

**DON'T WAIT FOR
THE CHICKENS TO
DIE...**

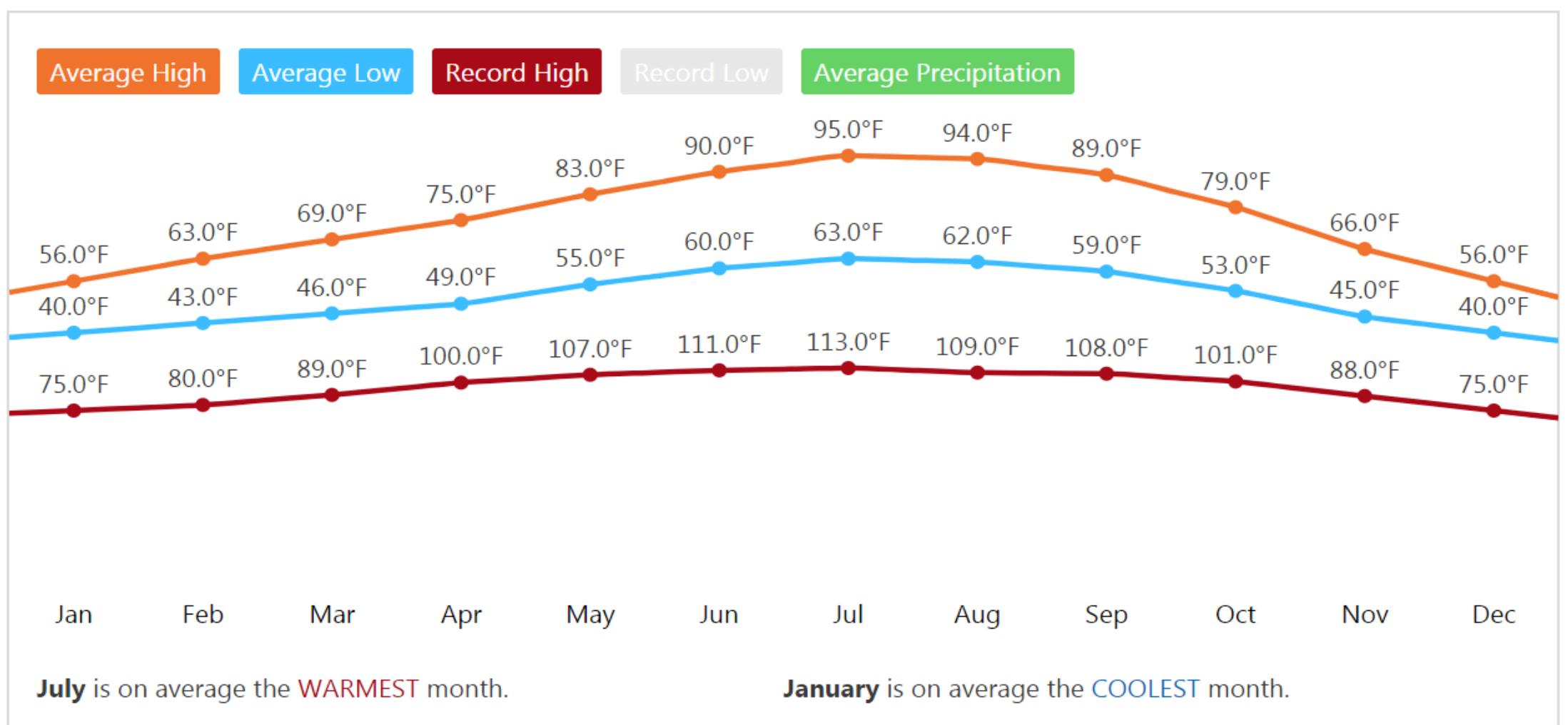
**JULIE VAISHAMPAYAN, MD, MPH
CCLHO, SEPTEMBER, 2019**

