



West Nile Virus

Mosquito Surveillance & Response Plan

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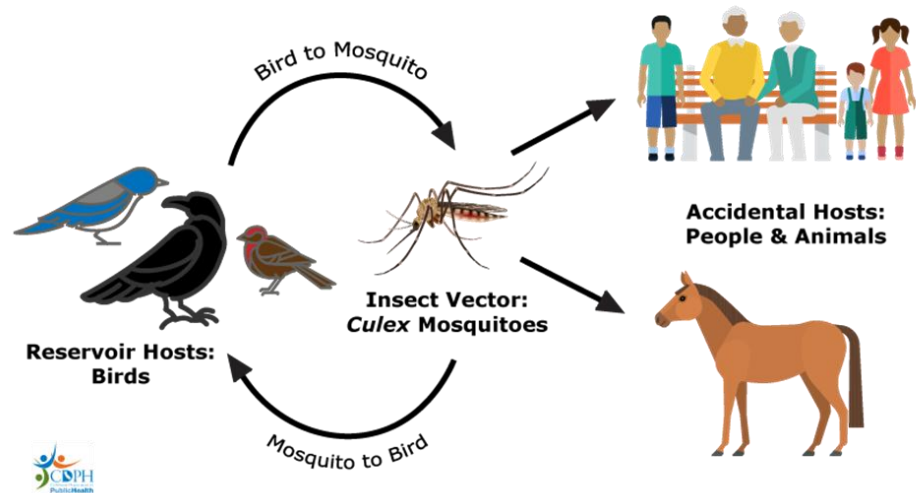
January 13, 2026



Overview

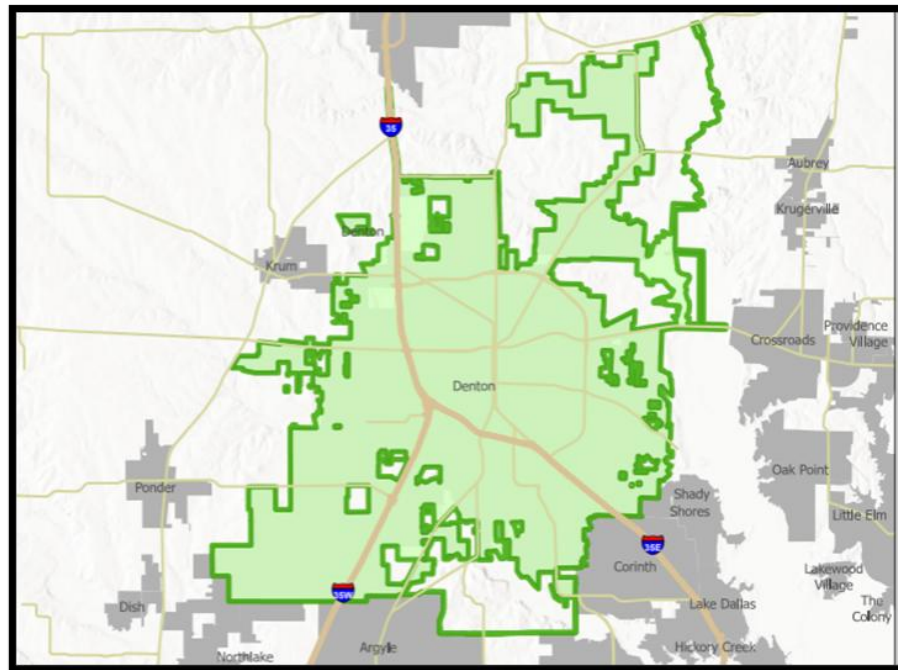
- Why have a Plan?
- Historical Mosquito Information
- Surveillance / Monitoring
- Risk Levels
- Awareness and Communication
- Response Options
- Direction

West Nile Virus Transmission Cycle



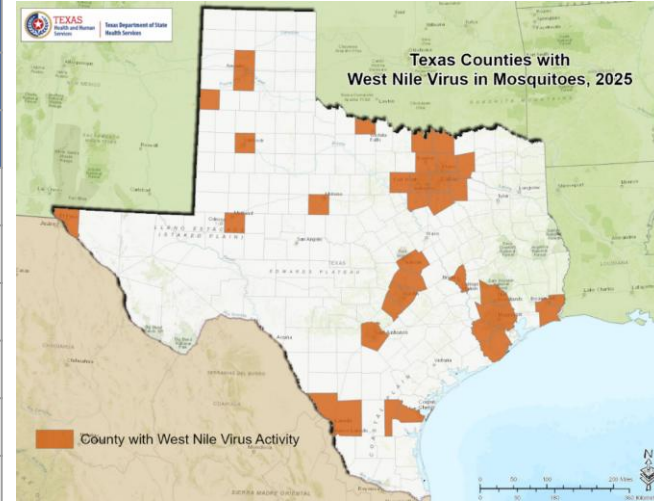
Why have a Plan?

