

SHIGELLOSIS

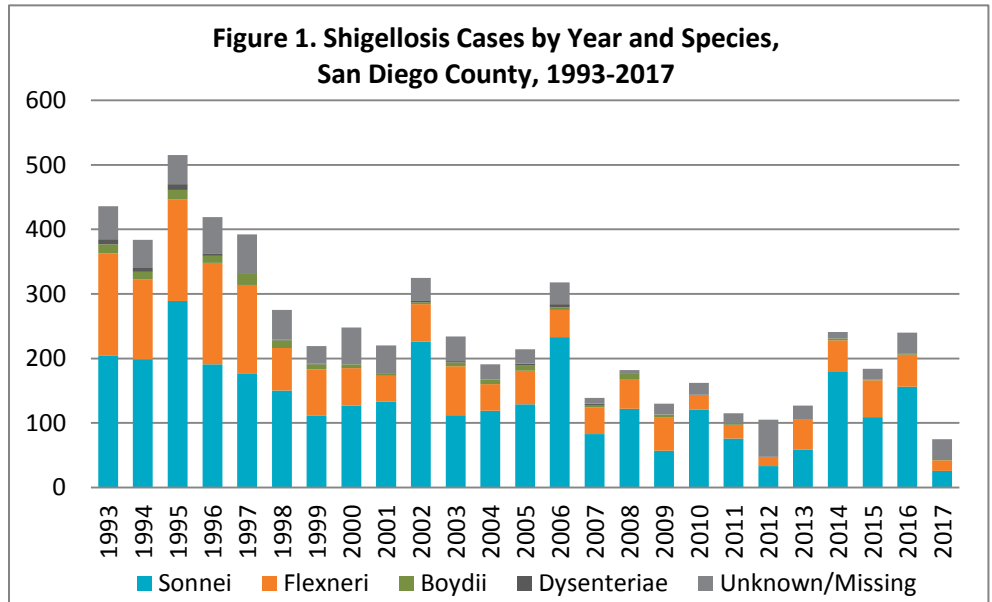
Shigellosis is an acute diarrheal illness caused by four species of *Shigella* bacteria: *S. sonnei*, *S. flexneri*, *S. boydii*, *S. dysenteriae*. Infections with *S. boydii* and *S. dysenteriae* are uncommon in the United States (U.S.), but remain an important cause of diarrhea in the developing world. Of San Diego County *Shigella* infections with known species since 1993, 65% have been caused by *S. sonnei* and 32% by *S. flexneri*.

Shigellosis is highly contagious (as few as 10 to 100 organisms can cause infection), and transmission occurs via contaminated food and water or direct person-to-person spread. Groups at

higher risk for *Shigella* infection include young children, men who have sex with men (MSM), and travelers to developing countries. Shigellosis is usually self-limited in immunocompetent hosts. Despite this, treatment with antibiotics is common: 75% of San Diego County cases since 2012 have received antibiotics.

Antibiotic-resistant *Shigella* is increasingly becoming a problem in the U.S. Because many *Shigella* strains are resistant to traditional first-line antibiotic choices for treatment, clinicians have turned to options such as

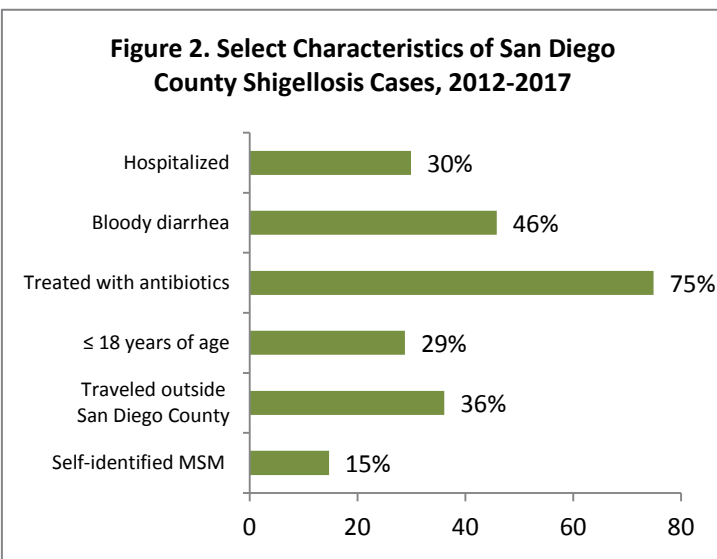
Figure 1. Shigellosis Cases by Year and Species, San Diego County, 1993-2017



