

The Sacramento County Public Health Emergency Preparedness (PHEP) Program has the overall responsibility of protecting the public's health during an emergency. In addition to coordinating with local, state, and federal agencies, PHEP monitors data from various sources to help in the planning, response, and recovery phases of an emergency.

## Air Quality<sup>1</sup>

In Sacramento County, the median air quality index (AQI) ranged from 49 ("good") to 56 ("moderate") and the maximum AQI ranged from 147 ("unhealthy for sensitive groups") to 172 ("unhealthy") during the years 2013 through 2017 [Figure 1]. On average, the majority of days (90%) were either "good" or "moderate." There were no "very unhealthy" or "hazardous" days during this five year period.

Some of the larger fires in Northern California during this time period included the Tubbs, Atlas, and Nuns fire in the counties of Sonoma and Napa in 2017.

## Heat-Related Illness<sup>2,3,4</sup>

In 2016, Sacramento County had 223 heat-related illness (HRI) emergency room (ER) visits and 32 HRI hospitalizations [Table 1]. The rate of HRI ER visits and hospitalizations were slightly higher in Sacramento County than the overall state rate.

As expected, ER visits for HRI were the highest during the hottest months of the year (June through August) in 2016 and 2017. There were also more HRI ER visits in 2017 than 2016, which is consistent with the hotter summer in 2017 (average temperature 93 °F, highest temperature 110 °F, 62 days over 90 °F) compared to 2016 (average temperature 91 °F, highest temperature 104 °F, 50 days over 90 °F).

Data Sources: <sup>1</sup>Environmental Protection Agency, <sup>2</sup>California Environmental Health Tracking Program/Office of Statewide Health Planning and Development, <sup>3</sup>CDC NSSP ESSENCE, <sup>4</sup>National Climatic Data Center

Figure 1. Air Quality by Year, Sacramento County, 2013-2017

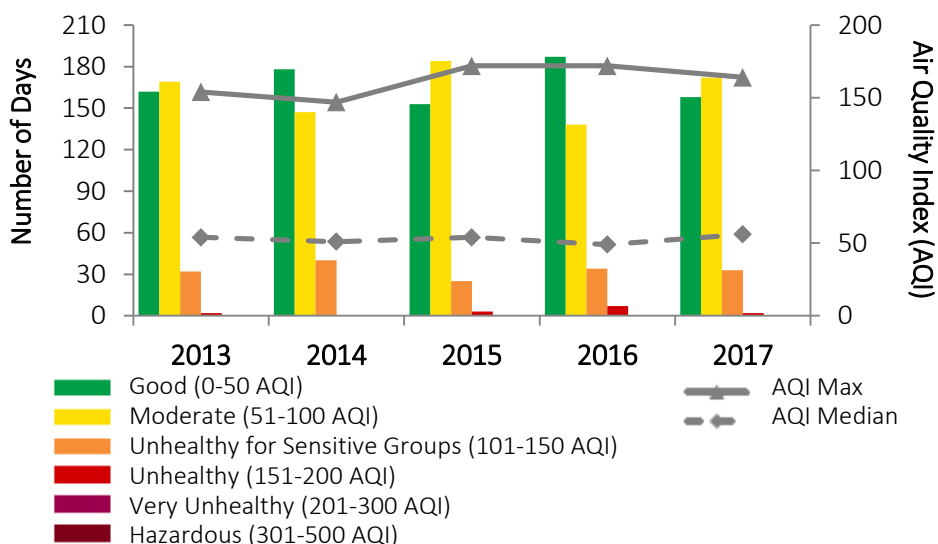
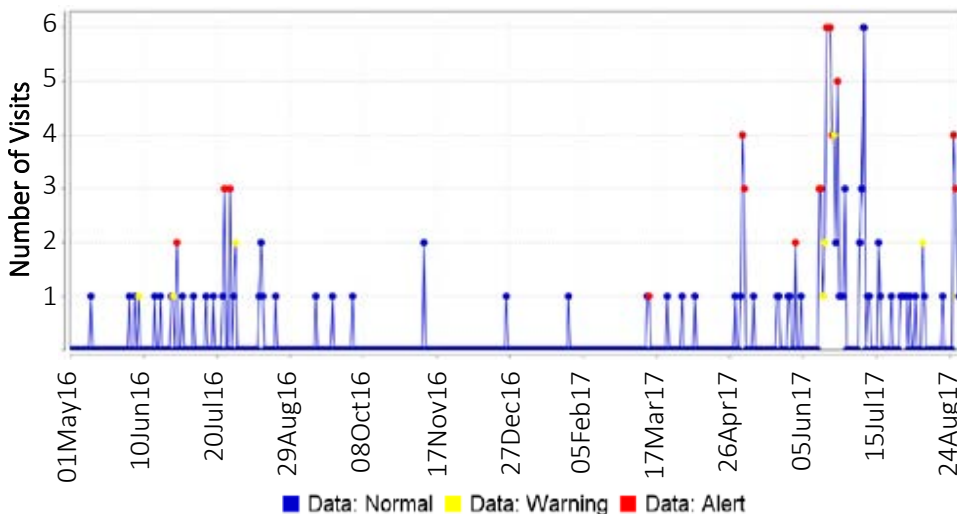


