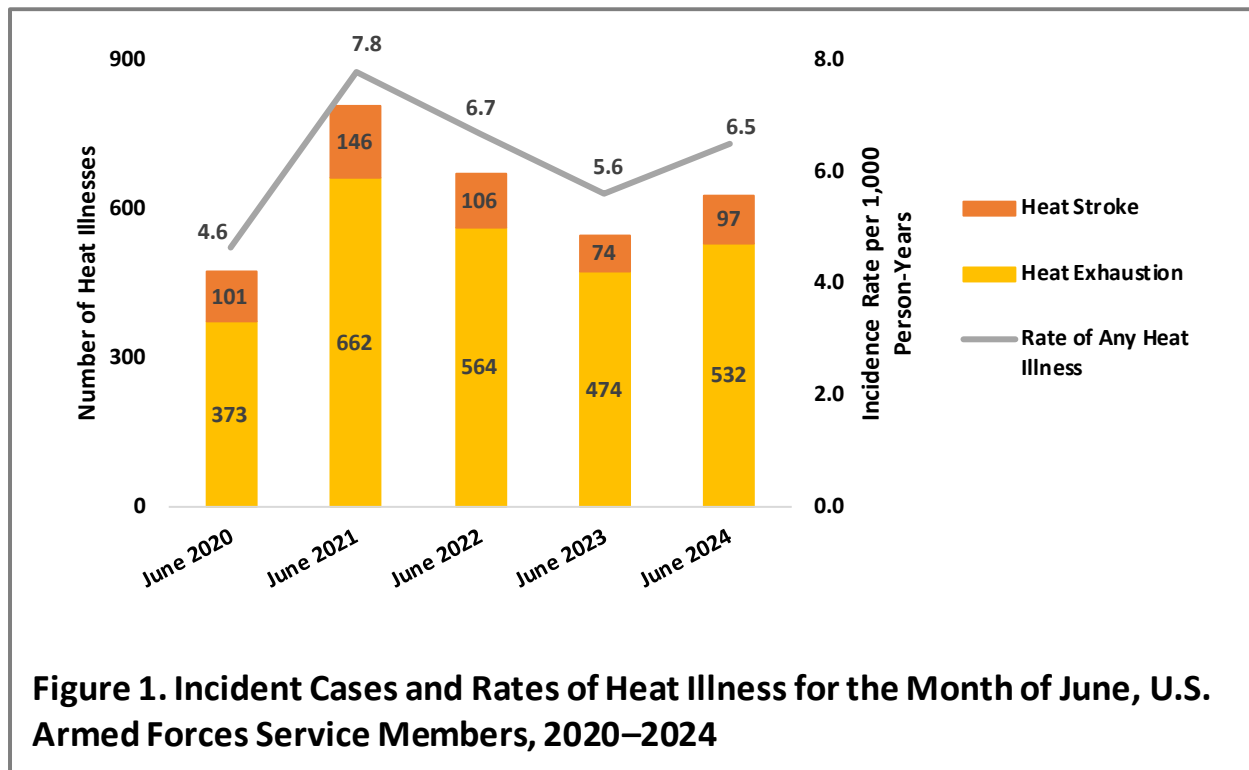




This report serves to describe incident heat illness (HI) cases among U.S. Armed Forces Service members (SMs) including Active Duty, trainees, Reserve, and Guard members. Non-Service member beneficiaries are excluded. The data for this report are obtained from the Defense Health Agency’s Weather-related Injury Repository (WRIR), which captures a selection of *International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)* codes in inpatient and outpatient medical encounter records from the Military Health System Data Repository (MDR), as well as medical event reports of heat exhaustion and heat stroke submitted through the Disease Reporting System-internet (DRSi).<sup>1</sup> The medical event reports used to identify HIs are adapted from standard case definitions established by the Armed Forces Health Surveillance Division (AFHSD).<sup>2</sup> SMs are counted as an incident case if they have an initial encounter for an HI within the calendar year. Consistent with the AFHSD case definition, SMs are considered an incident case only once per calendar year. Denominators used for the rate of any heat illness were obtained from MHS Mart (M2) by service branch and month. Due to late data entry and delayed processing of data in the MDR, values for 2024 may be artificially low.

Beginning in 2024, Coast Guard data were added to the WRIR. Coast Guard data from 2018 to 2023 were included in the WRIR for historical comparisons and new records will be included in the monthly updates to the WRIR moving forward. The completeness of the Coast Guard data is unknown at this time. The data in this report are not comparable to those of previous HI reports due to the addition of Coast Guard data.

