U.S. Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Weekly / Vol. 75 / No. 36
September 17, 2026

Syphilis Screening in Correctional Facilities — Alaska, October 2023–September 2025

Elizabeth Ohlsen, MD[1]; Julia Rogers, PhD[1]; Sara Clark, MPH[1]; Robert Lawrence, MD[1]; Joseph McLaughlin, MD[1]

Abstract

Since 2017, syphilis cases have increased substantially across the United States, including in Alaska. Nationwide, prevalence of syphilis tends to be higher among incarcerated persons than among the general population. During 2023–2025, opt-out screening for syphilis in Alaska correctional facilities (i.e., routine testing unless a person specifically declines) found reactive rapid plasma reagin (RPR) results, which often indicate a past or current syphilis infection, in 240 (4.6%) of 5,163 persons screened. Among persons with reactive RPR results, 114 (47.5%) had newly identified syphilis cases (2.2% of all persons screened), based on the 2018 Council of State and Territorial Epidemiologists definition. Among persons with newly identified syphilis, 88 (77.2%) were known to have completed treatment by September 2025. Among 1,020 women incarcerated in Alaska who were screened (19.6% of all persons screened), 95 (9.3%) had reactive RPR results. Among those 95 persons, 37 (3.6% of women screened) had newly identified confirmed or probable syphilis, and the remaining 58 (5.7% of women screened) had positive treponemal test results, demonstrating a high current or past syphilis prevalence among women incarcerated in Alaska. Implementing opt-out screening and treatment in correctional facilities could improve syphilis detection and treatment among persons in correctional facilities, and thereby reduce community syphilis transmission and help prevent congenital syphilis.

Introduction

Syphilis is a sexually transmitted bacterial infection caused by *Treponema pallidum*. Syphilis during pregnancy can result in congenital syphilis, which can lead to severe illness and death in a fetus or infant (*1*). Rapid identification and treatment of persons with syphilis and testing and treatment of their sex partners can prevent transmission (*2*). Reducing community syphilis rates and ensuring universal syphilis screening and timely treatment during pregnancy are critical to preventing congenital syphilis (*2*).

Syphilis in Alaska

From 2016 to 2024, the number of reported syphilis cases in Alaska increased almost 2,200%, from 20 to 452 (61 cases per 100,000 population), amid a nearly 700% national rise in total and congenital syphilis cases (*3*,*4*). Among the 452 syphilis cases reported in Alaska in 2024, nearly one half (216; 47.8%) were in women, most of whom (197; 91.2%) were of reproductive age (15–44 years) (*3*). Reported cases of congenital syphilis in Alaska increased concurrently, with zero cases as recently as 2019, to a record annual high of 12 cases in 2022, corresponding to 128 cases per 100,000 live births (*3*). Since then, 10 cases were reported in 2023 (105 per 100,000 live births), and six in 2024 (66 per 100,000 live births).

Syphilis in Incarcerated Persons

Nationally, rates of syphilis among incarcerated persons have been higher than those in the general population (*5*). Amid this historic increase in syphilis and congenital syphilis in Alaska, and as part of a statewide effort to reduce congenital syphilis, on October 16, 2023, the Alaska Department of Corrections (AKDOC), in partnership with the Alaska Department of

INSIDE

Continuing Education examination available at https://www.cdc.gov/mmwr/mmwr_continuingEducation.html

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

Health (AKDOH), initiated opt-out screening (i.e., universal routine testing on admission, unless a person specifically declines) for syphilis in correctional facilities, a strategy recommended in CDC guidelines to increase testing rates and reduce associated stigma (*6*). CDC recommends conducting opt-out syphilis screening for incarcerated persons based on the local and institutional prevalence of infectious syphilis

Methods

Syphilis Screening

Beginning in October 2023, adults in Alaska who were detained or incarcerated were screened for syphilis, HIV, gonorrhea, chlamydia, and hepatitis C on an opt-out basis during a routine medical visit conducted within 14 days of their arrival at the facility. A presumptive diagnosis of syphilis requires use of two laboratory serologic tests: a nontreponemal test and a treponemal test. Syphilis screening at AKDOC followed the traditional screening algorithm (*6,7*), beginning with a rapid plasma reagin (RPR) test, a nontreponemal test that detects lipoidal antibodies that, when present, often indicate a current or past syphilitic infection.* If the nontreponemal test is reactive (i.e., detection of nonspecific antibodies), the specimen is diluted to obtain a titer, and a treponemal test (specific to syphilis) is performed on the same sample to confirm syphilitic infection (Supplementary Figure 1). When results were suggestive of syphilis, case investigation and partner services were initiated per AKDOH syphilis disease intervention practices (Tomas Hernandez, AKDOH, unpublished information, 2024). This project was reviewed by the AKDOH Scientific Review Committee and deemed nonresearch public health surveillance.

Data Sources and Analysis

Laboratory results were obtained from electronic reports of screening tests performed on persons in Alaska correctional facilities during October 16, 2023–September 12, 2025. AKDOC facilities are for adults and serve as both jails (which house persons pretrial or for a short sentence) and prisons (for persons convicted of an offense for which they have been sentenced to a longer term of incarceration); juvenile facilities are administered separately through the Alaska Division of Juvenile Justice and are not included in these data. All AKDOC facilities were included in these data. Demographic and clinical information including age, sex, pregnancy status, previous syphilitic infection history, identification of syphilis stage, and syphilis treatment history were obtained from clinician reporting and public health surveillance records. The Alaska Section of Epidemiology surveillance database was queried for investigations associated with AKDOC facilities. Information was not available on the number or characteristics of persons who opted out of syphilis screening upon entering AKDOC

* RPR tests have lower sensitivity in the early primary and tertiary stages of syphilis. Because RPR tests do not detect antibodies specific for syphilis, they might yield reactive (i.e., false positive) results for persons with conditions such as autoimmune disease, pregnancy, viral infection, malignancy, or the use of certain drugs or medications, among others.

