

# Treatment of burnt wildlife

Dr Anne Fowler, BVSc, MACVSc



## Introduction:

There are around 300 wildlife carers in Victoria who have been trained in the treatment of burnt wildlife in the last 2 years. The role of vets is to assess, provide initial treatment, dispense medication and perform follow-ups on burnt wildlife. Wildlife likely to be brought in include koalas, ringtail possums and kangaroos. Reptiles and echidna are often only found some days later. These notes will focus on the marsupials.

1. Assess the burns. Burns to greater than the feet and a small part of the face have a guarded prognosis. Euthanasia is indicated for extensive burns, aged animals, burns to genitalia, eyeball rupture (from the heat), broken limbs/paralysis (from accidental trauma).
2. Assess the depth of the burns
  - a. Superficial – blisters, redness, painful
  - b. Superficial partial thickness: blisters, redness, painful, brisk bleeding on pin prick. Will heal in 2 weeks
  - c. Deep partial thickness: blotchy skin, reduced pain, hair loss, slow bleed on pin prick. Will heal in 2 – 4 weeks
  - d. Full thickness: not painful, not bleed, eschar- leathery skin present
3. Assess the animal – check for lactation status, age, presence of 1 testes (in koala) and concurrent disease – such as Chlamydia, skin infections etc.
4. Start fluids. Intravenous fluids can be given to koalas during treatment. However, subcutaneous fluids are simple, cheap and easy to give, and much less stressful. Aim to provide 10 – 15% of fluids bodyweight daily. This may be divided into 3-4% bodyweight 3 – 4 times daily. Continue fluids for a minimum of 5 days. Give fluids at each subsequent bandage change.
5. Burns need to be assessed and treated under sedation/anaesthesia.
6. Koala – sedate with diazepam 0.5 – 1mg/kg IM, then mask with iso/02 or use alfaxan 1-2mg IM/IV. Zoletil can also be used (check Virbac for dose rate).
7. Possums: sedate with diazepam 0.5 – 1mg/kg IM and mask down with iso/02.
8. Soak burns for 10 minutes in 0.9% saline. Change the water as soon as it becomes dirty. After 10 minutes, necrotic tissue becomes white. This is gently debrided. Do not leave flaps of dead skin – they do not protect the burn but harbour bacteria.
9. Antibiotics are indicated. The best choice is a fluoroquinolone – Baytril 5mg/kg for possums and 10mg/kg BID for koalas. This will target Pseudomonas and preserve the gut flora in these caecal fermenting species.
10. Pain relief – metacam 0.2mg/kg SID orally for up to 2 weeks.
11. Apply silvazene evenly over all surfaces.
12. Apply a non-adherent dressing – such as melolin.
13. Apply a bandage with vetrap/coplus – work from the toes up. Bandages need to be light and firm, not tight. Bandages need to be changed every second day at the least frequency. Silvazene lasts only 24 hours and thus a balance between repeated sedation and bandage changes needs to be made.
14. Restarting these animals on appropriate nutrition is important. Electrolyte replacers can be given for the first 3 days in between feeds. Assist feeding with milk such as divetalact (possums, koalas) or infasoy (koalas) provides nutrition and fluids. Koalas must have access to 2kg of leaf which is sprayed with water daily. ALL animals must have access to fresh water.