

West Nile Virus in Pinal County – 2014

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West Nile Virus



- Virus first found in 1937 in the West Nile District of Uganda
- Historically found in the Old World
- Discovered in New York City in 1999
- Spread from New York across the nation
- Typically transmitted by certain species of mosquitoes.
(Birds → Mosquito → Person)
- Pinal County first experienced human WNV cases in 2004



Human Impact

- Humans are exposed through a mosquito bite from an infected mosquito (only takes on bite)
- For those with symptoms, they begin 3-14 days after bite
- Can range from no symptoms, to flu-like symptoms, to severe neurologic problems and even death

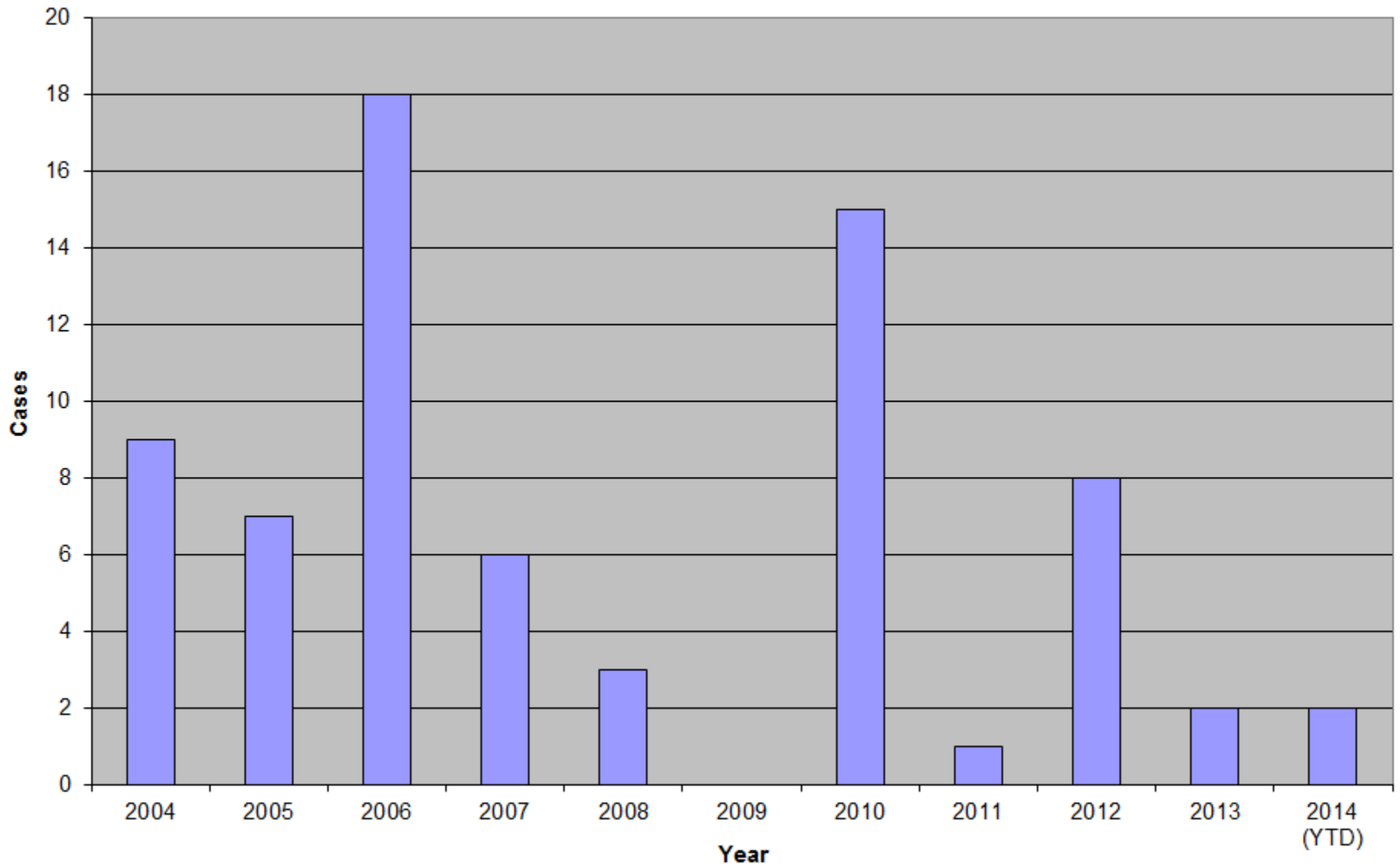


Human Impact (cont)