2017 data are year-to-date; data current as of 5/15/2017. Data are provisional and subject to change as additional information becomes available. Grouped by CDC disease years.

azithromycin and ciprofloxacin. However, *Shigella* strains have emerged that are resistant to these antibiotics, as well, and multidrug resistant strains are a concern. Although anyone can acquire an antibiotic-resistant strain, MSM are more likely to be infected with these strains. Several clusters in this population have been identified in recent years, including a recent cluster of *S. flexneri* in southern California. Since 2012, 143 *Shigella* infections were reported in San Diego County MSM, 15% of all cases, or 53% of cases in adult men with complete data.

Figure 2. Select Characteristics of San Diego County Shigellosis Cases, 2012-2017



Data current as of 5/15/2017. Data are provisional and subject to change as additional information becomes available. With exception of MSM, denominators include only those with complete data.

Resources

- [Centers for Disease Control and Prevention \(CDC\) website](#)
- [California Department of Public Health website](#)
- [CDC Antibiotic / Antimicrobial Resistance website](#)
- [CDC Health Alert Network \(HAN\) – Shigella Strains with Possible Reduced Susceptibility to Ciprofloxacin](#)
- [CAHAN San Diego Health Alert – Shigellosis among Men](#)

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 works to identify, investigate, register, and evaluate 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, send an email to EpiDiv.HHSA@sdcounty.ca.gov.

MONTHLY COMMUNICABLE DISEASE REPORT



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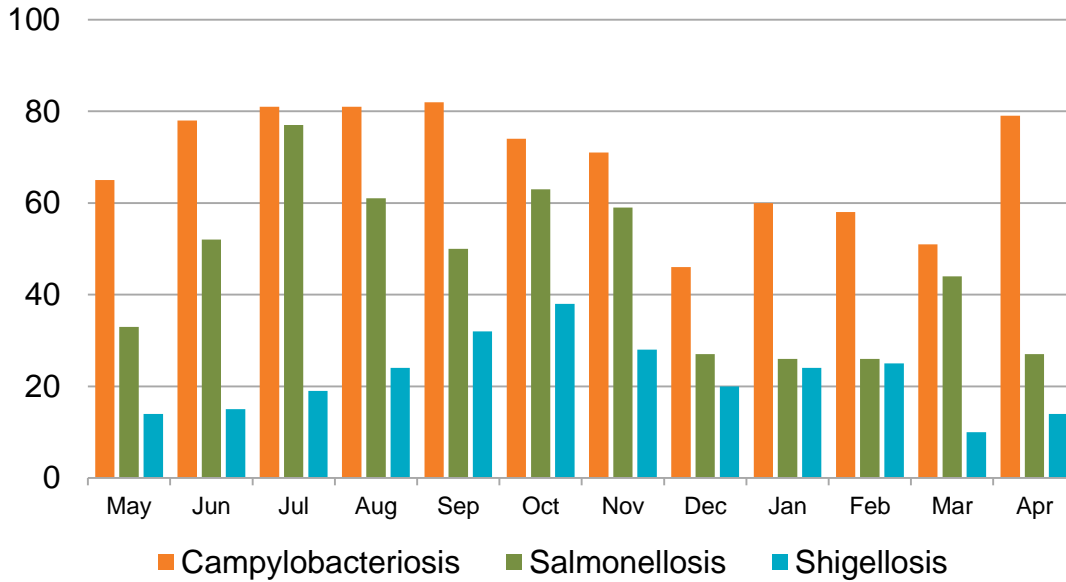


