

**Office of Surveillance & Public Health Preparedness**  
*Program of Public Health Informatics*

**Heat Surveillance Monthly Report**  
**2016 Season**

## Highlights

- Houston Health Department conducts heat injury surveillance from March to September. This time period includes Spring and Summer seasons.
  - An EC visit is counted as HRI when chief complaints include variations of heat exhaustion, heat stroke, heat cramps, overheating, etc. Most months heat exhaustion accounts for the majority of HRI EC visits.
  - From March to June 15, 2016, there was 82 heat-related deaths in the Houston area. As of June 15, 2016, there was 0 mortalities among in the Houston area.
  - From 2013 to 2015, the average number of mortalities during the Spring and Summer seasons was 4 (range 2 to 6).
  - From 2013 to 2015, heat related deaths are more likely to occur when the average maximum temperatures are above 90 degrees Fahrenheit.
  - This season 82 Emergency Center (EC) visits were related to Heat Related Illness (HRI) from March 2016 to June 15, 2016.
  - EC visits due to HRI have increased from March to June. The highest counts in any given day of HRI occurred on June 17 (n=7) and May 31 (n=4).
  - During the 2016 season 49% of EC visits for HRI occur among Males. The age-group that accounts for the most (59%) ED visits due to HRI is the 18 to 64 age group.
  - EC visits due to HRI have occurred in ZIP codes across the Greater Houston Metropolitan Area. There are not ZIP codes with counts higher than five.
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Table 1. Occurrence of Heat-Related Events in Houston, 2013 to 2016

Year	2013	2014	2015	2016
Heat related illness <sup>(a)</sup>	144	151	221	82
Heat related deaths <sup>(b)</sup>	6	2	4	0
<b>Total</b>	<b>150</b>	<b>153</b>	<b>225</b>	<b>82</b>

(a) Heat related illness for 2015 are from 03/20/2016 to 06/15/2016

(b) Heat related deaths for 2015 are from 03/20/2016 to 05/31/2016

Figure 1. Heat Related Illness per month

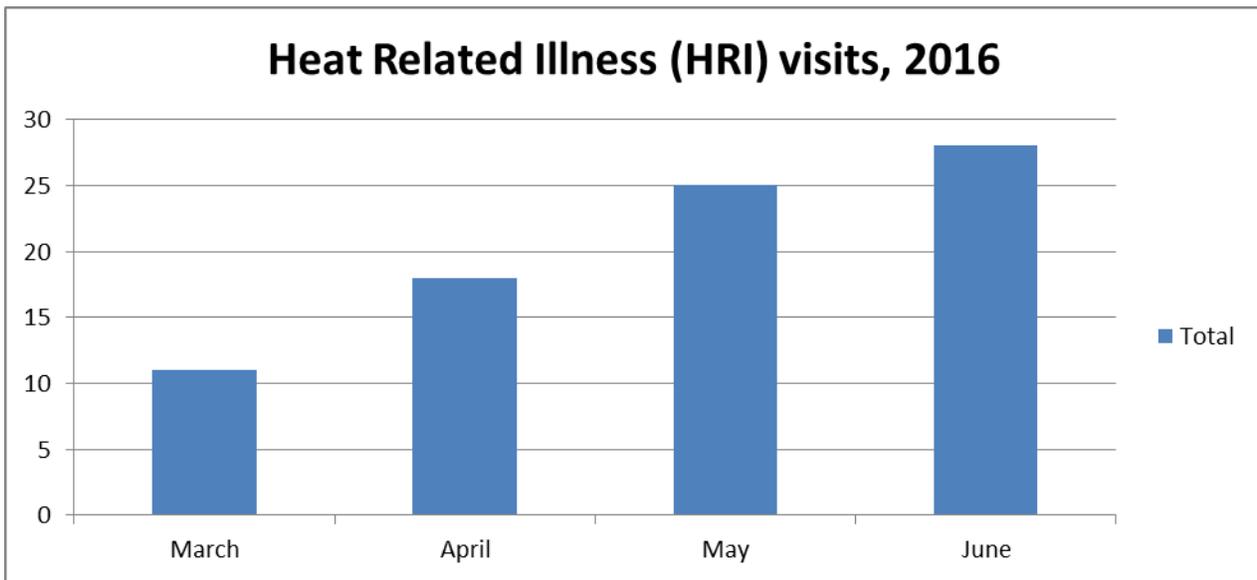
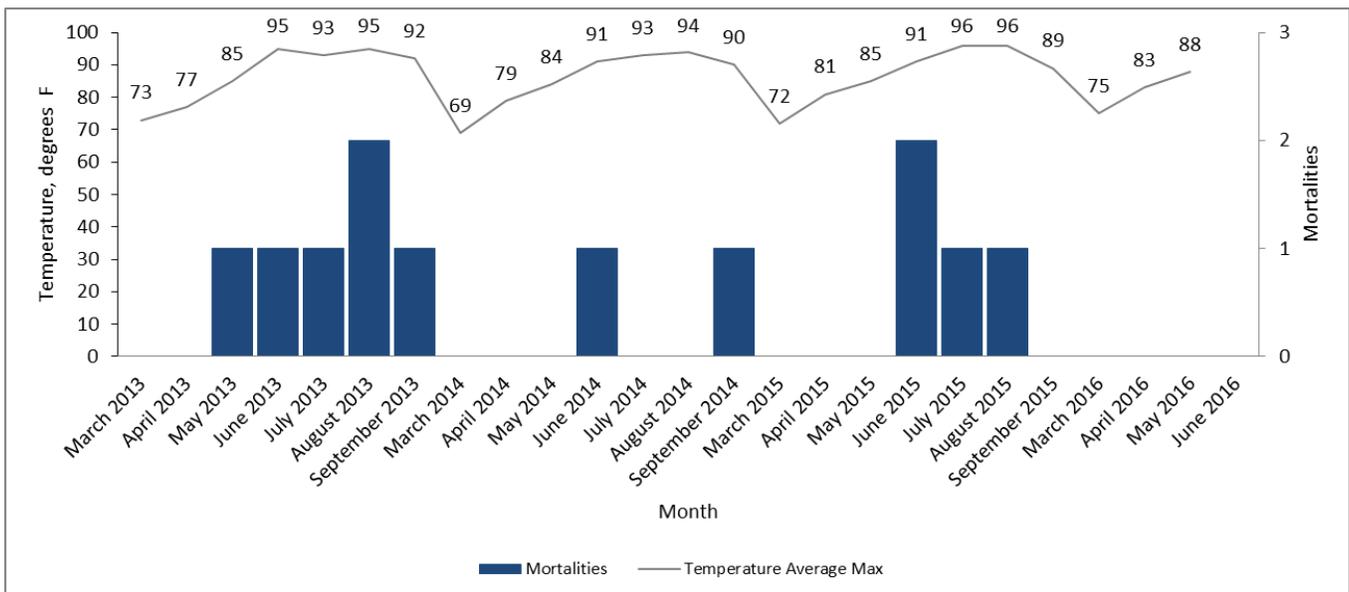


