EPIDEMIOLOGY AND IMMUNIZATION SERVICES BRANCH

MONTHLY COMMUNICABLE DISEASE REPORT

MARCH 2021

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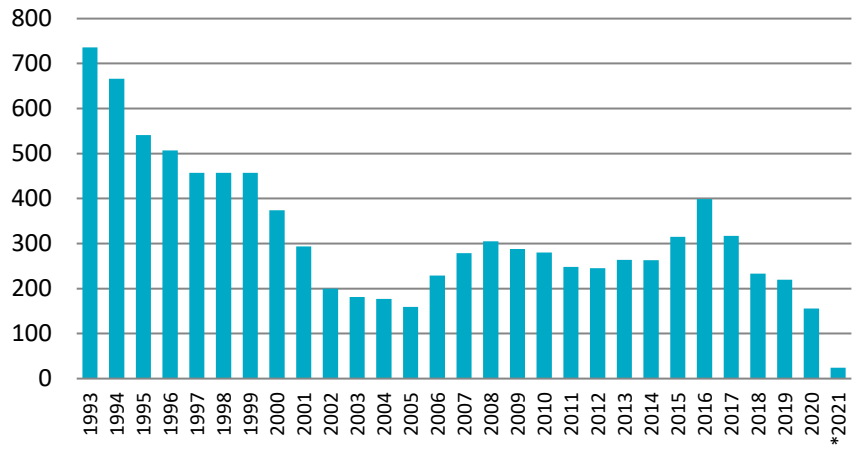
GIARDIASIS

Giardiasis is an intestinal infection caused by the protozoan parasite *Giardia intestinalis* (also known as *Giardia lamblia* or *Giardia duodenalis*). Symptoms, which may include diarrhea, gas, bloating, abdominal cramps, nausea, and dehydration, usually begin one to three weeks after infection and may last two to four weeks or longer. Nearly 50% of infections are asymptomatic.

Figure 1. Giardiasis Cases, San Diego County, 1993-2021*

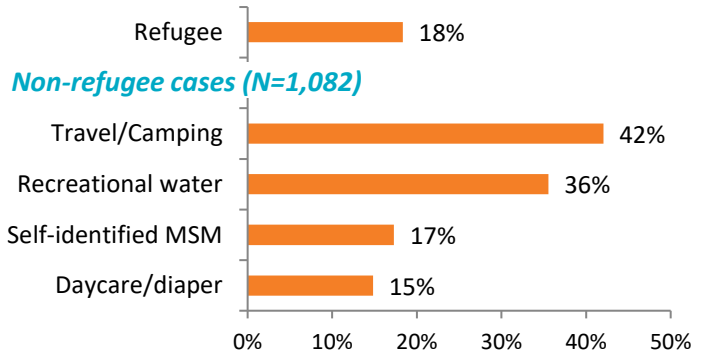


*2021 data are year-to-date; current as of 4/15/2021. Data are provisional and subject to change as additional information becomes available. Grouped by CDC disease years.

Giardia are transmitted fecal-orally. People often become infected after swallowing *Giardia* cysts in contaminated food or water. Contact with recreational water and consumption of untreated drinking water (e.g., while camping or backpacking or traveling in developing countries) are frequent sources of exposure. During 2012-2017 in the United States (U.S.), waterborne and person-to-person exposures were the leading causes of 111 giardiasis outbreaks (760 cases) from 26 states. Private residences and child care facilities were the most common settings for these outbreaks. Transmission from animal to person is less likely because the type of *Giardia* that infects humans is usually different than that causing infection in dogs and cats.

Giardiasis is a common infection worldwide, though it is more prevalent in areas with poor sanitation. In the U.S., it is the most common human intestinal parasitic disease, causing an estimated 1.2 million infections annually. In 2018, the national incidence rate was 4.8 cases per 100,000 persons (15,548 reported cases), compared to a rate of 6.6 (2,636 cases) in California and 7.0 (233 cases) in San Diego County.

Figure 2. Risk Factors Among Giardiasis Cases, San Diego County, 2016-2020 (N=1,325)



Risk factors are not confirmed sources of infection. Cases with missing data are excluded from non-refugee risk factor calculations (denominators range from 740-804), except MSM, which is a percentage of all non-refugee cases. Of adult men with complete information, 46% report sex with men. Data are provisional and subject to change as additional information becomes available.

Over the past five years, 18% of San Diego cases have been in refugees, who are routinely screened for giardiasis when they arrive in the U.S. Among non-refugee cases, travel or camping and recreational water were the most frequently-reported potential exposures. The median age of refugee cases was eight years, compared to 41 for non-refugee cases. Among all cases, 34% were under age 25 and 61% were male.

Resources

- Centers for Disease Control and Prevention (CDC) Giardiasis website
- CDC Health Information for International Travel (the Yellow Book) - Giardiasis
- CDC Healthy Water website
- California Department of Public Health (CDPH) Giardiasis website

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, visit the Statistics and Reports page on the Epidemiology Program website (www.sdepi.org) and click on the subscribe link.

