The information supplied in this booklet is intended to assist veterinary practitioners in providing initial care and first aid to wild macropods. The information provided has been sourced from and reviewed by qualified veterinarians. Macropods requiring ongoing hospitalisation will require input from experienced rehabilitators to address husbandry and housing needs. Macropods no longer requiring veterinary care should be transferred to an appropriate rehabilitator as soon as possible.

Supported by:

Australian Government
The Wildlife Heroes National Program is supported by the Australian Government’s Wildlife Rescue and Rehabilitation Initiative.
**Handling**
- Take care to avoid panic, chasing and struggling of macropods during capture and handling, as this may put them at risk of developing capture myopathy.
- **Medium and large** injured macropods should only be handled by someone experienced and will often require anaesthesia for safety and welfare.
- To handle a **large** macropod that is on the ground after chemical immobilisation, use several people to go in from behind sharing the weight to hold down the tail and apply pressure to the rump and shoulder area, stopping it from turning. Cover the head with a towel and stay away from the legs.
- For **small** macropods, grab the base of the tail near the rump and lift off the ground facing the legs away from you and others. Support the chest with the other hand (a). To place in a bag (pouch) have someone hold it open and insert the macropod head first, directing the body into a u-shape.
- **Small joeys** can be cupped in your hands and placed into a pouch.
- **Older joeys** can be handled in the same manner as adults above.

**Housing**
- **Pinkies** can be placed in a cotton pouch in a plastic aquarium lined with towels and maintained at 34-36°C. A thermometer should be used to monitor the pouch temperature. Ideally, they should be housed in a Humidicrib.
- Place furred orphans in a cotton pouch and then in a makeshift pouch using a pillowcase or woolen bag and coat hanger (b). Place towels underneath and inside for additional comfort and support. Maintain in a constant temperature of 30-32°C. Always provide a quiet place during the day and a safe closed room in case they get out.
- **Large joeys** can be housed temporarily on a soft bed post-operatively or if unable to move and in a recumbent state (c). Hand raised joeys once standing can temporarily be housed in a room (free of clutter) or outside pen.

**Fluid therapy**
- Warm all fluids before administration.
- Fluid therapy can be administered subcutaneously (1-3% body weight as a bolus dose), or intravenously using standard mammalian infusion rates and fluid selection principles.
- Cephalic, tarsal or lateral tail veins can be used for IV fluid administration.
- Suitable fluids include: 0.9% NaCl, Hartmanns, 0.45% NaCl + 5% glucose.

**Feeding**
- Only offer food once the animal has been warmed and rehydrated. Contact an experienced macropod rehabilitator for feeding advice if unsure.
- Adult macropods can be offered lucerne hay or commercial macropod pellet mixes in the short term, until the animal is transferred to a wildlife rehabilitator. Do not offer native vegetation unless you can confidently identify plant species. Avoid vegetation that has been sprayed with chemicals. Do not feed bread or fruit.
- Orphans can be given warmed water and glucodin or oral electrolytes for first two feeds, then suitable milk replacer (for example Wombaroo® Kangaroo Milk Replacer). This can be given either via a 1mL syringe with catheter tip, or bottle and appropriately sized teat.
- Unfurred joeys require feeding every 2-3 hours, and stimulation for defecation and urination at each feed. Excellent hygiene during feeding is critical.

**Examination**
- Only a brief and superficial examination of adult macropods will be possible without anaesthesia. For conscious examination, keep macropods in a pouch or bag and exteriorize the part of the body you want to examine.
- Age the joey via foot and tail measurements to determine age factor. This will assist with treatment and prognosis.
- Check eyes to ensure pupils are equal. Fixed, dilated pupils can be a sign of myopathy or shock.
- Check for any blood or discharge coming from the mouth, nostrils or ears.
- Check for symmetry of the head, jaw and limbs. Look for swelling, cuts or bruises and broken teeth.
- Check for bone fractures (use weight-bearing assessment and gait assessment).
- Assess the cardiovascular system, paying careful attention to the lung sounds. Aspiration pneumonia is not uncommon.
- X-rays should be part of the minimum database for any animal involved in HBC.
- Check the fur/skin for alopecia, ectoparasites, fungal infections and trauma. A heavy burden of ticks can indicate a more serious problem.
- Body temperature should be 35-37°C.

**Euthanasia**
- Macropods must be euthanised immediately when:
  - Death is imminent or highly likely, regardless of the treatment provided.
  - It is suffering from chronic, un-relievable pain or distress.
  - It is carrying or is suspected to be carrying an incurable disease that may pose a health risk to other wild animals.
  - Its ability to consume food unaided is permanently impaired (e.g. injured jaw or teeth).
  - It has significant burns to the face, genitals, digits, nail beds, tail or feet.

For euthanasia, injection of sodium pentobarbitone is critical.
- For larger macropods it is safest to use an intramuscular injectable agent such as Zoletil® for induction.
- For smaller animals use a snug-fitting anaesthetic mask at 5% isoflurane induction (d) with the macropod restrained in a bag.
- Maintain using a mask on isoflurane at 1.5 – 2% with an oxygen flow rate of 1 L/min.
- Macropods are best recovered in a pouch, sack or bag to minimize stress or struggling (e). Ensure the recovery area is warm and quiet.

**Be aware**
- Be careful of bites, scratches and kicks.
- Adult macropods should be chemically restrained for transport and treatment.
- Always check pouches for joeys – never pull a joey off the teat of a deceased mother, remove gently or cut the teat and transport teat and joey together.
- Capture myopathy in macropods is very common. Minimise stress, handling and restraint, give fluid support and maintain a quiet, warm environment to reduce myopathy risks.
- For unfurred joeys (“pinkies”), consult with an expert to confirm viability.

**Anaesthesia**
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- For smaller animals use a snug-fitting anaesthetic mask at 5% isoflurane induction (d) with the macropod restrained in a bag.
- Maintain using a mask on isoflurane at 1.5 – 2% with an oxygen flow rate of 1 L/min.
- Macropods are best recovered in a pouch, sack or bag to minimize stress or struggling (e). Ensure the recovery area is warm and quiet.

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