

# Cysticercus bovis – fact sheet

## Cysticercus bovis (C. bovis)

### Detection guide for South Australian abattoir workers

Bovine cysticercosis (formerly known as beef measles) is a notifiable disease in SA, caused by infection with *Cysticercus bovis* (*C. bovis*).

#### What it is

*C. bovis* is the intermediate (larval) stage in the life cycle of the human tapeworm *Taenia saginata*. The lifecycle involves humans and cattle: the human must get the tapeworm from cattle (meat) and cattle only get the infection from humans (faeces).

#### Key Facts:

- Cattle become infected by ingesting tapeworm eggs from human faecal contamination
- The eggs develop into small cysts (5-10 mm) in the animal's muscle tissue
- These cysts can remain infective for up to 2 years or possibly longer
- Only 10-20% of cysts found at abattoirs are still alive; the remainder have degenerated but remain visible

*Taenia saginata* (*C. bovis*) is a notifiable disease under the *Livestock Act 1997* (SA). This means there is a legal obligation to report if you know or suspect that an animal has this disease (see "How to report").

#### Why detection matters

Proper detection and management of *C. bovis* is crucial for:

- Preventing human infection with tapeworms
- Maintaining meat export market access
- Protecting the reputation of the Australian meat industry
- Ensuring compliance with food safety standards
- Fulfilling obligations under legislation

#### Detection of *C. bovis* in abattoirs

Maintain routine inspection procedures - no special handling is required. If unsure - ask your meat inspector/Meat Safety Officer.

#### Inspection protocol

- As identified in the Australian Standard for Hygienic production and transportation of meat and meat products for human consumption (AS4696:2023):
  - Conduct visual examination of muscle surfaces and cut areas during standard processing
  - Pay particular attention to heart and jaw muscles
  - Look for small, translucent cystic lesions in high-risk anatomical locations

#### Primary cyst locations

Inspect these areas carefully during routine processing:

- **Heart muscle** (most common site)
- **Masseter muscles** (jaw area)

- **Diaphragm**
- **Tongue**
- **Skeletal muscle** (general body musculature)

### Cyst characteristics

- **Size:** 5-10 mm diameter
- **Appearance:** Translucent or white, round to oval
- **Texture:** Fluid-filled, soft to touch
- **Internal features:** May contain a visible white dot (scolex/head)
- **Number:** Usually single cysts, but multiple cysts possible

## Response procedures

### Immediate actions upon detection

1. **Document findings:**
  - Note exact location(s) of cyst(s)
  - Record number of cysts found
  - Note size and appearance
  - Record animal identification details
2. **Carcass management:**
  - Mark the carcass clearly for veterinary examination
  - Segregate affected carcass from processing line
3. **Notification:**
  - Immediately notify the meat inspector/meat safety officer or plant veterinarian
  - Report to PIRSA (see “How to report”)

### Carcass disposition

- Qualified veterinary personnel will examine detected cysts
- Decision on whole carcass or partial condemnation will be made based on examination findings
- Follow all directions from meat inspection staff regarding carcass handling

## Key points to remember

- Maintain vigilant inspection procedures
- When in doubt, always consult meat inspection personnel
- Ensure proper documentation of all findings
- Follow all plant protocols for notifiable disease management

## How to report

Early detection and reporting protect public health, preserve market access, and maintain the integrity of South Australia's livestock industry.

If you suspect *C. bovis* infection, contact:

### Primary Industry and Regions (PIRSA)

- **Emergency Animal Disease Hotline** 1800 675 888
- **Email** [pirsa.animalbio@sa.gov.au](mailto:pirsa.animalbio@sa.gov.au)
- **Further information** [Reporting animal disease](#) page of the PIRSA website

### Your legal obligations

*Taenia saginata* (*Cysticercus bovis*) is a notifiable disease under the South Australia [Livestock Act 1997](#). Obligations apply under the *Livestock Act 1997* including those outlined in Section 27:

- you must report promptly if you know or suspect that an animal has this disease (see “How to report”)
- you must cooperate with official investigations by providing further information as requested by an inspector
- you must take all reasonable measures to control or eradicate the disease.

Under the [Livestock Regulations 2013](#) you must not feed to livestock, or permit livestock to feed on, a stock food that consists wholly or partly of faeces (Regulation 39).

*This fact sheet provides general guidance only. For further information about your legal obligations, refer to the Livestock Act 1997. For specific advice regarding your property or circumstances, consult with PIRSA veterinary officers or your private veterinarian.*

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- *Livestock Act 1997 (SA):*  
[legislation.sa.gov.au/lz?path=%2FC%2FA%2FLIVESTOCK%20ACT%201997](http://legislation.sa.gov.au/lz?path=%2FC%2FA%2FLIVESTOCK%20ACT%201997)
  - *Livestock Regulations 2013 (SA):*  
[legislation.sa.gov.au/lz?path=/c/r/livestock%20regulations%202013](http://legislation.sa.gov.au/lz?path=/c/r/livestock%20regulations%202013)
  - PIRSA Reporting animal disease: [pir.sa.gov.au/reporting-animal-disease](http://pir.sa.gov.au/reporting-animal-disease)