

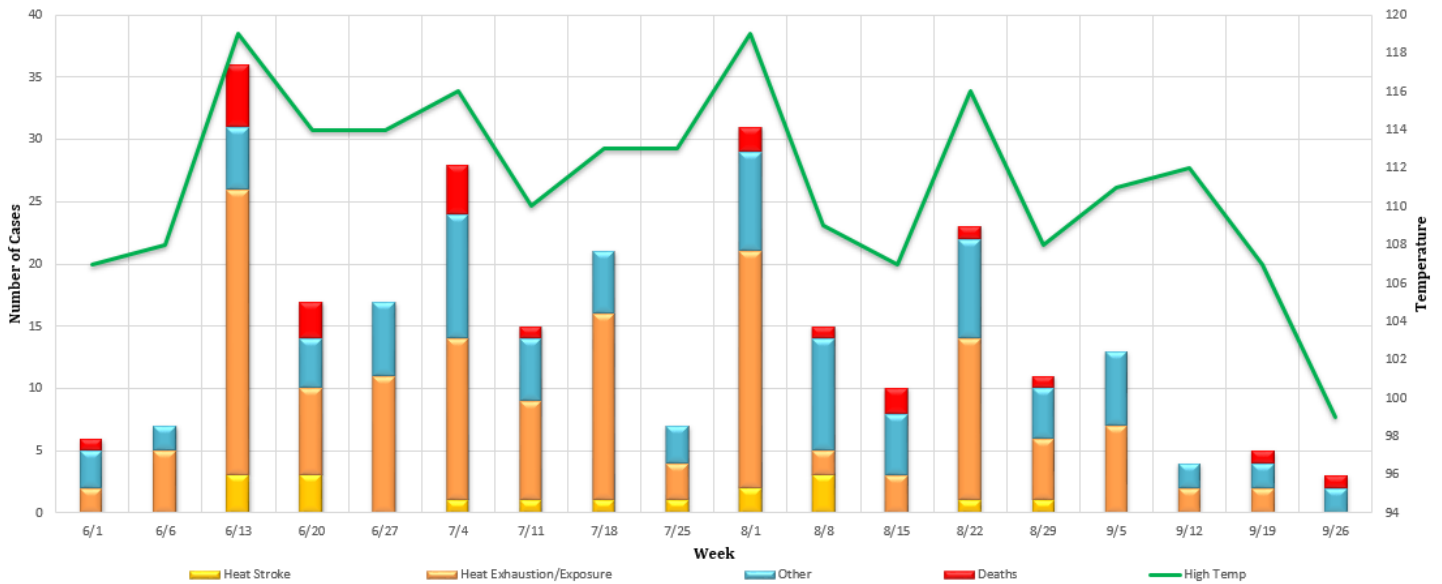
HEAT-RELATED ILLNESS UPDATE



HEAT-RELATED ILLNESS SURVEILLANCE 2021 IMPERIAL COUNTY

The Imperial County Public Health Department, in collaboration with El Centro Regional Medical Center, Pioneers Memorial Healthcare District, and the Imperial County Coroner’s office, has been monitoring heat-related illnesses and deaths due to environmental heat exposures beginning on June 1, 2021. Exposure to high temperatures can cause serious health problems including heat cramps, heat exhaustion, heat stroke, and even death. Children, the elderly, and people with some health conditions are at increased risk. For more information, go to: [Extreme Heat | Natural Disasters and Severe Weather | CDC](#). This report will include the summary data on heat-related illnesses and deaths identified in Imperial County from June 1 to October 2, 2021.

From June 1 to October 2, 2021, a total of **246** heat-related illnesses were reported by local hospitals. This is a **1.9%** decrease from 2019 and a **32.8%** decrease from 2018. From June 1 to October 2, 2021 a total of **23** deaths were reported by the Coroner’s Office. This is a 360% increase from 2019, but a 8.0% decrease from 2018. Over the past 13 years, the average



Heat-Related Morbidity & Mortality	2021	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Heat Stroke	17	21	25	34	8	15	11	29	27	19	14	26	13
Heat Exhaustion / Exposure	140	98	191	91	55	54	43	68	79	25	40	60	59
Other illnesses (i.e. heat fatigue, dehydration)	89	132	150	110	93	50	34	60	41	23	45	19	27
Deaths	23	5	25	8	3	10	2	3	8	2	8	9	7
Totals	269	256	391	243	159	129	90	160	155	69	107	114	106