The *MMWR* series of publications is published by the Office of Science, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30329-4027.

Suggested citation: [Author names; first three, then et al., if more than six.] [Report title]. MMWR Morb Mortal Wkly Rep 2026;75:[inclusive page numbers].

Centers for Disease Control and Prevention

Erica Schwartz, MD, MPH, JD, *Director*
Jennifer A. Shuford, MD, MPH, *Deputy Director and Chief Medical Officer*
Althea Grant-Lenzy, PhD, MSS, *Director, Office of Science*

***MMWR* Editorial and Production Staff (Weekly)**

Leonard Jack, Jr, PhD, MSc, *Acting Editor in Chief*

Jacqueline Gindler, MD, *Editor*
Mary Dott, MD, MPH, *Online Editor*
Terisa F. Rutledge, *Managing Editor*
Catherine B. Lansdowne, MS, *Acting Lead Technical Writer-Editor*
Stacy Simon, MA, Morgan Thompson, Suzanne Webb, PhD, MA, *Technical Writer-Editors*

Terraye M. Starr, *Acting Lead Health Communication Specialist*
Alexander J. Gottardy, Maureen A. Leahy, *Visual Information Specialists*
Quang M. Doan, MBA, Phyllis H. King, Moua Yang, *Information Technology Specialists*

Lowery Johnson, *Health Communication Specialist*
Will Yang, MA, *Visual Information Specialist*

***MMWR* Editorial Board**

Timothy F. Jones, MD, *Chairman*

Matthew L. Boulton, MD, MPH
Carolyn Brooks, ScD, MA
Virginia A. Caine, MD
Jonathan E. Fielding, MD, MPH, MBA

David W. Fleming, MD
William E. Halperin, MD, DrPH, MPH
Jewel Mullen, MD, MPH, MPA
Jeff Niederdeppe, PhD
Patricia Quinlisk, MD, MPH

Patrick L. Remington, MD, MPH
Carlos Roig, MS, MA
William Schaffner, MD
Morgan Bobb Swanson, MD, PhD

custody.[†] Descriptive analyses were performed using RStudio (version 2026.03; R Foundation).

Case Definitions

Syphilis cases were identified and staged using the 2018 Council of State and Territorial Epidemiologists (CSTE) definition (*8*) and treated according to CDC guidelines (Supplementary Figure 2) (*6*). Cases were reported to AKDOH per state statutory reporting requirements and to CDC per federal requirements.

Case identification. Persons were categorized as having a reactive RPR test result if at least one reactive RPR result was documented while in AKDOC custody during the opt-out period (October 16, 2023, through the date of surveillance database query on September 12, 2025); this categorization included persons who also had one or more nonreactive RPR result in addition to the reactive RPR result. Persons with repeat or persistent syphilitic infections during the opt-out period, ascertained by case investigation, were counted once in these data. Persons with only nonreactive RPR results (and no reactive RPR result) during the opt-out period were categorized as not having a reactive RPR. Persons with a reactive RPR result also received treponemal testing and were considered to have a newly identified syphilis case if they met CSTE criteria for probable or confirmed syphilis and this infection had not been previously identified (i.e., the person had not previously reported syphilis, or the 2018 CSTE syphilis surveillance case definition was newly met based on RPR titer increase or signs or symptoms of primary or secondary syphilis).

Documentation of treatment. Persons with syphilis were considered to have been fully treated if it was documented that they received appropriate treatment for their stage of infection, which for these persons was a single dose of benzathine penicillin or a 14-day course of doxycycline for primary, secondary, or early nonprimary nonsecondary syphilis, or 3 doses of benzathine penicillin or 28 days of doxycycline for unknown duration or late syphilis, per national guidelines (*6*). Partial treatment was defined as documentation of receipt of at least 1 dose of benzathine penicillin or doxycycline, without meeting criteria to be considered fully treated.

Results

Participant Characteristics and Syphilis Screening Results

During October 2023–September 2025, a total of 5,163 adults were screened for syphilis in Alaska correctional facilities; the median age was 35 years (range = 18–83 years) and 4,141 (80.2%) were men (Figure) (Table 1). Overall, 240 (4.6%) persons received reactive RPR results, including 95 (9.3%) of 1,022 women, 88 (92.6%) of whom were considered to be of reproductive age (18–44 years); and 145 (3.5%) of 4,141 men. No false positive results were identified.

Among the 240 persons with reactive RPR results, 114 (47.5%) met criteria for a new case of probable or confirmed syphilis (Table 2) according to the CSTE case definition. These accounted for 2.2% of all persons screened (corresponding to an estimated prevalence of 2,208 per 100,000 persons screened [95% CI = 1,841–2,648]). Among the 88 women of reproductive age with a reactive RPR, 37 (42%) had newly identified syphilis. Among these 37 women, pregnancy status was known for 32 (86%), one of whom was pregnant at the time of screening. The most common reason for unknown pregnancy status was having declined pregnancy testing at the time of clinical services and at the time of public health outreach.