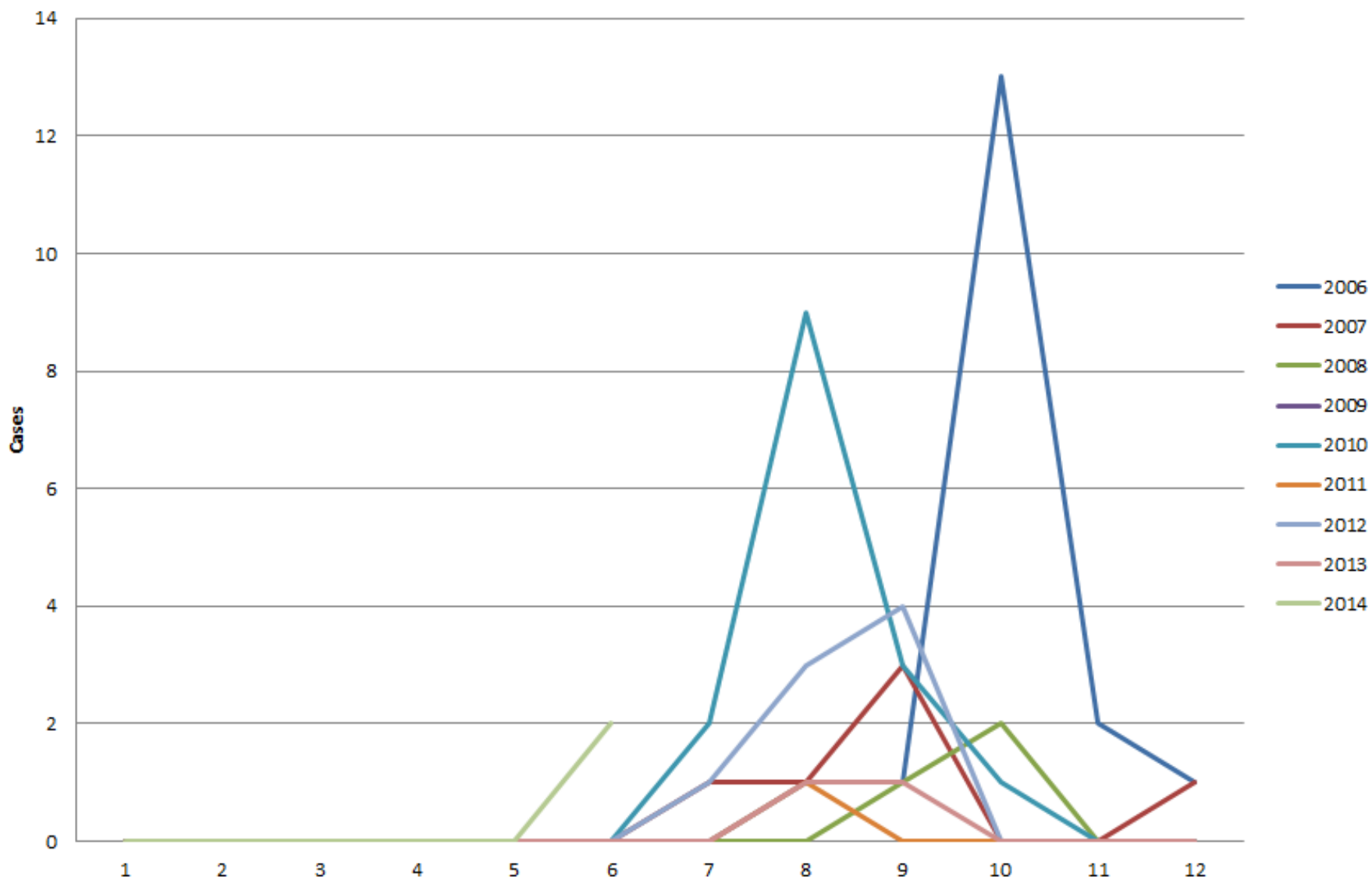
- 1 out of 150 will develop severe or life threatening disease
- It is fatal for approximately 1 out of 1000 cases
- Risk of severe disease increases with age, those >50 at highest risk
- Disease is not curable and may have lifetime health impacts such as renal failure