Table 1. Select Reportable Diseases		2017			Prior Years		
		Current Month	Prior Month	Year-to-Date (YTD)	2016 YTD	Avg YTD, 2014-2016	2016 Total
Disease and Case Inclusion Criteria (C,P,S)							
Amebiasis	C	0	1	2	15	14.0	19
Botulism (Foodborne, Infant, Wound)	C	0	0	1	1	0.7	5
Brucellosis	C	1	1	2	2	0.7	3
Campylobacteriosis	C	79	51	248	198	188.3	779
Chickenpox, Hospitalization or Death	C,P	0	0	0	1	0.3	3
Chikungunya	C,P	0	0	1	0	0.3	5
Coccidioidomycosis	C,P	3	8	29	46	49.7	133
Cryptosporidiosis	C,P	2	1	5	8	7.0	34
Dengue Virus Infection	C	0	0	2	6	2.7	18
Encephalitis, All	C,P	1	2	7	16	19.3	64
Giardiasis	C,P	15	24	90	100	76.7	384
Hepatitis A, Acute	C	44	26	82	8	5.0	24
Hepatitis B, Acute	C,P	0	1	4	1	2.3	2
Hepatitis B, Chronic	C	72	70	287	305	295.7	878
Hepatitis C, Acute	C,P	0	1	1	0	0.0	0
Hepatitis C, Chronic	C,P	201	192	749	933	874.0	2592
Legionellosis	C	3	3	16	14	14.7	31
Listeriosis	C,P	0	1	4	6	3.0	19
Lyme Disease	C	2	1	4	0	0.3	8
Malaria	C	0	0	1	1	1.7	9
Measles (Rubeola)	C,P	0	2	2	0	4.0	0
Meningitis, Aseptic/Viral	C	10	5	24	35	44.3	129
Meningitis, Bacterial	C	1	2	6	18	14.7	49
Meningitis, Other/Unknown	C,P,S	1	0	2	11	11.7	26
Meningococcal Infection	C,P	0	0	0	0	2.0	2
Mumps	C,P	0	2	6	13	4.3	22
Pertussis	C,P,S	77	105	281	111	355.0	386
Rabies, Animal	C	1	0	3	0	1.0	7
Rocky Mountain Spotted Fever	C,P	0	0	1	0	0.3	1
Salmonellosis (Non-Typhoid/Non-Paratyphoid)	C,P	27	44	123	113	116.7	528
Shiga toxin-Positive Feces (without culture confirmation)	C,P	0	2	2	8	4.0	23
Shiga toxin-Producing E. coli (including O157)	C,P	0	0	1	7	7.0	26
Shigellosis	C,P	14	10	73	50	35.3	234
Typhoid Fever	C,P	1	0	2	1	1.7	5
Vibriosis	C,P	0	1	5	7	7.7	24
West Nile Virus Infection	C,P	0	0	0	0	0.0	22
Yersiniosis	C,P	9	6	18	6	5.7	8
Zika Virus	C,P	1	0	4	12	4.3	75

