

Bexar County Heat-Related Illness Report

(March 12, 2023 - August 05, 2023)

Introduction:

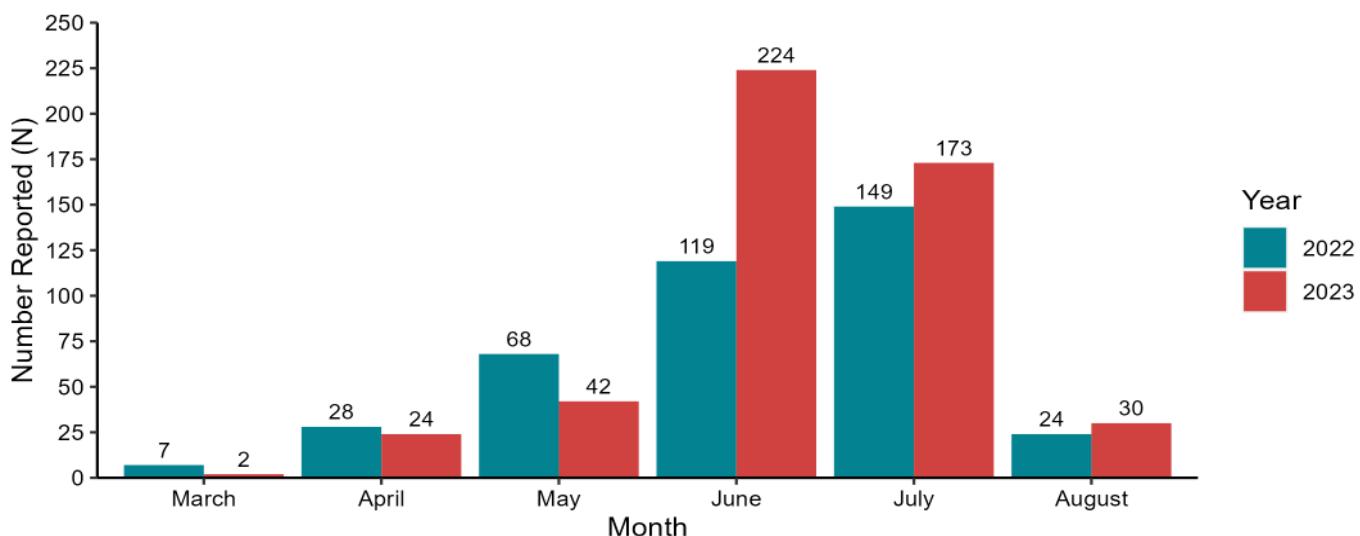
This report monitors heat-related illnesses associated with heat exhaustion and heat strokes in Bexar County. Heat-related illness happens when the body's internal temperature control system becomes overwhelmed due to prolonged exposure to extremely high temperatures¹. The body struggles to cool down by itself, possibly resulting in harm to the brain and other important organs¹. Heat-related illnesses can include dehydration, heat cramps, heat exhaustion, heat strokes, and may result in heat-related deaths. Data is primarily collected weekly from emergency medical services (EMS) calls that identify cases as having exposure to heat, which are provided by South Texas Regional Advisory Council (STRAC)².

Table 1. Health-Related Illnesses and Deaths Report: 03/12/2023 - 08/05/2023²

Week Ending	Dehydration	Heat Cramps	Heat Exhaustion	Heat Strokes	Heat Related Deaths	Total
03/18/2023	0	0	1	0	N/A	1
04/01/2023	0	0	1	0	N/A	1
04/08/2023	0	0	4	0	N/A	4
04/15/2023	0	0	7	0	N/A	7
04/22/2023	0	0	5	2	N/A	7
04/29/2023	0	0	5	1	N/A	6
05/06/2023	0	0	9	1	N/A	10
05/13/2023	0	0	9	0	N/A	9
05/20/2023	0	0	8	0	N/A	8
05/27/2023	0	0	11	0	N/A	11
06/03/2023	0	0	10	2	N/A	12
06/10/2023	0	0	23	0	N/A	23
06/17/2023	0	0	52	0	N/A	52
06/24/2023	0	0	81	3	N/A	84
07/01/2023	0	0	59	3	N/A	62
07/08/2023	0	0	33	1	N/A	34
07/15/2023	0	0	57	1	N/A	58
07/22/2023	0	0	51	1	N/A	52
07/29/2023	0	0	18	0	N/A	18
08/05/2023	0	0	33	3	N/A	36
	0	0	477	18	N/A	495