In June 2024, 629 HIs (532 heat exhaustion cases, 97 heat stroke cases) were diagnosed among SMs (Figure 1). Of these, 54 cases were hospitalized (18 heat exhaustion cases, 36 heat stroke cases) (data not shown). The incidence rate of any HI in SMs for June 2024 was 6.5 cases of HI per 1,000 person-years. In the month of June during the last 5 years, HI rates were lowest in 2020 (4.6 cases of HI per 1,000 person-years) and highest in 2021 (7.8 cases of HI per 1,000 person-years). After decreasing yearly from 2021 to 2023 (5.6 cases of HI per 1,000 person-years), the rate of any HI increased in 2024 (6.5 cases of HI per 1,000 person-years) (Figure 1).

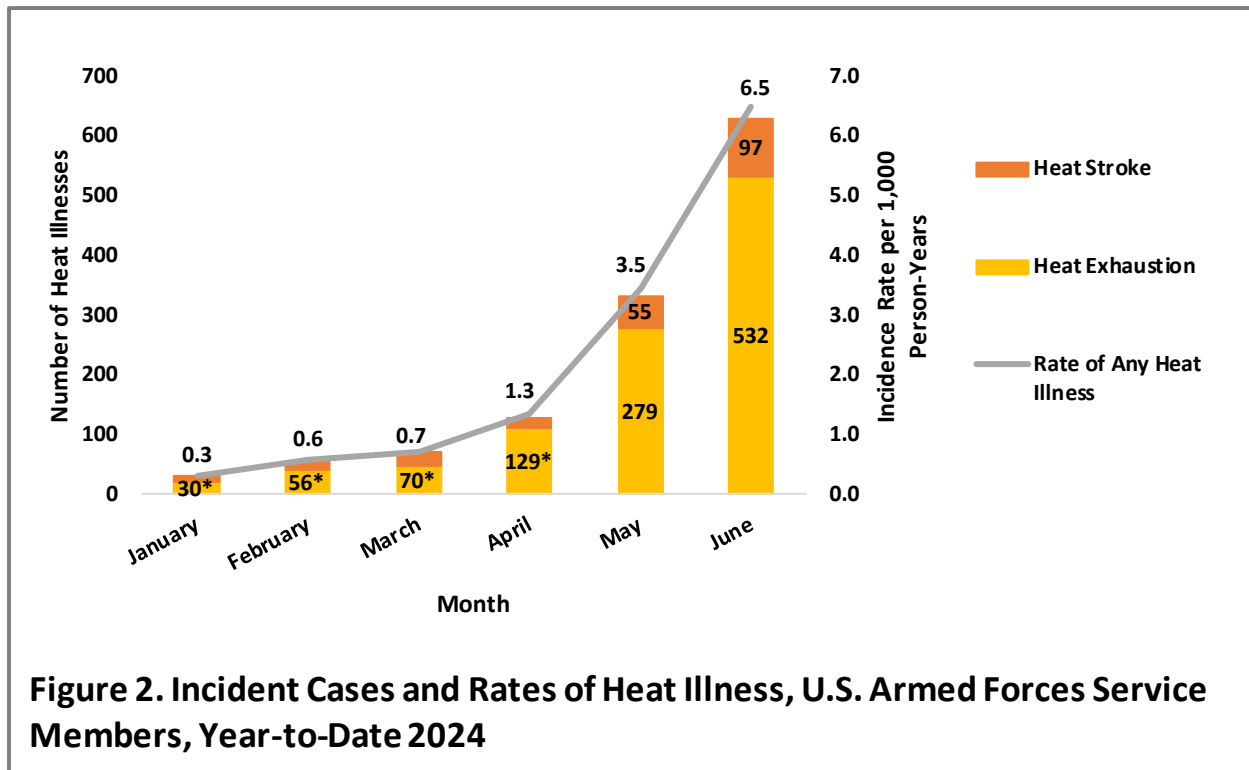


### References

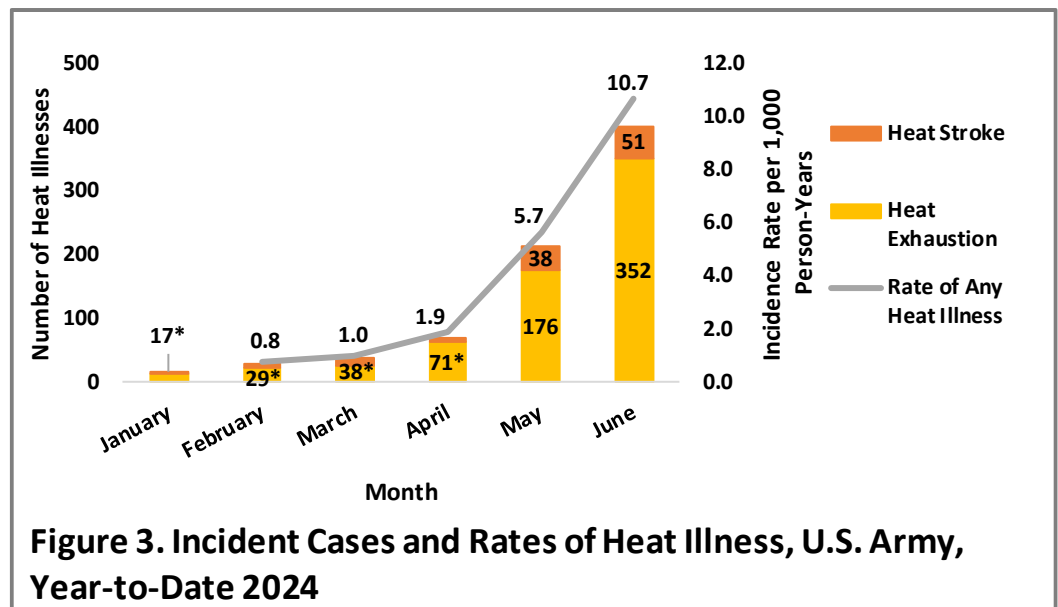
1. Armed Forces Health Surveillance Branch, Defense Health Agency. In collaboration with U.S. AirForce School of Aerospace Medicine, U.S. Army Public Health Center, and Navy and Marine Corps Public Health Center. Armed Forces Reportable Medical Events. Guidelines and Case