- Define the “Season”
- Surveillance Program
 - Identify mosquito locations
 - Identify WNV infected mosquito locations
- Awareness and Communication
 - Individual actions
 - Outreach options
- Response Options
 - Breeding habitat source reduction
 - Break the life cycle (larvicide)
 - Attack the adult mosquito (spray)



Historical Mosquito Information

Year	WNV Human Cases			City of Denton WNV Traps*		
	City	County	State	Consecutive Weeks		
				One	Two	Three
2025	2	3	125	14	1	1
2024	1	24	169	22	3	0
2023	0	6	90	0	0	0
2022	0	0	36	1	0	0
2021	0	4	77	1	0	0
2020	2	7	69	21	1	0



*WNV Positive traps begin in May with typical peak in July / August

Surveillance / Monitoring

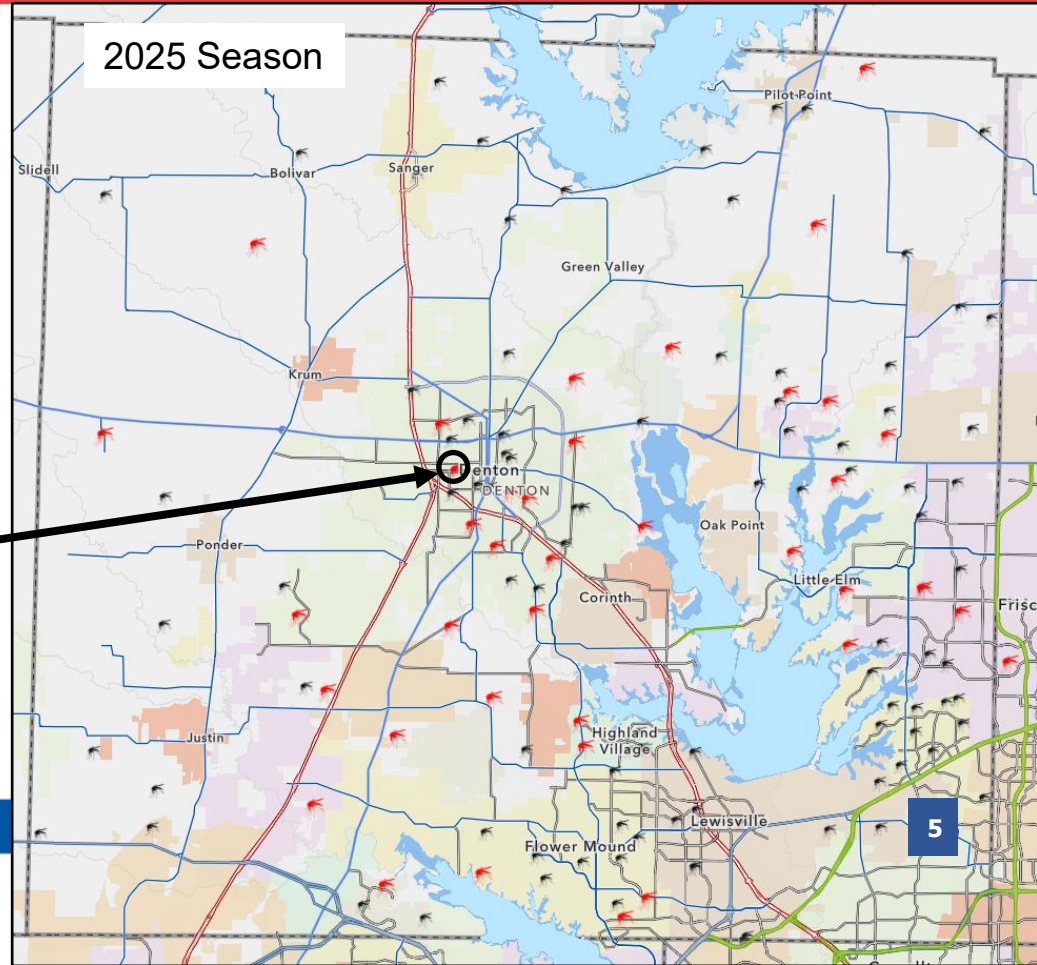
- Season: May through October
- Mosquito Surveillance Program
 - ✓ Weekly Trapping
 - ✓ Analysis by the Texas DSHS
- Human Case Monitoring
 - ✓ DSHS notifies Denton County Public Health
 - ✓ County notifies City could be up to 6 weeks post bite
 - Up to 2 weeks for symptoms, up to 2 weeks for medical professional to report, and up to 2 weeks to confirm the results

