EPIDEMIOLOGY AND IMMUNIZATION SERVICES BRANCH

# MONTHLY COMMUNICABLE DISEASE REPORT

JULY 2025

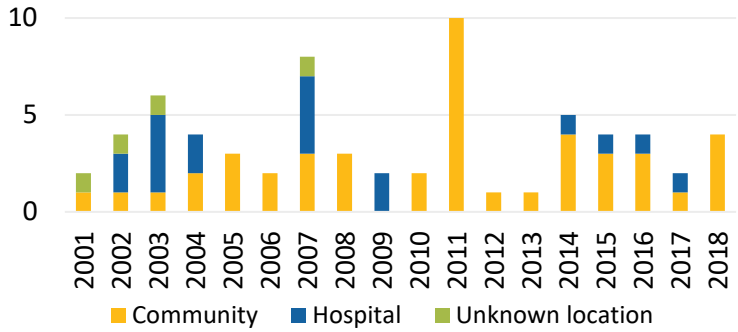
Volume 9, Issue 7: August 15, 2025

## *CRONOBACTER* INFECTION

### *Epidemiology*

*Cronobacter* (previously *Enterobacter*) *sakazakii*, commonly known as *Cronobacter*, are naturally-found bacteria that may cause infection in humans through the contamination of dry foods such as powdered infant formula, powdered milk, herbal teas, and starches. Historically, *Cronobacter* infections were not nationally notifiable, and Michigan and Minnesota were the only states that required reporting. The Centers for Disease Control and Prevention (CDC) received 1–10 voluntary reports per year from 2001 to 2018 (figure 1), but a laboratory surveillance-based study estimated approximately 18 infant cases annually in the United States. Invasive *Cronobacter* infections in infants under 12 months of age are nationally reportable as of 2024. There have been no reported cases in San Diego County to date.

**Figure 1. Reported Invasive Cronobacter Infections among Infants, United States, 2001–2018**




*Adapted from: Strysko J, Cope JR, Martin H, Tarr C, Hise K, Collier S, Bowen A. Food safety and invasive Cronobacter infections during early infancy, 1961–2018. *Emerging Infectious Diseases*. 2020;26(5):857–865. doi:10.3201/eid2605.190858

### *Clinical Manifestations in Babies*

*Cronobacter* infections can be deadly in infants and usually occur in the first few weeks of life. Initial symptoms often include fever, malaise, and poor feeding. In severe cases, *Cronobacter* bacteria can cause sepsis, a severe bloodstream infection, or meningitis, an infection of the lining of the spine and brain. The death rate for these severe cases is high; in the United States, 20% of infants with meningitis or sepsis due to *Cronobacter* have died.

### *Diagnosis*

Diagnosis is made by isolation of *Cronobacter* from a normally sterile site (e.g., blood or cerebrospinal fluid). The CDC requests that isolates be sent to the CDC laboratories for further characterization.

### *Treatment*

*Cronobacter* infections are treated with empiric antibiotics, preferably immediately after diagnosis. Drug-resistant strains have been reported, so antimicrobial susceptibility testing should be completed to help determine which antibiotic will be most effective. In patients with meningitis, brain imaging should be completed to detect brain abscesses and other complications.

### *Prevention*

Breastfeeding has a number of advantages over formula, including avoiding exposure to contaminated powdered formula, a major cause of *Cronobacter* in infants. If formula is needed, premixed formula should be used when possible because it is manufactured and bottled under sterile conditions. If powdered formula is needed, it should be reconstituted with water above 70° Celsius. Prepared formula should be used or refrigerated within two hours of preparation and any extra formula discarded. All equipment that holds formula or touches the baby's mouth such as bottles, breast pumps, and pacifiers should be cleaned and properly stored.

**Resources**

- Centers for Disease Control and Prevention (CDC) *Cronobacter* Infection website
- U.S. Food and Drug Administration *Cronobacter sakazakii* website

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*The Monthly Communicable Disease Surveillance Report is a publication of the County of San Diego Public Health Services Epidemiology and Immunization Services Branch (EISB). EISB identifies, investigates, registers, and evaluates communicable, reportable, and emerging diseases and conditions to protect the health of the community. The purpose of this report is to present trends in communicable disease in San Diego County. To subscribe to this report, visit the Data and Reports page on the Epidemiology Program website (www.sdepi.org) and click on the subscribe link.*

