – Lead affected food producing animals in New South Wales

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## Management of the biosecurity risk

Lead contamination of food producing animals and animal food commodities is potentially harmful to the health of humans and animals. The purpose of this procedure is to specify the response required by New South Wales Department of Primary Industries (NSW DPI) and Local Land Services (LLS), offices with the Department of Regional NSW to suspect or confirmed lead contamination of food producing animals.

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## Scope

The [Biosecurity Act 2015](#) (the Act) promotes biosecurity as a shared responsibility between government, industry and communities. This procedure is a State Priority for NSW and should be read in conjunction with the policy '[Chemically affected food producing animals, animal food commodities and stock food](#)'. The procedure applies to NSW DPI and LLS in their role as authorised officers under the Act when responding to cattle that are suspect or confirmed to be lead affected via acute exposure (i.e., less than 42 days since most recent exposure to lead source).

Suspect or confirmed cases of lead residues in:

- all other food-producing animals or
- animal-source food products or
- chronic exposure in cattle

will be risk-assessed by the State Residue Coordinator (SRC), in consultation with the NSW Food Authority, National Residue Survey, Local Land Services and/or other experts at the discretion of the SRC. If as a result, a food producing animal or animal food commodity is deemed lead affected, the SRC will coordinate management of the animal to prevent lead affected animal food commodities entering the human food chain; the management plan will be approved by the NSW Chief Veterinary Officer.

Cattle are considered lead affected if one or more of the following lead levels are detected:

- blood level greater than or equal to 0.24 µmol/L
- liver and kidney lead levels are greater than 0.5mg/Kg

- food commodities derived from cattle with lead levels exceeding those stated in the [Australia New Zealand Food Standards Code- Schedule 19 - Maximum levels of contaminants and natural toxicants](#)
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## Biosecurity legislation summary

Under the Act, lead contamination of food producing animals and animal commodities may result in a biosecurity event (section 39 (1)) with the animals and their products becoming chemically affected (section 13 (2)).

Mandatory measures relating to chemicals in food producing animals and animal food commodities are detailed in Division 10 of the Biosecurity Regulation 2017. These measures detail the obligation for laboratory reporting of test results for metals, including lead, in animal food commodities and the obligation of vendors of a food producing animal to notify a purchaser if the animal is chemically affected.

All members of the NSW community have a general biosecurity duty to take reasonably practicable steps to prevent food producing animals from having access to items that contain lead.

The collection, use and disclosure of information in accordance with this procedure, including any internal or external discussion or distribution of information, must be in compliance with the Privacy and Personal Information Protection Act 1998 or be exempted by the operation of section 387 of the Act.

Section 387 (2) of the Act provides authority for the disclosure of information about a person, without the consent of the person: to a public sector agency, or to any other person, but only if the disclosure is reasonably necessary for the purpose of exercising a biosecurity risk function.

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## Work health and safety

The *Work Health and Safety Act (2011)* places an obligation on the agency (NSW DPI and LLS) as a person conducting a business or undertaking and workers to provide a safe and healthy workplace. Safe Work Method Statements that support activities included in this procedure must be used in identifying, assessing and controlling risks.

NSW DPI and LLS will work together to create a safe and supportive work environment when undertaking any activities for this procedure.

The *Work Health and Safety Act (2011) No 10 - NSW Legislation* and the NSW Government Department of Regional NSW Work health and safety policies (see item 11) apply to all people using this procedure.

Animals that are lead affected generally show neurological signs, including blindness. Care must be taken when handling any animals showing abnormal behaviour.

The *Work Health and Safety Act (2011)* places an obligation on the agency (NSW DPI and LLS) as a person conducting a business or undertaking and workers to provide a safe and healthy workplace.

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## Contents

1. Roles and responsibilities	4
2. Initial diagnosis and notification of lead affected cattle or cattle commodities	4
3. On-farm investigation	4
4. Livestock Health Management System (LHMS)	5
5. Blood test monitoring and management of lead affected cattle	5
5.1 Less than 42 days since cattle have been removed from the lead source	5
5.2 43 to 89 days since cattle have been removed from the lead source	6
5.3 90 to 364 days since cattle have been removed from the lead source	6
5.4 365 days or more since the cattle have been removed from the lead source, and the owner/manager agrees to retesting all individual PB1 cattle	7
5.5 365 days or more since cattle have been removed from the lead source and have not been previously tested.	7
5.6 When source of lead contamination and/or timing of exposure is not clear	7
6. Notification of the State Residue Coordinator	8
7. Biosecurity undertakings and directions	8
8. Update of NLIS statuses	8
9. Other considerations	8
9.1 Movement of cattle with PB1 status	8
9.2 Subsequent offspring of detained cattle	9
9.3 Milk from lactating cows with a PB1 or PB2 status	9
9.4 Payment for blood testing	9
9.5 Cattle with PB1 or PB2 statuses with lost RFIDs	9
9.6 Cattle with a PB1 or PB2 status that die on-farm	9
9.7 Cattle with PB1 and PB2 status at an abattoir	10
10. Definitions and acronyms	13
11. Documentation	13
12. Records	14
13. Revision history	14
14. Contact	14
Appendix One: Livestock Health Management System entry	14
Appendix Two: Storage of blood samples	15

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## 1.Roles and responsibilities:

- NSW Department of Primary Industries
  - will appoint a State Residue Coordinator to oversee the management of lead-affected food producing animals in NSW.
- Local Land Services
  - will ensure that Local Land Services Veterinarians are available to investigate and manage cases of lead-affected food producing animals in NSW.

