Mosquitoes are the most dangerous animal on earth, primarily due to their role as vectors for numerous infectious diseases. West Nile Virus is one such disease, posing a particularly significant public health burden in North America. To reduce the public health burden of West Nile Virus, it is crucial to increase the surveillance of active cases. This allows for targeted vector control efforts, ensuring resources are directed where they are most needed while avoiding unnecessary expenditures in areas with low risk. This is why I decided to create a map documenting every reported human case from 2024. The CDC already tracks human West Nile cases as a disease of interest, but without a qualitative means of visualizing, it is difficult to use it towards vector control strategies. Using R, I was able to generate a map that visualized reported human West Nile cases by state for the year 2024. The map was able to highlight key states where West Nile Virus target vector control could really benefit, such as Texas and California. While the map I created only visualized data from 2024, the code itself is adaptable and can generate maps for any year, provided the corresponding case data is supplied. This allows for year-to-year comparisons and may even help access the success of any vector control measures that has been implemented in certain states.

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