

Safety Educational Webinar Series – Insect & Bug Bite Protection





Outdoor Workers Are Unique

- Share their workspaces with stinging insects.
- Increased Risk The Longer Outdoors.
- Risk Identification Is A Must!

According To NIOSH . . .

- Health effects of stinging or biting insects vary.
- Severe allergic reaction can occur.
- 90 to 100 people in the United States die as a result of allergic reactions.



Topics

- Insects that can sting/bite
- Reactions & illness associated with these insect bites/stings
- How to protect yourself
- Basic First Aid





Bees, Wasps & Hornets - General

Bees



Wasps



Hornets



Where They Live...



Bees, Wasps & Hornets

American Bumble Bee



Bald-Faced Hornet



Bees, Wasps & Hornets

Cicada Killer Wasp



Common Eastern Bumble Bee



Bees, Wasps & Hornets

Cuckoo Wasp



Eastern Carpenter Bee



Bees, Wasps & Hornets

European Wasp



European Honeybee



Bees, Wasps & Hornets

Sweat Bee



Tri-Colored Bumble Bee



Bees, Wasps & Hornets

Yellow Jacket



Invasive Pest Alert!!!

- **Asian Giant/Murder Hornet**
 - NOW IN US
 - Can kill honeybee hives
 - Has been intercepted in the U.S.
 - Sting can debilitate or kill
 - If found report to Department of Agriculture or badbug@pa.gov



40 DEADLY ATTACKS IN ONE MINUTE

- The Asian hornet is nearly 2in long with a 3in wingspan – slightly smaller than the European hornet but much more aggressive
- One Asian hornet can kill 40 bees in a minute; a handful can destroy a hive of 30,000 bees in a couple of hours
- They build rugby ball-shaped nests in trees, housing some 500 hornets
- They scare off intruders by sending a lone worker hornet to 'warn' them. If that fails, the workers attack en masse
- Worker hornets have lifespans of 30-55 days

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Spiders – General

- Spiders rarely bite people
- Most spiders have fangs and jaws to deliver venom
- Most bites have little effect to humans
- The Brown Recluse & Southern Black Widow are the exception
- Some people may have allergic reactions to bites



Spiders

Wolf Spider



Fishing Spider



Spiders

Jumping Spider



Bold Jumper



Spiders

Common House Spider



Medically Important Spider Types

- Rarely encountered.
- Black widows can be found native in Pennsylvania.
- Brown recluse spiders must be introduced and cannot survive in our climate.
- In these situations, medical emergencies may result.