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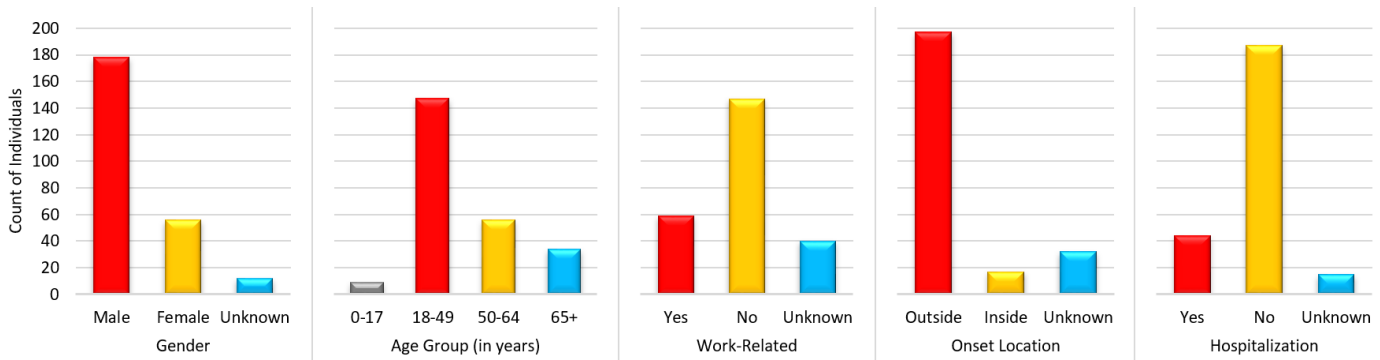
	Male	Female	Totals
	No.(%)	No.(%)	No.(%)
Age			
0 - 17	6 (3.4)	3 (5.3)	9 (3.6)
18 - 49	108 (60.3)	30 (53.6)	147 (59.8)
50 - 64	45 (25.1)	10 (17.9)	56 (22.8)
65+	20 (11.2)	13 (23.2)	34 (13.8)
Ethnicity			
Hispanic or Latino	94 (52.5)	32 (57.2)	126 (51.2)
Not Hispanic or Latino	36 (20.1)	6 (10.7)	42 (17.1)
Unknown	49 (27.4)	18 (32.1)	78 (31.7)
Work-Related			
Yes	49 (27.4)	10 (17.9)	59 (23.9)
No	114 (63.7)	44 (78.6)	147 (59.8)
Unknown	16 (8.9)	2 (3.5)	40 (16.3)
Onset Location			
Outside	158 (88.3)	45 (80.4)	197 (80.1)
Inside	8 (4.5)	6 (10.7)	17 (6.9)
Unknown	13 (7.2)	5 (8.9)	32 (13.0)
Hospitalization			
Yes	33 (18.4)	8 (14.3)	45 (17.9)
No	125 (69.9)	43 (76.8)	170 (76.0)
Unknown	21 (11.7)	5 (8.9)	31 (6.1)

Heat-Related Deaths

Between June 1 and October 2, 2021, the Imperial County Coroner's Office identified **23** deaths due to extreme heat.

There was **one** new heat-related death reported to the Coroner's office from September 26th to October 2nd, making the total **23** deaths. Overall, 82.6% (n=19) of all heat-related deaths occurred in males. Among the 18 for whom age information is available, nine were 18-49 years old, three were 50-64 years old, and six were 65 years or older. In addition, 39.1% (n=9) of the deaths occurred in the open desert of Ocotillo, Winterhaven, Holtville, or Glamis.

Figure 1. Heat-Related Illness Cases by Gender, Age Group, Onset Location, Work-Related, and Hospitalization



Source: El Centro Regional Medical Center and Pioneers Memorial Healthcare District

Hazardous Weather Outlook



EXCESSIVE HEAT WARNINGS

NOAA issues extreme heat advisories to indicate when excessive, extended heat will occur. The advisories are based mainly on predicted heat index values:

Excessive Heat Outlook: issued when the potential exists for extended excessive heat (heat index 105-110°F) **over the next 3-7 days**. This is a good time to check on supplies, such as extra water coolers, and refresh worker training.

Excessive Heat Watch: issued when excessive heat could occur within the next **24 to 72 hours**, but the timing in uncertain.

Excessive Heat Warning: issued when the heat index will be high enough to be **life threatening in the next 24 hours**. This warning indicates that the **excessive heat is imminent or has a very high probability of occurring**.

Excessive Heat Advisory: similar to an Excessive Heat Warning, but less serious. This is issued when the heat index could be **uncomfortable or inconvenient, but is not life threatening if precautions are taken**.

Heat Index Chart

	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100		
	Relative Humidity (%)																						
140	125																						
135	120	128																					
130	117	122	131																				
125	111	116	123	131	141																		
120	107	111	116	123	130	139	148																
115	103	107	111	115	120	127	135	143	151														
110	99	102	105	108	112	117	123	130	137	143	150												
105	95	97	100	102	105	109	113	118	123	129	135	142	149										
100	91	93	95	97	99	101	104	107	110	115	120	125	132	138	144								
95	87	88	90	91	93	94	96	98	101	104	107	110	114	119	124	130	136						
90	83	84	85	86	87	88	90	91	93	95	96	98	100	102	106	109	113	117	122				
85	78	79	80	81	82	83	84	85	86	87	88	89	90	91	93	95	97	99	102	105	108		
80	73	74	75	76	77	77	78	79	79	80	81	81	82	83	85	86	86	87	88	89	91		
75	69	69	70	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80		
70	64	64	65	65	66	66	67	67	68	68	69	69	70	70	70	71	71	71	71	71	71	71	72

Heat Index: 130+°F
Heat Effect: Heatstroke/sunstroke is highly likely with continued exposure
Recommendations: Avoid strenuous outdoor activity; stay indoors in an air-conditioned facility; stay well hydrated; check on your family, friends, and neighbors

Heat Index: 105-129°F
Heat Effect: Sunstroke, heat exhaustion and heat cramps are likely. Heat stroke is possible with prolonged exposure and/or physical activity
Recommendations: Avoid strenuous outdoor activity; stay indoors in an air-conditioned facility; stay well hydrated

Heat Index: 90-104°F
Heat Effect: Sunstroke, heat exhaustion and heat cramps are possible with prolonged exposure and/or physical activity
Recommendations: Limit strenuous outdoor activity; limit your time outdoors; stay well hydrated

Heat Index: 80-89°F
Heat Effect: Fatigue is possible with prolonged exposure and/or physical activity
Recommendations: Limit your time outdoors; stay well hydrated



Heat index, sometimes referred to as the apparent temperature and given in degrees Fahrenheit, is a measure of how hot it really feels when relative humidity is factored with the actual air temperature.