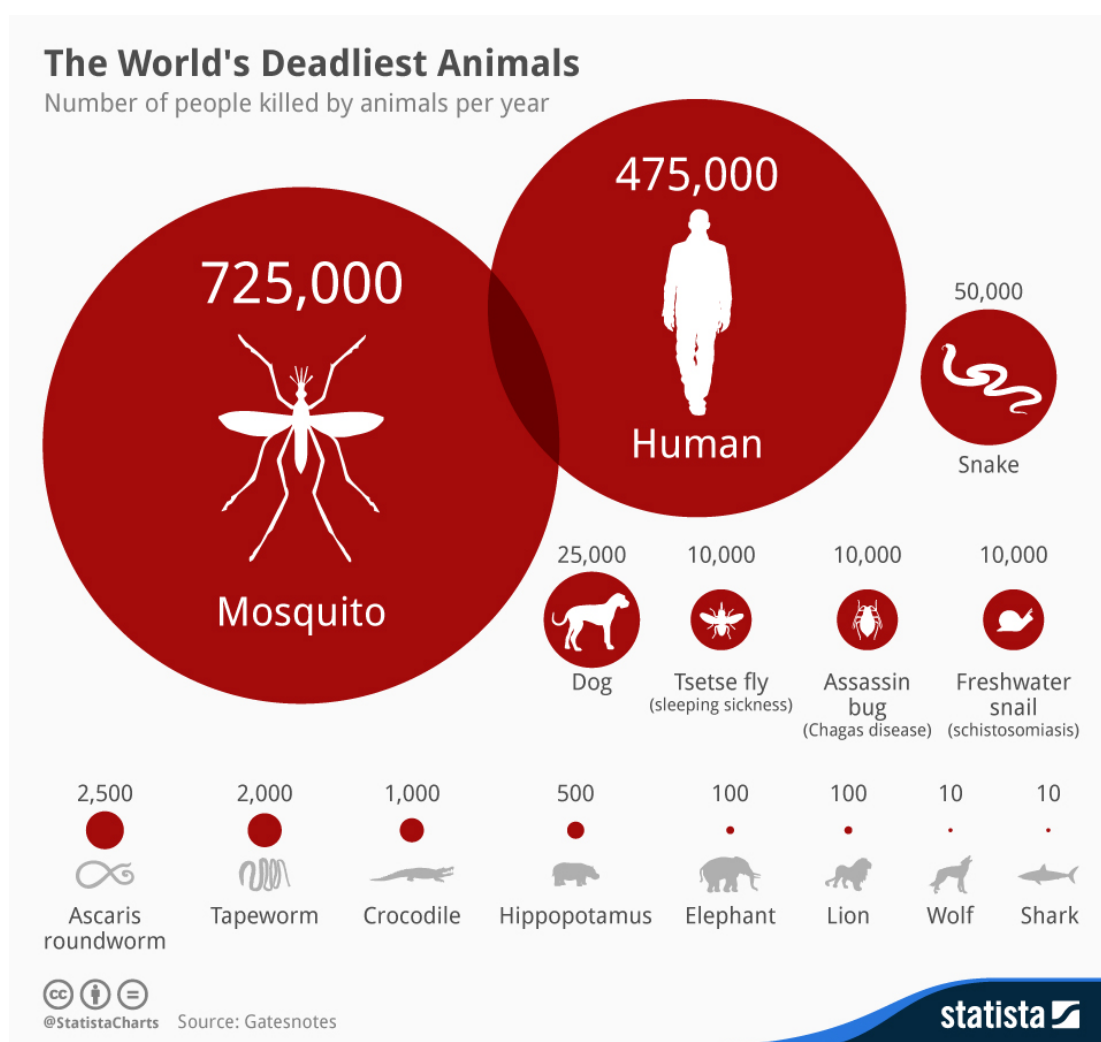


## Not So funny Facts About Mosquitoes

1. **Mosquitoes are the deadliest animals on Earth.** Many mosquito species are vectors of disease. They can carry and transmit disease-causing organisms such as viruses, bacteria and worms, from host to host. In fact they are the deadliest animals in the world. Beware the dangers of tigers, sharks, snakes? Actually, fear the mosquito, the most lethal creature on the planet. More deaths are caused by mosquitoes than any other animal, thanks to bugs' aid in spreading malaria, dengue fever, yellow fever and encephalitis.



2. **Malaria infects around 250 million people each year worldwide and kills about one million, mostly children in Africa.** A single malarial mosquito can infect more than 100 people; and according to the World Health Organization, malaria kills a child every 45 seconds in Africa. About a fifth of those deaths can be attributed to counterfeit anti-malarial drugs.
3. **Birds were originally blamed for the spread of the West Nile Virus.** But a 2010 study says that it was the mosquitoes themselves, which can travel up

to 2.5 miles per day, that were responsible for the spread of the disease from 2001 to 2004.