STANISLAUS COUNTY

- Population 550,000
- County seat: Modesto



MODESTO



STANISLAUS COUNTY AGRICULTURE, 2018

Number	Product	Dollars in Millions
1	Almonds	1,110
2	Milk	636.5
3	Chickens	276.9
4	Cattle	236.8
5	Nurseries	170.2
6	Silage	135.9
7	Walnuts	102.6
8	Almond pollination by commercial beekeepers	75.8
9	Turkeys	64.3
10	Peaches	56.6

HEAT WAVE, JULY 2006

- Highs greater than 100° F for 12 days straight
 - Between 111°-113° for 3 days in a row
 - Highest heat index 118°
- Highest low was 86° F
- Higher than usual humidity

- 23 people died
 - 3,000 cattle (> 1,187 tons)
 - > 700,000 chickens and turkeys (> 3,455 tons)

ORDER OF DEATH

Chickens

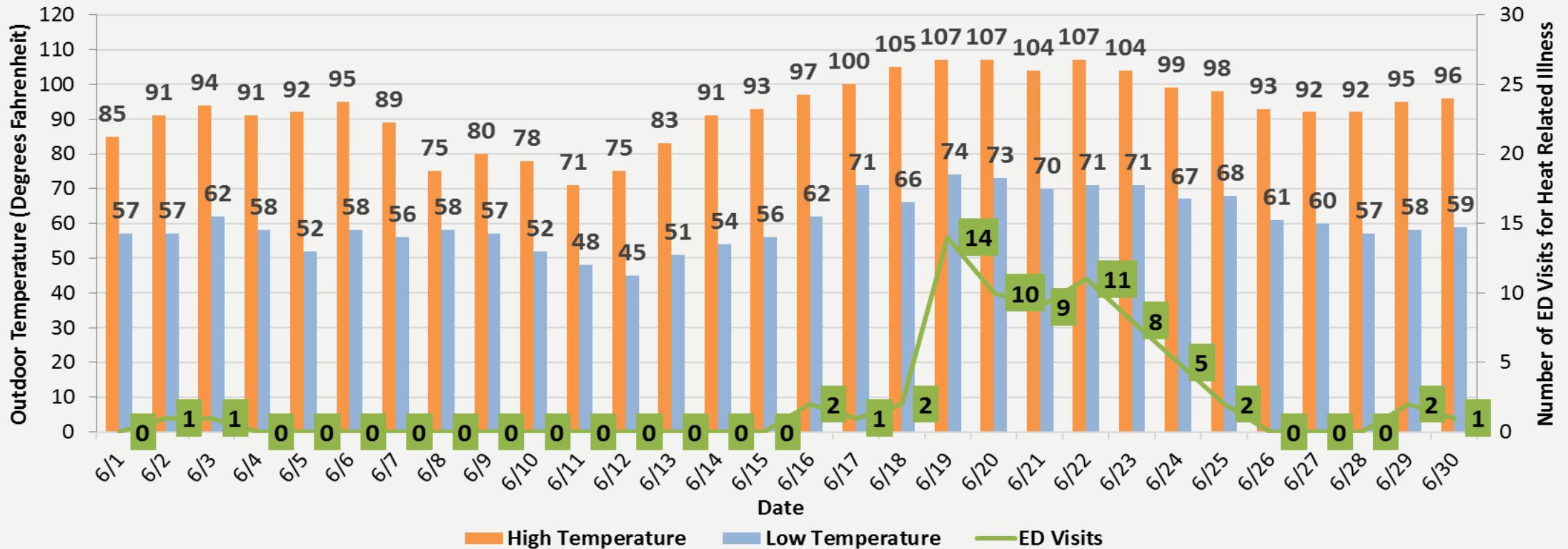
Cattle

People

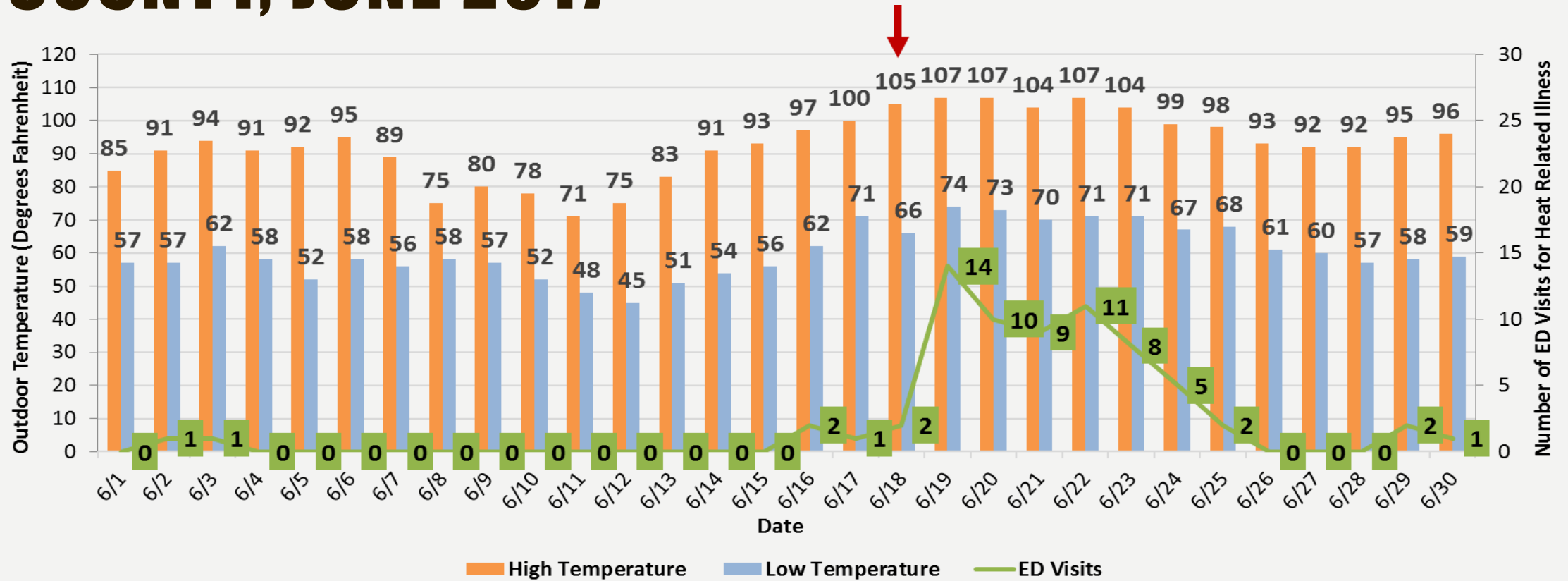


**HEAT WAVE
JUNE, 2017**

EMERGENCY DEPARTMENT VISITS FOR HEAT RELATED ILLNESS WITH MAXIMUM AND MINIMUM DAILY TEMPERATURE, STANISLAUS COUNTY, JUNE 2017