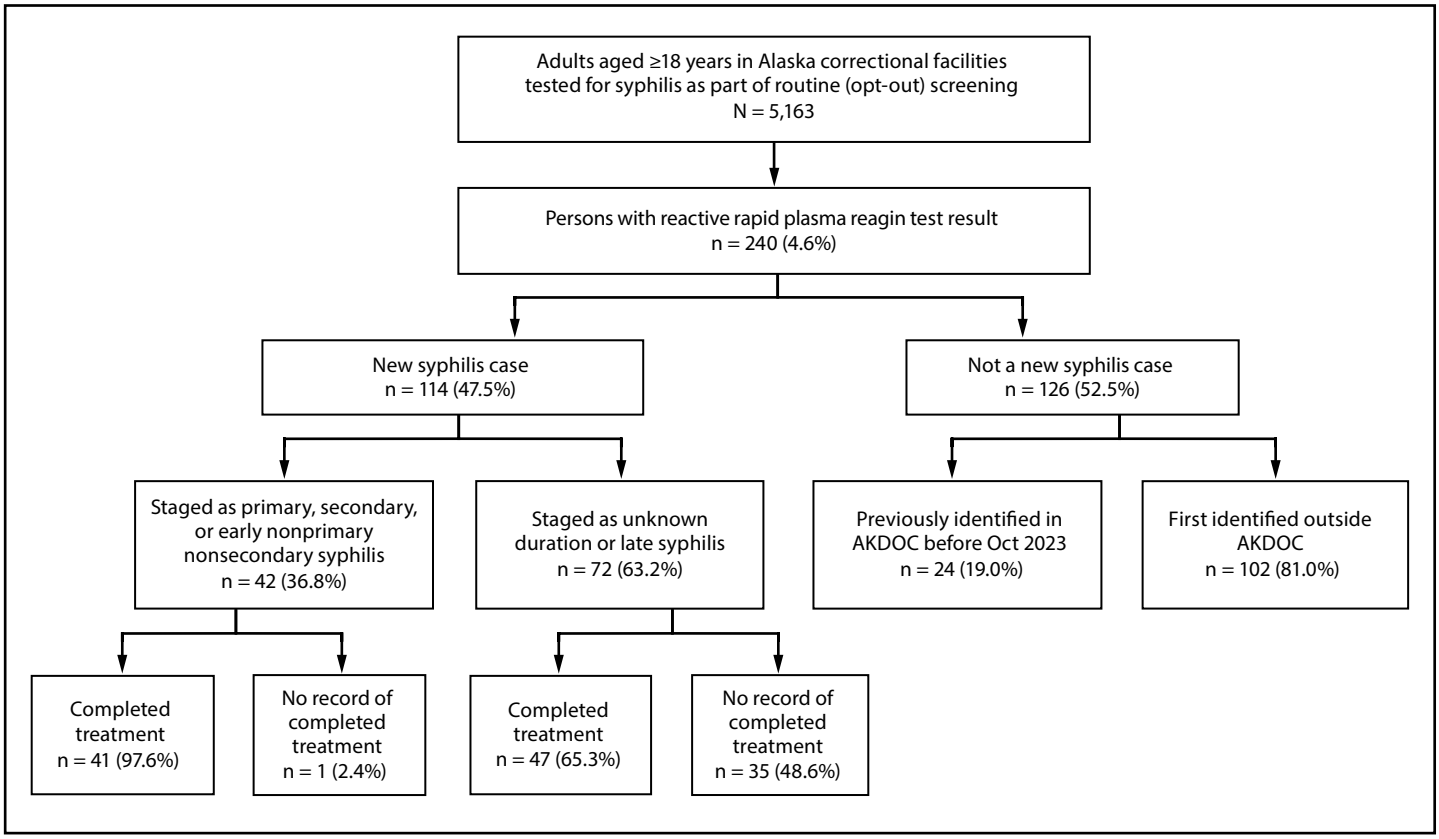
Among the 126 persons with a reactive RPR who did not have newly identified syphilis, 24 (19.0%) had received a diagnosis of syphilis through routine AKDOC medical services before the opt-out screening program; the remaining 102 (81.0%) had previously identified syphilis outside of AKDOC. All had positive treponemal (confirmatory) testing results.

Syphilis Staging and Treatment Status

Among the 114 new syphilis cases identified, 42 (36.8%) were staged as primary, secondary, or early nonprimary nonsecondary syphilis; 41 (97.6%) of these patients completed treatment with the indicated single dose of benzathine penicillin or a 14-day course of doxycycline by September 2025 (Figure); the remaining patient left DOC custody before the result was available and could not be located for treatment. The remaining 72 (63.2%) cases were staged as unknown duration or late syphilis, requiring a longer duration of treatment. Among these, 47 (65.3%) patients completed treatment with 3 doses of benzathine penicillin or 28 days of doxycycline, 13 (18.1%) received at least 1 dose of benzathine penicillin or doxycycline but did not complete a full treatment course (partial treatment), and 12 (16.7%) remain untreated or have an unknown treatment status due to inability to be located for treatment completion after AKDOC discharge when test results were returned. Thus, 88 (76.3%) of the 114 patients with newly identified syphilis were known to have completed treatment as of September 2025. Among the 114 newly identified cases, 73 (64.0%) patients completed treatment while in AKDOC custody, 15 (13.1%) completed treatment after discharge from AKDOC, 13 (11.4%) received some treatment in AKDOC custody but are not known to have completed treatment, and 13 (11.4%) remained untreated or had an

[†] During the first 7 months of the analysis period in this report (October 2023–May 2024), 2,330 persons were tested for syphilis in AKDOC, or 85.5% of the 2,633 persons who were in AKDOC custody for ≥14 consecutive days during that period. Testing rates for the complete period were not available at the time of this report but are estimated to be similar.

