



Tips for Teachers

Incorporate Fight the Bite poster contest into science or health lessons. "Fight the Bite" may be a good complement to a science curriculum focusing on mosquitoes, ticks or other ecological elements, diseases in the United States or the domestic risks presented by mosquitoes. This information may also complement a health course looking at outdoor risks and prevention.

Objectives may include:

- Students will learn the difference between ticks and mosquitoes.
 - The students will learn about insect repellent use.
 - Students know how to identify major structures of insects and ticks (e.g., wings, legs, mouthparts) and their life cycles.
 - Students will learn about proper insect repellent use and understand the differences between repellents (used to prevent insect bites) and insecticides (used to kill insects).
 - Students will be able to identify at least two diseases transmitted by insects or ticks in the United States, particularly those present in their state.
1. Ask students to research Fight the Bite website. <http://www.fightthebitecontest.org/>.
 2. Discuss why the contest is held and who is CDC. <http://www.cdc.gov/about/> Discuss your state health department or local county/city health department. Find your state or local health department at: <http://www.cdc.gov/mmwr/international/relres.html>
 3. Discuss disease transmission from vector (mosquito or tick). The tick (deer tick, black legged tick) that transmits Lyme disease does not live in all states in the country. Determine if the tick that transmits Lyme disease is found in your state at: http://www.tickcounter.org/education/tick_identification/
 4. Research tick borne and mosquito borne diseases:
 - <http://www.deetonline.org/insectborne.php>
 - http://www.bam.gov/sub_diseases/diseases_westnile.html
 - http://www.bam.gov/sub_yoursafety/yoursafety_ticktactics.html
 - <http://www.cdc.gov/ncidod/dvbid/arbor/neato.htm>
 - <http://www.cdc.gov/ncidod/dvbid/lyme/index.htm>
 - <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>
 5. What do mosquitoes look like? Research images: <http://www.cdc.gov/ncidod/dvbid/westnile/insects.htm><http://phil.cdc.gov/phil/home.asp>
 6. What do ticks look like? Research images:
 - American Lyme Disease Association at: <http://www.aldf.com/pdf/TickCard.pdf>
 - CDC: http://www.cdc.gov/ncidod/dvbid/lyme/ld_transmission.htm
 - Public Health Images: <http://phil.cdc.gov/phil/home.asp>
 - University of Rhode Island: http://www.tickcounter.org/education/tick_identification/
 7. Have students create POSTERS following "Helpful Hints" on the Fight the Bite website: <http://www.fightthebitecontest.org/Index.html>. with emphasis on how to prevent mosquito or tick bites.

Fun Facts:

- Young ticks have six legs, and mature ticks have eight legs.
- Ticks are actually arachnids, not insects, since the adults have eight legs whereas insects only have six.
- Ticks do not jump or fly, although they may drop from their perch and fall onto a host.
- You cannot get West Nile virus from a person who sneezes or coughs on you.
- Mosquitoes have sensors that help them find people to bite Most insects are not harmful to humans or plants.
- Female mosquitoes and females ticks are the disease transmitters, not the males, because the males do not bite people and other mammals.

HELPFUL HINTS



FOR STUDENTS, TEACHERS, PARENTS AND OTHERS

- DO have fun, and feel free to use a bit of humor.
- DO use some (not all) of the tips you can find on our “**Kids Can Help**” page and the Web sites suggested on our “**Information Resources**” page.
- DO ask for advice from a teacher or parent.
- DO spell words correctly, especially “mosquito.”
- DO check your spelling and ask an adult to do that, also.
- DO not suggest spraying repellents on pets and wildlife; it’s not for use on animals.
- DO try to make your bugs look like bugs, not horses, ducks or octopi.



- DO make your images as clear as possible and lines dark enough to be seen.
- **DO look at past winners to get some ideas.** (ND winners at <http://www.ndhealth.gov/WNV/>)
- DON’T miss the **April 18 deadline**; we can’t make exceptions, sorry.
- DON’T try to include every message on our suggested list
- Repellents make bugs stay away from people. They don’t kill bugs. So DON’T use the words “kill” or show repellents killing bugs
- DON’T show repellent being sprayed directly onto insects since, again, repellents do not work that way.
- DON’T use the phrase “bug spray,” since many people think that means insecticide.
- DON’T use paper larger than 11x14.

Information Resources



Protect Yourself Against Diseases Bugs Can Carry.

Below are Web sites that have scientifically valid information about mosquitoes, ticks, the diseases that they sometimes carry and ways to prevent mosquito and tick bites.

1. Centers for Disease Control and Prevention: www.cdc.gov/westnile and www.cdc.gov/ncidod/dvbid/lyme
2. DEET Education Program: www.deetonline.org
3. University of Florida: <http://mosquito.ifas.ufl.edu/Index.htm>
4. American Lyme Disease Foundation: www.aldf.com
5. About Bugs: www.aboutbugsbugsbugs.com

