

# **Bites and Envenomations**



#### History

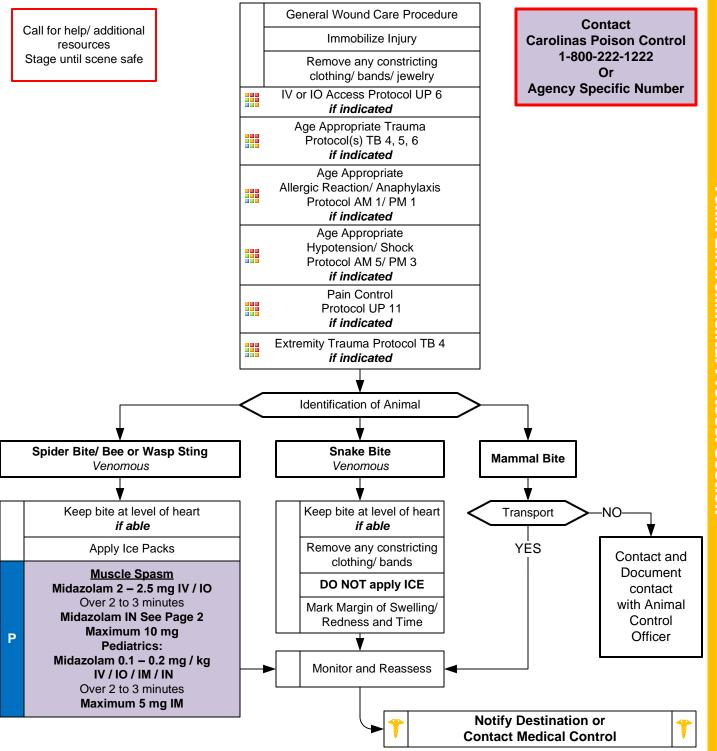
- Type of bite/ sting
- Description/ photo for identification
- Time, location, size of bite/ sting
- Previous reaction to bite/ sting
- Domestic vs. Wild
- Tetanus and Rabies risk
- Immunocompromised patient

# 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





# **Bites and Envenomations**



#### Refusal of treatment and/ or transport:

Often patients will refuse treatment and/ or transport following an animal bite.

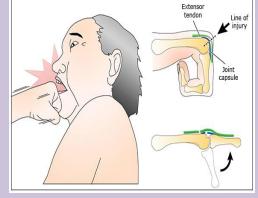
#### Important care for patients when declining transport:

- Wash wounds with copious amounts of soap and water.
- After thorough cleaning, place dressing.

# Important information for patients when declining transport:

- Animal bites have a high risk of infection and almost all need antibiotics.
- Animal bites may have a foreign body (teeth) retained in the wound.
- Animal bites to the hand or feet may have a fracture.
- Animal bites require tetanus protection and update in vaccination.

Encourage patient to see a physician within 12 – 24 hours.



**Fight Bite** 

Animal bites need to be reported to the county animal control (county where the bite occurred):

• If patient is declining transport, notify animal control of the incident.

#### **Human bites:**

- Human bites have a high risk of infection and almost all need antibiotics.
- Human bites require tetanus protection and update in vaccination.

Encourage patient to see a physician within 12 - 24 hours.

#### Fight bites:

- Lacerations over the "knuckles" of the fist.
- High rate of infection. High rate of joint penetration.

Need to be evaluated by physician as soon as possible.

# 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
- Immunocompromised patients are at an increased risk for infection: diabetes, chemotherapy, transplant patients.
- Consider contacting the North Carolina Poison Control Center for guidance (1-800-222-1222).
- Do not put responders in danger attempting to capture an animal or insect for identification purposes.
- Evidence of infection: swelling, redness, drainage, fever, red streaks proximal to wound.
- Human bites:

Human bites have higher infection rates than animal bites due to normal mouth bacteria. Hand and foot bites have highest rates of infection.

# Dog/ Cat/ Carnivore bites:

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 multicoda).

## Snake bites:

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.

Snake bites are treated based on signs and symptoms and progression.

It is not important to attempt to identify the type of snake and attempts may endanger providers.

Do not bring a snake to the facility for identification as accidental bites to providers may occur.

# Spider 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).

## Animal bite(s) in subjects declining transport to a medical facility for evaluation:

NCGS 130A-196 requires that all animal bites be reported to the local health department even if the bite is by the owner's animal, and even if accidental.

Reporting requirements can be satisfied by reporting to local animal control official.

