

NUTRITION AND HEALTH



Vigilance Pays in Thwarting Ticks, Mosquitoes

For centuries, insects have spread diseases to humans and animals. Experts at land-grant universities are working to understand the health issues they cause and how to control the spread of diseases from vector insects.

HERE ARE A FEW EXAMPLES OF THEIR WORK:

- Diagnostic testing and vaccine development are critical components to safeguarding human and animal health from tickborne diseases. **Connecticut** veterinary scientists tested nearly 400 ticks last year, with each test screening for eight diseases. Tick tests help determine factors that may impact transmission of pathogens to people and animals. Test results are helpful to physicians and vets treating patients.
- **Iowa** scientists led statewide mosquito surveillance that first identified mosquitoes in the state that could transmit

dengue fever and chikungunya, two potentially deadly diseases. They identified mosquito species that are primary carriers of the diseases in multiple trap sites, including residential areas. A critical mass determined that the mosquitoes had become established. Entomologists then worked closely with local and state public health officials and the news media to inform and educate people of the potential mosquito-borne disease threat. Results also were shared with experts in neighboring states members working on mosquito-borne diseases. Researchers continue to increase knowledge of the biology, ecology and management of emerging disease vectors like mosquitoes, which in turn increases the vigilance of public health decision makers.

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