FIGURE. Rapid plasma reagin test results and syphilis treatment status among persons in correctional facilities* — Alaska, October 2023–September 2025



Abbreviation: AKDOC = Alaska Department of Corrections.
* Percentages are calculated using the number in the preceding box as the denominator.

unknown treatment status as of September 2025. Five cases identified outside of AKDOC were previously untreated and had treatment completed while in AKDOC custody.

Discussion

Correctional settings in Alaska represent an important opportunity for syphilis detection and treatment. In this analysis, 73 people were successfully treated for syphilis while in AKDOC custody, directly reducing the overall impact of syphilis in adults. The identification and timely treatment of at least one pregnant woman with syphilis might have averted a case of congenital syphilis. Further, additional congenital syphilis cases might have been prevented through this effort in the course of treating syphilis among incarcerated women of reproductive age and their sex partners, although not all patients with new syphilis diagnoses could be located for treatment completion or partner services after AKDOC discharge. Continued efforts to expand screening and treatment

TABLE 1. Results of syphilis screening with rapid plasma reagin tests among persons in correctional facilities, by age and sex — Alaska, October 2023–September 2025

Characteristic*	Total persons screened, no. (column %)	RPR test result,† no. (row %)	
		≥1 reactive RPRs	No reactive RPR§
Total*	**5,163 (100.0)**	**240 (4.6)**	**4,923 (95.4)**
Sex			
Female	1,022 (19.8)	95 (9.3)	925 (90.7)
Male	4,141 (80.2)	145 (3.5)	3,996 (96.5)
Age, yrs			
Median (range) [IQR]	35 (18–83) [28–41]	36 (19–66) [29–41]	35 (18–83) [28–42]

Abbreviation: RPR = rapid plasma reagin.
* No other demographic information was available.
† An RPR test detects lipoidal antibodies; when present, they often indicate a current or past syphilitic infection. If the test is reactive (i.e., detects nonspecific antibodies), the RPR specimen is diluted to obtain a titer, and a treponemal test specific to syphilis is performed on the same sample to confirm syphilitic infection.
§ A person was counted only once regardless of the number of times screened. If at least one RPR test result was reactive, the person was considered to have a reactive RPR.

TABLE 2. Syphilis cases and treatment among persons with reactive rapid plasma reagin* test results in correctional facilities — Alaska, October 2023–September 2025

Characteristic*	No. (%)†
Reactive treponemal test result	**240 (100.0)**
Sex	
Female	95 (39.6)
Reproductive age (15–44 yrs)§	88 (36.7)
Male	145 (60.4)
Syphilis case status	
New case	114 (47.5)
Not a new case, identified in AKDOC before Oct. 2023	24 (10.0)
Not a new case, first identified outside AKDOC¶	102 (42.5)
Persons with newly identified syphilis	**114 (100.0)**
Stage	
Primary, secondary, or early nonprimary nonsecondary	42 (36.8)
Unknown duration or late	72 (63.2)
Treatment relative to AKDOC custody	
Completed treatment in AKDOC custody	73 (64.0)
Completed treatment after discharge from AKDOC	15 (13.1)
Began treatment in AKDOC custody but did not complete treatment	13 (11.4)
Untreated or unknown treatment status	13 (11.4)
Completed treatment	
Patients with primary, secondary, or early nonprimary or nonsecondary syphilis (n = 42)	41 (97.6)
Patients with late latent syphilis or of syphilis of unknown duration (n = 72)	47 (65.3)
Newly identified cases in females of reproductive age (15–44 yrs)§	37 (100.0)
Pregnant at time of test	1 (2.7)
Not pregnant at time of test	31 (83.8)
Pregnancy status unknown	5 (13.5)

Abbreviations: AKDOC = Alaska Department of Corrections; RPR = rapid plasma reagin.

* An RPR test is nontreponemal and detects lipoidal antibodies; when present, although nonspecific, they often indicate a current or past syphilitic infection. If the test is reactive (i.e., detects nonspecific antibodies), the RPR specimen is diluted to obtain a titer, and a treponemal test (i.e., specific to syphilis) is performed on the same sample to confirm syphilitic infection.

† Percentages calculated among those with available data.

§ Although CDC defines reproductive age as 15–44 years, all women in this analysis were aged ≥18 years.

¶ Although five cases identified outside of AKDOC were not new cases, patients were untreated at the time the cases were identified and had treatment completed while in AKDOC custody.

in AKDOC so that persons passing through the corrections system too quickly to access regular medical intake or linkage to care at discharge (e.g., treatment completion, partner services, and follow-up care) will be central to optimizing the impact of opt-out screening and treatment.

Because congenital syphilis occurs during pregnancy, reducing the incidence of congenital syphilis might also be addressed by enhanced efforts to meet reproductive health care needs among populations such as incarcerated persons. Increasing the availability of reproductive care in health care settings serving incarcerated persons might assist Alaskans in planning when they want to be pregnant and connect them with effective options for contraception.