Note: where the term LLS Authorised Officer (AO) is used throughout this procedure, this activity could be undertaken by either an LLS veterinarian or a biosecurity officer acting under the supervision of an AO that is a veterinarian.

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## 2.0 Initial diagnosis and notification of lead affected cattle or cattle commodities:

The State Residue Coordinator (SRC) may receive notification:

- of lead affected cattle via a laboratory report. Blood or tissue samples may have been submitted to the laboratory by the LLS or a private veterinary practitioner as part of an on-farm investigation. If the laboratory report comes from a private veterinary practitioner, the SRC forwards the laboratory report to the relevant LLS region requesting a follow up investigation, in consultation with the private veterinary practitioner.
  - from National Residue Survey (NRS) of lead having been detected in a commodity, in which case a trace back investigation to the property of origin is requested by the SRC and undertaken by an LLS veterinarian. Please refer to the [Chemical Trace back](#) investigation procedure for guidance for investigations.
  - from a veterinarian that they suspect cattle may be at risk of being lead affected to discuss case prior to any testing.
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## 3.0 On-farm investigation

The initial investigation is conducted by an LLS veterinarian. An LLS veterinarian attends a property to investigate unusual behaviour and/or mortalities and, if lead toxicity is considered a reasonable differential diagnosis, submits relevant samples (blood or tissue) to NSW DPI Animal and Plant Health Laboratories for testing. Please refer to the NSW DPI Prime Fact.

The Property Identification Code (PIC) owner/manager is advised by the LLS veterinarian to identify and safely remove all access that food producing animals may have to lead sources. The LLS veterinarian determines which cattle are at risk of being lead affected. Any animal which may have had prior contact with the source of lead must be considered to be at risk. Please refer to [Primefact 413](#) "Lead affected cattle" for further information regarding possible lead sources. The LLS veterinarian advises the PIC owner/manager that all at-risk cattle must be detained on the PIC until confirmatory test results have returned.

- Once a diagnosis of lead toxicity has been confirmed, an LLS veterinarian will:
    - decide on a testing option and implement (refer to section 5.0)
    - issue an individual biosecurity direction to detain all at-risk cattle or accept a biosecurity undertaking from the owner/manager. Templates for these documents are available on the
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Chemical Residues landing page of the DRNSW intranet. At the discretion of the LLS veterinarian and SRC, the individual biosecurity direction/undertaking may apply to all or some cattle on the property. The RFID of all detained cattle must be recorded on the direction or undertaking. Procedures on issuing Biosecurity directions and accepting Biosecurity undertakings are available at: <https://www.dpi.nsw.gov.au/about-us/policies-procedures>

- record the date the at-risk animals were removed from the source(s) of lead in Livestock Health and Management System (LHMS). The timing relating to blood tests and length of movement restrictions only starts when no further access to lead sources can be assured.

The LLS Veterinarian may advise the stock owner/manager of the following requirements:

- Retesting confirmed lead affected animals prior to release from movement restrictions ensuring all confirmed lead affected animals are individually identified with RFID tags (some producers may also find additional management tags helpful to easily identify the lead affected animals)
- Ensuring all lead affected cattle identified in the biosecurity direction or undertaking remain on the PIC unless authorised by LLS to be moved elsewhere
- It takes animals at least 12 months to clear blood lead residues that exceed regulated limits
- Depending on the class of animal and form of lead source ingested, lead residues can persist for much longer than 12 months
- The early warning (EW) National Livestock Identification System (NLIS) status that will be on the PIC where the lead-affected animals are kept
- How to complete an national vendor declaration (NVD)
- Care with handling as lead toxicity can cause behaviour changes such as aggression

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## 4.0 Livestock Health Management System (LHMS)

LLS veterinarian enters all PIC visits and reports, including relevant history, laboratory reports and legal documents into Livestock Health Management System (LHMS)(See Appendix One).

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## 5.0 Blood test monitoring and management of acutely lead affected cattle (i.e., at most 42 days since first exposure to lead source)

Selection of a testing option is made based on consultation with the producer by the LLS veterinarian. Testing all at-risk cattle within 42 days of removal from source is the preferred option to ensure the security of the food chain.

### 5.1 Less than 42 days since cattle have been removed from the lead source and less than 42 days since first exposed

See Figure 1.

