**Fight the Bite and Stop Ticks Summer Prevention Messages for Children: Grades 9-12**

This document and its corresponding flyer have been developed by the Philadelphia Department of Public Health to educate children and families about the risks of diseases from mosquitoes and ticks and what they can do to prevent getting sick during the summer. This document is for teachers or parents describing the “No Suckers” and “Stop Ticks” informational flyer for children grades 9 through 12 (ages 14 -17 years). Pass out the flyer and review the points below with each section.

**Mosquito Information: Grades 9-12**

Introduction
Everybody wants to have fun this summer and stay healthy. Let’s look over these pictures to learn about mosquitoes and ticks and the diseases that they carry, and how to prevent them from making us sick.

What are mosquitoes?
- Mosquitoes are small, flying insects that consume blood from hosts such as animals and humans to survive. Mosquitoes can spread several viruses and diseases in humans and animals. The main disease in Philadelphia spread by mosquitoes is West Nile Virus. There are also diseases that travelers bring back, like malaria, Zika (Zee-kah), dengue fever (den-gay) fever, and chikungunya (chik-en-gun-yah).
What diseases do mosquitoes carry?

- Different mosquitoes can carry different diseases.
- Mosquitoes can pick up viruses when they bite a human, bird, or other animal with a disease (also known as a host). They then spread the disease by biting another animal or human.
- Chikungunya, dengue fever, and malaria are three of the most common diseases people get from mosquitoes when traveling to areas that have warmer climates. Local mosquito transmission in the United States is not common, but outbreaks of chikungunya, dengue, and Zika occasionally occur in warmer states like Florida and Texas.

Why do mosquitoes bite us?

- Female mosquitoes use iron and blood proteins to produce their eggs. This is why they bite people and animals.

How can I protect myself?

- The best way to protect yourself from getting these diseases is by preventing getting bitten in the first place.
- Use a repellent (also known as “spray”) that is approved by the EPA (Environmental Protection Agency) for repelling mosquitoes.
- Wear long pants, long-sleeved shirts, and socks to lessen the amount of uncovered skin.
- Keep them out of the house: Use screens on windows and keep doors closed.
- Don’t let them lay eggs: Reduce mosquito breeding grounds around homes and make your yard safer.
  - Throw away old tires, cans, bottles or other containers left outside that might collect water and serve as a mosquito breeding ground.

What is Zika and how do people catch it?

- Zika is primarily transmitted through mosquito bites in places where mosquitoes carry Zika (mostly South and Central America, Caribbean islands, southern Florida and Texas). CDC keeps a website with updated locations where Zika is spread by mosquitoes (www.CDC.gov/zika).
- The Zika virus can also be spread sexually. Some women and men have been infected with Zika by having unprotected sex with a Zika-infected partner. It is recommended that anyone who thinks they might have Zika should use condoms or other barriers for all types of sex.
- It can also be transmitted from a pregnant mother to her baby during pregnancy or around the time of birth. **This can cause severe birth defects to the baby and is why Zika virus is so important to control.**

Is there Zika in Philadelphia?

- The Zika virus is not being spread by the mosquitoes in Philadelphia.
- If you have not traveled and do not have a sexual partner who has traveled, then you are not at risk of Zika.
What are ticks?
- Ticks are arachnids—like mites, spiders, and scorpions.
- Ticks can carry several diseases that affect humans and animals. Ticks found in Philadelphia can spread diseases like Lyme disease, anaplasmosis (anna-plas-mosis), and babesiosis (bab-eese-ee-osis).

How do they bite me?
- Ticks have a barbed beak that allows them to attach to your skin. The beak also numbs the area on your skin that the ticks are attaching to so that you do not even notice they are biting.
• Ticks cannot jump or fly so they will wait on grasses and shrubs for a person or animal to brush up against them. They grab onto clothes or fur to attach (like a hitchhiker).

**Where do ticks live?**
• Ticks prefer forests, wooded areas and bushes and grassy meadows.

**What diseases do ticks spread?**
• Diseases that ticks carry include: Lyme disease, Anaplasmosis (ANA-PLAZ-MOSIS), and Babesiosis (BA-BEEZ-IOSIS).

**What is Lyme disease?**
Lyme disease is an infection caused by the bacteria known as *Borrelia burgdorferi*. The bacteria can be spread to humans from the bite of an infected tick.

**What are the symptoms?**
• Symptoms of Lyme disease include:
  o Circular rash near the bite
  o Chills
  o Fever
  o Headache
  o Muscle and joint pain
  o Swollen lymph nodes

**What should I do if I think I have Lyme Disease?**
• Tell an adult or contact your primary care provider so that an evaluation can be made of your symptoms and tick exposure history. Your physician may also do a blood test. Lyme disease is treated with a course of antibiotics.

**How can I protect myself from tick bites?**
• When you are outdoors use insect repellent with 20% - 30% DEET on exposed skin and clothing. A product called Permethrin can also be used on your clothes to repel ticks.
• When you are walking in the woods, stay in the center of the trail so you do not brush up against grasses and bushes where ticks are waiting.
• Perform a “Tick Check”: Use your finger tips and your sight to feel around your body for ticks. Pay attention to your head, hairline, neck, armpits, waist, between your legs, thighs, and behind your knees.
• Animals can get bitten by ticks, too. Make sure to check your pets for ticks daily and keep them on tick prevention medicine.
• When you come back inside, take a shower or bath as soon as possible.
• After coming inside from outdoors, you can place your clothes in a dryer on high heat for approximately 10 minutes. The clothes may then be washed to remove ticks from them.

**What if I find a tick on me?**
• Use fine-tipped tweezers to remove the tick. Do not use petroleum jelly, a hot match, nail polish, or other products to remove a tick.
• Clean your skin with soap and warm water.
• Go to the doctor if you have a fever, muscle aches, or a rash on your skin.