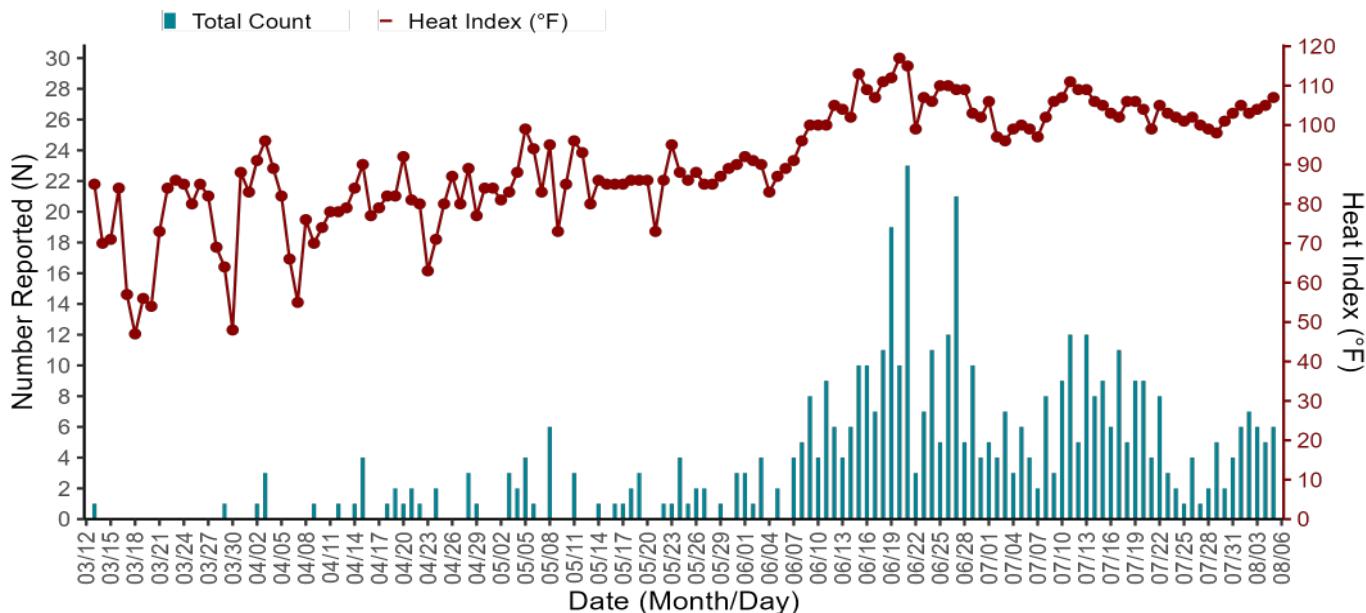
Note: N/A is the abbreviation for not available.

Figure 1. Data comparing Monthly Heat-Related Illnesses for the years 2022 and 2023, Bexar County: 03/12/2023 - 08/05/2023²



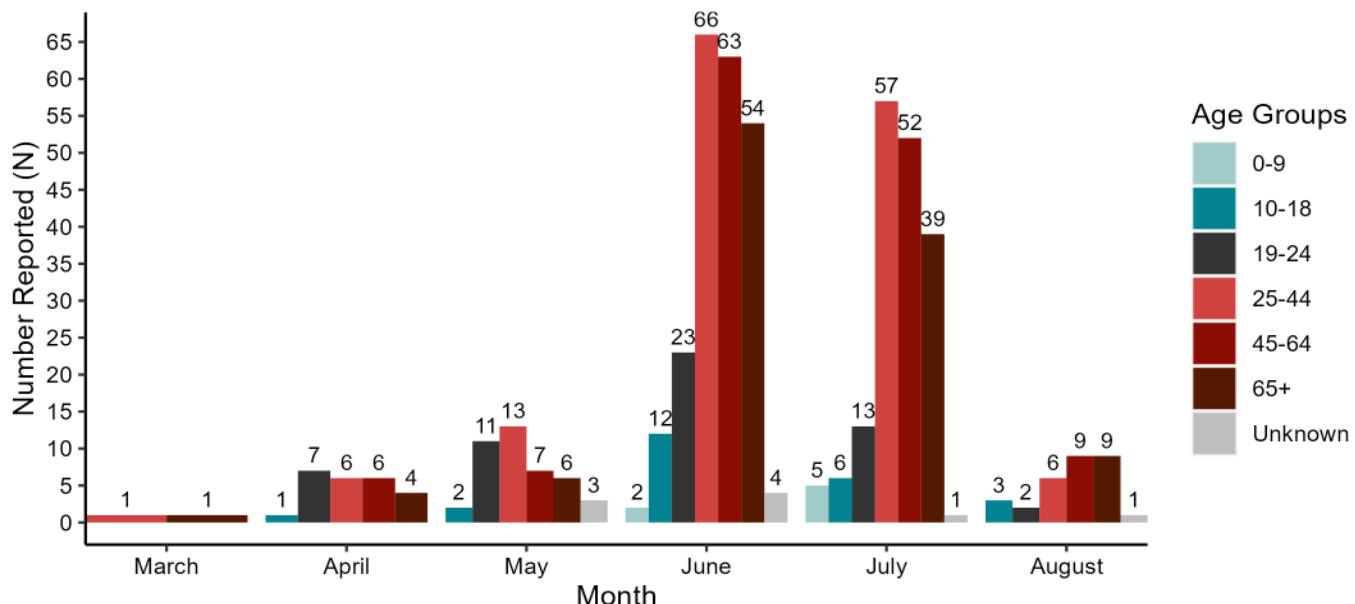
The bar graph in figure 1 compares the monthly heat-related illnesses reported from the previous year 2022 to the current year 2023. In 2022, the number of heat-related illnesses reported in the months of March (7), April (28), and May (68) were greater than the same months in 2023 (2, 24, 42 heat-related illnesses respectively). In June 2023, there was an increase in reported heat-related illnesses, totaling 224, surpassing the 119 illnesses reported in 2022. The total number of heat-related illnesses reported in July 2023 was 173 illnesses, compared to the 149 illnesses reported in July 2022. As of this report, in August 2023, 30 heat-related have been reported, in contrast to the 24 illnesses for the same time in August 2022. Overall, the heat-related illnesses increased in 2023 (495 illnesses) compared to 2022 (395 illnesses).