- collect blood samples from all at-risk cattle
- record all individual NLIS/radio frequency identification (RFID) tag numbers with reference to their corresponding blood samples
- send blood samples to the NSW DPI Animal and Plant Health Laboratories

- animals:
  - with blood lead < 0.24 µmol/L are released from movement restrictions
  - with blood lead levels ≥ 0.24 µmol/L continue movement restrictions and are assigned PB1 statuses on the NLIS by the SRC
  - in the majority of cases, cattle with blood levels ≥ 0.24 µmol/L will be retested at 12 months from the date of removal from the lead source (refer to item 5.4 below). If the owner wishes to retest these PB1 status cattle sooner than the 12-month period, any animal with a subsequent test result <0.24 µmol/L will be assigned a PB2 status (PB1 is removed), which will mean these animals may go to slaughter but the liver and kidneys will be condemned (refer to item 5.3 below). The PB2 status will be set to automatically expire at 365 days from the date of removal from the lead source.

If the owner/manager chooses not to pay for all blood samples from at-risk cattle to be tested immediately, the LLS veterinarian may agree to temporarily store the remaining blood samples (see Appendix Two). When these stored blood samples are tested at a time in the future, the actions taken are as below depending on the time since removal from the lead source. In the meantime, all such untested animals will receive a PB1 status on their RFIDs until such time they are tested and cleared.

Similarly, if a PIC owner/manager is unable to have any of the at-risk cattle tested in the first 42 days after removal from the lead source the LLS veterinarian should:

- ensure all at risk animals are individually identified with RFID tags
- record the RFID for all at-risk cattle
- issue an individual biosecurity direction or accept a biosecurity undertaking from the owner/manager to detain all at-risk cattle (refer to the templates on the [Chemical Residues landing page](#))
- notify the SRC who will apply a PB1 status to all at-risk cattle
- advise the stock owner/manager that these PB1 status animals require blood lead level testing prior to release from detention as per items 5.3 or 5.5, depending on when testing is eventually done

## 5.2 43 to 89 days since cattle have been removed from the lead source

Blood must not be tested during this period; the tissue/blood levels are in a state of flux during this time and blood test results are unreliable.

## 5.3 90 to 364 days since cattle have been removed from the lead source

See Figure 2.

- collect blood from all at-risk cattle, label and dispatch as in step 5.1
- animals with:
  - blood lead levels <0.24 µmol/L will be assigned a PB2 status. This will automatically expire 12 months from the date of removal from the lead source. PB2 cattle may go to slaughter but the liver and kidneys will be condemned, unless tested at the producers' expense and shown to meet food standards.
  - blood lead levels ≥ 0.24 µmol/L will be assigned a PB1 status and be placed under movement restrictions.

- Issue an individual biosecurity direction or accept a biosecurity undertaking form the owner/manager to detain all PB1 status cattle (refer to Chemical Residues templates on the DRNSW intranet).
- When a PB2 status is applied to cattle, the LLS AO will inform the PIC owner/manager in writing:
  - the date the PB2 NLIS statuses will expire and,
  - cattle with PB2 status are allowed to move without a permit and,
  - that the movement of any animal with a PB2 status to another PIC will automatically cause the recipient PIC to be assigned an EW status once the movement is recorded on NLIS and,
  - if slaughtered, the liver and kidneys of an animal with a PB2 status must be condemned and,
  - if planning on moving an animal with a PB2 status, the PIC owner/manager should contact the receiving establishment/property prior to the movement to inform them of the device-based PB2 status and the PIC-based EW status.

#### 5.4 365 days or more since the cattle have been removed from the lead source, and the owner/manager agrees to retesting all individual PB1 cattle

See Figure 3.

- collect blood from all cattle with a PB1 status and label and dispatch as in 5.1
- animals with:
  - blood lead levels  $<0.24 \mu\text{mol/L}$  release from movement restrictions
  - blood lead levels  $\geq 0.24 \mu\text{mol/L}$  will continue movement restrictions and PB1 status. The timing of future retesting will be determined by the LLS veterinarian and SRC based on lead levels detected at this test compared to previous test results

NOTE:

- All PB2 statuses are automatically removed 365 days after removal from lead source i.e., no blood test is required to remove a PB2 status.
- Retest blood collection may be undertaken by LLS authorised officers such a biosecurity officer. The case remains the responsibility of an LLS veterinarian who is involved in the blood result interpretation, decision-making and advice provided to the stock owner/manager

#### 5.5 364 days or more since cattle have been removed from the lead source and have not been previously tested

See Figure 4.

- collect blood from a sample of cattle from the mob/herd (Table 1: Sampling size for herd release from detention). Label and dispatch as in step 5.1
- results:
  - If all sampled cattle are  $< 0.24 \mu\text{mol/L}$ : release entire mob/herd from movement restrictions
  - If one or more animals from the tested sample have blood lead levels  $\geq 0.24 \mu\text{mol/L}$ , then all remaining animals in the mob/herd will need to be individually tested (pooling may be considered, see below). Any cattle with blood lead levels  $\geq 0.24 \mu\text{mol/L}$  from this test will continue with movement restrictions and PB1 status. Any cattle with blood lead levels  $<0.24 \mu\text{mol/L}$  will be released from movement restrictions and PB1 status removed.

