

Got Mosquitoes?

Pennsylvania Integrated Pest Management Program

Penn State Entomology



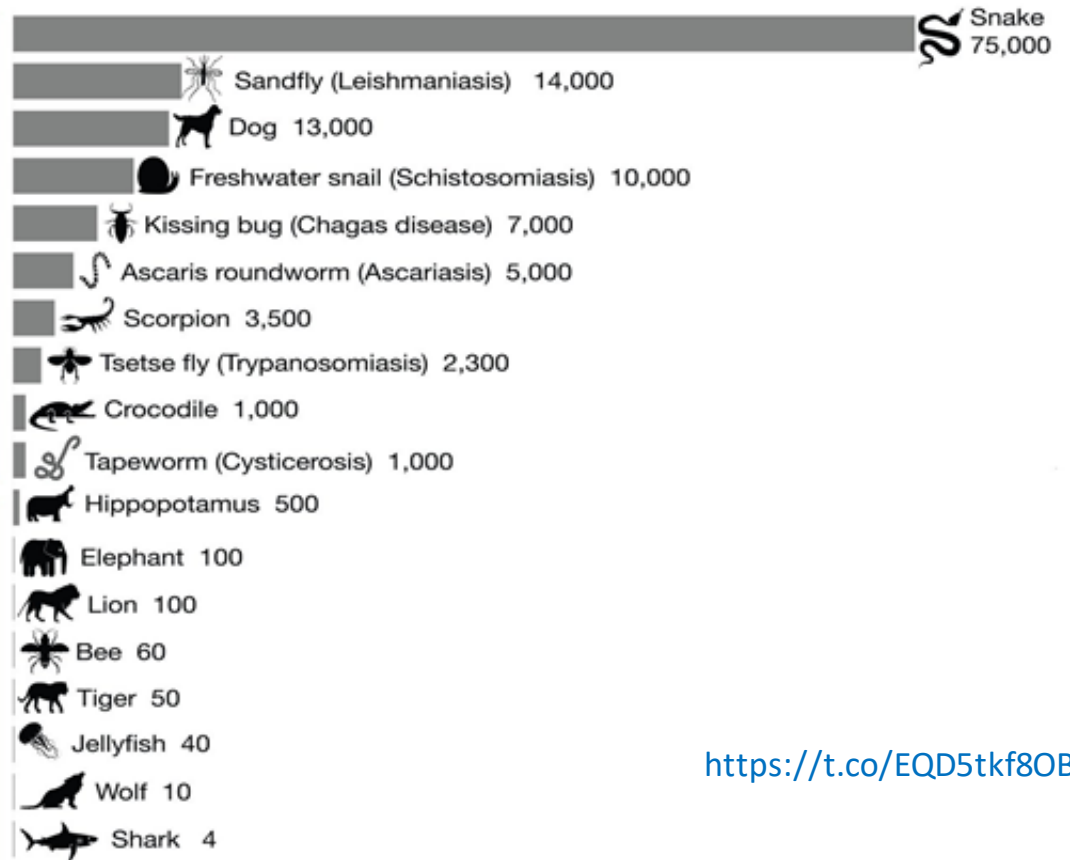
Deadliest Animals: Global Deaths, 2016



Mosquito
780,000



Human
546,000



<https://t.co/EQD5tkf8OB>

Based on data by IHME, WHO, Shark Attack File, CrocBITE, GatesNotes, National Geographic, UN FAO, WWF. Logo source: Noun Project.
Global estimates for some animals have a significant error margin, but expected to be representative of relative magnitude.
The data visualization is available at OurWorldinData.org. There you find research and more visualizations on this topic.

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Mosquitoes

62 species in state

Species of concern:

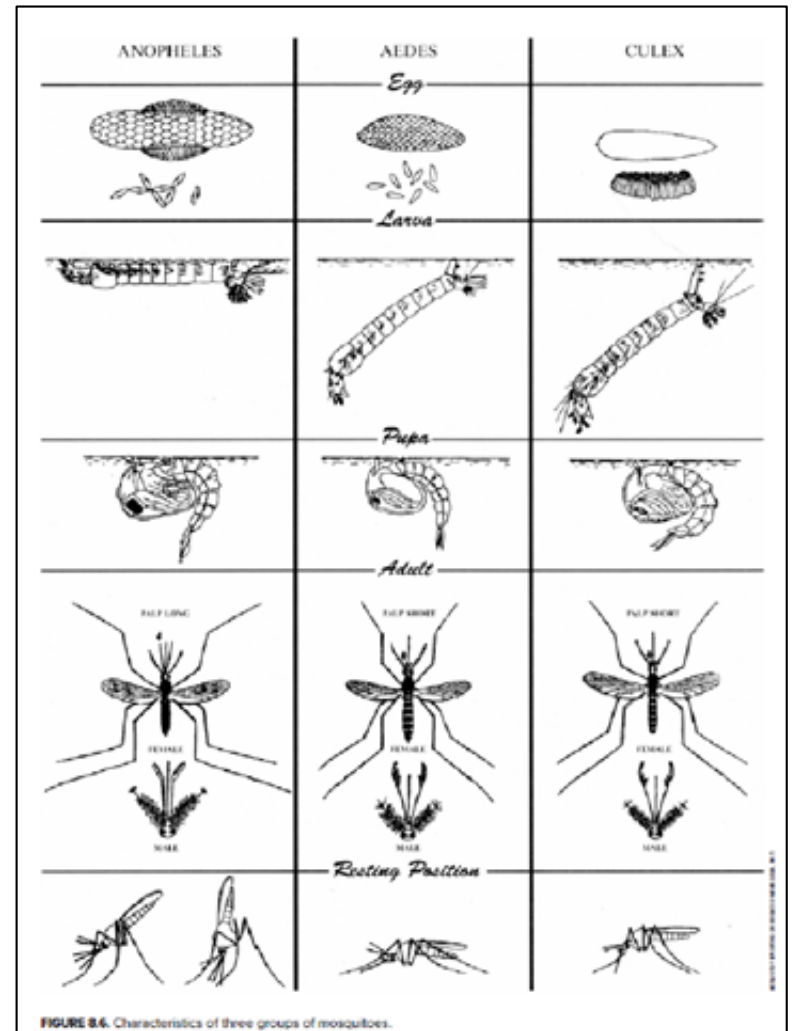
- *Aedes albopictus*
- *Culex spp.*
- *Anopheles spp.*



Aedes albopictus

Species of Concern

- *Anopheles spp.* – Malaria mosquitoes
 - “Stand on their heads”
 - Tropical, mostly dusk & evenings
 - Also vector Zika, Chikungunya, Dengue
- *Aedes albopictus* - Asian Tiger Mosquito
 - Big, black w/ white stripes
 - Day flying, indoors, low-flying
 - Competent for Zika, Chikungunya, Dengue
 - *Aedes aegypti* – yellow fever; formerly local
- *Culex spp.* – Northern House Mosquito
 - Small, dark gray
 - Dusk flying, outdoors
 - Primary vector for West Nile (via birds)