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**Table 1. Select Reportable Diseases**

| Disease and Case Inclusion Criteria (C,P,S) | | 2025 July | 2025 June | 2025 January - July (YTD) | Prior Years 2024 YTD | Prior Years Avg YTD, 2022-2024 | Prior Years 2024 Total |
|---|---|---|---|---|---|---|---|
| Botulism (Foodborne, Infant, Wound, Other) | C,P | 0 | 0 | 3 | 3 | 1.3 | 5 |
| Brucellosis | C,P | 0 | 0 | 0 | 1 | 2.0 | 1 |
| Campylobacteriosis | C,P | 137 | 107 | 613 | 684 | 610.7 | 1,127 |
| *Candida auris* | C | 8 | 15 | 98 | 69 | 44.0 | 151 |
| Chickenpox, Hospitalization or Death | C,P | 0 | 1 | 1 | 3 | 2.7 | 3 |
| Chikungunya | C,P | 0 | 0 | 0 | 0 | 0.7 | 2 |
| Coccidioidomycosis | C | 61 | 68 | 435 | 358 | 290.3 | 649 |
| Cryptosporidiosis | C,P | 22 | 10 | 71 | 79 | 63.7 | 129 |
| Dengue Virus Infection | C,P | 1 | 0 | 10 | 23 | 12.0 | 64 |
| Encephalitis, All | C | 1 | 0 | 16 | 23 | 18.0 | 49 |
| Giardiasis | C,P | 17 | 14 | 140 | 147 | 133.3 | 244 |
| Hepatitis A, Acute | C | 0 | 2 | 4 | 7 | 18.7 | 17 |
| Hepatitis B, Acute | C | 0 | 0 | 10 | 11 | 9.3 | 18 |
| Hepatitis B, Chronic | C,P | 42 | 46 | 360 | 366 | 438.7 | 683 |
| Hepatitis C, Acute | C,P | 2 | 9 | 39 | 73 | 66.0 | 94 |
| Hepatitis C, Chronic | C,P | 151 | 102 | 956 | 1,050 | 1,399.7 | 1,879 |
| Legionellosis | C | 6 | 6 | 41 | 43 | 47.3 | 83 |
| Listeriosis | C | 1 | 2 | 5 | 6 | 8.7 | 10 |
| Lyme Disease | C,P | 1 | 0 | 1 | 4 | 5.0 | 6 |
| Malaria | C | 5 | 2 | 9 | 7 | 5.7 | 19 |
| Measles (Rubeola) | C | 0 | 0 | 0 | 3 | 1.0 | 4 |
| Meningitis, Aseptic/Viral | C,P,S | 13 | 7 | 42 | 68 | 48.3 | 106 |
| Meningitis, Bacterial | C,P,S | 2 | 3 | 24 | 26 | 23.0 | 44 |
| Meningitis, Other/Unknown | C | 3 | 3 | 13 | 17 | 14.7 | 24 |
| Meningococcal Disease | C,P | 0 | 2 | 7 | 4 | 3.0 | 5 |
| Mumps | C,P | 0 | 0 | 1 | 1 | 1.3 | 2 |
| Pertussis | C,P | 15 | 29 | 233 | 409 | 167.3 | 729 |
| Rabies, Animal | C | 6 | 0 | 8 | 2 | 2.3 | 13 |
| Rocky Mountain Spotted Fever | C,P | 0 | 1 | 1 | 3 | 2.3 | 3 |
| Salmonellosis (Non-Typhoid/Non-Paratyphoid) | C,P | 68 | 87 | 523 | 392 | 349.0 | 747 |
| Shiga toxin-Producing *E. coli* (including O157) | C,P | 32 | 22 | 148 | 164 | 133.7 | 262 |
| Shigellosis | C,P | 40 | 42 | 209 | 273 | 240.7 | 471 |
| Typhoid Fever | C,P | 0 | 0 | 1 | 3 | 6.0 | 4 |
| Vibriosis | C,P | 5 | 8 | 27 | 26 | 18.0 | 53 |
| West Nile Virus Infection | C,P | 0 | 0 | 0 | 0 | 0.3 | 2 |
| Yersiniosis | C,P | 13 | 17 | 94 | 91 | 53.0 | 135 |
| Zika Virus | C,P | 2 | 0 | 2 | 0 | 0.3 | 1 |

***Case counts are provisional and subject to change as additional information becomes available.*** Cases are grouped into calendar months and calendar years on the basis of the earliest of the following dates: onset, lab specimen collection, diagnosis, death, and report received. Counts may differ from previously or subsequently reported counts due to differences in inclusion or grouping criteria, late reporting, or updated case information. Inclusion criteria (C,P,S = Confirmed, Probable, Suspect) based on Council of State and Territorial Epidemiologists/Centers for Disease Control and Prevention (CSTE/CDC) surveillance case criteria. Includes San Diego County resident cases only.