Definitions, October 2022. Accessed May 20, 2024. <https://www.med.navy.mil/Portals/62/Documents/NMFA/NMCPHC/root/Documents/program-and-policy-support/DRSI/Armed-Forces-Reportable-Medical-Events-Oct-2022.pdf>
2. Armed Force Health Surveillance Branch. Surveillance Case Definition: Heat Illness. Accessed May 6, 2024. <https://health.mil/Reference-Center/Publications/2019/10/01/Heat-Injuries>



During the 2024 heat year, the rate of HIs among SMs increased monthly to a season high in June 2024 (Figure 2).



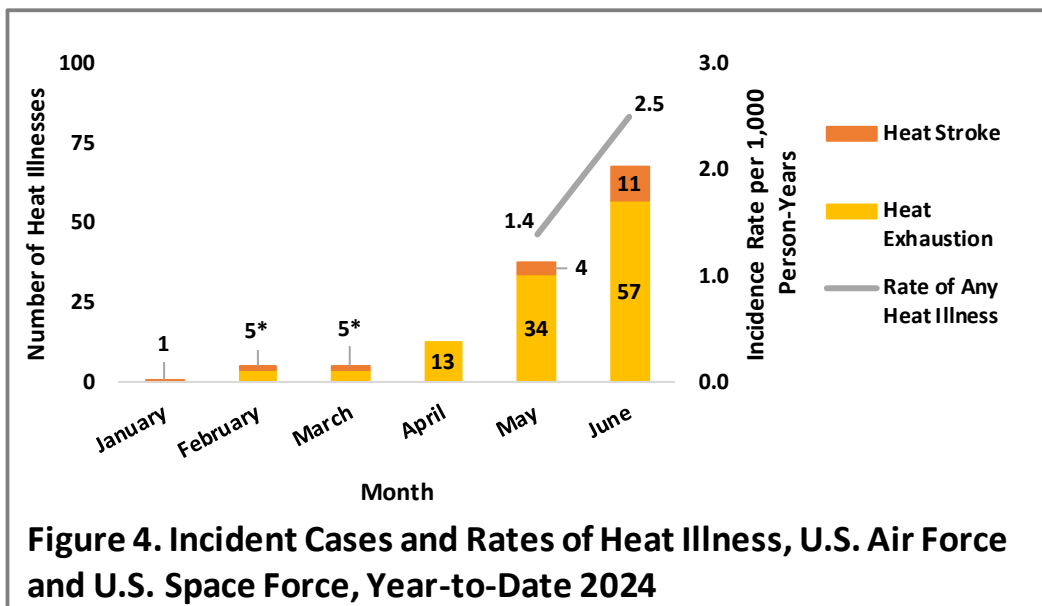
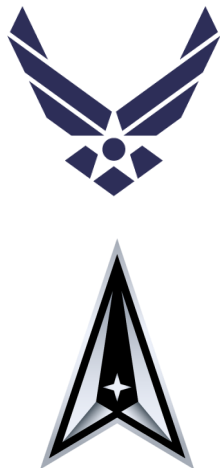
This section of the report contains additional figures and tables. Figures 3—7 present the number of HIs by service branch; rates are also presented when 20 or more cases of HI were recorded for the month. Table 1 provides a summary of HI cases by service branch, type of HI, hospitalizations, rank, sex, and age group. Figures 8 and 9 present HIs by installation for the month and the year, when 10 or more HIs occurred at the installation.



