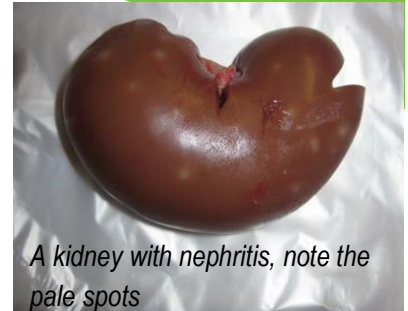


## Nephritis

**Nephritis** is the term used to describe damaged kidneys. The damage seen at the abattoir may have been caused:

1. Some time ago - kidneys are usually shrunken, irregular and scarred; or
2. Recently - kidneys are usually swollen and may be discoloured or spotty.



### ECONOMIC CONSEQUENCES

On Farm	At the Abattoir
<ul style="list-style-type: none"> <li>• <b>Reduced growth rate/weight loss</b> – in cases of long term kidney damage. Can be significant.</li> <li>• <b>Deaths</b> – may be sudden or after weeks to months of doing poorly (depending on cause).</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Kidney condemnations</b> – affected kidneys are condemned (this is an industry cost as does not affect carcass weight for producers)</li> <li>• <b>Carcass condemnations</b> – rare, associated with whole of carcass affects of kidney failure (e.g. fluid accumulation in the tissue).</li> </ul>

### WHAT CAUSES NEPHRITIS?

There are many causes of nephritis however the most common include:

1. **Infections** – spread of bacteria to the kidneys, often associated with:
  - Marking/mulesing wounds; or
  - Rumenitis (due to grain poisoning/acidosis)
2. **Poisonous plants** – Soursobs, lesser loosestrife, sorrel, pigweed, lantana, Buffel grass and oaks (acorns)
3. **Toxins**
  - Over drenching – especially debilitated lambs
  - Some antibiotics; and
  - Some fertilizers (e.g. direct access to superphosphate)

### WHAT MIGHT BE SEEN ON FARM?

Signs of nephritis will only be seen if 75% or more of the kidneys are damaged, kidneys have a large reserve capacity. If damage is significant decreased production, growth and/or death may be seen. If damage is mild then sheep may show no signs of illness or adverse production affects.

Signs of nephritis are highly variable as there are many possible causes and both sudden and longer term problems, due to resultant kidney failure, are seen. Signs in a flock indicative of chronic kidney damage can include:

- Ill-thrift.
- Pale gums
- Increased urination; and
- Sporadic deaths.

## TREATMENT

Treatment will vary depending on the cause of nephritis and whether the problem is sudden or has developed over time. Sheep should immediately be moved (slowly) from known toxic plants should a problem arise.

## PREVENTION

### 1. Marking/mulesing hygiene and management

- Use sharp and clean marking equipment - disinfect and change disinfectant regularly. Use a chlorhexidine based disinfectant e.g. Hibitane.
- Avoid wet/muddy conditions.
- Minimise the time lambs are held in yards and don't overcrowd stock as this will increase faecal contamination of fresh wounds.
- Place lambs onto their feet when released from the cradle – again to avoid contamination of fresh wounds.
- Mark smaller mobs if possible (400 or less) so lambs can be moved back to their lambing paddock as soon as possible.
- Minimise/avoid lamb and ewe separation.
- Allow ewes/lambs to walk slowly back to their paddock from the yards and avoid driving which causes crowding and dust.

### 2. Ensure any rations fed are correctly balanced and introduced slowly

- Seek nutritional advice to ensure rations are balanced.
- Ensure adequate roughage is fed - hay digestibility, quality and quantity is important; and
- Backgrounding is advised and gradually introduce rations over a minimum of 2 weeks.

### 3. Prevent the introduction of weeds

- Quarantine newly purchased sheep for seven days; weeds will be easier to control in one paddock if they are inadvertently brought in.
- Sow certified seed.
- Feed hay/grain from known uninfested sources.

### 4. Weed control and grazing management

- Maintain competitive pastures - ensure toxic weeds do not dominate.
- Control weeds with spray topping, crash grazing, spray-grazing and slashing (as indicated/practical).
- Ensure weed control includes laneways/yards and shelter belts; pay particular attention to soursobs around yards.
- Provide adequate hay if there is no option but to let hungry stock on weedy paddocks. Introduce slowly.

### 5. Measure drench and antibiotic dosage rates accurately and drench strategically using faecal egg counts.

## FOR FURTHER INFORMATION:

Contact the Enhanced Abattoir Surveillance Program manager Dr Allison Crawley (Phone: 08 8429 0866 or Email: [Allison.Crawley@sa.gov.au](mailto:Allison.Crawley@sa.gov.au)), your local veterinarian, livestock consultant or PIRSA Animal Health Officer.

**FOR ANY SIGNS OF UNUSUAL OR SERIOUS DISEASE, PLEASE CALL THE ANIMAL DISEASE HOTLINE: 1800 675 888**