### Crotalinae Snakebite Flowsheet

<table>
<thead>
<tr>
<th>Date / Time 24 hr clock</th>
<th>Time of each antivenom dose</th>
<th>Has initial control of local findings/Labs/Vitals been achieved? (Y/N)</th>
<th>Symptoms (pain, neuro, respiratory, GI, CV)</th>
<th>Local Progress (cm from bite site to proximal leading edge)</th>
<th>BP</th>
<th>HR</th>
<th>Respirations</th>
<th>Pulse oximetry</th>
<th>Temp</th>
<th>PT</th>
<th>INR</th>
<th>Fibrinogen</th>
<th>D-dimer or FDP or FSP Once Only</th>
<th>Platelets</th>
<th>Hgb</th>
<th>Hct</th>
<th>BUN</th>
<th>Cr</th>
<th>CK</th>
<th>CPK</th>
</tr>
</thead>
</table>

***Perform extremity measurements (date/time marking of proximal leading edge of edema) every 60 minutes until swelling has stopped progressing (no active leading edge; there will be some proximal progression from redistribution of edema fluid). There is no utility in circumferential measurements. If there appears to be very high tissue pressures or impairment of distal circulation, contact the poison center immediately.
CONSULT THE POISON CENTER AND REVIEW ANTIVENOM PACKAGE INSERT FOR COMPLETE RECOMMENDATIONS FOR ADMINISTERING ANTIVENOM.

- Initial CroFab antivenom dose is 4 – 6 vials for >= minimal envenomations. May need to repeat 4-6 vial initial dose as needed to control swelling, hematologic effects, or hypotension.
- CBC, fibrinogen, D-dimer (or fibrin split products), PT/INR, PTT, and platelets on arrival. If significant abnormalities, repeat tests help to determine whether there is initial control of hematologic effects. After initial control, obtain a daily panel (without D-dimer).
- After control of envenomation has been established give 2 vials of antivenom every 6 hours for 3 doses. This is recommended to avoid recurrence of local symptoms of envenomation. Breakthrough progression of local effects can be treated with additional antivenom (2 vials prn).
- Update tetanus prophylaxis. Routine antibiotics are not recommended. Opioid pain relief may be required.
- Consult NMPDIC for recommendations regarding ongoing assessment and management, and post-discharge recommendations.
- Administer antivenom at recommended rates/dilution. Watch closely for allergic reactions during antivenom infusion. Be prepared to manage allergic reactions, including airway control.
- For allergic reaction (cough, pruritus, urticaria, nausea, vomiting, hoarseness, wheezing, laryngeal edema, hypotension)
  - Stop antivenom. This may be sufficient. Manage symptoms as indicated.
  - Speak with a toxicologist at the Poison Center regarding advisability of further antivenom therapy.
  - Please describe the adverse drug reaction on the following line______________________________
  - If there was an adverse drug reaction was the patient pretreated? And what drugs and dosages were used?

- NMPDIC recommends follow-up CBC, fibrinogen, PT/INR, PTT, and platelets, and wound check, 2-5 days after envenomation. Patients with early hematologic effects are at risk for recurrence of the same type and degree, and including significant hemorrhagic complications. A positive D-dimer or FSP (obtain ONCE, at least 2 hours post envenomation) is not, in itself, an indication for antivenom, but indicates fibrinogenolytic activity and is a risk factor for recurrent hypofibrinogenemia.
- A 20% increase in platelets post-CroFab loading dosing is a risk factor for recurrent coagulopathies.
- Serum sickness may occur 5 – 21 days after antivenom administration (fever, arthralgias, myalgias, rash).

- PLEASE FAX A COPY OF THIS DOCUMENT TO THE NEW MEXICO POISON AND DRUG INFORMATION CENTER WHEN THE PATIENT IS DISCHARGED. (505) 272-5892
POST-HOSPITAL CARE

RECURRENCE
Recurrence of hematologic effects can occur up to several days after a rattlesnake envenomation that has been treated with CroFab Antivenin. The reason for this is that the half-life of the venom is longer than the half-life of the antivenin. Patients with a higher risk of recurrence are those who have experienced early hematologic effects. A positive D-dimer, or FSP indicates fibrinogenolytic activity and is a risk factor for recurrent hypofibrinogenemia. Recurrent effects can be of the same type and degree as the early effects, and may include significant hemorrhagic complications.

The Poison Center now recommends:
48 - 72 hours after the last maintenance dose of CroFab:
Labs: CBC, fibrinogen, coagulation profile

The recommendation for follow-up care:
2 – 5 days after envenomation and as needed after that:
Wound check
Assess need for physical therapy / occupational therapy

The Poison Center will:
Obtain the home telephone number while the patient is in the hospital.
Contact the patient within 36 hours of discharge to discuss symptoms and what to expect and to reiterate the need for the follow-up visit.
Obtain the PCP’s telephone number, if possible, and contact the PCP to discuss the need for and timing of follow-up labs, as well as the need for follow-up wound check visit(s).

If for any reason the patient or treating physician would prefer that the Poison Center not contact the patient after discharge from the hospital, please discuss this with the Poison Information Specialist.

Serum sickness may occur 5 – 21 days after anti-venin administration (fever, arthralgias, myalgias, rash).