Table 1. Select Reportable Diseases		2021			Prior Years		
Disease and Case Inclusion Criteria (C,P,S)		Current Month	Prior Month	Year-to-Date (YTD)	2020 YTD	Avg YTD, Prior 3 Years	2020 Total
Botulism (Foodborne, Infant, Wound, Other)	C,P	0	1	1	0	1.3	2
Brucellosis	C,P	0	0	0	0	0.3	0
Campylobacteriosis	C,P	75	49	156	142	161.7	596
Chickenpox, Hospitalization or Death	C,P	2	1	3	0	0.3	0
Chikungunya	C,P	0	0	0	0	0.0	1
Coccidioidomycosis	C	44	50	149	132	108.0	278
Cryptosporidiosis	C,P	1	2	3	14	12.7	29
Dengue Virus Infection	C,P	0	0	0	2	1.3	5
Encephalitis, All	C	2	1	7	10	12.0	26
Giardiasis	C,P	6	7	23	41	61.3	149
Hepatitis A, Acute	C	1	1	2	12	10.3	15
Hepatitis B, Acute	C	0	2	2	2	2.7	7
Hepatitis B, Chronic	C,P	77	60	210	209	223.7	638
Hepatitis C, Acute	C,P	0	0	0	23	12.7	25
Hepatitis C, Chronic	C,P	240	85	502	989	1,042.7	2,714
Legionellosis	C	3	5	16	10	12.7	36
Listeriosis	C	0	0	0	1	1.3	17
Lyme Disease	C,P	1	1	4	1	1.3	1
Malaria	C	0	0	0	5	2.7	7
Measles (Rubeola)	C	0	0	0	0	0.0	0
Meningitis, Aseptic/Viral	C,P,S	2	8	12	23	24.7	61
Meningitis, Bacterial	C,P,S	1	2	9	8	11.7	20
Meningitis, Other/Unknown	C	1	0	1	1	4.7	6
Meningococcal Disease	C,P	0	0	0	4	3.7	4
Mumps	C,P	0	0	0	15	8.7	16
Pertussis	C,P,S	2	1	8	193	196.0	220
Rabies, Animal	C	0	0	1	1	1.0	8
Rocky Mountain Spotted Fever	C,P	0	1	1	1	0.3	3
Salmonellosis (Non-Typhoid/Non-Paratyphoid)	C,P	28	20	69	92	109.3	501
Shiga toxin-Producing *E. coli* (including O157)	C,P	2	3	11	32	30.3	100
Shigellosis	C,P	8	13	29	68	71.3	238
Typhoid Fever	C,P	0	1	1	1	2.0	4
Vibriosis	C,P	0	1	1	7	6.3	37
West Nile Virus Infection	C,P	0	0	0	0	0.0	2
Yersiniosis	C,P	0	1	3	6	7.7	27
Zika Virus	C,P	0	0	0	0	1.0	0