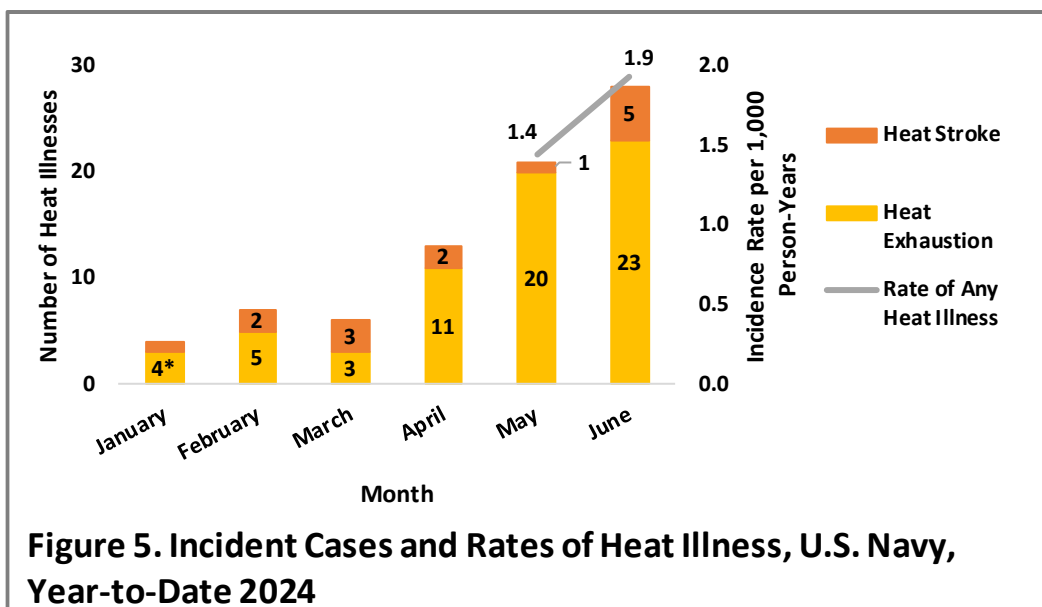
\*Sum of heat exhaustion and heat stroke cases.

Note: Due to small numbers, rates are not calculated for each service when fewer than 20 heat illness cases are reported in the month.