NOTE: To reduce costs on large numbers of untested cattle which are considered to be low risk, samples may be pooled, in pools of two at the laboratory. Individual samples are retrieved on any positive pools to determine whether one or both samples are lead affected. Pooling individual samples is a considerable cost reduction, when the anticipated number of positives is considered to be low and the number of animals high.

## 5.6 When source of lead contamination and/or timing of exposure is not clear

- The SRC will lead an individual event risk assessment, in consultation with representatives from LLS, NSW Food Authority, NRS and/or other experts at the discretion of the SRC.
- The SRC will propose an evidenced-based management proposal within a 20-business-day time frame based on the findings of the risk assessment.
- The NSW CVO must approve the management plan.

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## 6.0 Notification of the State Residue Coordinator

LLS veterinarian immediately notifies SRC via the [residues.animal@dpi.nsw.gov.au](mailto:residues.animal@dpi.nsw.gov.au) of all NLIS/RFID tag numbers and the corresponding current statuses based on all blood test results, so that appropriate NLIS statuses may be applied.

All RFID status updates must be emailed to the SRC by the LLS veterinarian and be in Excel, Word or email formats. Exporting from the RFID scanner in Excel format is the most efficient method. If this is not possible please email the numbers as a list typed in the following format: 9XX XXXXXXXXXXXXX. Handwritten RFIDs or lists in pdf format will not be accepted.

When emailing the SRC to request removal of PB1 status, please include details of the PIC number, the original date of removal from the lead source, the RFIDs that are eligible to have the PB1 status removed and the blood results, including the key used to identify the animals.

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## 7.0 Individual biosecurity direction and undertakings

LLS authorised officer varies individual biosecurity direction/ undertaking to reflect the number of animals under movement restrictions and their most recent statuses (refer to biosecurity direction procedure and biosecurity undertaking procedure (<https://www.dpi.nsw.gov.au/about-us/policies-procedures>)). Example individual biosecurity direction and undertaking for chemically affected food producing animals is available on DRNSW intranet ([Chemical Residues](#)).

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## 8.0 Update of NLIS statuses

The SRC updates NLIS with most recent statuses (PB1 or PB2) and emails any status change to LLS veterinarian as confirmation.

The PIC on which a PB1 or PB2 status RFID is currently linked will automatically be assigned an EW status in the NLIS database. The SRC will check that the RFID numbers are on the correct PIC. If the PIC currently linked with a PB1 or PB2 status RFID is not the same as the PIC in reality, the LLS veterinarian will inform the producer as such, and it is the producer's responsibility to update movements on the NLIS database within two (2) business days. See work instruction- NLIS PB status application INT17/41995.

The SRC will undertake an annual audit of PIC numbers with PBI or PB2 statuses and send a list of these PIC numbers to LLS Veterinarians.



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## 9.0 Other considerations

### 9.1 Tracing of at-risk cattle moved prior to the identification of the lead contamination

The LLS authorised officer will interrogate the NLIS database and ask the producer/manager for information regarding the destination PIC of all at-risk animals moved off the property from first possible exposure date.

The property managers for the identified PIC numbers will be contacted and an investigation will be carried out in accordance with the NSW procedure for lead affected food producing animals. For movements within NSW, LLS veterinarian will contact the LLS veterinarian in the region the at-risk animal(s) have moved to, and the local LLS veterinarian will follow up. For interstate movements, the LLS veterinarian will inform the NSW SRC. The NSW SRC will brief the NSW Chief Veterinary Officer (CVO) or NSW Deputy CVO and once approved, the NSW SRC will inform the SRC in the relevant jurisdiction of the movement. NSW DPI may assist with the costs of testing for any such trace animals initially.

### 9.2 Movement of cattle with PB status

- Property-to-property movement is allowed with a movement permit (refer to Example –Individual Permit Chemical Residues on the [Chemical Residues](#) landing page). This permit is issued by an authorised officer, preferably the locally based LLS veterinarian in the LLS region within which the animal/s reside. If moving to another LLS area or interstate, the authorised officer issuing the permit will notify the destination LLS area or jurisdictional equivalent of the movement, prior to the event. If the request is to move to another jurisdiction, the LLS AO notifies the NSW SRC, who then notifies the SRC in the receiving jurisdiction of the proposed movement.
- Movement permits must not be issued for PB1 status animals to move to an abattoir or a knackery. The meat from these animals is considered not suitable for human food or pet food. If a PB1 animal reaches an abattoir, the EW status should alert the establishment to prevent the animal entering the food chain. This may involve the animal being returned to the property of origin. If the animal is slaughtered the carcass is retained and sampled and tested for lead at the owner's expense. Kidneys and liver are destroyed.
- The carcass meat from individuals with a PB2 status is considered safe for human consumption, but the liver and kidneys are not and must be condemned, unless tested at the cattle producers' expense and confirmed to meet food standards. Cattle with a PB2 status are allowed to move to a saleyard, abattoir or knackery without a permit. The PIC owner/manager should contact the receiving establishment prior to the movement to inform them of the PB2 status.
- The LLS AO that issues any such movement permit emails the SRC ([residues.animal@dpi.nsw.gov.au](mailto:residues.animal@dpi.nsw.gov.au)) with the permit details prior to the date of the movement.
- Movement of any animal with a PB status to another PIC will automatically cause the recipient PIC to be assigned EW status once the movement is recorded on NLIS.

