**Contra Costa County Emergency Medical Services**

**Bites and Envenomation**

**History**
- Type of bite or sting
- Description or photo of creature for identification, if safe to do so
- Time, location, size of bite or sting
- Previous reaction to bite or sting
- Domestic vs. wild
- Tetanus and Rabies risk
- Immunocompromised patient

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

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

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**Flowchart**

- **General wound care**
- **Consider, IV/IO**
  - **Allergic reaction/Anaphylaxis**
    - **Yes**
      - Allergic Reaction/Anaphylaxis TG
    - **No**
  - **Serious injury or hypotension**
    - **Yes**
      - Hypotension/Shock TG
    - **No**
  - **Moderate/severe pain**
    - **Yes**
      - Appropriate pain control

- **Identification of animal, if possible**
  - **Spider bite**
  - **Bee/wasp sting**
  - **Snake bite**
  - **Dog / cat**
  - **Human bite**

  **Immobilize injury**
  - Elevate wound location to a neutral position, **if able**
  - Consider, applying cold pack(s)
  - Remove any constricting clothing/bands/jewelry

  **Elevate wound to a neutral position, if able**
  - DO NOT apply COLD PACKS
  - Remove all jewelry from affected extremity
  - Mark margin of swelling/redness and time

  **Notify receiving facility. Contact Base Hospital for medical direction, as needed.**

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**If needed**
California Poison Control (800) 222-1222

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**Effective Jan. 2016**

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Pearls

- Human bites have higher infection rates than animal bites due to normally occurring mouth bacteria.
- Carnivore bites are much more likely to become infected and may have risk of Rabies exposure.
- Cat bites may progress to infection rapidly due to a specific bacteria (Pasteurella multocida).
- Poisonous snakes in our region are generally of the pit viper family: six rattlesnake species.
- If no pain or swelling is present, envenomation is unlikely. About 25% of snake bites are dry bites.
- Black Widow spider bites tend to be minimally painful initially, but over a few hours, muscular and severe abdominal pain may develop (black spider with a 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 includes: swelling, redness, drainage, fever, and red streaks proximal to wound.
- Immunocompromised patients are at an increased risk for infection.
- Consider contacting the California Poison Control Center for identification (800) 222-1222.