## Air Force and Space Force



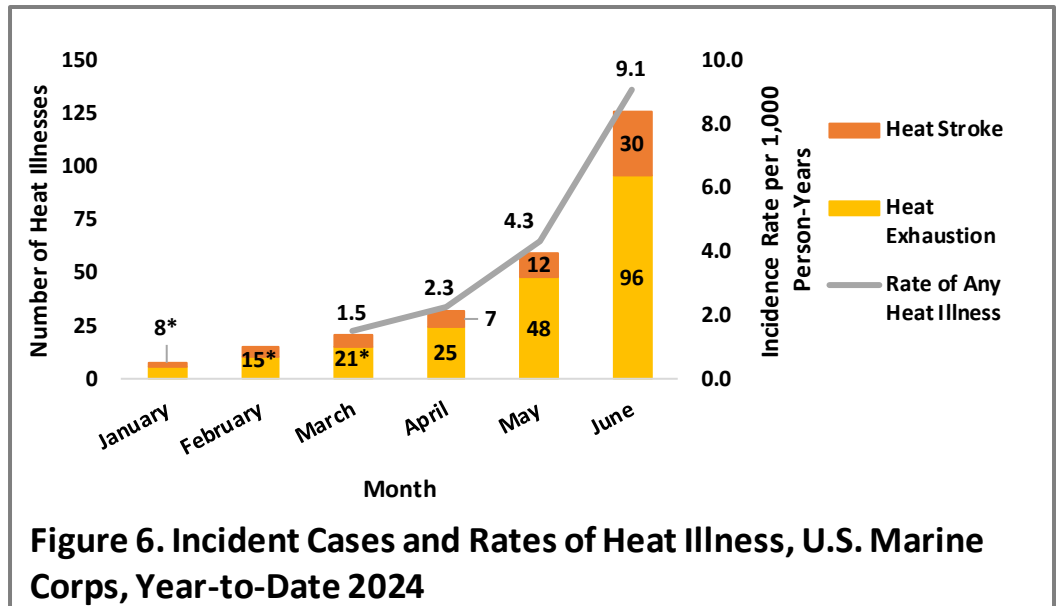
## Navy



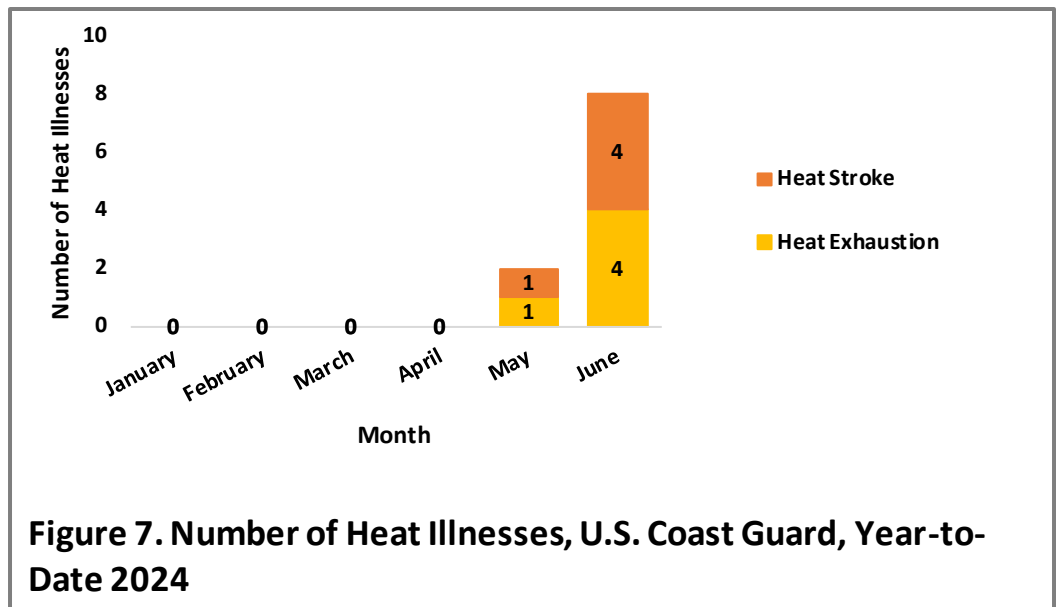
\*Sum of heat exhaustion and heat stroke cases.

Note: Due to small numbers, rates are not calculated for each service when fewer than 20 heat illness cases are reported in the month.