4. **Alexander the Great may have died from a mosquito bite.** The King of Macedonia and conqueror of the Persian Empire, never lost a battle and is considered one of history's most successful commanders, but he may have met his final defeat at a mosquito infected with West Nile virus. George Washington suffered from malaria. George contracted the disease when he was a teenager. In the second year of his presidency, he experienced severe hearing loss due to quinine toxicity.
5. **Viruses increase their bloodlust.** Female mosquitoes already have an unquenchable need for blood, but researchers have found that the dengue virus, which the mosquitoes transmit to humans, makes them even hungrier for the red stuff. The virus manipulates the insect's genes to make them thirstier for blood; it also activates genes to increase the mosquitoes' sense of smell to become better hunters.
6. **Parasites make them go nuts for dirty socks.** Not only do parasites live on and feed from their hosts, but can also manipulate the behavior of their hosts to increase their odds of spreading. Scientists have shown that mosquitoes infected with the malaria parasite are drawn to the smell of human sweat, as was evidenced in experiments with the use of a well-worn sock.
7. **Mosquitoes feed day and night.** The majority of the species are really crepuscular which means that they feed at dawn or dusk. Whereas the Asian tiger mosquito is one of these that primarily feed in daytime.
8. **Mosquito spit is itchy.** The female's saliva contains an anti-coagulant that lets her more easily suck up her meal. The saliva induces an allergic response from her victim's immune system; that's why your skin gets an itchy bump. While one tube in the proboscis draws blood, a second pumps in saliva containing a mild painkiller and an anti-coagulant.
9. **Mosquitoes can smell human breath.** They have receptors on their antennae that detect the carbon dioxide released when we exhale. Those plumes of CO<sub>2</sub> rise into the air, acting as trails that the mosquitoes follow to find the source.
10. **Sweat helps mosquitoes choose their victims.** Our skin produces more than 340 chemical odors. They are fond of octenol, a chemical released in sweat, as well as cholesterol, folic acid, certain bacteria, skin lotions, and perfume.
11. **Body heat marks the target.** Mosquitoes use heat sensors around their mouthparts to detect the warmth of your body – actually, the blood inside it – then land on you and locate the best capillaries for tapping.
12. **Female mosquitoes can lay up to 300 eggs at a time.** Usually, the eggs are deposited in clusters – called rafts – on the surface of stagnant water, or they

are laid in areas that flood regularly. Eggs can hatch in as little as an inch of standing water. Females will lay eggs up to three times before they die.

13. **The average mosquito lifespan is approximately two months.** The lifespan of female mosquitoes entirely depends on the surrounding temperature in that some live on for couple of weeks while others can live about six to eight weeks, under ideal conditions. Females of species that hibernate may live up to six months. Males have the shortest lives, usually 10 days or less,
14. **Bats do not eat mosquitoes.** At least, not very many of them. Mosquitoes make up less than 1 percent of a bat's diet. And purple martins, a bird popularly believed to be a mosquito predator, eat very few mosquitoes. They prefer dragonflies and other insects.
15. **Mosquitoes do not transmit HIV.** The virus that causes AIDS does not replicate in mosquitoes and is actually digested in their stomachs, so it's broken down without being passed on.
16. **Bacteria can be used to kill mosquito larvae.** *Bacillus thuringiensis israelensis* (Bti) is a commercially-produced bacteria, that can be placed into water where larvae live and inhibit their development.



17. **Insecticides work, but only in the short term.** Permethrin, one of the most common chemicals used by local mosquito control programs, kills mosquitoes on contact by disrupting their central nervous systems. However, eggs and larvae often are not affected. Once the insecticide dissipates, mosquitoes can return.
18. **Mosquito traps can kill thousands of mosquitoes in a single night.** One study conducted by public health researchers in Australia found that a Mega Catch trap caught and killed more than 44,000 female mosquitoes from 17 species in less than two weeks.
19. **Bug zappers are useless against mosquitoes.** Studies have shown that less than 1 percent of the insects killed by zappers are mosquitoes or other biting insects. The devices attract and kill beneficial or harmless insects, like moths, and have no effect on the overall mosquito population. Electronic repellents have also proven ineffective in scientific testing.
20. **Insecticide-treated nets (ITNs)** that hang over a bed have been shown to reduce malaria incidence among children and pregnant women by up to 50 percent. The nets last only a few years before they have to be replaced.

21. **DEET is considered the 'gold standard' of mosquito repellents.** Endorsed by the Centers for Disease Control (CDC), DEET doesn't mask the smell of the host or jam the insect's senses - mosquitoes simply don't like it because it smells bad to them. A product containing 10 percent DEET can protect you for up to 90 minutes. Two other repellents, picaridin and lemon-eucalyptus oil, have also proven effective and are now recommended by the CDC. The Centers for Disease Control and Prevention lists only four chemicals as being effective for repelling mosquitoes: DEET, Picaridin, Oil of Lemon Eucalyptus (or its synthetic version, called PMD) and IR3535.
22. **Midges and crane flies are often mistaken for mosquitoes.** Biting midges are smaller, have shorter wings and tend to feed in swarms. Mosquito traps often attract and kill biting midges. Meanwhile, crane flies are much larger than mosquitoes – up to 1 ½ inches long in some cases – and do not bite.
23. **Some scientists think that eliminating mosquitoes wouldn't be such a bad thing.** Others aren't so sure, though, and worry about the effects on the ecosystem of the loss of an insect that is eaten by spiders, salamanders, frogs, fish and other insects.

**Sources:**

- [www.mosquito.org/fun-facts](http://www.mosquito.org/fun-facts)
- <http://www.smithsonianmag.com>
- [www.megacatch.com/mosquitofacts.htm](http://www.megacatch.com/mosquitofacts.htm)
- <http://www.mnn.com/earth-matters/>
- <http://www.sciencekids.co.nz/sciencefacts/animals/mosquito.html>
- [www.statista.com](http://www.statista.com)