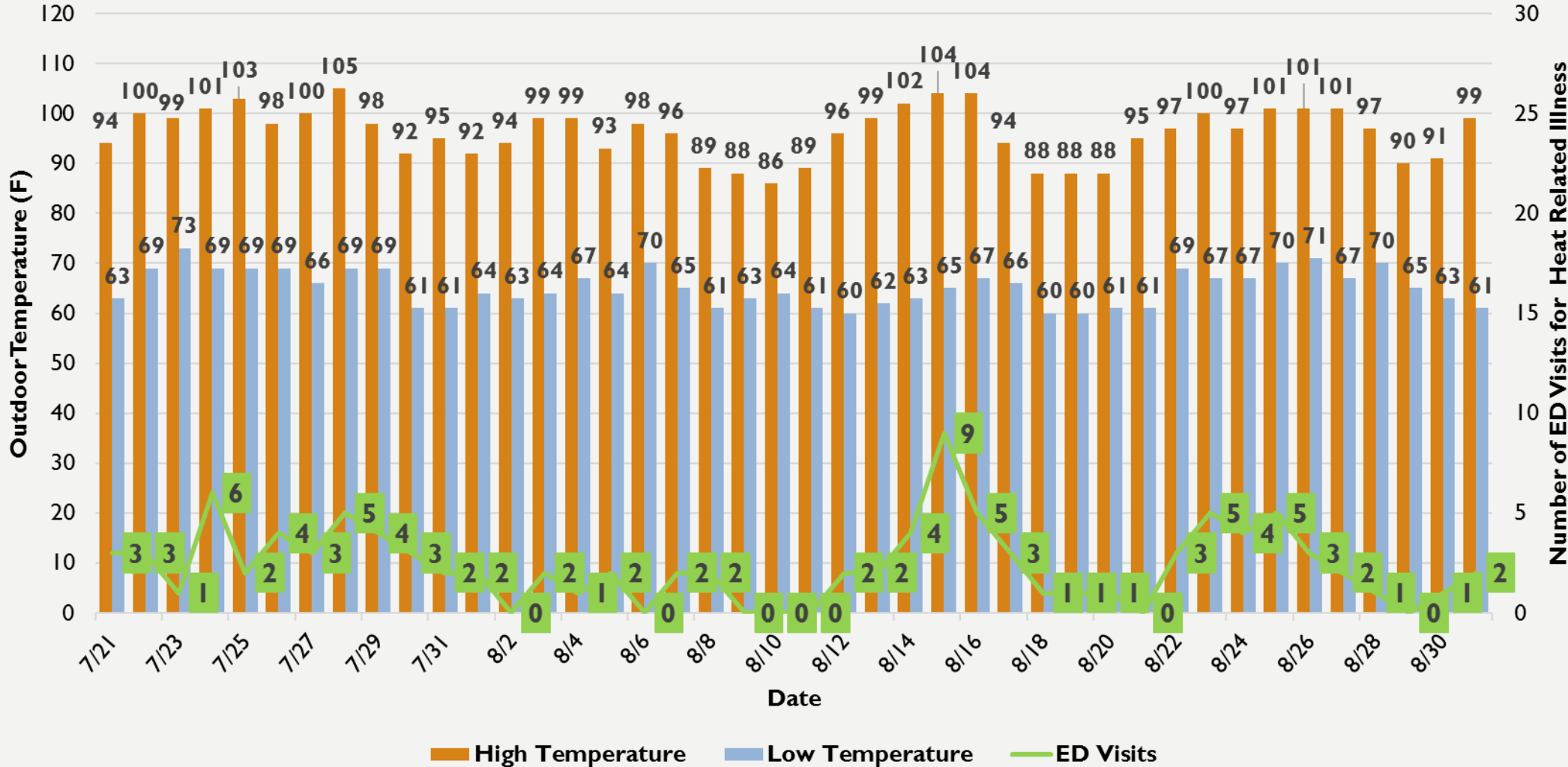
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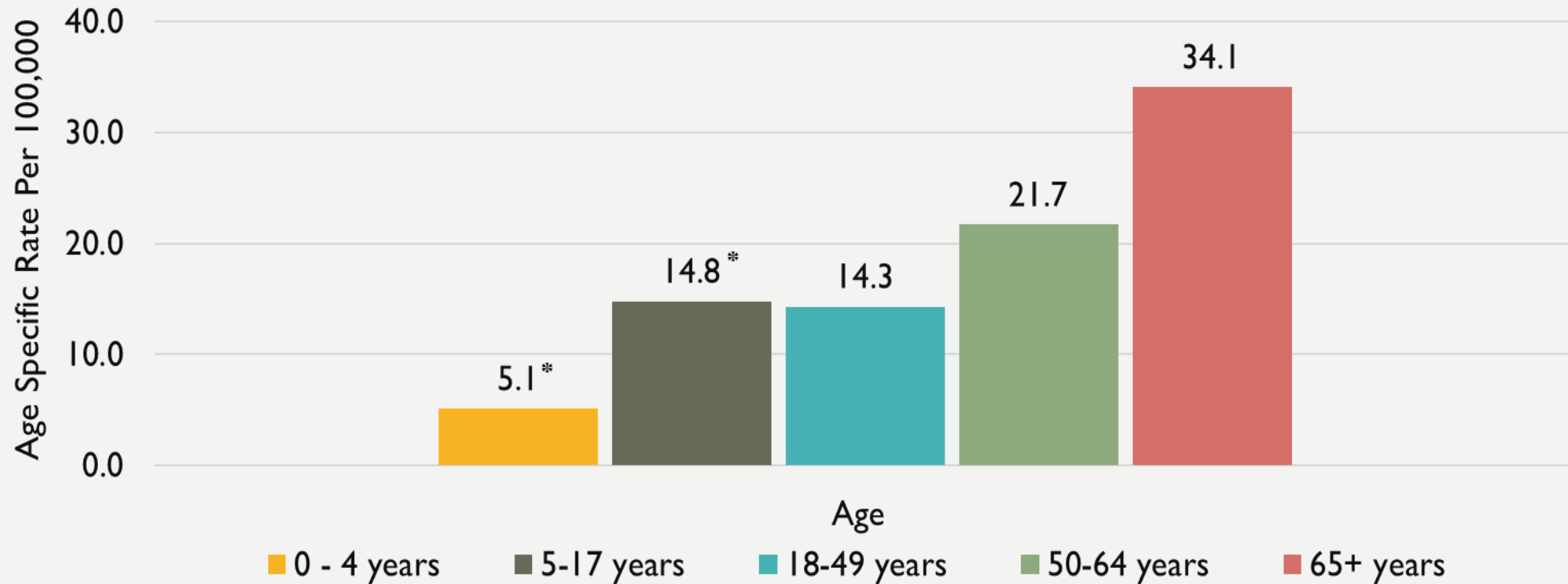