**Marine Corps**



**Coast Guard**



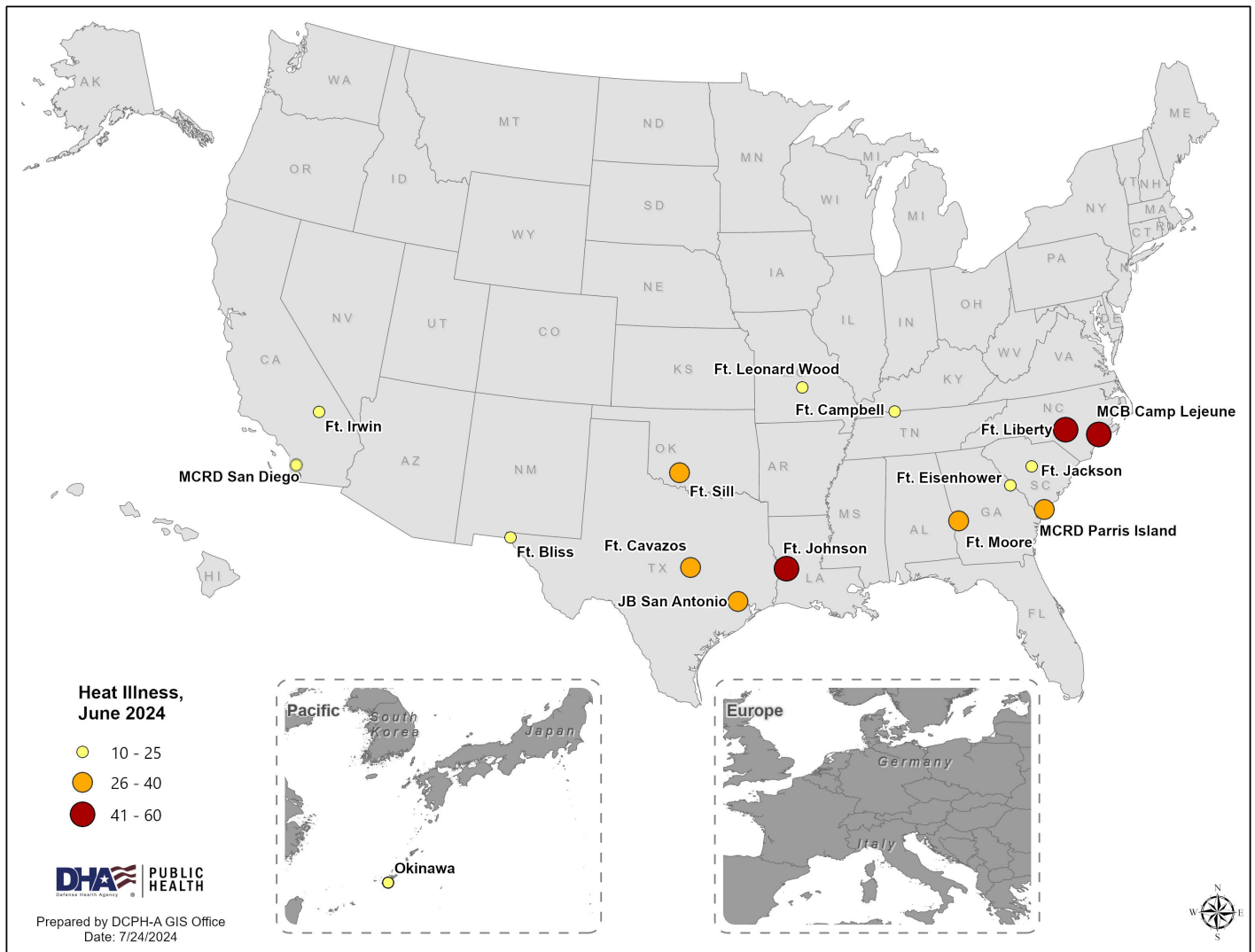
\*Sum of heat exhaustion and heat stroke cases.

Note: Due to small numbers, rates are not calculated for each service when fewer than 20 heat illness cases are reported in the month.



**Table 1. Heat Illnesses by Service, Year-To-Date 2024**

	Number of Cases by Service Branch				
	Army	Air Force and Space Force	Navy	Marine Corps	Coast Guard
<b>Total Heat Illness Cases</b>	<b>772</b>	<b>130</b>	<b>79</b>	<b>262</b>	<b>5</b>
Heat Exhaustion	653	112	65	201	5
Heat Stroke	119	18	14	61	0
<b>Heat Illness Hospitalizations</b>					
Heat Exhaustion	47	0	1	7	0
Heat Stroke	64	5	2	13	0
<b>Rank</b>					
Cadets and Midshipmen	6	0	1	0	1
Junior Enlisted (E1–E4)	209	32	34	64	1
Senior Enlisted (E5–E9)	64	14	15	6	2
Officer (O1–O10)	17	0	2	1	0
Warrant Officer (W1–W5)	2	0	0	0	0
Unknown	474	84	27	191	1
<b>Sex</b>					
Female	170	35	18	31	1
Male	602	73	45	229	1
Unknown	0	22	16	2	3
<b>Age Group (Years)</b>					
<25	430	77	48	214	2
25–34	271	36	20	41	0
35–44	56	13	9	7	3
45+	15	4	2	0	0



