

Using Syndromic Surveillance to Track and Report Emergency Department Visits for Heat-Related Illness in Louisiana

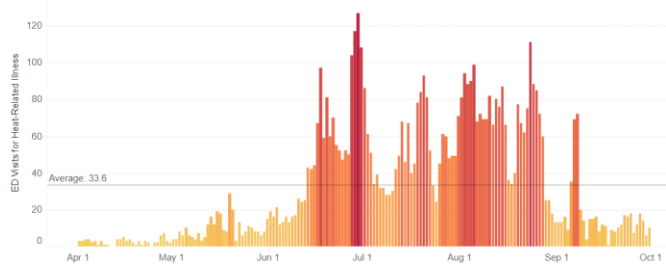
Louisiana's Occupational Heat-Related Illness and Injury (HRI) Program established timely analysis and reporting of syndromic surveillance data for HRI. Data were instrumental in communicating the impact of heat on Louisiana residents and workers.

The Challenge

The summer of 2023 was the hottest on record for Louisiana. High humidity resulted in heat indices or “feels like temperatures” of 115-120°F. Night-time highs remained in the 80's providing little cooling relief. Dangerously hot conditions persisted for most of the summer.

The Response

The HRI Program established weekly syndromic surveillance reports for HRI using a built-in ESSENCE query that flags emergency department (ED) visits of records containing text or an ICD code associated with heat exhaustion, heat exposure, heat cramps, heat stroke or hyperthermia. The query was modified to include Clinical Impression and Triage Notes fields and ICD code for environmental hyperthermia of a newborn. Reports were emailed to stakeholders and posted on our website. Content included daily number of HRI visits to EDs in Louisiana and cumulative counts by age, sex, race\ethnicity, region, day of the week and time. In August, we partnered with the Louisiana Department of Health's Bureau of Health Informatics to develop and launch a public-facing Tableau dashboard for HRI.



The Impact

Syndromic surveillance data for HRI were instrumental in informing state and local policies and practices related to heat and health. The number of HRI ED visits during the summer of 2023 was three times greater than the annual average number of ED visits for HRI. The data highlighted the high rates among working-age men (75% of HRI visits were men, with the highest number among men ages 20 to 49 years). This finding influenced messaging about heat risks for workers.

HRI Program staff conducted numerous interviews with local and national media, and data were used or contributed to the following activities:

- The Governor of Louisiana declared a state of emergency for extreme heat.
- Health Alert Network issued to all Louisiana physicians (Extreme Heat Poses Serious Risk of Heat Exhaustion and Heat Stroke).
- Heat action plan developed by the City of New Orleans.
- Guidance issued for employers and workers about working in excessive heat.

For more information, visit [Louisiana's Occupational Heat-Related Illness and Injury Program website](#)