Figure 2. Daily Heat-Related Illnesses and Heat Index, Bexar County: 03/12/2023 - 08/05/2023²



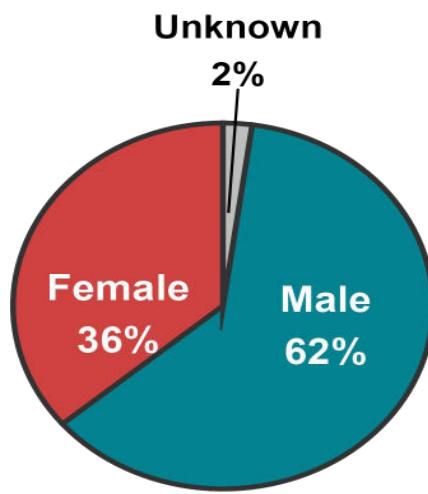
The graph presented in figure 2 showcases the total number of heat-related illnesses alongside the corresponding heat index measured in degrees Fahrenheit. On July 30, 2023, the heat index reached 101°F, with a total of 2 heat-related illnesses. On August 02, 2023, the heat index was 103°F, and the total heat-related illnesses reported as 7. On August 05, 2023, the heat index rose to 107°F, with a total of 6 illnesses reported. The average heat index for the previous week was 101°F and for the current week is 104°F. The average heat-related illnesses last week were 3 and for the current week is 5. Overall, this week there is an increase in heat index average and the average number of heat-related illnesses.

Figure 3. Monthly Heat-Related Illnesses by Age Group, Bexar County:03/12/2023 - 08/05/2023²



The bar graph in figure 3 illustrates the monthly occurrences of heat-related illnesses in Bexar County, from March 2023 to August 5, 2023, segmented to different age groups. In March there were only one heat related illnesses reported in the 25-44 and 65+ age groups. In April 2023, the most heat-related illnesses occurred in the 19-24 age group (7), followed by 25-44 (6) and 45-64 age groups (6). In May 2023, the 25-44 age group had the highest illnesses reported at 13, followed by the 19-24 age group with 11 illnesses reported. In June and July, the age group of 25-44 had the highest heat-related illnesses (66 and 57 respectively) followed by the 45-64 and 65+ age groups (63 and 52 illnesses reported). As of August 2023, there were zero illnesses reported for age group 0-9, three illnesses reported for age group 10-18, two illnesses for age group 19-24, six illnesses for age group 25-44, nine illnesses for age group 45-64, nine illnesses for age group 65 and over, and one illness reported with unknown age. Overall, in August 2023, the age groups of 45-64 and 65+ had the highest number of heat-related illnesses followed by the 25-44 age group.

Figure 4. Heat-related illness by gender, Bexar County: 03/12/2023 - 08/05/2023 N= 495²



The pie chart in figure 4 illustrates the percentage of heat-related illnesses categorized by gender in Bexar County, spanning from March 12 to August 05, 2023. Males exhibited a higher incidence of heat-related illness (61%) compared to females (37%). Gender was unknown for 2% of the cases.

¹Source: Centers for Disease Control and Prevention, National Center for Environmental Health

²Source: South Texas Regional Advisory Council (STRAC, RescueNet Reporting)