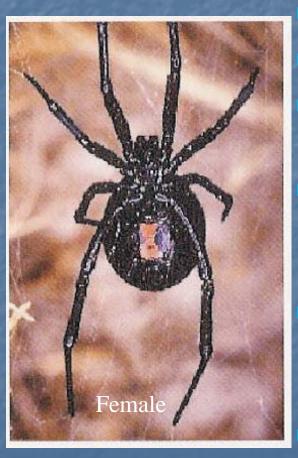
#### Black Widow Spider



- Throughout US
- Indoors year round, also outdoors
- Usually in seldom disturbed locations
- Black color with red or orange hourglass marking on underside of abdomen (female only)
- Males generally do not bite. Females bite only when hungry, agitated or protecting the egg sac
- Male 7-10mm, Female 12-13mm
- Web is approximately 12" in diameter



- No tissue necrosis
- Venom is a potent
   neurotoxin induces
   severe muscle cramping
   & spasms



 Life-threatening reactions are generally seen only in small children and the elderly

Signs and Symptoms with Grading of Envenomation:

- Mild Envenomation
   Localized pain at bite Normal vital signs
- Moderate Envenomation
   Muscular pain in envenomated extremity Extension of muscular pain to chest or abdomen Local diaphoresis at bite Normal vital signs •
- Severe Envenomation

Generalized muscular pain in back, abdomen and chest. Diffuse diaphoresis. Latrodectus facies. High blood pressure & tachycardia. Nausea and vomiting. Headache

#### **Treatment:**

- Tetanus immunization updated if indicated
- Clean the wound- Infection is not common
- Narcotics
- Benzodiazepines
- Antivenin for Moderate to Severe symptoms (one vial of the antitoxin produces significant and rapid relief of symptoms but has a small risk for anaphylaxis and post serum sickness)
- Calcium gluconate
  - (Alpha-latrotoxin acts as a cation pore in the presynaptic neuron allowing influx of calcium which causes depolarization and release of acetylcholine. This results in stimulation of skeletal and cardiac muscle fibers, pain, and autonomic hyperactivity)

#### Follow-up:

- Necessary in cases where antivenin is used. (Serum sickness may occur 7-12 days after)
  - Skin lesions
  - Fever
  - Pain in the joints
  - Swollen lymph glands
- The process goes away in 2-3 weeks.
  Can be treated with antihistamines and steroids.