### 9.3 Subsequent offspring of lead-affected cattle

- Calves born to cows with PB1 statuses are considered to be lead affected. These calves must be tagged with an RFID when first yarded or by three months of age, whichever is the earliest, and assigned a PB1 status. The LLS Veterinarian must send the relevant RFID number of the calf to the state residue coordinator to assign the PB1 status on the NLIS database within two business days of receiving the new RFID tag number. These calves should retain their PB1 status until they

are weaned (i.e., no longer able to suckle) from their PB1 status dams and are greater than five months of age. The LLS veterinarian must then send the calf's RFID number to the SRC for status removal who will update the NLIS database within two business days of receiving the RFID tag number.

- Calves from PB2 status dams will not be considered lead affected.

#### 9.4 Milk from lactating cows with PB1 or PB2 status

- Milk from a cow with a PB1 status is not fit for sale and not fit for consumption by people or food-producing animals (including calves)
- Milk from PB2 cows may be used for human consumption and food-producing animals (including calves).

#### 9.5 Payment for blood testing

NSW DPI will pay for blood testing of up to six animals if lead toxicity is a reasonable differential diagnosis. Once lead toxicity is confirmed as a diagnosis, all further testing is at the owner's expense.

#### 9.6 Cattle with PB1 or PB2 status with lost RFIDs

The producer is responsible for replacing lost tags with the appropriate tag type (breeder or post-breeder) and informing an LLS AO within two business days. The LLS AO in turn advises the SRC of the new NLIS/RFID tag number. If two animals or more have lost their tags and the LLS veterinarian is unable to distinguish between the animals, all animals with lost tags will require retesting if there is doubt about the lead status of any. The LLS veterinarian updates the individual biosecurity direction/ undertaking with the new RFID tag numbers and advises the SRC via email ([residues.animal@dpi.nsw.gov.au](mailto:residues.animal@dpi.nsw.gov.au)), who will update the NLIS database within two business days of receiving the new RFID tag numbers.

#### 9.7 Cattle with a PB1 or PB2 status that die on-farm

The producer is responsible for informing an LLS authorised officer of any deaths (natural causes or humane euthanasia on welfare grounds) of animals with PB1 or PB2 statuses on-farm as soon as practicable – maximum two business days after becoming aware of the death. The LLS authorised officer must then inform the SRC of the death via email ([residues.animal@dpi.nsw.gov.au](mailto:residues.animal@dpi.nsw.gov.au)), including the RFID number. The SRC must then deactivate the animal on the NLIS within two business days of receiving the email and send a confirmatory email to the LLS authorised officer.

Missing cattle with PB1 or PB2 statuses should be reported in the same manner as dead cattle.

The RFID will always have a PB status which would be detected if the animal shows up at a saleyard or abattoir at a later date.

A producer may opt to humanely euthanise an animal with a PB1 or PB2 status on-farm. The producer must inform the LLS authorised officer prior to the event if the humane euthanasia is due to persistently high lead levels. The LLS authorised officer must then discuss the case with the SRC, prior to the euthanasia.