Human West Nile Cases in Pinal County: 2004-2012



Human West Nile Disease by Month, Pinal County: 2006-2014



Pinal County Strategy

- Monitor for WNV positive mosquitoes through trapping
- Investigate sources of breeding to decrease or eliminate mosquito breeding
- Source reduction- prevent breeding by education of home and land owners
- Inform the public on how to protect themselves
 - Ensure screens are intact
 - Wear mosquito repellent
 - Avoid being outdoors just before and after sunset/rise



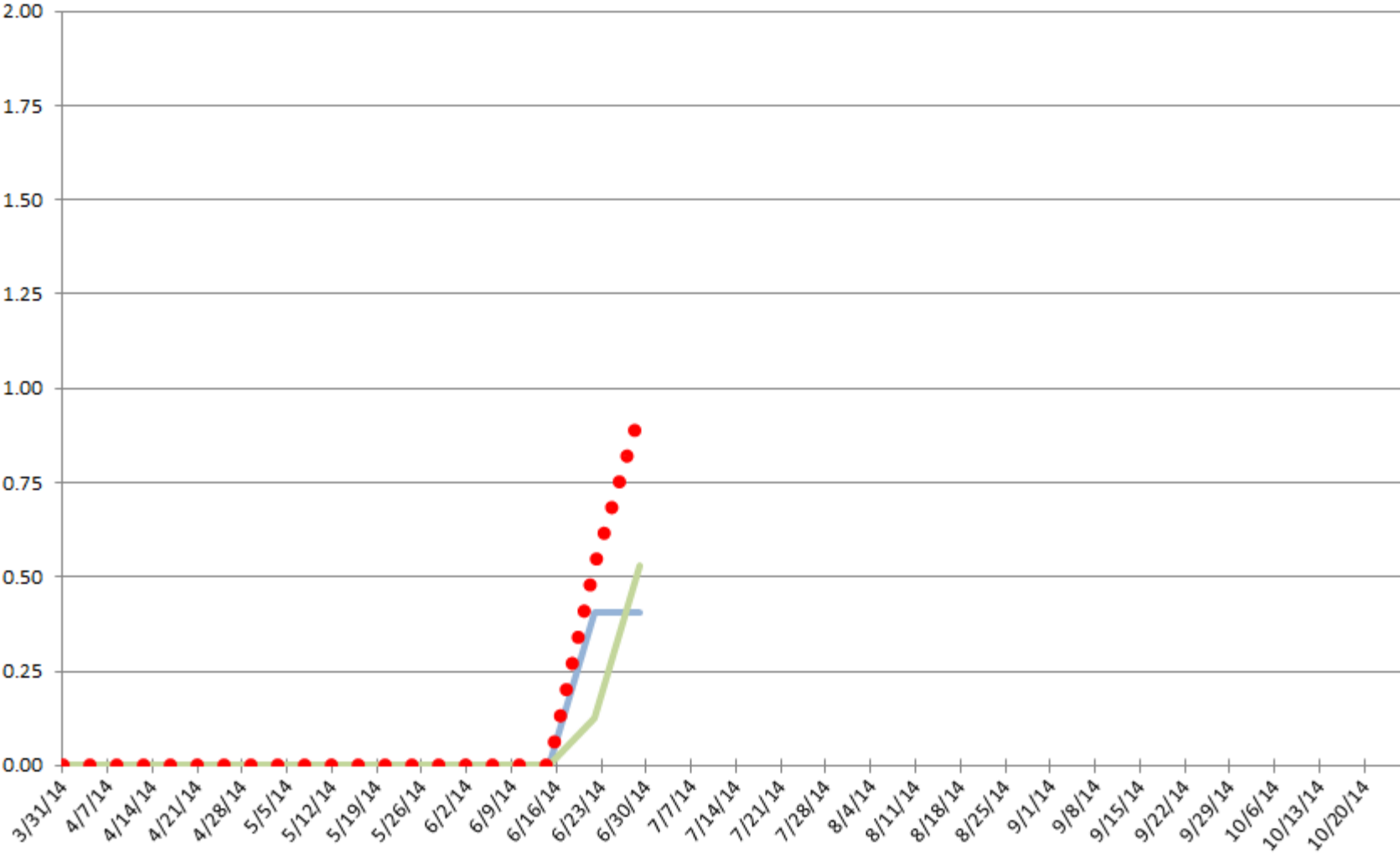
West Nile Virus Monitoring

- Trapping Known Sites
- Investigating Citizen Complaints
 - Mosquitoes Biting
 - Standing Water
 - Green Pool
 - Abandoned Pool
 - Investigate and take appropriate action
- Human Cases