Summary

What is already known about this topic?

Since 2017, syphilis cases have increased substantially in the United States, including in Alaska. Historically, syphilis prevalence has been high among incarcerated populations.

What is added by this report?

During October 2023–September 2025, opt-out syphilis screening (i.e., routine testing unless a person declines) in Alaska correctional facilities found reactive rapid plasma reagin (RPR) results among 4.6% of screened persons, including 9.3% of women screened and 3.5% of men screened. These findings indicate high syphilis rates among incarcerated Alaskans who received testing. Reactive RPRs often indicate a past or current syphilis infection. Among all 5,163 persons screened, 2.2% had newly identified syphilis; of these, 77.2% completed syphilis treatment during this period.

What are the implications for public health practice?

Syphilis testing and treatment in correctional facilities might increase syphilis detection and treatment among persons who are incarcerated or detained, reduce community syphilis transmission, and help prevent congenital syphilis.

Limitations

The findings in this report are subject to at least four limitations. First, because information on the number or characteristics of persons who opted out of syphilis screening upon entering AKDOC custody was not available, estimation of the proportion of eligible persons who were screened and determination of characteristics associated with opting out was not possible. Second, the population screened might not be representative because it primarily represents persons remaining in AKDOC custody for at least 14 days. Persons briefly in custody, including many of those in pretrial facilities, might not have yet been provided syphilis screening. It is not known whether the incidence of syphilis or the acceptability of syphilis testing differs among persons with shorter stays in custody. Third, the prevalence of syphilis in a screened population is not directly comparable to the annual prevalence of reported cases statewide, as universal opt-out screening does not occur statewide. Finally, pregnancy status was not available for all women of reproductive age with a new syphilis diagnosis; therefore, the true number of congenital syphilis cases averted might be underreported. It is possible that more than one newly identified and treated infection occurred in a woman who was pregnant, but whose pregnancy status was not known.

Implications for Public Health Practice

CDC recommends conducting opt-out syphilis screening for incarcerated persons based on the local and institutional prevalence of infectious syphilis (*6*). In light of the nationwide

increase in syphilis, including congenital syphilis, the lack of timely testing and adequate treatment contributing to nearly 90% of U.S. congenital syphilis cases (*2*), and the relatively high prevalence of syphilis among incarcerated persons, correctional facilities nationwide might benefit from adopting an opt-out screening strategy for syphilis among incarcerated persons.

Acknowledgment

Alaska Department of Corrections.

Corresponding author: Joseph McLaughlin, joseph.mclaughlin@alaska.gov.

[1]Alaska Department of Health, Anchorage, Alaska.

All authors have completed and submitted the International Committee of Medical Journal Editors form for disclosure of potential conflicts of interest. No potential conflicts of interest were disclosed.

References

1. CDC. Syphilis: about congenital syphilis. Atlanta, GA: US Department of Health and Human Services, CDC; 2025; https://www.cdc.gov/syphilis/about/about-congenital-syphilis.html
2. McDonald R, O'Callaghan K, Torrone E, et al. Vital signs: missed opportunities for preventing congenital syphilis—United States, 2022. MMWR Morb Mortal Wkly Rep 2023;72:1269–74. PMID:37971936 https://doi.org/10.15585/mmwr.mm7246e1
3. Ohlsen E, Clark S. Syphilis and congenital syphilis update—Alaska, 2024. Epidemiol Bull; 2025. 9; https://epi.alaska.gov/bulletins/docs/b2025_09.pdf
4. CDC. STI statistics: sexually transmitted infections surveillance, 2024 (provisional). Atlanta, GA: US Department of Health and Human Services, CDC; 2025. https://www.cdc.gov/sti-statistics/annual/index.html
5. Spaulding AC, Miller J, Trigg BG, et al. Screening for sexually transmitted diseases in short-term correctional institutions: summary of evidence reviewed for the 2010 CDC Sexually Transmitted Diseases Treatment Guidelines. Sex Transm Dis 2013;40:679–84. PMID:23945422 https://doi.org/10.1097/01.olq.0000431353.88464.ab
6. CDC. Sexually transmitted infectious treatment guidelines, 2021: syphilis. MMWR Recomm Rep 2021;70(No. RR-4):1–187. PMID:34292926 http://doi.org/10.15585/mmwr.rr7004a1
7. Papp JR, Park IU, Fakile Y, Pereira L, Pillay A, Bolan GA. CDC laboratory recommendations for syphilis testing, United States, 2024. MMWR Recomm Rep 2024;73(No. RR-1):1–32. PMID:38319847 https://doi.org/10.15585/mmwr.rr7301a1
8. CDC. Case data implementation resources: syphilis (*Treponema pallidum*) 2018 case definition. Atlanta, GA: US Department of Health and Human Services, CDC. 2021. https://ndc.services.cdc.gov/case-definitions/syphilis-2018/

Notes from the Field

Heat-Related Emergency Department Visits — June 28–July 7, 2026

Ambarish Vaidyanathan, PhD[1]; Abigail Gates, MSPH[2]; Paul Iniguez, MS[3]; Jessica Lee, MS[3]; Aaron Bernstein, MD[4]

Introduction

National surveillance reports continue to document heat-related deaths and emergency department (ED) visits across the United States (*1*,*2*). Heat exposure is linked to a range of adverse health outcomes, from mild conditions including dehydration and heat exhaustion, to severe complications including heat stroke, organ failure, and death (*1*,*3*). Persons affected by heat-related illness (HRI) often have underlying comorbidities that heighten their susceptibility to heat stress, such as cardiovascular disease, respiratory conditions (e.g., asthma), kidney disease, or other chronic medical conditions (*3*). The ongoing 2026 heat season in the United States has produced some of the highest temperatures on record (*4*,*5*). In late June and early July, a heat dome, a weather pattern in which a strong, persistent high-pressure system traps hot air over an area and causes unusually high temperatures, persisted for approximately 10 days (June 28–July 7) and affected large portions of the eastern, midwestern, southern, and south-central United States.