GRAVID TRAP



This trap has tested positive for West Nile Virus.
This trap's jurisdiction is Denton .

ID 25-2291



Risk Levels

- **Level 1: Mosquito Awareness** 

WNV Infected Positive Mosquitoes Possible

- **Level 2: Mosquito Alert** 

WNV Infected Mosquitoes Confirmed

- **Level 3: Mosquito Warning**   

Mosquito Trap(s) WNV Positive for two consecutive weeks

Staff authorized to consider spraying without Council Resolution

Emergency Declaration

Could be due to number of
WNV human cases &
favorable weather
conditions for WNV activity

Awareness and Communication

General Season Outreach

- Printed (posters, brochures, etc.)
- Website
- Social Media
- Denton TV



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WNV Positive Results

- Press Release
- Targeted Social Media (e.g., Nextdoor)

Spray Events

- Automated Robocalls to Spray Area
- Signage in Spray Area



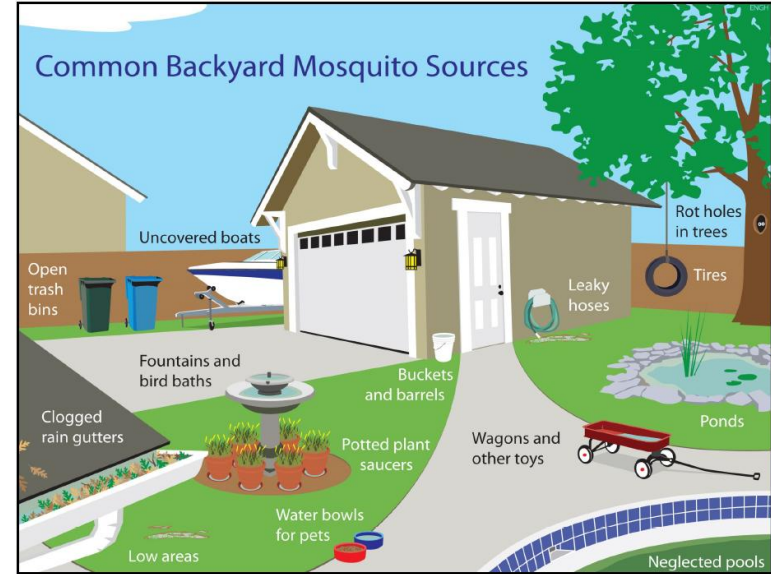
Response Options

- Breeding Habitat Source Reduction

- ✓ Remove standing water

- Target Mosquito Life Cycle

- ✓ Treat standing water (apply Larvicide)
- ✓ BTi Dunks Free to Residents
 - Limit 2 per resident
 - Customer Service
 - Composting (PCWRP)



Response Options (Cont'd)

- Attack Adult Mosquitoes



Disease Transmission Control (spray area of WNV infected trap)



Nuisance Control (i.e., general spray for mosquitoes)

Consider spraying as follows:

- ✓ WNV positive trap for two consecutive weeks
- ✓ Spray area determined by local area characteristics

Street access / Open Space / Geography / Weather Conditions

- ✓ Ultra-Low Volume (ULV) Sprayer

Along low-speed streets



Direction

1. Update the Plan as discussed
 - Consider ground-level spraying after 2 consecutive weeks (single WNV positive trap)
2. Update the Plan using other factors
3. Make no changes (stay with existing MSRP)