**Figure 8. Heat Illnesses by Installation, June 2024**

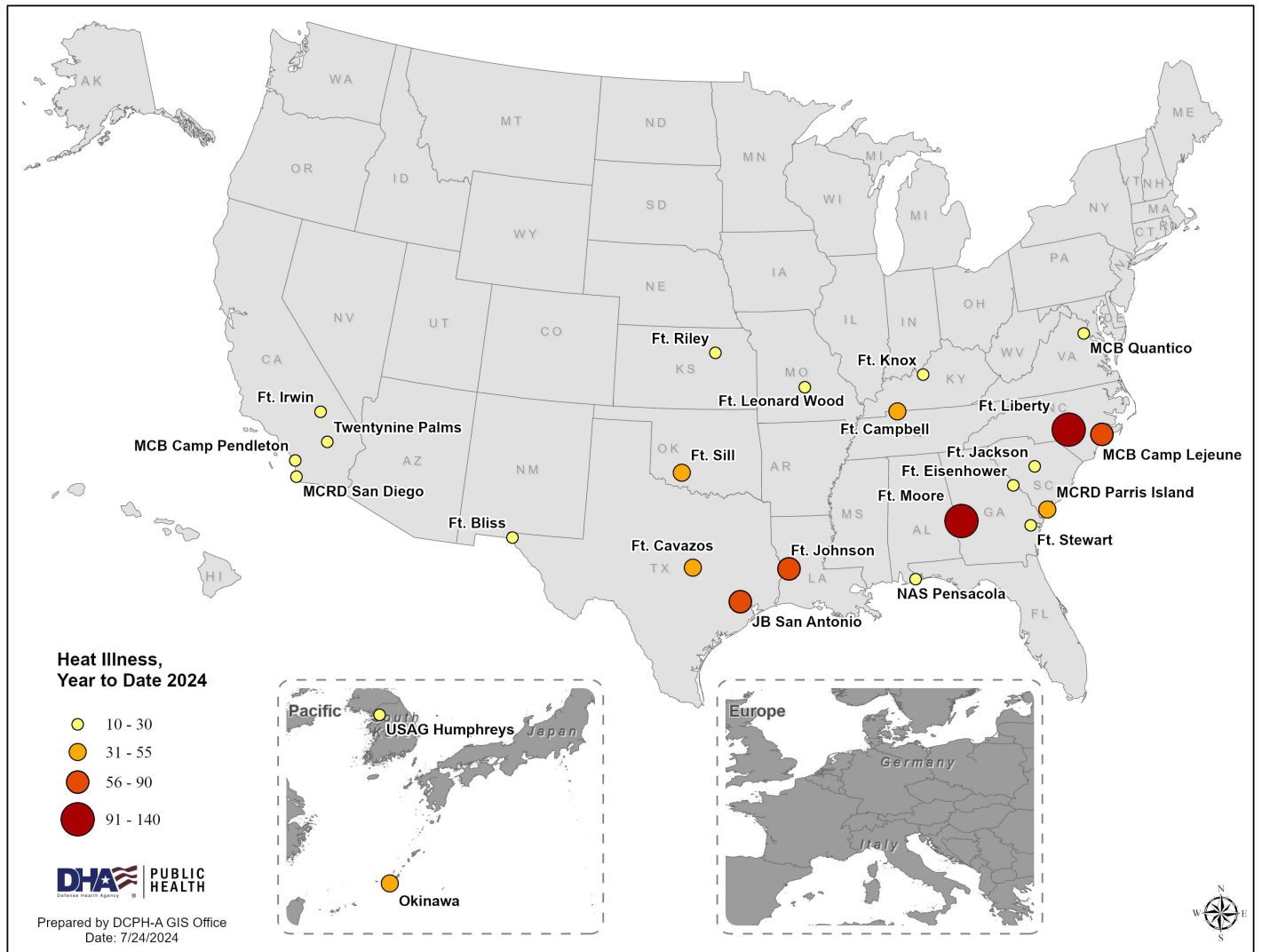
*Installations where the total number of diagnosed cases were less than 10 are not shown.*

*Ft.=Fort*

*JB=Joint Base*

*MCB=Marine Corps Base*

*MCRD=Marine Corps Recruit Depot*



**Figure 9. Heat Illnesses by Installation, Year-to-Date 2024**

*Installations where the total number of diagnosed cases were less than 10 are not shown.*

*Ft.=Fort*

*JB=Joint Base*

*MCB=Marine Corps Base*

*MCRD=Marine Corps Recruit Depot*

*NAS=Naval Air Station*

*USAG=U.S. Army Garrison*