Investigation and Outcomes

Identification of HRI ED Visits

To characterize changes in HRI ED visits associated with this heat dome, CDC analyzed data from the National Syndromic Surveillance Program (NSSP) by comparing daily HRI ED visits per 100,000 all-cause ED visits (visit rates) during June 28–July 7, 2026, with visit rates observed during the same calendar dates during 2018–2025. Data were extracted from NSSP's Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE), and daily counts of HRI and all-cause ED visits were aggregated for each of the 10 U.S. Department of Health and Human Services (HHS) regions and stratified by age group and sex (*2*). To minimize the impact of temporal changes in facility participation, the study restricted comparisons across years to EDs that reported consistently during the study period.*

Assessment of U.S. Heat Exposure Patterns

HeatRisk is a five-level, location-specific forecasting framework developed by the National Oceanic and Atmospheric Administration's National Weather Service (NOAA/NWS) and CDC that integrates meteorologic data with human health metrics to assess and communicate the progressive, population-level risks (none/low, minor, moderate, major, and extreme) of heat exposure in real time. In collaboration with NOAA/NWS, HeatRisk data were processed and county-level maximum daily values were mapped for June 28–July 7, 2026, to assess differences in heat exposure patterns across the United States. This activity was reviewed by CDC, deemed not research, and conducted consistent with applicable federal law and CDC policy.†

HRI ED Visits and HeatRisk Levels by HHS Region

As of September 10, 2026, ESSENCE recorded 145,321 HRI ED visits in 2026,§ approximately 15% (21,775) of which occurred in HHS regions 1–7 (primarily covering the eastern, midwestern, southern, and south-central regions of the United States) during June 28–July 7, 2026. During this time, approximately 65% of the U.S. population (221 million persons) in 42 states and the District of Columbia experienced ≥1 day of major or extreme HeatRisk (Figure). Consistent with these conditions, daily HRI visit rates in these regions substantially exceeded those during the same dates during 2018–2025. In the majority of HHS regions, daily visit rates exceeded a previously established benchmark defined as the 95th percentile of HRI visit rates (*2*) during 2018–2025; in HHS regions 2, 3, and 5, the maximum daily HRI visit rates recorded since 2018 occurred on or just before the July 4 holiday weekend. HRI ED visit rates were highest among men aged 26–54 years in HHS regions 1, 3, 4, 5, 6, and 7. In HHS Region 2, visit rates were highest among men aged ≥55 years.

Preliminary Conclusions and Actions

The June 28–July 7, 2026, heat dome was one of several events during the 2026 heat season associated with increased

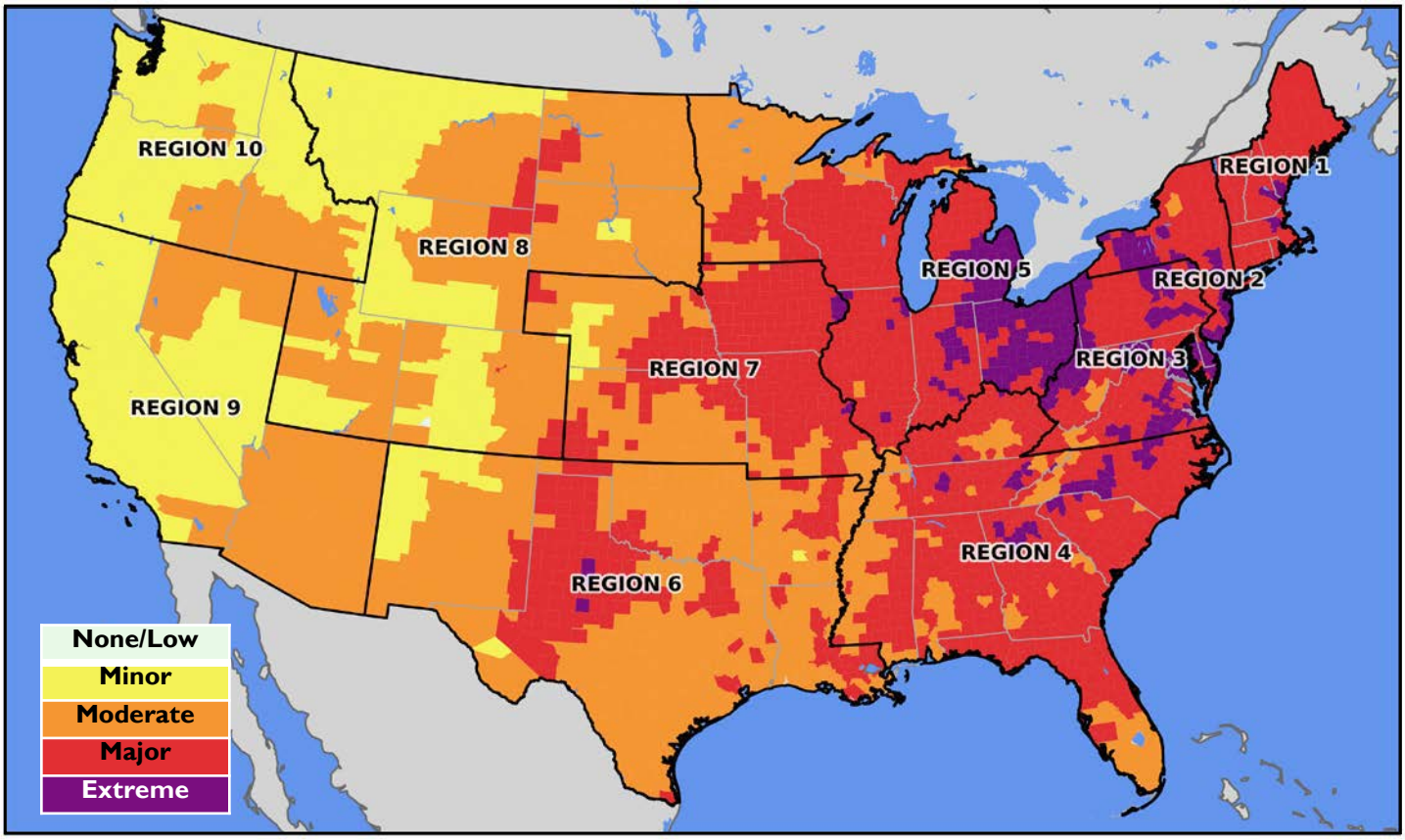
* Data quality filters were used to reduce artifactual impact from changes in reporting patterns. Specifically, for comparing visit rates across HHS regions and years, analyses were restricted to facilities with a coefficient of variation for ED visits ≤40 and average weekly informative discharge diagnosis completeness ≥70%, with discharge diagnosis code formatting consistent during January 1, 2018–September 10, 2026.