San Diego County Sexually Transmitted Infection Data | San Diego County Tuberculosis Data

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**Figure 2. Select Enteric Infections by Month**
**August 2024 – July 2025**

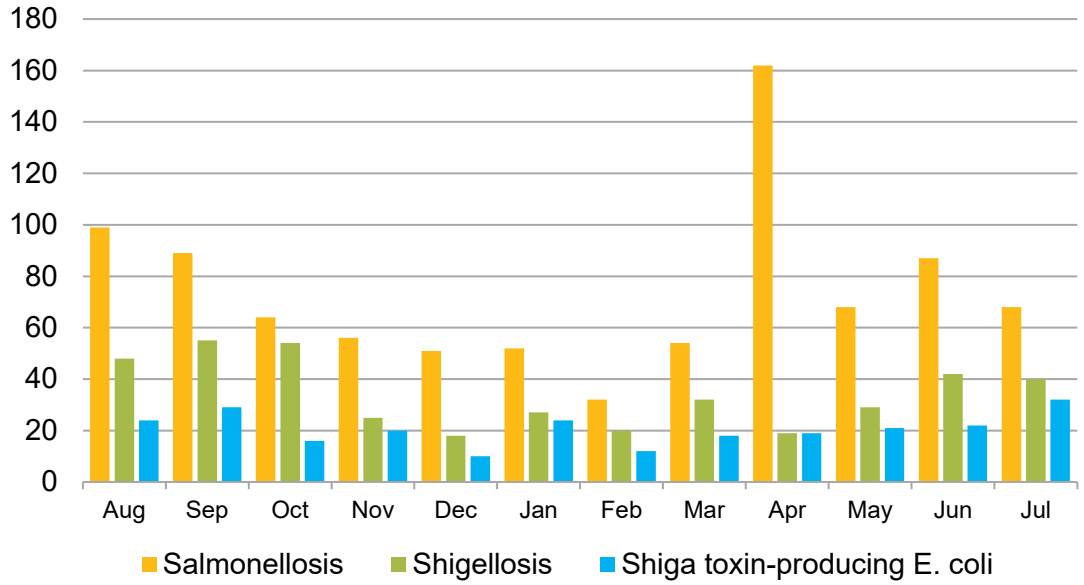
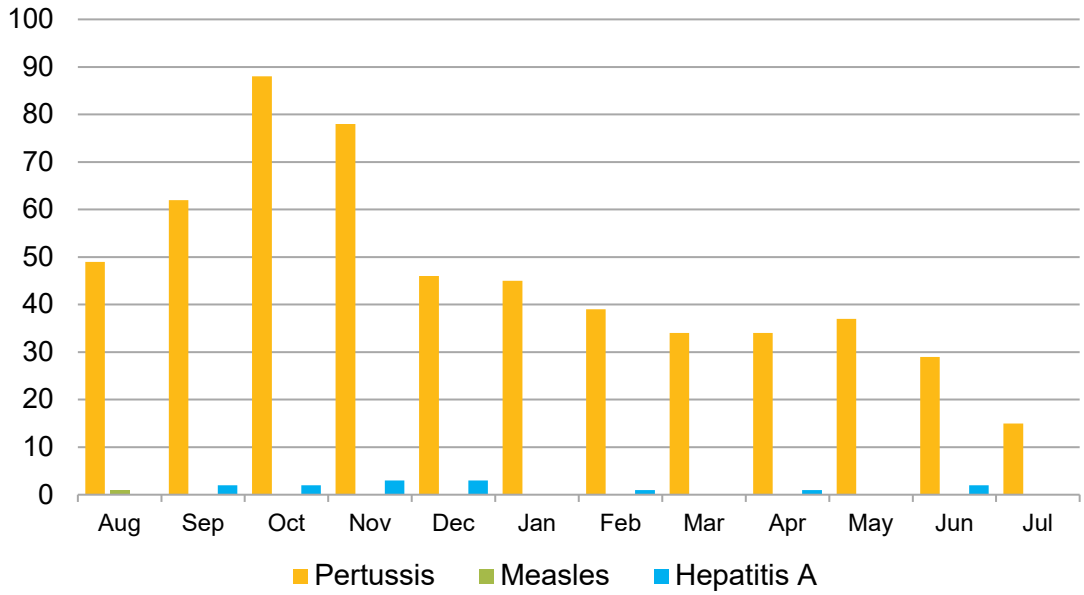



**Figure 3. Select Vaccine-Preventable Infections by Month**
**August 2024 – July 2025**




***Case counts are provisional and subject to change as additional information becomes available.*** Cases are grouped into calendar months and calendar years on the basis of the earliest of the following dates: onset, lab specimen collection, diagnosis, death, and report received. Counts may differ from previously or subsequently reported counts due to differences in inclusion or grouping criteria, late reporting, or updated case information. Inclusion criteria (C,P,S = Confirmed, Probable, Suspect) based on Council of State and Territorial Epidemiologists/Centers for Disease Control and Prevention (CSTE/CDC) surveillance case criteria.

