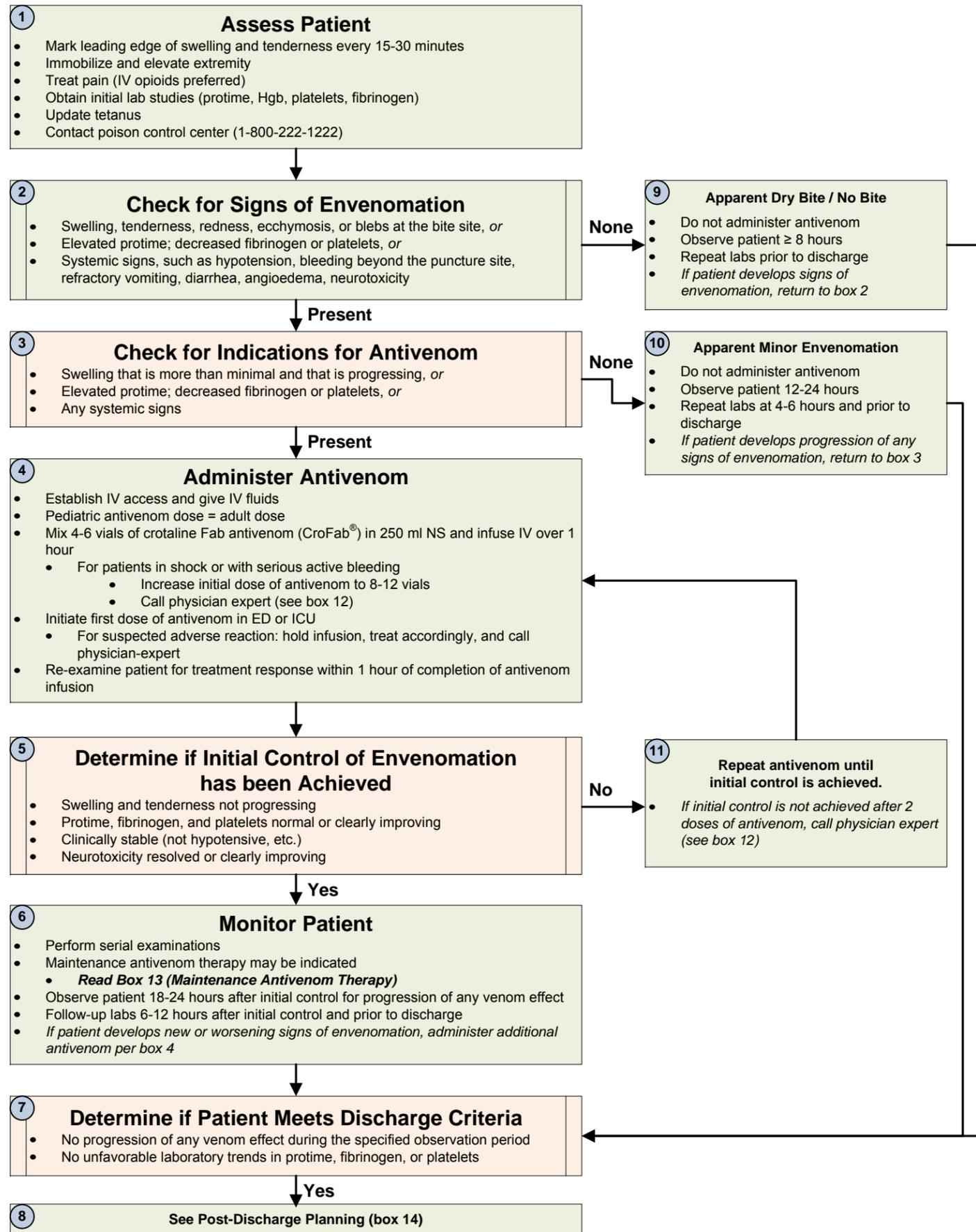


# Emergency Department and Hospital Management of Pit Viper Snakebite

Includes: Rattlesnakes, Copperheads, and Cottonmouths (Water Moccasins)



**12 When to Call a Physician-Expert**

Direct consultation with a physician-expert is recommended in certain high-risk clinical situations:

- Life-threatening envenomation**
  - Shock
  - Serious active bleeding
  - Facial or airway swelling
- Hard to control envenomation**
  - Envenomation that requires more than 2 doses of antivenom for initial control
- Recurrence or delayed-onset of venom effects**
  - Worsening swelling or abnormal labs (protime, fibrinogen, platelets, or hemoglobin) on follow-up visits
- Allergic reactions to antivenom**
- If transfusion is considered**
- Uncommon clinical situations**
  - Bites to the head and neck
  - Rhabdomyolysis
  - Suspected compartment syndrome
  - Venom-induced hives and angioedema
- Complicated wound issues**

If no local expert is available, a physician-expert can be reached through a certified poison center (1-800-222-1222) or the antivenom manufacturer's line (1-877-377-3784).

**13 Maintenance Antivenom Therapy**

- Maintenance therapy is additional antivenom given after initial control to prevent recurrence of limb swelling
  - Maintenance therapy is 2 vials of antivenom Q6H x 3 (given 6, 12, and 18 hours after initial control)
- Maintenance therapy may not be indicated in certain situations, such as
  - Minor envenomations
  - Facilities where close observation by a physician-expert is available.
- Follow local protocol or contact a poison center or physician-expert for advice.

**14 Post-Discharge Planning**

- Instruct patient to return for
  - Worsening swelling that is not relieved by elevation
  - Abnormal bleeding (gums, easy bruising, melena, etc.)
- Instruct patient where to seek care if symptoms of serum sickness (fever, rash, muscle/joint pains) develop
- Bleeding precautions (no contact sports, elective surgery or dental work, etc.) for 2 weeks in patients with
  - Rattlesnake envenomation
  - Abnormal protime, fibrinogen, or platelet count at any time
- Follow-up visits:
  - Antivenom not given:
    - PRN only
  - Antivenom given:
    - Copperhead victims: PRN only
    - Other snakes: Follow up with labs (protime, fibrinogen, platelets, hemoglobin) twice (2- 3 days and 5-7 days), then PRN

**15 Treatments to Avoid in Pit Viper Snakebite**

- Cutting and/or suctioning of the wound
- Ice
- NSAIDs
- Prophylactic antibiotics
- Prophylactic fasciotomy
- Routine use of blood products
- Shock therapy (electricity)
- Steroids (except for allergic phenomena)
- Tourniquets

**16 Notes:**

- All treatment recommendations in this algorithm refer to crotalidae polyvalent immune Fab (ovine) (CroFab®).
- This worksheet represents general advice from a panel of US snakebite experts convened in May, 2010. No algorithm can anticipate all clinical situations. Other valid approaches exist, and deviations from this worksheet based on individual patient needs, local resources, local treatment guidelines, and patient preferences are expected. This document is not intended to represent a standard of care. For more information, please see the accompanying manuscript, available at [www.biomedcentral.com](http://www.biomedcentral.com).