Medically Important Spider Types

Brown Recluse Spider



Black Widow Spider



Spiders

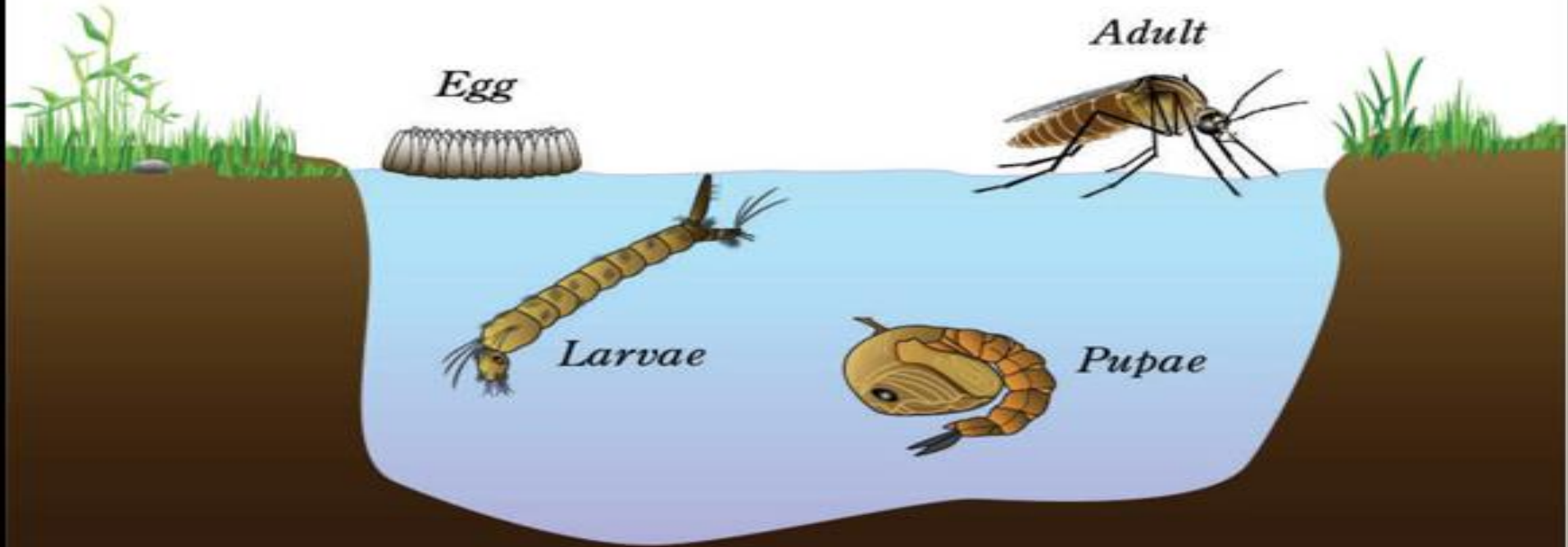
False Black Widow Spider



Mosquitoes - General

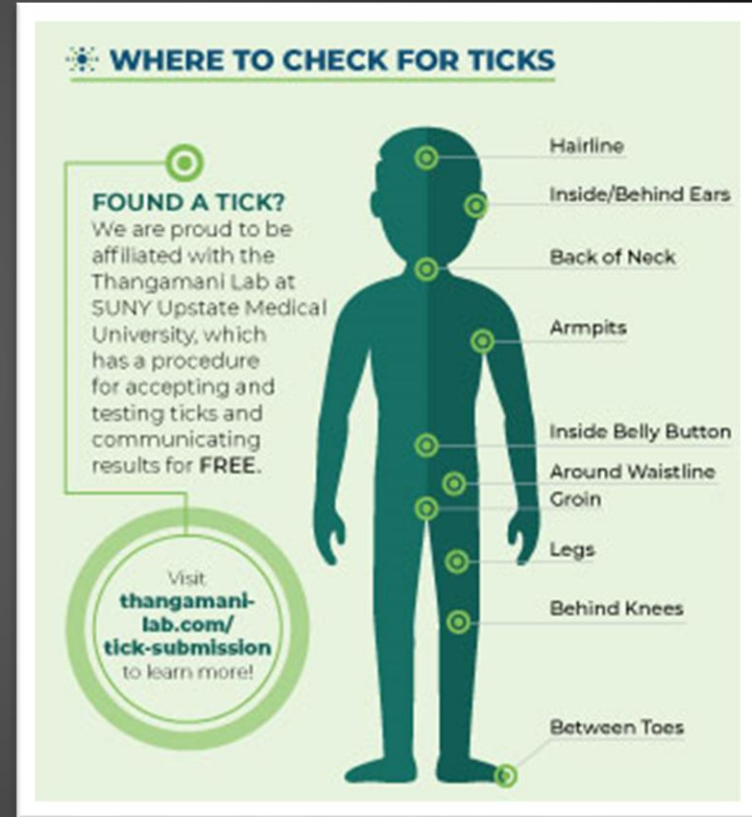
- Female mosquitoes require a blood meal in order to produce viable eggs.
- Females inject saliva-containing anticoagulants that prevent the blood from clotting.
- Mosquitoes can acquire disease organisms from an infected host and transmit to uninfected hosts.
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- Environmental conditions such as high rainfall and warm temperatures favor mosquito development.