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
April 2020 – March 2021

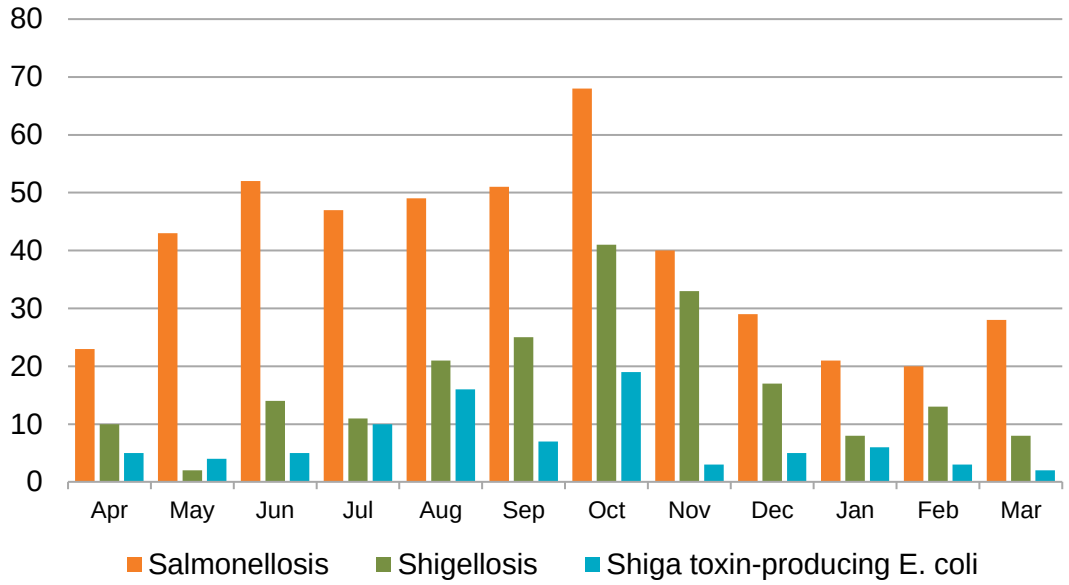


Figure 4. Select Vaccine-Preventable Infections by Month
April 2020 – March 2021

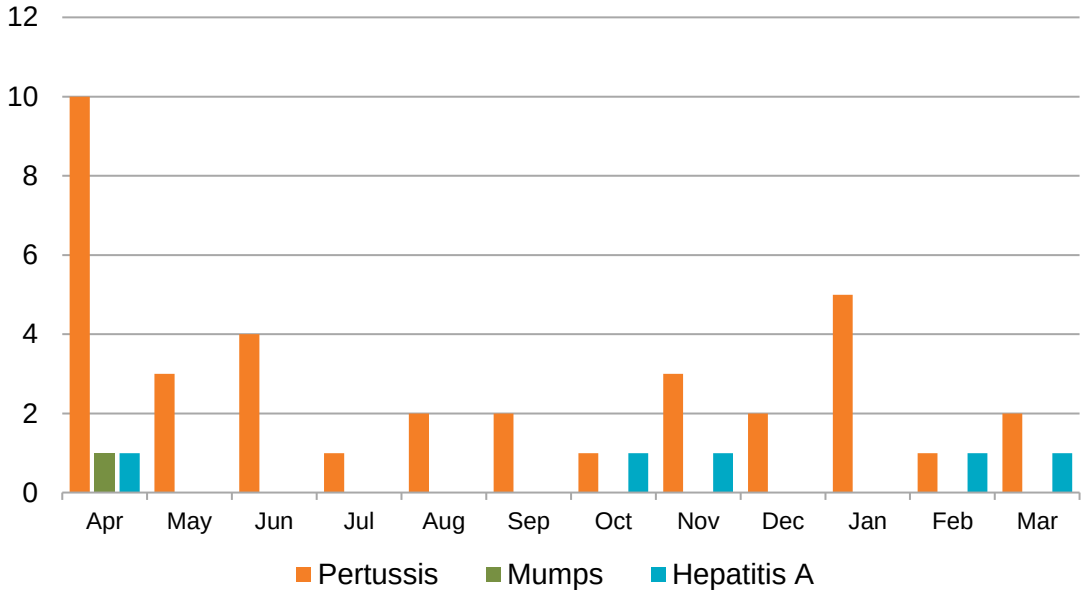


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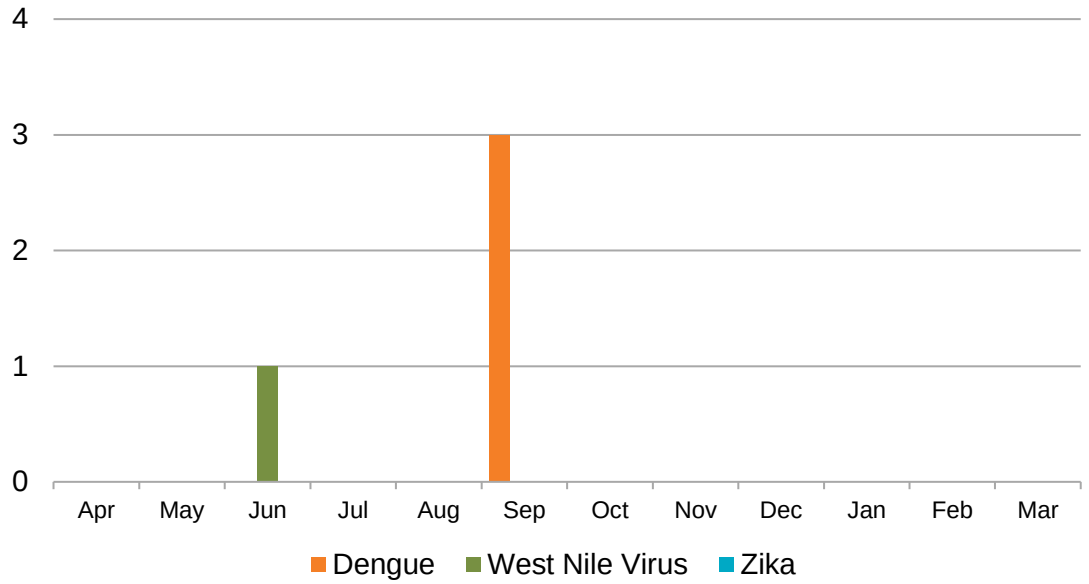
Figure 5. Select Vector-Borne Infections by Month
April 2020 – March 2021



All of the dengue and Zika virus cases are travel-associated. For additional information on Zika cases, see the HHSA Zika Virus webpage. For more information on West Nile virus, see the County West Nile 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 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.