† 45 C.F.R. part 46.102(l)(2), 21 C.F.R. part 56; 42 U.S.C. Sect. 241(d); 5 U.S.C. Sect. 552a; 44 U.S.C. Sect. 3501 et seq.

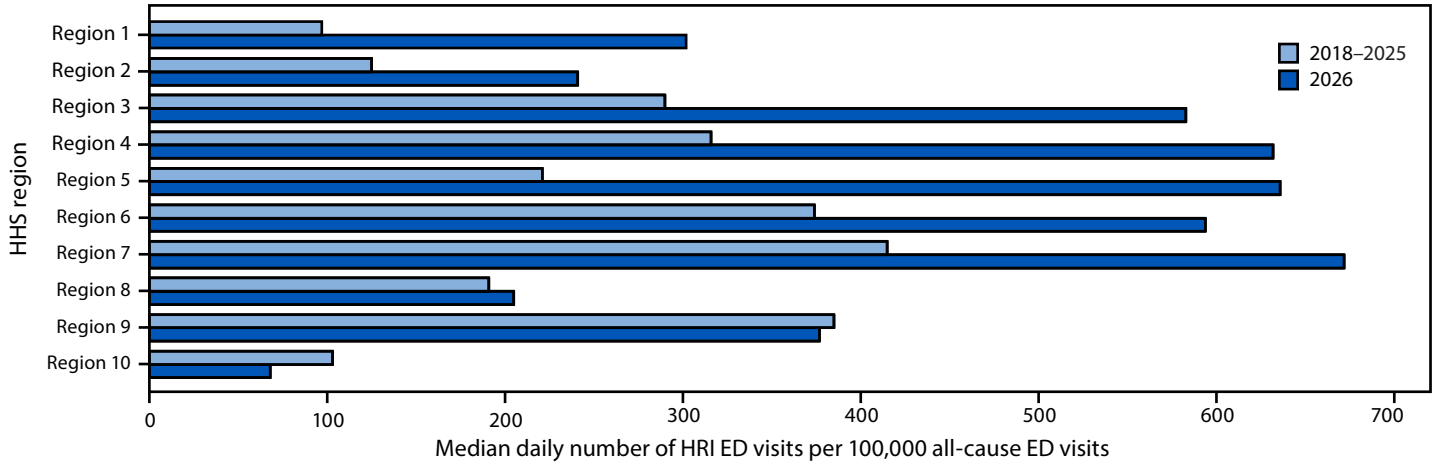
§ All facilities reporting HRI data to NSSP were included in the total HRI ED visits reported during January 1–September 10, 2026, across all HHS regions. During this period, HRI data were reported by a maximum of 1,737 EDs (range = 23–1,737; median = 213) that participated in NSSP and returned one or more visits associated with HRI. For comparing visit rates across HHS regions and years, data quality filters were applied, resulting in a maximum of 1,069 ED facilities (range = 3–1,069; median = 39) that participated in NSSP returning one or more visits associated with HRI.

FIGURE. Distribution of maximum daily HeatRisk levels,* by county (A), and comparison of median daily heat-related illness emergency department visit rates,† by region§ and period (B) — United States,¶ June 28–July 7, 2018–2025, and June 28–July 7, 2026

A. Distribution of maximum daily HeatRisk levels during June 28–July 7, 2026



B. HRI ED visit rates during June 28–July 7, 2018–2025, and June 28–July 7, 2026, by HHS region



Abbreviations: ED = emergency department; HHS = U.S. Department of Health and Human Services; HRI = heat-related illness; NOAA = National Oceanic and Atmospheric Administration; NSSP = National Syndromic Surveillance Program; NWS = National Weather Service.

