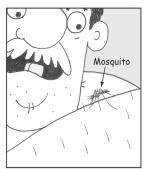
## West Nile Virus

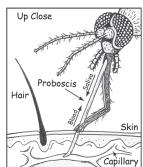
# TEACHER'S COPY

Mosquitoes are dangerous! Some species (kinds) can transmit (give) certain diseases to the animals and people they feed on.



When the female mosquito feeds, she uses a specialized mouth called a proboscis to pierce the skin, suck blood, and inject saliva into the host (the animal she is feeding on). Diseases are spread through the saliva of infected mosquitoes.



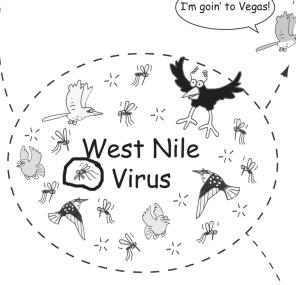


Answers to Questions...(answers will be written on the back of worksheet)

- 1. Q: What is a proboscis?
  - A: A proboscis is the specialized mouth of the mosquito that allows her to pierce the skin, suck blood, and inject saliva into the host.
- 2. Q: What does the mosquito inject into the host while feeding?
  - A: Saliva
- 3. Q: How long does WNV stay in a bird's blood
  - A: Several days
- 4. Q: What is a "dead end" host?
  - A: Host that a mosquito cannot get enough virus from to infect another host (horses and humans).
- 5. Q: Which of the 2 people in the picture is less likely to be bit by a mosquito.
  - A: The boy is less likely to be bit because he has a long-sleeved shirt, pants, hat, shoes and mosquito repellant. The older man is more exposed.

**Bonus Q**: Circle the one mosquito in the picture that could not transmit WNV.

A: The male mosquito (circled). Males do not feed on blood, and are easily identified by their "bushy" antennae.



West Nile Virus (WNV) is spread by mosquitoes to wild birds. Once a bird is infected, the virus remains in the bird's blood for several days. During this time, the bird may fly many miles and mosquitoes in other areas may become infected when they feed on that bird. Mosquitoes can also pass the virus to horses and humans. Horses and humans are "dead end" hosts. This means that if a mosquito feeds on an infected human or horse, the mosquito will not get enough virus to infect another host. Not all animals die from the virus, but it can be deadly to some.

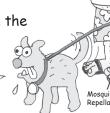
#### Grade 5 Life Sciences

"Students know many multicellular organisms have specialized structures to support the transport of materials."

"Students know the sequential steps of digestion and the roles of teeth and mouth...

### Grade 6 Ecology (Life Sciences)

"Students know matter is transferred over time from one organism to others in the food web and between organisms and the physical environment."



WEST NILE VIRUS =

■ GRADES 5-6