History
- Type of bite / sting
- Description or bring creature / photo with patient for identification
- Time, location, size of bite / sting
- Previous reaction to bite / sting
- Domestic vs. Wild
- Tetanus and Rabies risk
- Immunocompromised patient

Signs and Symptoms
- Rash, skin break, wound
- Pain, soft tissue swelling, redness
- Blood oozing from the bite wound
- Evidence of infection
- Shortness of breath, wheezing
- Allergic reaction, hives, itching
- Hypotension or shock

Differential
- Animal bite
- Human bite
- Snake bite (poisonous)
- Spider bite (poisonous)
- Insect sting / bite (bee, wasp, ant, tick)
- Infection risk
- Rabies risk
- Tetanus risk

**If Needed**
Carolinas Poison Control
1-800-222-1222

### General Wound Care Procedure

**IV Procedure if indicated**

**IO Procedure if indicated**

### Scene Safe

- **YES**
  - Call for help / additional resources
  - Stage until scene safe

- **NO**
  - Scene Safe

### Appropriate Pain Protocol

- **YES**
  - Appropriate Pain Protocol

- **NO**
  - Not Appropriate Pain Protocol

### Calling Bites and Envenomations

- **YES**
  - General Wound Care Procedure
  - IV Procedure if indicated
  - IO Procedure if indicated

- **NO**
  - Transport

### If Needed
- Hypotension / Shock Protocol
- Appropriate Trauma Protocol(s)
- Allergic Reaction / Anaphylaxis Protocol

### Identification of Animal

- Spider Bite
- Bee / Wasp Sting
- Snake Bite
- Dog / Cat
- Human Bite

### Immobilize Injury

- Elevate wound location if able
- Apply Ice Packs
- Remove any constricting clothing / bands / jewelry

### Muscle Spasm

- Midazolam 0.5 – 2 mg IV / IO
- Over 2 to 3 minutes
- Midazolam 1 to 2 mg IN
- Midazolam 5 mg IM
- Maximum 5 mg
  - PED:
    - Midazolam 0.1 – 0.2 mg/kg IV / IO
    - Over 2 to 3 minutes
    - Midazolam 0.2 mg/kg IN

### DO NOT apply ICE

- Remove all jewelry from affected extremity
- Mark Margin of Swelling / Redness and Time

### Notify Destination or Contact Medical Control

- Animal bites: Contact and Document contact with Animal Control Officer

Protocol 68
This protocol has been altered from the original 2012 NCCEP Protocol by the Johnston County EMS System Medical Director 2012
Adult / Pediatric Environmental Section Protocols

Pearls

- **Recommended Exam:** Mental Status, Skin, Extremities (Location of injury), and a complete Neck, Lung, Heart, Abdomen, Back, and Neuro exam if systemic effects are noted
- Human bites have higher infection rates than animal bites due to normal mouth bacteria.
- Carnivore bites are much more likely to become infected and all have risk of Rabies exposure.
- Cat bites may progress to infection rapidly due to a specific bacteria (Pasteurella multicauda).
- Poisonous snakes in this area are generally of the pit viper family: rattlesnake and copperhead.
- Coral snake bites are rare: Very little pain but very toxic. "Red on yellow - kill a fellow, red on black - venom lack."
- Amount of envenomation is variable, generally worse with larger snakes and early in spring.
- If no pain or swelling, envenomation is unlikely. About 25% of snake bites are "dry" bites.
- Black Widow spider bites tend to be minimally painful, but over a few hours, muscular pain and severe abdominal pain may develop (spider is black with red hourglass on belly).
- Brown Recluse spider bites are minimally painful to painless. Little reaction is noted initially but tissue necrosis at the site of the bite develops over the next few days (brown spider with fiddle shape on back).
- Evidence of infection: swelling, redness, drainage, fever, red streaks proximal to wound.
- Immunocompromised patients are at an increased risk for infection: diabetes, chemotherapy, transplant patients.
- Consider contacting the North Carolina Poison Control Center for guidance (1-800-84-TOXIN).