* HeatRisk is a five-level, location-specific forecasting framework developed by NOAA/NWS and CDC that integrates meteorological data with human health metrics to assess and communicate the progressive, population-level risks for heat exposure in real time. HeatRisk was calculated using observed maximum and minimum temperatures from the NOAA Unrestricted Mesoanalysis at 2.5 sq km grid spacing, with values aggregated (median) to the county level for June 28–July 7, 2026. The highest HeatRisk category observed during this 10-day period was then mapped. HeatRisk | NWS; HeatRisk | CDC

† To reduce artifactual impact from changes in reporting patterns, analyses were restricted to facilities with a coefficient of variation for ED visits ≤40 and average weekly informative discharge diagnosis completeness ≥70%, with discharge diagnosis code formatting consistent during January 1, 2018–September 10, 2026. After data quality filters were applied, a maximum of 1,069 EDs (range = 3–1,069; median = 39) that participate in NSSP returned one or more visits associated with HRI.

§ HHS Regional Offices | HHS.gov

¶ Puerto Rico and the U.S. Virgin Islands do not currently report data to NSSP.

HRI ED visit rates. During periods of extreme heat, persons in affected areas can monitor heat warnings and advisories and use early heat warning systems (e.g., HeatRisk) with adequate lead time to plan and prepare for outdoor activities. If home air conditioning is unavailable, persons can follow recommendations from local and state emergency agencies on ways to mitigate extreme heat exposure, including guidance on accessing cooling centers and other air-conditioned spaces. Public health agencies can continue to use near real-time heat-health information systems,¶ and clinical and public-facing guidance documents** (*3*) to detect, track, and communicate heat-related impacts.

¶ For example, CDC's Heat and Health Tracker is an interactive, online information system designed to help communities prepare for and respond to extreme heat. The tracker combines real-time weather forecasts, historical weather data, and ED visit records to assess local heat risks and protect populations at risk for HRI.

** Heat health resources: Heat.gov | National Integrated Heat Health Information System; Heat Health | CDC

Corresponding author: Ambarish Vaidyanathan, envhealthmedia@cdc.gov.

[1]Division of Environmental Health Science and Practice, National Center for Environmental Health, CDC; [2]Detect and Monitor Division, Office of Public Health Data, Surveillance, and Technology, CDC; [3]Weather Prediction Center, National Weather Service, National Oceanic and Atmospheric Administration, College Park, Maryland; [4]National Center for Environmental Health, Agency for Toxic Substances and Disease Registry, CDC.

All authors have completed and submitted the International Committee of Medical Journal Editors form for disclosure of potential conflicts of interest. No potential conflicts of interest were disclosed.

Summary

What is already known about this topic?

Sustained periods of extreme heat are associated with increased heat-related emergency department (ED) visits and deaths; certain groups, including working-age and older adults, often experience more heat-related illnesses than do younger persons.

What is added by this report?

During a 10-day period of extreme heat in late June and early July 2026, heat-related ED visit rates in the eastern, midwestern, southern, and south-central regions of the United States were markedly higher than those during the same dates in earlier years; the highest rates occurred around the July 4 holiday.

What are the implications for public health practice?

Syndromic surveillance and early heat warning systems are critical for rapidly detecting increases in heat-related illness during extreme heat events and can guide timely public health responses, including targeted prevention efforts for populations and regions at highest risk.

References

1. Vaidyanathan A, Malilay J, Schramm P, Saha S. Heat-related deaths—United States, 2004-2018. MMWR Morb Mortal Wkly Rep 2020;69:729–34. PMID:32555133 https://doi.org/10.15585/mmwr.mm6924a1
2. Vaidyanathan A, Gates A, Brown C, Prezzato E, Bernstein A. Heat-related emergency department visits—United States, May–September 2023. MMWR Morb Mortal Wkly Rep 2024;73:324–9. PMID:38635484 https://doi.org/10.15585/mmwr.mm7315a1
3. CDC. Heat health: about heat and your health. Atlanta, GA: US Department of Health and Human Services, CDC; 2026. https://www.cdc.gov/heat-health/about/index.html
4. National Centers for Environmental Information, National Oceanic and Atmospheric Administration. Monitoring the U.S. temperature and precipitation in August 2026. Asheville, NC: National Oceanic and Atmospheric Administration, National Centers for Environmental Information; 2026. https://www.ncei.noaa.gov/news/national-climate-202608
5. National Centers for Environmental Information, National Oceanic and Atmospheric Administration. Data tools: daily weather records. Asheville, NC: National Oceanic and Atmospheric Administration, National Centers for Environmental Information; 2026. https://www.ncei.noaa.gov/cdo-web/datatools/records

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the U.S. Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format. To receive an electronic copy each week, visit *MMWR* at *https://www.cdc.gov/mmwr/index.html*.

Readers who have difficulty accessing this PDF file may access the HTML file at https://www.cdc.gov/mmwr/index2026.html. Address all inquiries about the *MMWR* Series to Editor-in-Chief, *MMWR* Series, Mailstop V25-5, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30329-4027 or to mmwrq@cdc.gov.

All material in the MMWR Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

MMWR and *Morbidity and Mortality Weekly Report* are service marks of the U.S. Department of Health and Human Services.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in *MMWR* were current as of the date of publication.

ISSN: 0149-2195 (Print)