

Texas Integrated Vector Management Capacity

About the Survey: DSHS distributed a survey to 46 Public Health Emergency Preparedness (PHEP) participating local health departments to ascertain the state’s integrated vector management capacity. The survey was distributed on June 1, 2016 with a deadline of June 2, 2016. Thirty-eight (38) health departments responded to the survey. In light of the short response time, LHD answers are likely based exclusively on one individual’s knowledge.

For purposes of the survey, DSHS defined **vector control** as any method to limit or eradicate pests which transmit disease pathogens; and **integrated vector management (IVM)** as the efficient and effective use of chemical and non-chemical resources with the goal of overall vector control.

Major Finding: *65% of the state’s population resides in a PHEP participating jurisdiction that has an integrated vector management plan and/or activities*

The following jurisdictions indicated chemical and non-chemical approaches will be used for mosquito control:

Texas PHEP-Participating LHDs with Integrated Vector Management Plans/Activities	
Abilene-Taylor County	Hidalgo County
Austin/Travis County	Laredo, City of
Brazoria County	Midland, City of
City of El Paso	San Antonio, City of
City of Sweetwater/Nolan County	South Jefferson County/Port Arthur, City of
Dallas County	Tarrant County
Galveston County	Waco-McLennan County
Harris County	Wichita Falls/Wichita County
Houston, City of	Williamson County
Hays County	

IVM Activities

LHDs will use both chemical and non-chemical approaches: Trapping and surveillance, mosquito prevention education, larvacide (dunks) and adulticides were the most commonly cited methods of vector control. LHDs indicate spraying will include aerial, truck-based and backpack spraying. Some will use contracts, others their own assets. For many jurisdictions’, data from surveillance activities will guide spraying plans.

Additional innovative approaches:

- Geographic Information Systems (GIS) – GIS for mapping of surveillance data
- Minnows – for mosquito control in standing or stagnant water
- Vector Control Task Force (Hidalgo Co.)
- Training community groups to assist in environmental assessments (Hidalgo Co.)
- Multimedia television radio print and social media – with bilingual and binational communications (Hidalgo Co.)

- Insecticide resistance testing (Harris Co.)
- Alternative Mosquito Control Research Branch (Harris Co.)

Partnerships

LHDs with IVM programs have broad ranging partnerships. Many of the LHDs with IVM programs plan to work with many of the same partners including healthcare/hospitals, healthcare coalitions, emergency management, schools, Women Infants and Children (WIC) Program, public works/parks and recreation, blood banks, non-profits and other governmental entities.

Innovative partnerships include:

- Home Owners Associations
- Neighboring jurisdictions (non-incorporated areas)
- Dallas Fort Worth Airport
- Code Compliance Officers
- Military Bases
- University Partners
- Local utilities (bill inserts)

Barriers

LHDs cite funding and the need for additional staff as the major barriers. LHDs indicated additional technical assistance and staffing could strengthen response capacity. One jurisdiction specifically mentioned the need for subject matter expertise/technical assistance to determine thresholds for escalating vector control efforts.

Additional barriers include:

- Counties have challenges working municipalities located within their jurisdiction due to different codes, processes, enforcement and capability
- Public concern about and opposition to chemical spraying
- Limited information from neighboring jurisdictions *without IVM programs*
- Needs software to track surveillance (currently using Excel)

Follow-up. DSHS will reach out to the eight (8) health service regions as well as non-PHEP participating local health departments to ascertain IVM capacity and add those data to this analysis.