

EMR & EMT

Scene safety and provide universal patient care. Be on the lookout for signs of allergic reactions, treat per the allergic reaction SOG.



SNAKE

- splint and bandage the limb. Below the level of the heart.
- minimize movement
- Remove constricting items
- Do not apply ice!

INSECT



- Remove the stinger
- Remove constricting items
- Apply ice
- Minimize movement

PARAMEDIC

Continue EMR/EMT Treatment. Establish IV access as needed and consider pain management.

BROWN RECLUSE

Multimodal analgesia

- Acetaminophen
- IV opiates for breakthrough pain

BLACK WIDOW

- Opiates for severe pain.

PIT VIPER

Rattlesnake, Copperhead

- IV opiates
- Avoid NSAIDs
 - may increase the risk of hemorrhage

BITES AND ENVENOMATION

SEPT 2026 PSRM

HISTORY

- Type of bite/sting
- Description of creature. A picture works (do not bring it with you!)
- Time, location, size of bite
- Any previous reactions
- Domestic vs wild
- Tetanus or Rabies risk
- Immunocompromised patients

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)
- Rabies risk
- Infection risk
- Tetanus risk

BROWN RECLUSE

The initial bite is typically painless, after a few hours patient's can develop severe localized pain, fever, chills, and nausea. The bite area starts as a lesion and starts to blister. The tissue around the area starts to necrotize.

Brown recluse spiders can be recognized by the fiddle shape on their back and a cluster of 6 eyes instead of 8.



BLACK WIDOW

Starts with a sharp pin prick pain with swelling, redness. Often times you will see red fang marks. Black widow venom is neurotoxic, within an hour patients will exhibit intense muscle cramps, abdominal pain, heavy sweating, and high blood pressure.



HUMAN

More likely to become infected due to normal mouth bacteria

Not always from an actual bite. It can happen for example in closed fist injuries when someone hits another person in the mouth.

Wounds should be irrigated and covered with sterile dressings.

BITES AND ENVENOMATION TYPES

CARNIVORE

Have a high likelihood of becoming infected and all have a risk of rabies exposure. Cat bites progress rapidly to infection due to the *Pasteurella multocoda* bacteria.

PIT VIPERS

98% of venomous snakebites in the United States are from American pit vipers. In Illinois, specifically there are 4 types of native species; Copperhead, Cottonmouth, Massasauga, and Timber Rattlesnake.

LOCAL RESPONSE

- Edema
- Ecchymosis
- Skin Necrosis
- Blisters

SYSTEMIC RESPONSE

- Neurotoxic paralysis
 - dysarthria, dysphagia
 - respiratory failure
- Cardiac effects
 - Brady/Tachycardia
 - Hyper/hypotension

EMR & EMT

<https://www.classmarker.com/online-test/start/?quiz=ndp6a886b6d75e3b>

PARAMEDIC

<https://www.classmarker.com/online-test/start/?quiz=ak36a8860174ba06>

BITES AND ENVENOMATION TESTS

**DONT FORGET
TO ENTER
YOUR
CERTIFICATION
INTO VAIRKKO**