# SNAKEBITE MANAGEMENT CHART
### *Patient presents with possible snakebite*

**Patient is severely envenomed**
ie has one or more of:
collapse/unconscious, paralytic signs, coagulopathy, myolysis

**Patient is symptom free or has only mild or general symptoms**
ie has one or more of: headache, nausea/vomiting, abdominal pain

**FIRST AID**
Patient has had correct first aid applied ie PIB

**FIRST AID**
No effective first aid has been applied APPLY PIB first aid

**FIRST AID**
Patient has had correct first aid applied ie PIB

**FIRST AID**
No effective first aid has been applied DO NOT apply now if >1hr post-bite

*Leave PIB first aid in place until patient is stabilised, fully assessed, and antivenom given (if required)*

## TREATMENT
- Attend to "ABC" but be careful of causing bleeding
- **Insert IV line**, give IV fluid load
- **Take blood for lab tests†** and swab bite site for **venom detection***, collect urine and check for haemoglobin/myoglobin (dip stick) + keep bite site swab for venom detection
- **Commence IV antivenom** (use Polyvalent AV or mixture of monovalent AVs if snake identity uncertain - do not delay giving AV by waiting for venom detection results)
- **Monitor fluid balance**, catheterise if in doubt about urine output

## TREATMENT
- **Insert IV line**, give IV fluid load
- **Take blood for lab tests†**
- Cut away first aid bandage (if present) over bite site and swab bite site for **venom detection***
- **Collect urine** and check for haemoglobin/myoglobin (dip stick) + keep for venom detection
- **Secure supply of antivenom** (use Polyvalent AV or mixture of monovalent AVs if snake identity uncertain)
- **Monitor fluid balance**, consider catheterising if in doubt about urine output

**Repeat blood tests** at 3hrs & 6hrs post AV

**Coagulopathy is resolving**
(rise in fibrinogen/ reduction in whole blood clotting time)

**Coagulopathy not resolving**
(no rise in fibrinogen/ grossly prolonged whole blood clotting time)

**Develops or has significant symptoms or signs or abnormal blood tests** ie paralytic signs, coagulopathy, myolysis, renal impairment

Remains symptom free or minor general symptoms only (ie headache, nausea etc) and blood tests are normal, do not give antivenom

## TREATMENT
**Give appropriate Antivenom** IV, diluted, adrenaline ready (in case of anaphylactoid reaction)

*Remove first aid once IV line inserted, venom detection* and blood tests performed and reported as normal*

*Leave PIB first aid in place until patient is stabilised and antivenom given*

## TREATMENT
Continue to monitor closely repeat blood tests to ensure continuing improvement

## TREATMENT
**Give more Antivenom IV**, diluted, adrenaline ready (in case of anaphylactoid reaction)

## TREATMENT
Check patient for signs of envenoming frequently and repeat blood tests after about 2hrs, then 2-3hrs later

## TREATMENT
Once recovered, send home, but follow up for serum sickness. Consider prophylactic oral steroids for 1 week

## TREATMENT
**Admit overnight** if remains well, repeat blood tests next morning and if normal, send home

Remains symptom free or minor general symptoms only (ie headache, nausea etc) and blood tests are normal, do not give antivenom