SUMMER, 2019

JULY 21 2019 - AUGUST 31 2019

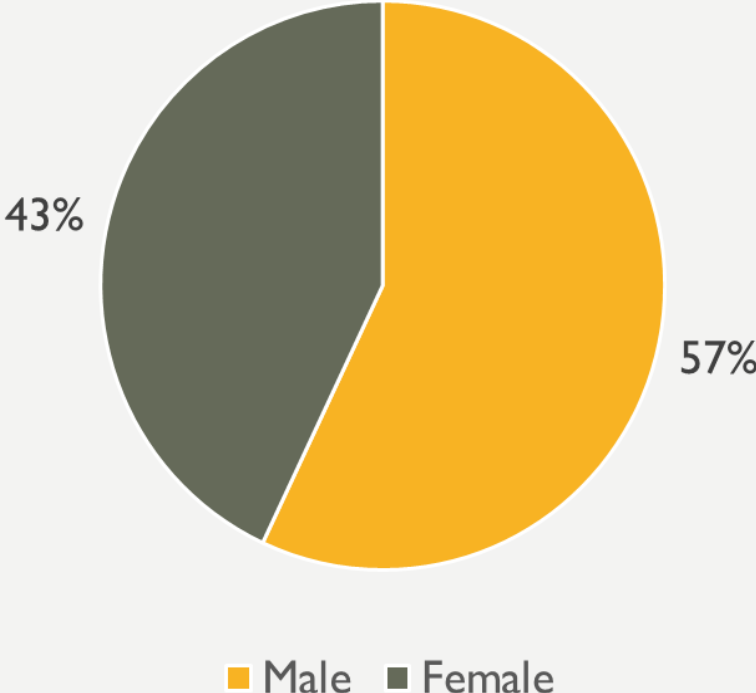


RATES OF HEAT RELATED EMERGENCY DEPARTMENT VISITS BY AGE, STANISLAUS COUNTY, JULY 21 2019 - AUGUST 31 2019



*Unreliable rates - rates based on fewer than 20 cases

EMERGENCY DEPARTMENT VISITS FOR HEAT RELATED ILLNESS BY GENDER, STANISLAUS COUNTY, JULY 21 2019 - AUGUST 31 2019



SUMMARY

- Adverse health events for all animals are influenced by many factors including maximum and minimum temperatures
- Syndromic surveillance is a valuable tool to help assess the impact of heat and inform response activities



QUESTIONS?