

**Houston Department of Health and Human Services
Office of Surveillance and Public Health Preparedness
Bureau of Epidemiology**

**Heat Surveillance Report
August 26, 2009**

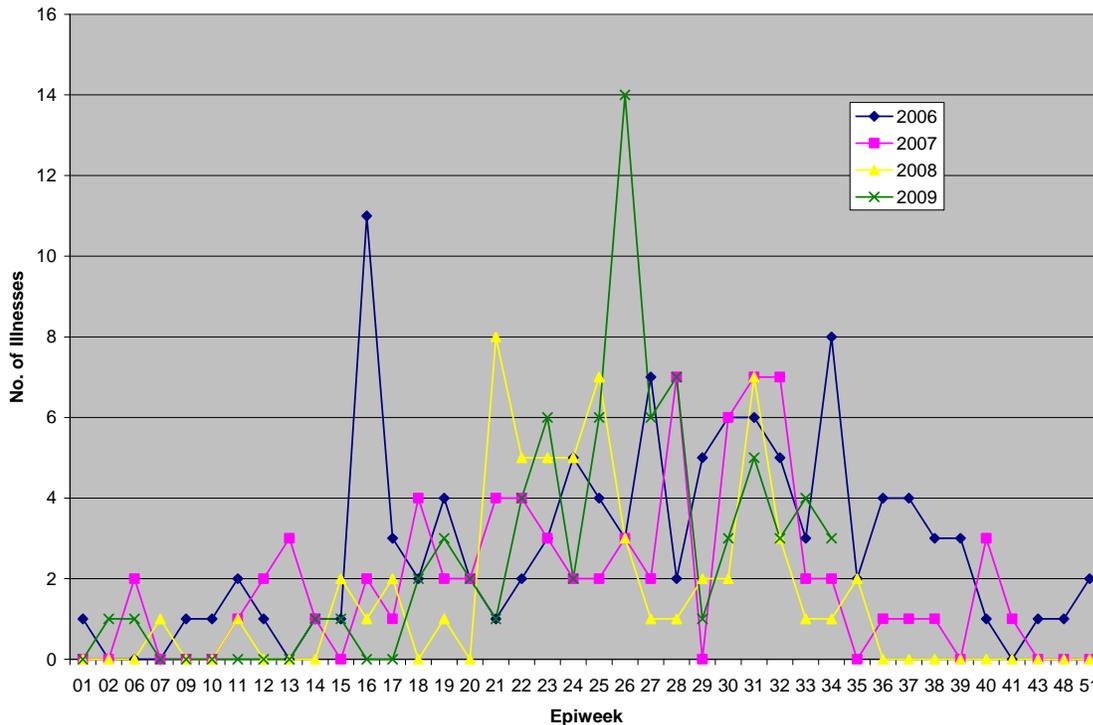
Introduction

- Houston has a humid subtropical Climate. The warmest month on the average is July at 85°F and the coldest month being January at 54 °F.
- Summer in Houston is hot and humid. The average daily high temperature peaks at 94°F at the end of July, with an average of 99 days per year above 90°F
- Exposure to extreme heat is associated with morbidity (Heat Cramps, Heat Exhaustion, and Heat Stroke) and occasionally mortality.
- Routine reporting for heat surveillance has been poor
- Using the Real time outbreak and Disease Surveillance System (RODS), we are able to extract hospital chief complaints that are surrogates for heat related Emergency Room visits.

Results

- **The Graph shows Heat-related Illnesses 2006 – 2009**

Trend of Heat-related Illnesses 2006-2009



Summary

- In 2009, we begin to observe sustained number of heat-related illnesses at about week 17 (3/22/2009).
- Compared to previous years, the number of reported illnesses fluctuated at higher levels with a peak at about Epiweek 26/27 (between 6/24/2009 to 7/2/2009). This peak is the highest for the same time period in four years.
- The June 2009 reported heat illness count has increased from 26 to 29 because data recovery was done for previously lost data during the month of June 2009.

Heat-Related Illnesses in Houston \ Harris County 2006 - 2009

Year	June	July	YTD* (August 26,2009)
	Counts		Counts
2006	15	20	92
2007	11	17	71
2008	22	10	61
2009	29	18	76

- YTD: Year to date (Covers from 01/01/2009 to 08/26/2009).

Heat Related –Mortality in Houston \ Harris County 2003-2009

	Harris County*	Houston
	Counts	Counts
2003	11	8
2004	8	3
2005**	1	0
2006	6	4
2007	2	2
2008	5	5
2009	6	6

*Harris County counts include Houston

** Does not include deaths associated with the evacuation for Hurricane Rita

2009

There have been six (6) heat related deaths reported by the ME office. They occurred on 5/8/09, 5/14/09, 6/15/09, 6/26/09, 6/1/09, and 8/5/09 and respectively. Cases included a 42-year old Hispanic male who was found in a hospital parking lot with altered mental status, a 56 year-old African-American male found inside his residence without air-conditioning, and a 77 year-old African American female found in her residence also without air-conditioning. These first three described deaths had underlying health conditions. The fourth is a fourteen year (14) old who died from dehydration following extreme heat exposure. The fifth and sixth mortalities were a 35-year-old Hispanic male and a 56 year-old Hispanic male. These last two described deaths both expired at local hospitals due to complications related to hyperthermia.