### *Patient Discharged Home*

**PLEASE NOTE:** This chart cannot cover all possible situations and assumes an understanding of the symptoms and signs of local, general and specific envenoming by Australian venomous snakes (see Snakebite section and preceeding pages). If in doubt, seek advice from the **Poisons Information Centre** (131126) and from your local **Critical Care Referral Network**
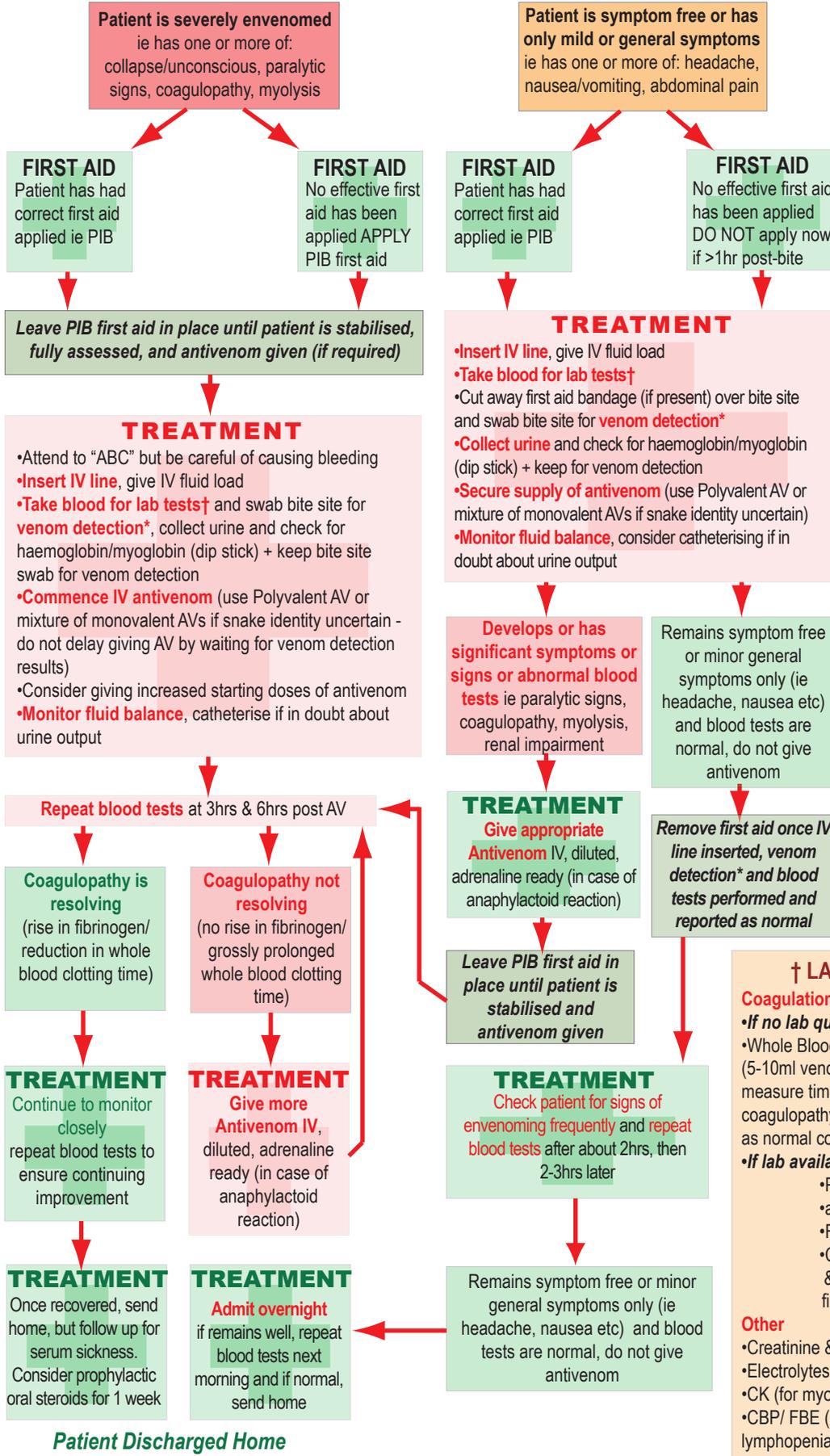
### FIRST AID FOR SNAKEBITE
**PIB** = Broad bandage over bite site, then rest of bitten limb, including toes/fingers, at same pressure as for ankle sprain, then splint limb, keep imobile

### SVDK
### SNAKE VENOM DETECTION KIT
* Cut away first aid bandage over bite site only, to allow visual access and swab for venom detection
NOTE: bite site swab is best sample
Only test urine if no bite site available AND patient has systemic envenoming
DO NOT use SVDK to determine if patient has snakebite

### † LABORATORY TESTS
**Coagulation**
- *If no lab quickly available*
- Whole Blood Clotting Time (WBCT) (5-10ml venous blood in glass test tube, measure time to clot; >10mins suggests coagulopathy, but test staff member's blood as normal control)
- *If lab available request*
    - Prothrombin time/INR
    - aPTT
    - FDP/ XDP (d-dimer)
    - CBP/ FBE (platelet count & blood film for schistocytes)

**Other**
- Creatinine & urea
- Electrolytes (especially K+)
- CK (for myolysis)
- CBP/ FBE (WCC for leukocytosis ± lymphopenia)

Flowchart developed by Professor Julian White