

Vector Waste Stats and Facts



FACTS

1. Vector-borne diseases (VBDs) are infections caused by pathogens that are transmitted by arthropods such as mosquitoes, triatomine bugs, blackflies, tsetse flies, sand flies, lice, and ticks.
2. Biological hazards include vector-borne diseases, venomous wildlife and insects, and poisonous plants. Venomous snakes, spiders, scorpions, and stinging insects can be found throughout various geographic regions and are especially dangerous to workers who have allergies to the animal.
3. Limiting zoonotic pathogen-shedding in farm or production facilities for domestic animals should be accomplished by preventing illness in livestock, through minimizing exposure to pathogens, by increasing immunity, by manipulation of the animal gastrointestinal tract microbial ecology and by managing (including treating) animal waste to reduce the release of zoonotic pathogens into the environment.
4. DVBD's Rickettsial Zoonoses Branch (RZB) Q fever team has been supporting the NAHMS study by providing laboratory testing for animal samples collected in 2019 and early 2020. More than 2,000 serum samples have been tested for antibodies against *C. burnetii*. More than 4,200 swabs collected from goats have been tested for the presence of *C. burnetii*. A positive swab indicates that a goat is spreading bacteria into the environment.
5. Forestry workers had a probability of testing positive for any tick-borne disease nearly two times higher than firefighters/indoor workers.

STATS

- Dengue, Chagas disease, Japanese encephalitis, leishmaniasis, lymphatic filariasis, malaria, and yellow fever threaten over 80% of the world's population and disproportionately affect the poorest populations living in the tropics and subtropics.
- VBDs contribute significantly to the global burden of disease, accounting for 17% of the global estimated burden of all infectious diseases.
- Most of the malaria cases are found in Africa. There is also an average of 1,500 cases of malaria diagnosed in the United States each year according to the CDC.
- Vector-borne diseases account for more than 17% of all infectious diseases, causing more than 700 000 deaths annually. They can be caused by either parasites, bacteria, or viruses.
- It takes just one bite to contract a mosquito-borne disease. This ease of transmissibility and the presence of mosquitoes on nearly every continent make them the most dangerous species in the world—accounting for more than 17% of all

infectious diseases. In the United States, it's most common to encounter West Nile virus (WNV), Eastern Equine Encephalitis (EEE), Chikungunya, and Zika.