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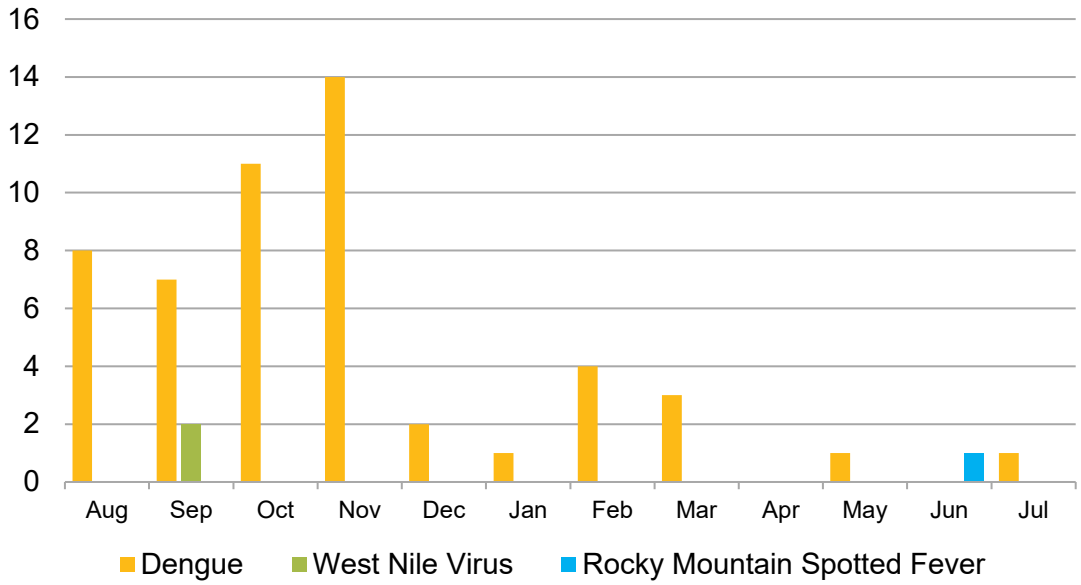
**Figure 4. Select Vector-Borne Infections by Month**
**July 2024 – June 2025**




See the County disease-specific webpages, for more information on West Nile virus and Dengue.
***Case counts are provisional and subject to change as additional information becomes available.*** Cases are grouped into calendar months and calendar years on the basis of the earliest of the following dates: onset, lab specimen collection, diagnosis, death, and report received. Counts may differ from previously or subsequently reported counts due to differences in inclusion or grouping criteria, late reporting, or updated case information. Inclusion criteria (C,P,S = Confirmed, Probable, Suspect) based on Council of State and Territorial Epidemiologists/Centers for Disease Control and Prevention (CSTE/CDC) surveillance case criteria.

**Disease Reporting in San Diego County**

San Diego County communicable disease surveillance is a collaborative effort among Public Health Services, hospitals, medical providers, laboratories, and the San Diego Health Connect Health Information Exchange (HIE). The data presented in this report are the result of this effort.

Reporting is crucial for disease surveillance and detection of disease outbreaks. Under the California Code of Regulations, Title 17 (Sections 2500, 2505, and 2508), public health professionals, medical providers, laboratories, schools, and others are mandated to report more than 80 diseases or conditions to San Diego County Health and Human Services Agency.

To report a communicable disease, contact the Epidemiology Program by phone at (619) 692-8499 or download and print a Confidential Morbidity Report form and fax it to (858) 715-6458. For urgent matters on evenings, weekends or holidays, dial (858) 565-5255 and ask for the Epidemiology Program duty officer. For more information, including a complete list of reportable diseases and conditions in California, visit the Epidemiology Program website, www.sdepi.org.

Tuberculosis, sexually transmitted infections, and HIV disease are covered by other programs within Public Health Services. For information about reporting and data related to these conditions, search for the relevant program on the Public Health Services website, http://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs.html.