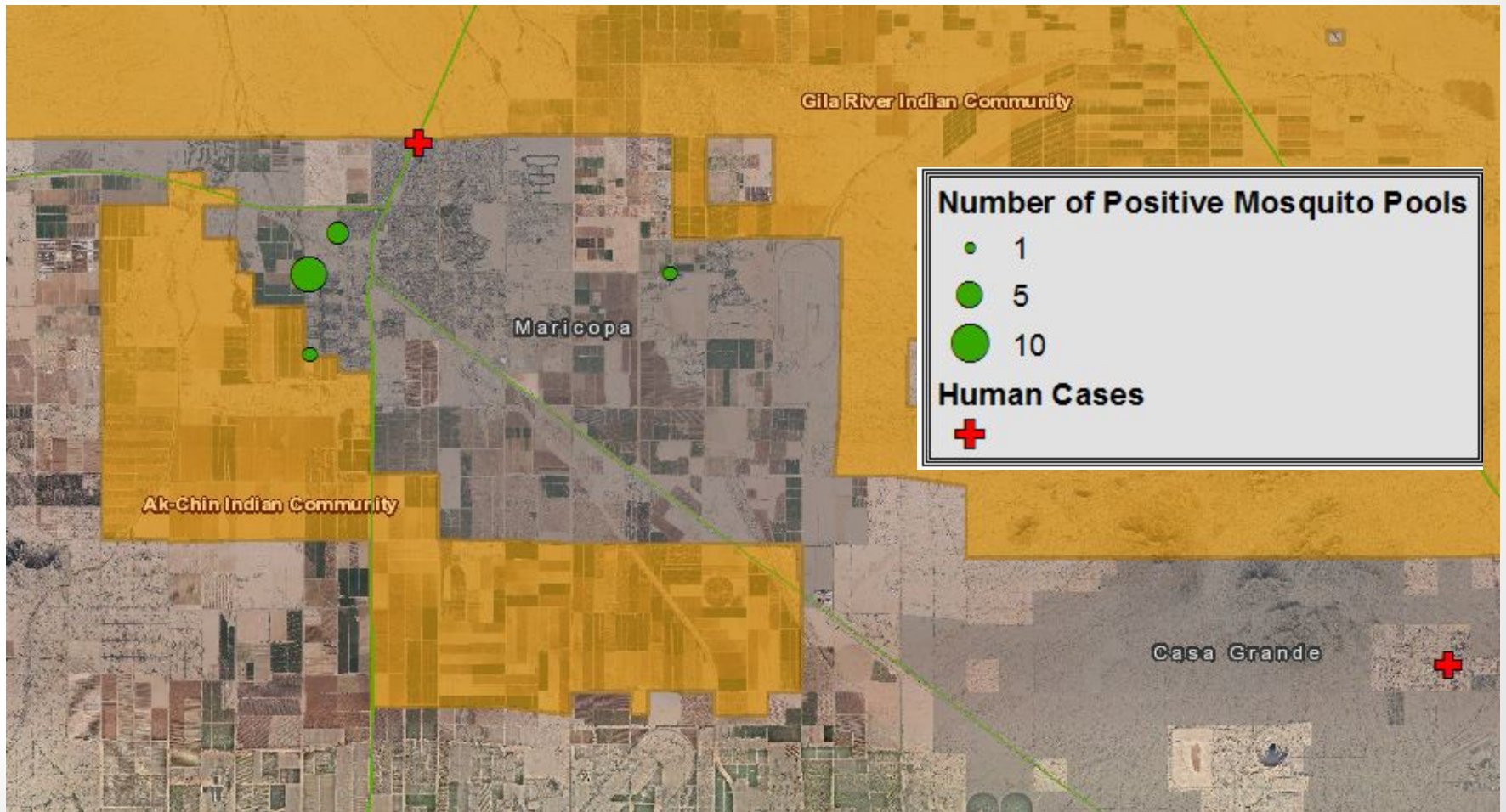


WEST NILE VIRUS INDEX

- Tarsalis
- Quinquefasciatus
- Combined

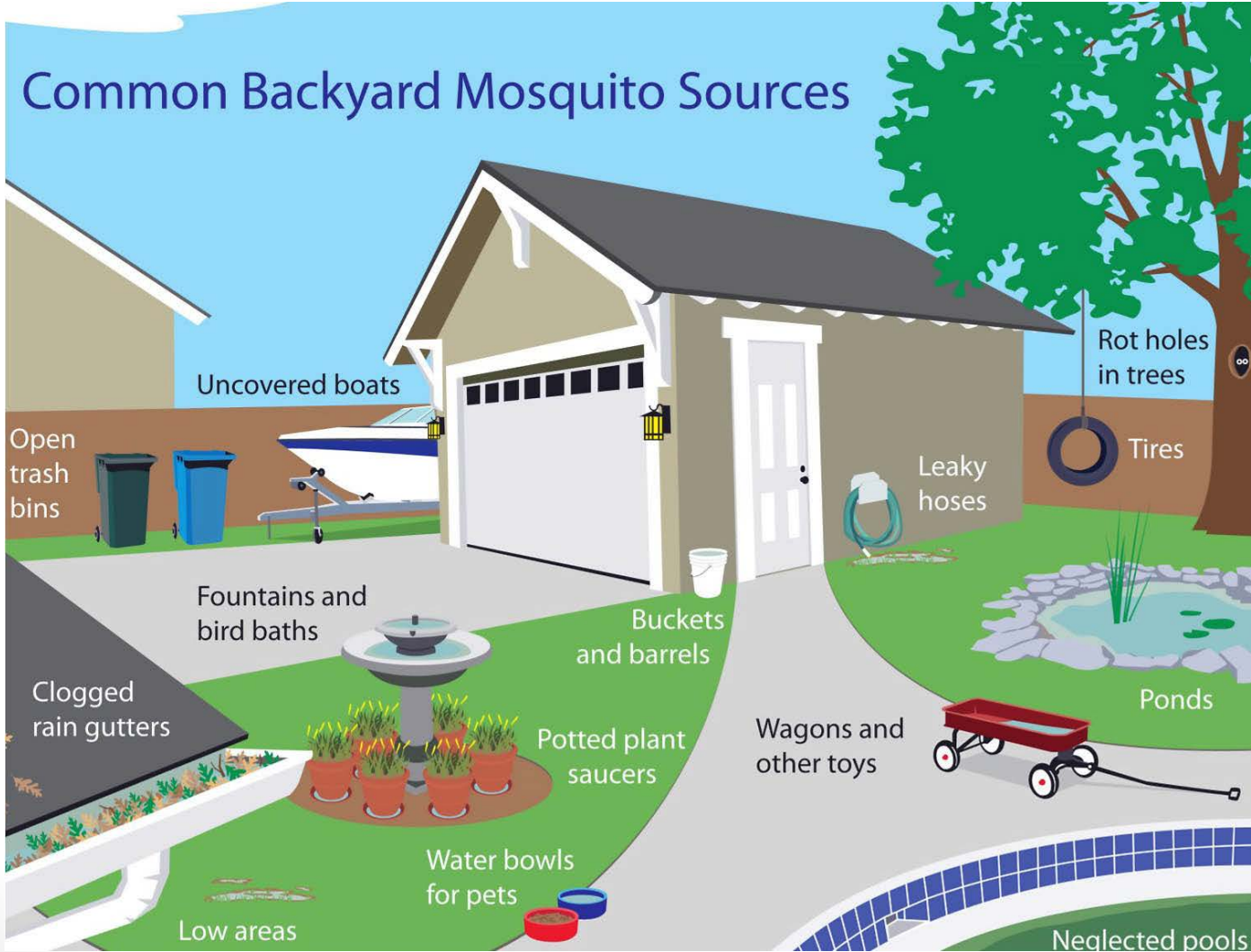


Human Cases and Positive Samples – W Pinal Co. 2014



What can the public do?

Common Backyard Mosquito Sources



Fogging as a Strategy?

- Fogging was a core element of the Pinal County strategy however for the past two years we have decrease fogging because:
 - For fogging to be effective it must be consistent and in concert with source reduction
 - For every citizen who wants fogging another one does not
 - Data does not exist to prove that fogging is a cost effective solution to mosquito breeding
 - Source reduction as a prevention strategy is cost effective and has a measureable impact on the total mosquito population



Questions or Comments?



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