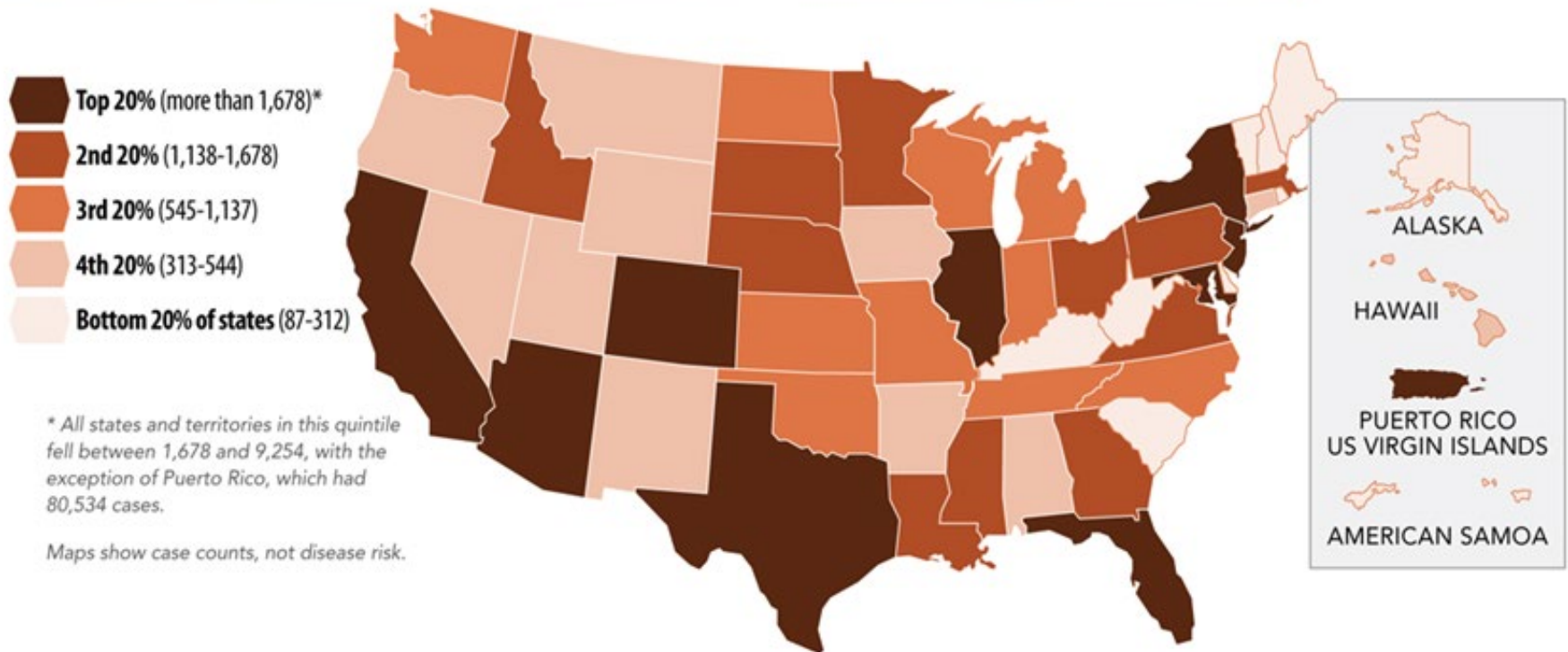


Mosquito-borne Disease



DISEASE CASES FROM MOSQUITOES (2004-2016, REPORTED)

Disease counts include both locally transmitted and travel-associated cases.



Mosquito Ranges

Aedes aegypti mosquitoes



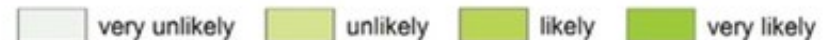
Mosquitoes' ability to live and reproduce



Aedes albopictus mosquitoes



Mosquitoes' ability to live and reproduce



Mosquito Control

Do:

- Eliminate standing water
- Use larvicides
 - *Bti* – bacterial toxin (“Dunks”)
 - Methoprene – IGR (“Torpedo’s”)
- Repair screens, door seals, and other entry points
- Use insect repellent
- Use box fans outdoors
- Use professional traps



Don't use:

- Mosquito Magnets!
- adulticides!



BG traps:

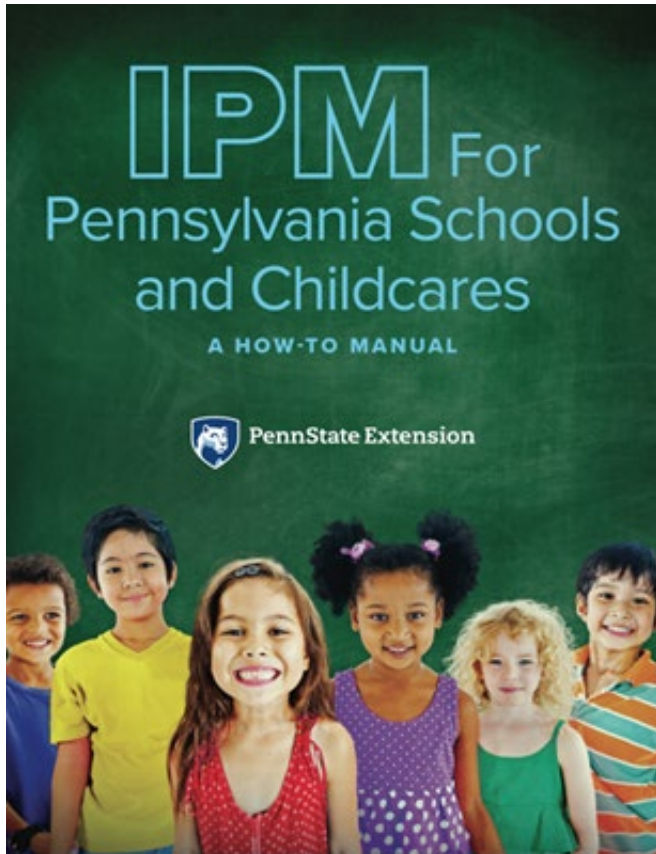
R: GAT Gravid trap

R: Mosquitaire

(Biogents USA)



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Sources as noted on slides and in References

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