



Know Your Predator

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WHAT WE WILL COVER:

- **Stinging Insects (Bees, Wasps)**
- **Mosquitoes & the Viruses They Carry**
- **Poisonous Spiders in New York**
- **Other Harmful Insects in New York**
- **Ticks & Diseases They Carry**
- **Bed Bugs**



True

False

All

FALSE

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STINGING INSECTS- BEES

- **416 Bee Species in NY.**
- **Most are Sweat or Digger Bees.**
- **Several species are rare, threatened or endangered.**
- **Honeybees are the only ones to die after stinging.**
- **Sting releases pheromones to tell other bees to attack.**
- **Most only sting when threat is perceived.**

(Cornell University)



True

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STINGING INSECTS- WASPS

- Most yellowjackets are smaller than hornets.
- Both are more aggressive than bees.
- Yellowjackets are attracted to sweets, other wasps & hornets are not.
- Hornets nest in aerial locations- Yellowjackets both above and below ground.
- Can sting more than once.

(Wikipedia)



STINGING INSECTS- AVOIDING STINGS

- **Wear light colored clothing- covering as much of the body as possible.**
- **Avoid perfumed toiletries.**
- **Keep outdoor areas clean.**
- **Avoid flowering plants.**



True

False

Mosquitoes are

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TRUE



MOSQUITOES

- Over 50 varieties in NY. Some carry disease causing viruses, others do not.
- Most active during dawn and dusk.
- Lay eggs on or near water.
- Attracted to octenol, a chemical released in sweat, as well as cholesterol, folic acid, certain bacteria, skin lotions, and perfume.
- Also attracted to heat.

(NYSDOH)



MOSQUITOES- NY VIRUSES

WEST NILE VIRUS

- In NY since 1999.
- Most do not know they have it- few die.
- Mild symptoms: headache, high fever, chills, vomiting, body aches, nausea, disorientation.
- Severe: seizures, coma, paralysis, inflammation, meningitis.

EASTERN EQUINE ENCEHPALITIS

- Life threatening in people & horses.
- Most do not notice- few die from brain inflammation.
- Survivors of severe cases suffer brain damage.
- Swampy areas of Northern Central NY most at risk.

(NYSDOH)



MOSQUITOES-ZIKA

- **Has not made it to NY-but has to the Southern U.S.**
- **Can be sexually transmitted.**
- **Causes birth defects.**
- **Symptoms include: fever, rash, joint pain, or conjunctivitis (red eye).**
- **Zika virus usually remains in the blood of an infected person for a few days but it can be found longer in some people.**
- **Vaccinations are not yet available.**

(CDC)



MOSQUITOES-PREVENTION

- Eliminate breeding grounds.
- Inspect for stagnate or standing water.
- Use protective measures around dead birds and animals.
- Avoid perfumes and colognes when outdoors.
- Cover as much skin as possible.
- Use EPA registered repellent appropriate for time outside.
- Spray on outside of clothing and exposed skin only. Never spray on wounds or on the face.
- Wash off after coming indoors.

(CDC)



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SPIDERS IN NY

- **Only 2 kinds of poisonous spiders native to NY and both are Sac Spiders.**
- **Sac Spiders often mistaken for Brown Recluse.**
- **Sac Spiders produce venom that causes itchy or painful ulcerating sores that are slow to heal.**
- **If bitten- keep infected area clean. Do not squeeze.**
- **Wolf spiders only bite if provoked. Venom rarely has any affects.**

(NYS DEC)



OTHER POISONOUS INSECTS IN NY

HICKORY TUSSOCK MOTH

- Insect's fuzzy black spines contain venom.
- Can be white or brightly colored (yellow or green).
- Irritates human skin, leaves rash.
- Treat with ice and lotions.

(NYS DEC)



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TICKS

- Ticks will attach themselves anywhere on a human body.
- In NY the 3 most common ticks are Deer Ticks, American Dog Ticks and the Lone Star Tick.
- Deer ticks can carry Lyme Disease & Powassan.
- Dog Ticks can carry bacterium that causes Rocky Mountain Spotted Fever.
- Lone Star Tick can carry germs that cause monocytic ehrlichiosis.
- Most active in Spring, Early Summer and Fall.
- Should be removed with a special tool like a tick key.
- Call your doctor if you have been bitten.

(NYSDOH)



TICKS- LYME DISEASE

- Carried by deer ticks.
- An acute inflammatory disease.
- Skin changes, joint inflammation and flu-like symptoms-often missed.
- Difficult to diagnose
- Leaves a “bulls-eye”.
- Can be cured with antibiotics.

(NYSDOH)





TICKS- POWASSAN

- Disease from tick bite.
- Symptom include fever, headache, vomiting, weakness, confusion, loss of coordination, speech difficulties, and seizures.
- Severe infections include headache, high fever, confusion, tremors, seizures, paralysis, coma or death.
- Can cause fatal brain inflammation and meningitis.
- Average of 2 fatal cases per year in New York.

(NYSDOH)



TICKS-PREVENTION

- **Wear long sleeved shirts and pants.**
- **Apply 20-35% DEET containing insect repellent sparingly to the skin.**
- **Do not apply 100% DEET directly to the skin as it is HARMFUL. Use this concentration on clothing and equipment only.**
- **Apply repellent to clothing.**
- **Tuck pants into socks to deter ticks.**
- **White socks make them more visible.**



TICKS-PREVENTION

- Hiking gaiters can also be worn.
- Apply double sided tape around ankles (ticks).
- Look for unusual bites, swelling, or irritation and seek medical attention if necessary.
- All tick bites should be reported.
- Workers should be trained on problematic insects in their work area and how to avoid them.



True

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BED BUGS

- **Made a resurgence since the use of DDT has been banned.**
- **Can live up to a year.**
- **Thermal death point is 113 degrees.**
- **Can be as small as a poppy seed-about a big as an apple seed.**
- **Bite but do not carry disease. Leave itchy welts.**
- **Do not jump or fly but can move through a building. (Walls, Plumbing, Electrical)**
- **Like to hide in dark places.**

(CDC)



BED BUGS- WHAT DOESN'T WORK

- **Bed legs in kerosene or gasoline;**
- **Thyme oil;**
- **Abandoning the home for a period of time;**
- **Turning up the heat;**
- **Sleeping with lights on;**
- **Sleeping in a different room;**
- **Buying a new mattress;**
- **Wrapping items in plastic and placing in the sun;**
- **Pesticides, alone, often do not work.**

(CDC)



BED BUGS- WHAT DOES WORK

- **Bed bug proof mattress covers.**
- **Heat- Dryer on HOT for 1 hour.**
- **Steam Cleaning.**
- **Calling in a Pest Management Professional.**
- **Most municipalities require mattresses to be bagged before they will pick it up.**
- **Bag any affected item to contain the problem.**

(CDC)



BED BUGS- AT WORK

- **Report any bed bugs sightings.**
- **Provide training.(Call your OSH Specialist)**
- **Request a labor-management meeting.**
- **Set deadlines for corrective action.**
- **Remind uncooperative management that they can be cited by PESH/OSHA under the Vermin Control standard. (1910.141)**
- **File PESH complaint as a last resort.**



FOR MORE INFORMATION

National Pesticide Information Center

1-800-858-7378

Center for Disease Control

www.cdc.gov

WWW.CSEANY.ORG/OSH