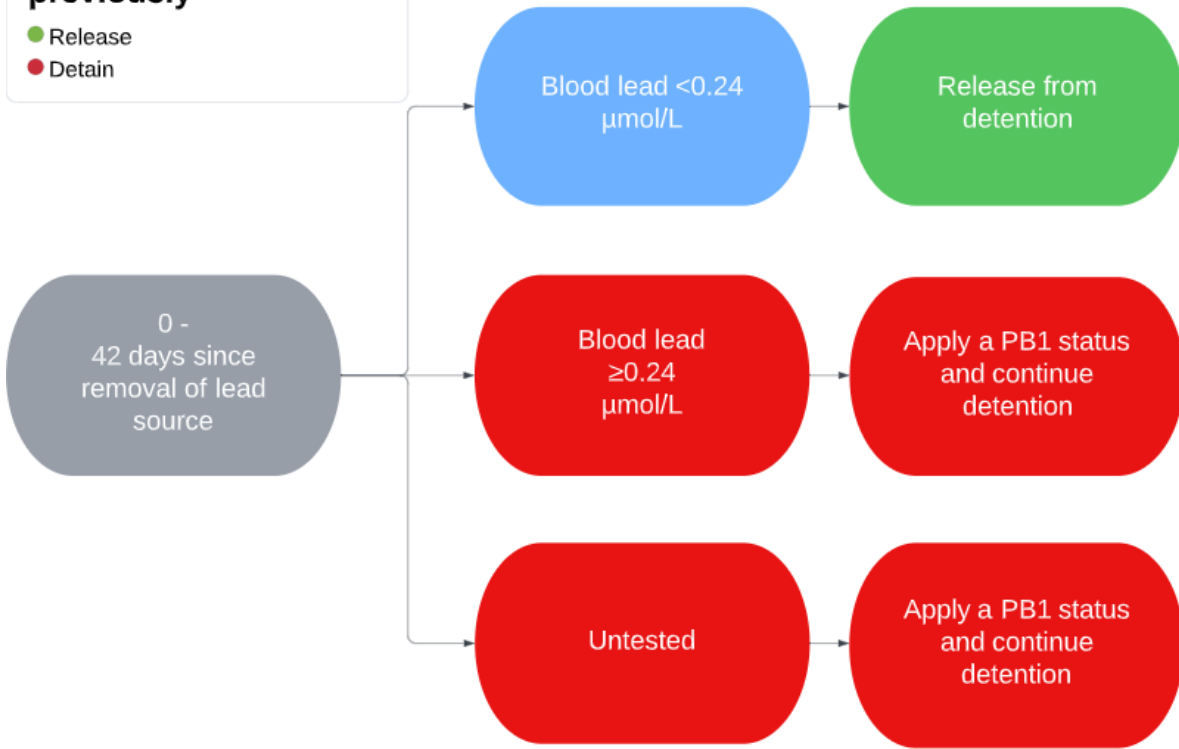
The LLS authorised officer must then inform the SRC of the euthanasia via email, including the RFID number. The SRC must then deactivate the animal on the NLIS within two business days of receiving the email and send a confirmatory email to the LLS authorised officer.

Table 1: Sampling size for herd release from detention  $\geq 12$  months after removal from lead source

Total number of at-risk animals	Number of at-risk animals to be sampled
$\leq 15$	Test all animals
16-20	15
21-30	18
31-40	23
41-50	26
51-60	30
61-100	35
101-200	45
201 or more	50

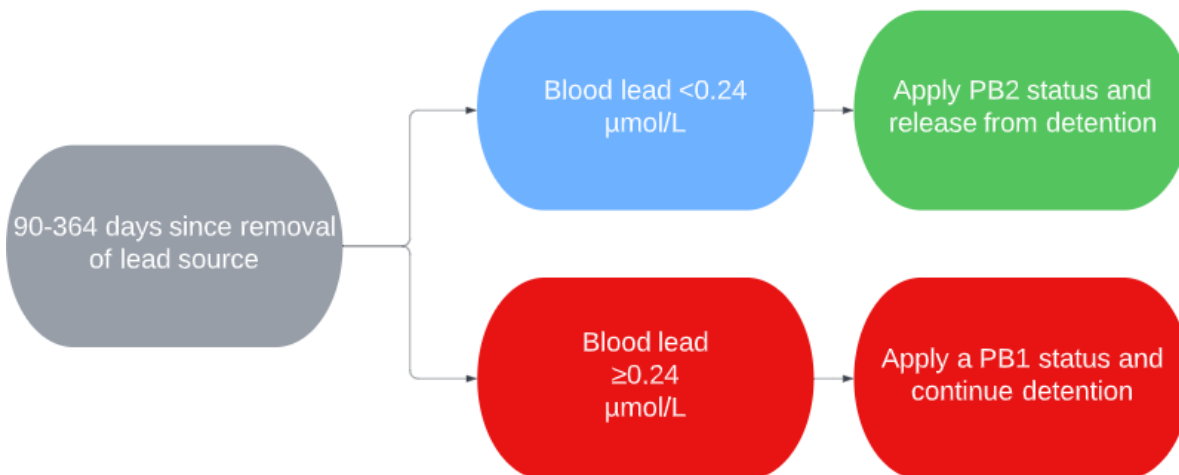
**Figure 1: Removal of lead source 0-42 days previously**