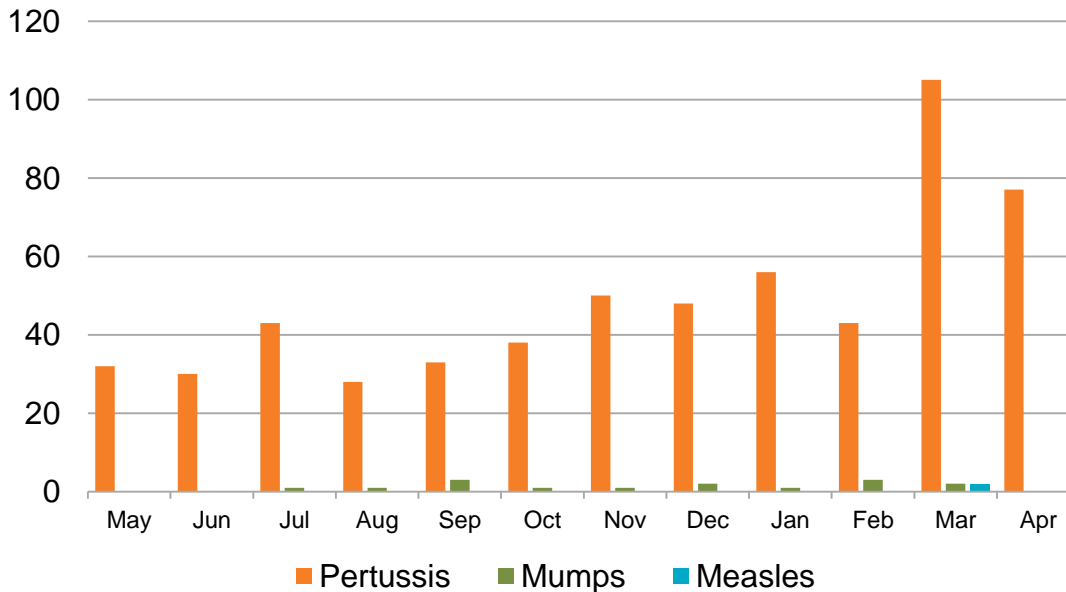
Case counts are provisional and subject to change as additional information becomes available. Cases are grouped into calendar months and calendar years on the basis of the earliest of the following dates: onset, lab specimen collection, diagnosis, death, and report received. Counts may differ from previously 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.



**Figure 3. Select Enteric Infections by Month
May 2016 – April 2017**

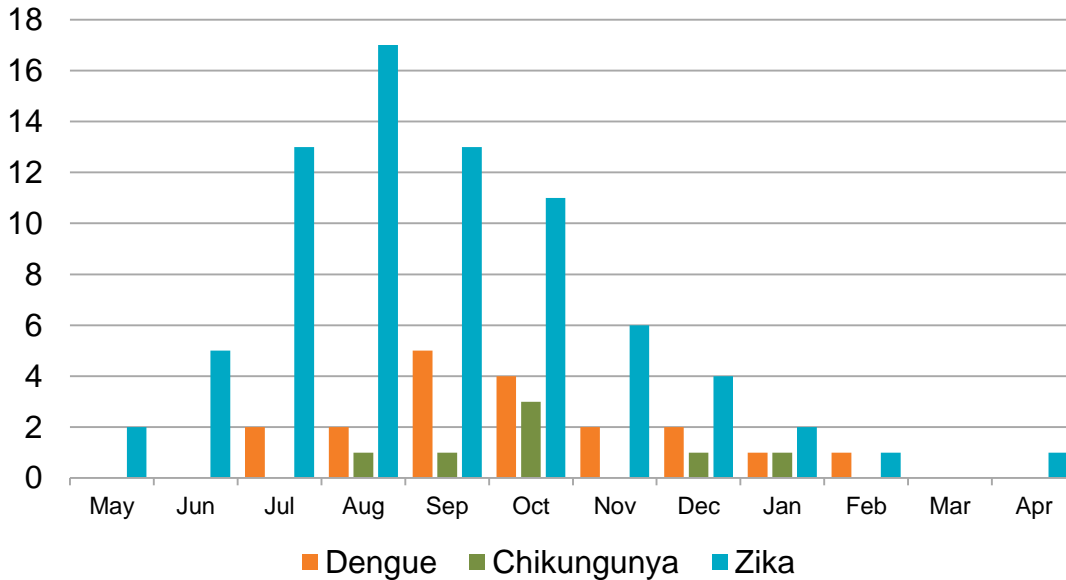


**Figure 4. Select Vaccine-Preventable Infections by Month
May 2016 – April 2017**



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**Figure 5. Select Vector-Borne Infections by Month
May 2016 – April 2017**



All of these dengue, chikungunya, and Zika virus cases are travel-associated. For additional information on Zika cases, see the [HHSa Zika Virus webpage](#). **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 those efforts.

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>.