Figure 2. Heat related deaths<sup>c</sup> by month, 2016



<sup>c</sup> A heat related death is defined as a death whose primary cause is related to excessive heat.

Figure 3. Moving average for Heat Related Illness visits to Emergency Center

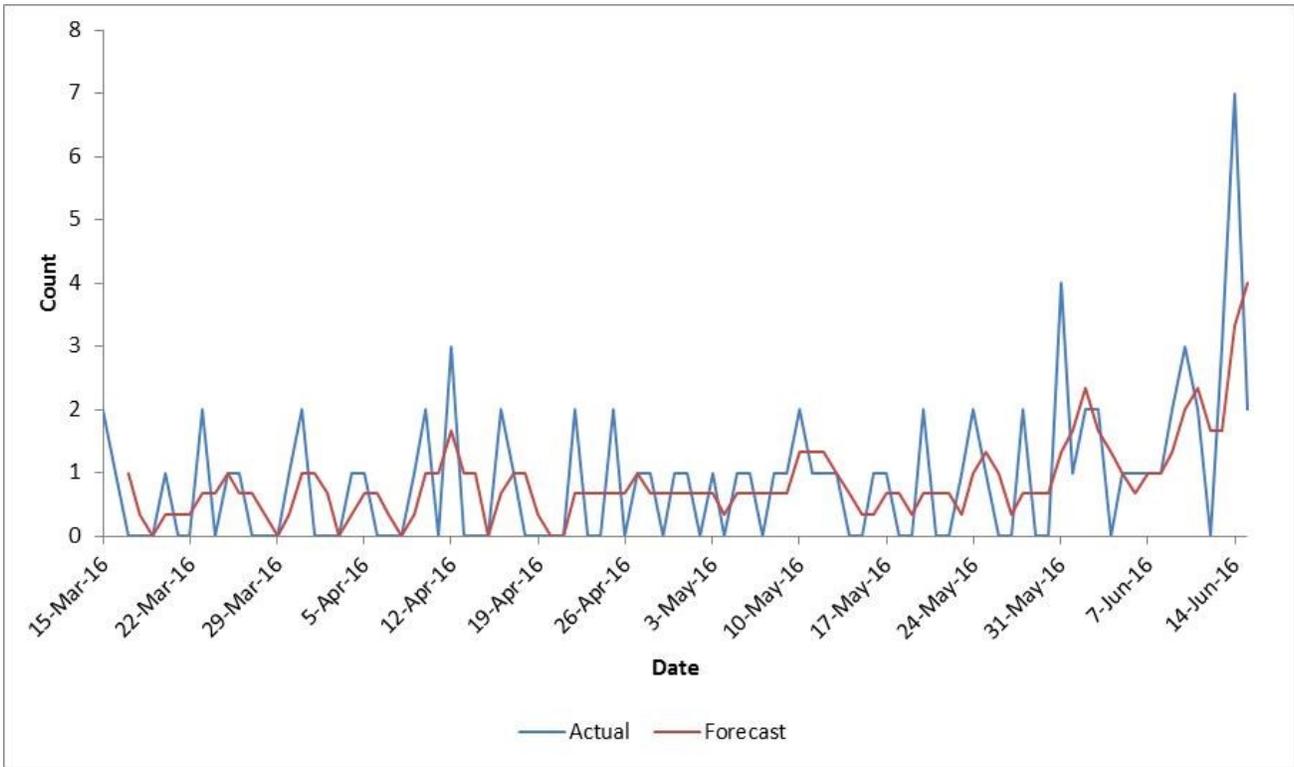


Figure 4. Map of Heat-Related illness in Greater Houston Metro Area

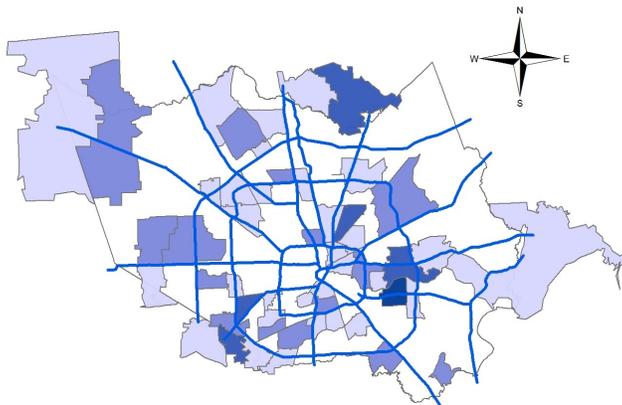
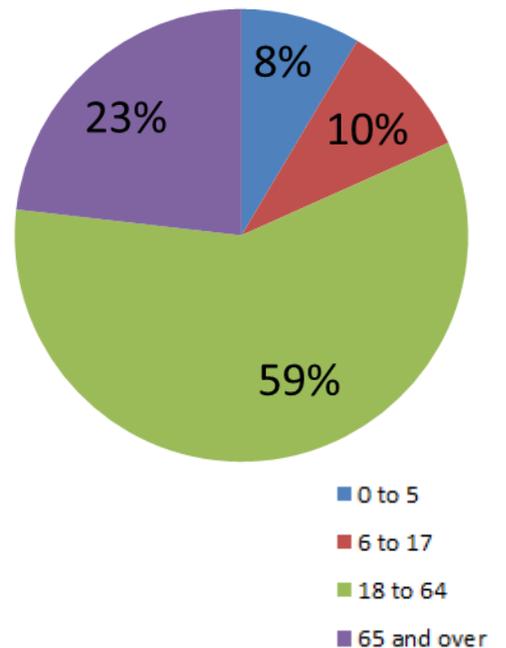


Figure 5. Age distribution of Heat-Related Illness



## Tips for Prevention of Heat-related Illness

The Houston Health Department (HHD) recommends Houstonians begin taking precautions against high temperatures to avoid heat-related illnesses. High body temperatures can lead to damage to the brain or other vital organs and even death.

### What Can You Do?

#### Stay cool.

- Find an air-conditioned shelter
- Avoid direct sunlight
- Wear lightweight, light-colored clothing
- Take cool showers or baths
- Do not rely on a fan as your primary cooling device

#### Stay hydrated.

- Drink more water than usual
- Don't wait until you're thirsty to drink more fluids
- Avoid alcohol or liquids containing high amounts of sugar
- Remind others to drink enough water

#### Stay informed.

- Check local news for extreme heat alerts and safety tips
- Learn the symptoms of heat illness

For more information regarding prevention tips for heat-related events, please see:

<http://ephtracking.cdc.gov/showClimateChangeExtremeHeat.action>

*The Houston Heat Surveillance Annual Report is available on the Houston Health Department web site at:*

[www.houstontx.gov/health/](http://www.houstontx.gov/health/)

*NOTE: Additional information regarding extreme heat can be accessed at: <http://emergency.cdc.gov/disasters/extremeheat/>*

*NOTE: Data for Heat Related Illness is obtained from RODS system. The system retrieves Emergency Center chief complain data from over 35 emergency centers in the Greater Houston Metropolitan Area.*

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