Table 1. Heat-Related Illness Emergency Room Visits and Hospitalizations, Sacramento County, 2016

	Emergency Room Visits		Hospitalizations	
	Total	Crude Rate (per 100,000)	Total	Crude Rate (per 100,000)
Sacramento County	223	14.8	32	2.1
California	5,338	13.6	787	2.0

Figure 2. Daily Heat-Related Illness Emergency Room Visits, Sacramento County, 5/1/16-8/31/17



**Flood Risk<sup>5</sup>**

The 100-year flood plain is an area with a 1 in 100, or 1%, chance of flooding each year whereas the 500-year flood plain is an area with a 1 in 500, or 0.2%, chance of flooding each year. Figure 3 shows the areas in the County with 1% and 0.2% annual chance of flooding.

**Social Vulnerability Index<sup>6</sup>**

Social vulnerability refers to the resilience of communities when confronted with external stresses (i.e. natural or human-caused disasters, disease outbreaks) on human health. The Centers for Disease Control and Prevention (CDC) developed the Social Vulnerability Index (SVI) to determine the social vulnerability of each census tract using 15 social factors to create four related themes and an overall ranking, which include:

- Socioeconomic Status: below poverty, unemployed, income, no high school diploma
- Household Composition and Disability: aged 65 and older, aged 17 and younger, civilian with a disability, single-parent households
- Minority Status and Language: minority, speak English "less than well"
- Housing and Transportation: multi-unit structures, mobile homes, crowding, no vehicle, group quarters

Figure 4 shows the overall SVI ranking (1-high, 0-low) by census tract for the County.

Visit the SCPH [Epidemiology Unit](#) website to access interactive and detailed maps.

Data Sources: <sup>5</sup>Federal Emergency Management Agency, <sup>6</sup>CDC/2016 American Community Survey 5-Year Estimates

Figure 3. Flood Risk Zones, Sacramento County, 2018

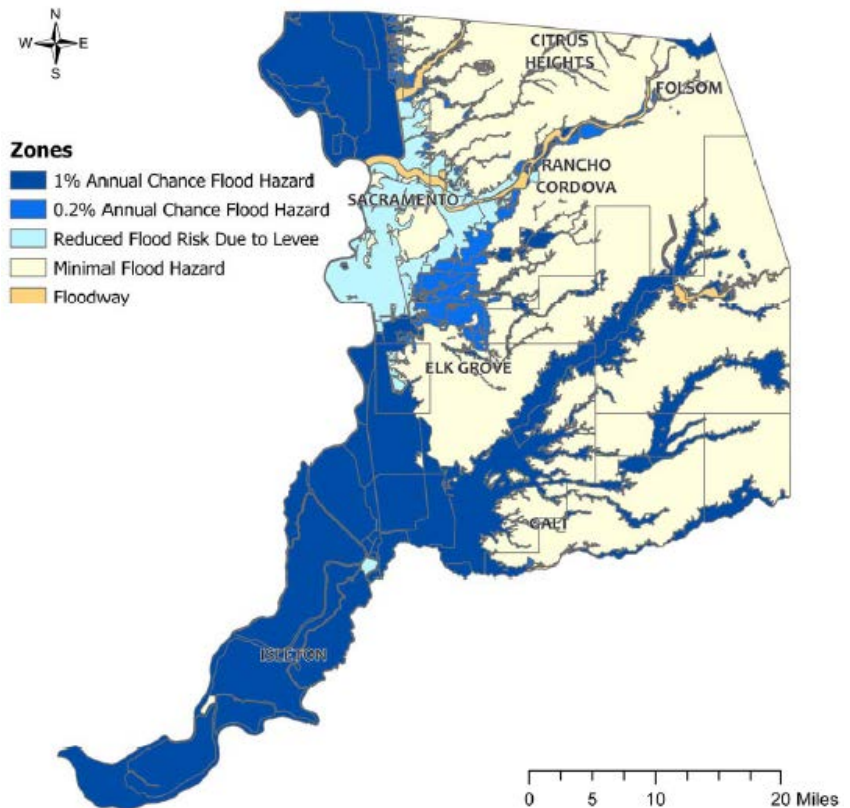


Figure 4. Social Vulnerability Index, Sacramento County, 2016