Mosquito Life Cycle



Ticks - General

- Ticks are either “Hard” or “Soft”
- Must remain on an animal host to survive & reproduce
- Carry & transmit a number of pathogens
- They do not fall from trees



Ticks

Wood Tick



Deer Tick



Ticks

Lone Star Tick



Caterpillars

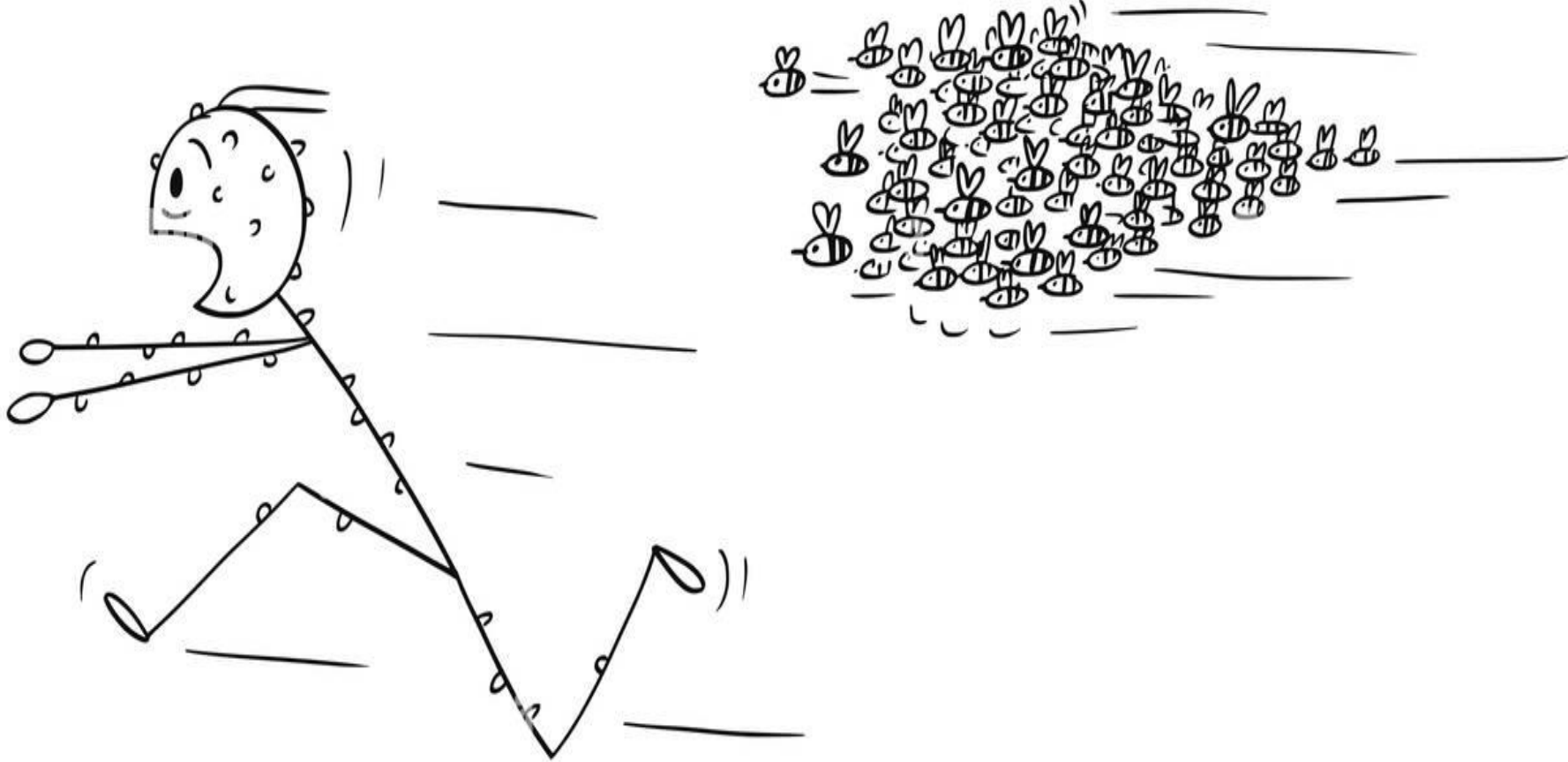
- **White Hickory Tussock Moth Caterpillar**
 - White with black markings
 - Found on trees
 - Hairs are connected to poison glands
 - Sting results in rash



Protect Outside Workers

- Identify & Assess Risk;
- Daily Debriefing;
- Hazard Analysis;
- PPE;
- Repellents;
- Training; and
- First Aid





Most safety hazards involve inanimate objects, chemicals or conditions, such as extreme heat. But living things can also pose a threat to workers, particularly when they work outside.

Questions, Comments or Concerns?