- Release
- Detain



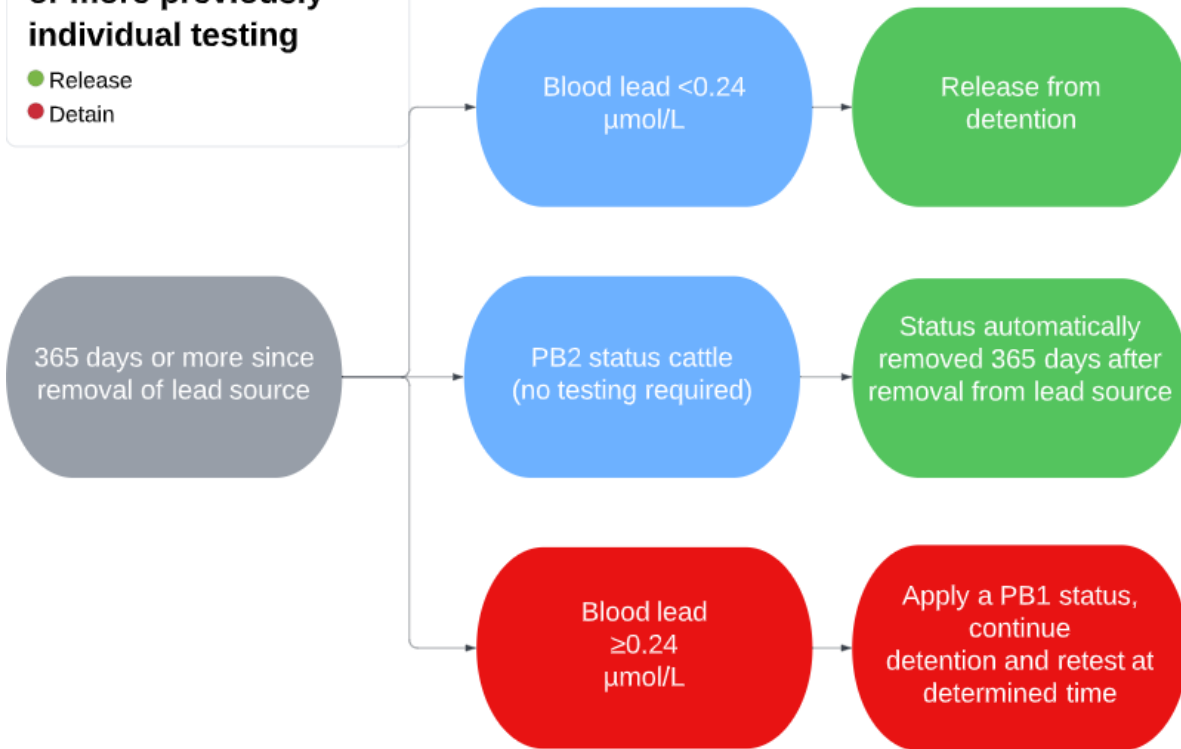
**Figure 2: Removal of lead source 90-364 days previously**

- Release
- Detain



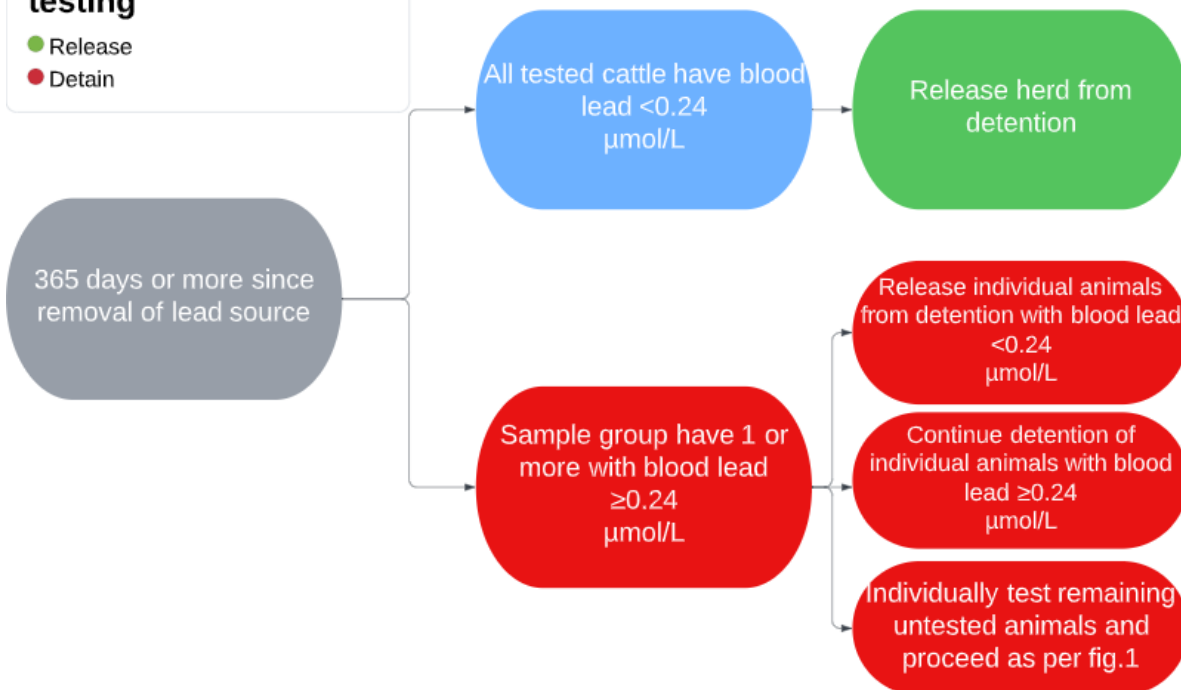
**Figure 3: Removal of lead source 365 days or more previously - individual testing**

- Release
- Detain



**Figure 4: Removal of lead source 365 days or more previously - sample mob/herd testing**

- Release
- Detain



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## Definitions and Acronyms:

- **Animal:** a food producing animal as defined in the Biosecurity Regulation 2017
- **Authorised officer (AO):** as defined in Biosecurity Act 2015
- **Blood sample:** 5mL of blood collected in an EDTA tube. Lead levels  $\geq 0.24 \mu\text{mol/L}$  are considered positive.
- **Commodity:** is an animal food commodity as defined in the Biosecurity Regulation 2017
- **CVO:** Chief Veterinary Officer
- **DPI:** NSW Department of Primary Industries
- **EW:** early warning status - property carrying cattle with a high-risk status that may be unfit for human consumption
- **LHMS:** Livestock Health Management System
- **LLS:** NSW Local Land Services
- **LLS veterinarian:** district veterinarian or team leader animal biosecurity. LLS veterinarians are authorised officers under the *Biosecurity Act 2015*.
- **NLIS:** National Livestock Identification Scheme
- **NRS:** National Residue Survey- the purpose of this is to manage monitoring programs for agricultural chemicals, veterinary drugs and natural contaminants in animal food commodities in Australia.
- **PB1:** Cattle under restrictions due to lead residues and not to be sold for slaughter. If slaughtered, test meat for lead, at owner's expense. Condemn liver and kidneys.
- **PB2:** Cattle under restrictions due to lead residues. Unacceptable residues may not apply to carcass meat. Condemn liver and kidneys, or test at owner's expense.
- **PIC:** Property Identification Code
- **RFID:** Radio Frequency Identification Device
- **SRC:** State Residue Coordinator- a contact officer appointed by NSW Government to liaise with the Commonwealth Government of Australia to manage the NRS.
- **Tissue samples:** kidney is the preferred tissue, but liver is also acceptable. Require 5g of tissue for analysis and prefer fresh tissue. Lead levels  $> 0.5 \text{ mg/kg}$  are positive.

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## Documentation:

- Policy - Biosecurity collection, use and disclosure of information
- Policy - Information Security (IND-I-197)
- Policy - Code of Ethics and Conduct
- Procedure - Biosecurity collection, use and disclosure of information
- Biosecurity Regulation 2017
- Policy - Chemically affected food producing animals, animal food commodities and stock food
- Policy - Records Management (IND-I-177)

- Policy -Classified Information (IND-I-196)
- Policy - Government Information (Public Access) (IND-I-178)
- Primefact 413 Lead affected cattle
- Work instruction NLIS PB status application INT17/41995

## Records:

- Individual biosecurity direction for lead affected food producing animals – available on NSW DPIE intranet
- Undertaking for lead affected food producing animals - available on NSW DPIE intranet
- Biosecurity permit for movement of chemically affected food producing animals - available on NSW DPIE intranet
- Records created as a result of this procedure are stored in the Livestock Health Management System (LHMS).
- Records relating to properties placed under biosecurity restrictions must be maintained for at least ten years.

## Revision history:

Version	Date issued	Notes	By
1	01 July 2017	Substantially revised procedure in response to the Biosecurity Act 2015	Animal Biosecurity and Welfare
1.1	25 September 2017	Minor amendments to 5.1, 5.3 and 6	Animal Biosecurity Services and Response
2.0	06 September 2019	Minor amendments to hyperlinks, 5.1. Addition of items 9.6 and 9.7. Clarification of what biosecurity officers can do.	Animal Biosecurity Risk Management
3.0	January 2023	Entire procedure reviewed	Animal Biosecurity

## Contact:

Branch or unit contact and telephone number – use position rather than name.

- Animal Biosecurity NSW – General  
Ph: 1800 808 095  
[biosecurity@dpi.nsw.gov.au](mailto:biosecurity@dpi.nsw.gov.au)

## Appendix:

- **1. Livestock Health Management System Entry**
  - Select diagnostic event
  - In general details tab:- differential diagnosis select “toxicity- lead”
    - Program: select “surveillance” and “residue & food safety” on the initial visit; select “residue & food safety” for all follow up visits.

Sources: [Enter sources]

- Complete clinical exam tab.
- Complete lab tests tab.
  - Specimen advice should be diagnosis for initial testing and monitoring for follow-up testing.
- Complete diagnosis tab
  - select “toxicity- lead” for final diagnosis if positive for lead toxicity; select “toxicity- lead” for evidence based exclusions if negative for lead toxicity,
  - include lab reference no.
  - attach all laboratory results and NLIS/RFID tag numbers list.
- Complete advice/plan tab
  - Attach any relevant documents (e.g. undertakings, individual biosecurity direction).
- **2. Storage of blood samples**
  - EDTA tubes should be stored as whole bloods, i.e. not centrifuged.
  - For long term storage samples need to be frozen to prevent bacterial overgrowth. For short term storage (up to a week) EDTA tubes can be stored in the fridge.
  - Sample tubes should be plastic, half full and stored on the side to minimise the risk that frozen tubes split/burst on freezing.
  - Sample tubes that split or burst during freezing require additional packaging while thawing to contain the eventual spill as it may present a hazard to laboratory staff.
  - Frozen samples are to be stored at the LLS office.