EPIDEMIOLOGY AND IMMUNIZATION SERVICES BRANCH

MONTHLY COMMUNICABLE DISEASE REPORT

APRIL 2020

Volume 4, Issue 4: May 15, 2020

MALARIA

Malaria is a serious, and sometimes fatal, parasitic disease transmitted by the bite of infected mosquitos. Malaria is not endemic to San Diego, but is sometimes diagnosed among travelers, refugees, and immigrants coming from places where malaria occurs such as sub-Saharan Africa, or South Asia.

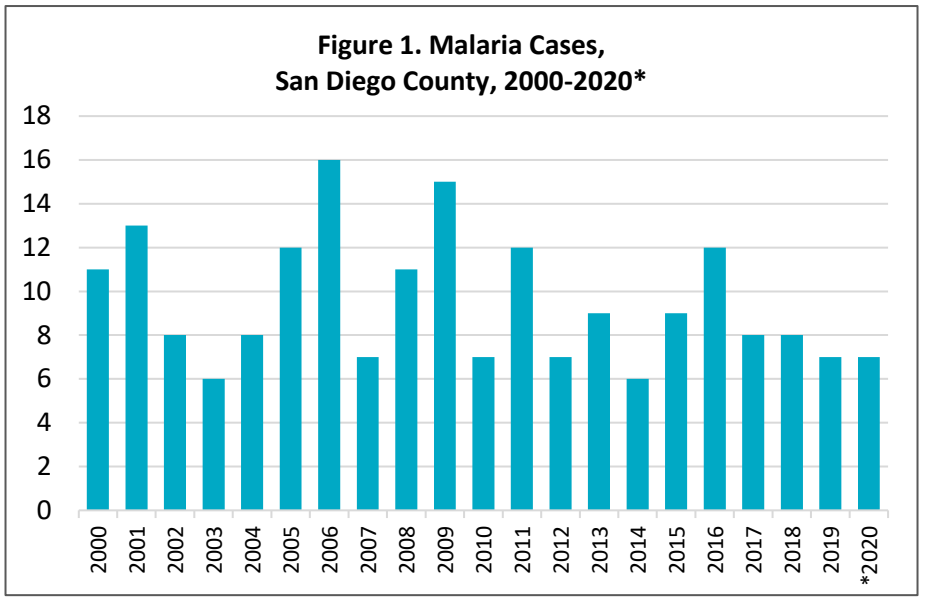
One-celled malaria parasites called *Plasmodium* infect and destroy red blood cells, causing symptoms such as fever, chills, and influenza-like illness. There are five *Plasmodium* species that cause disease in humans: *P. falciparum*, *P. vivax*, *P. ovale*, *P. malariae*, and *P. knowlesi*.

Symptoms of malarial disease usually begin between 7-30 days after a person becomes infected, depending on the *Plasmodium* species. People get malaria by being bitten by an infected *Anopheles* mosquito. Malaria cannot be transmitted from person to person. Anti-malarial drugs are very effective at preventing disease, but they must be taken according to the prescribed schedule.

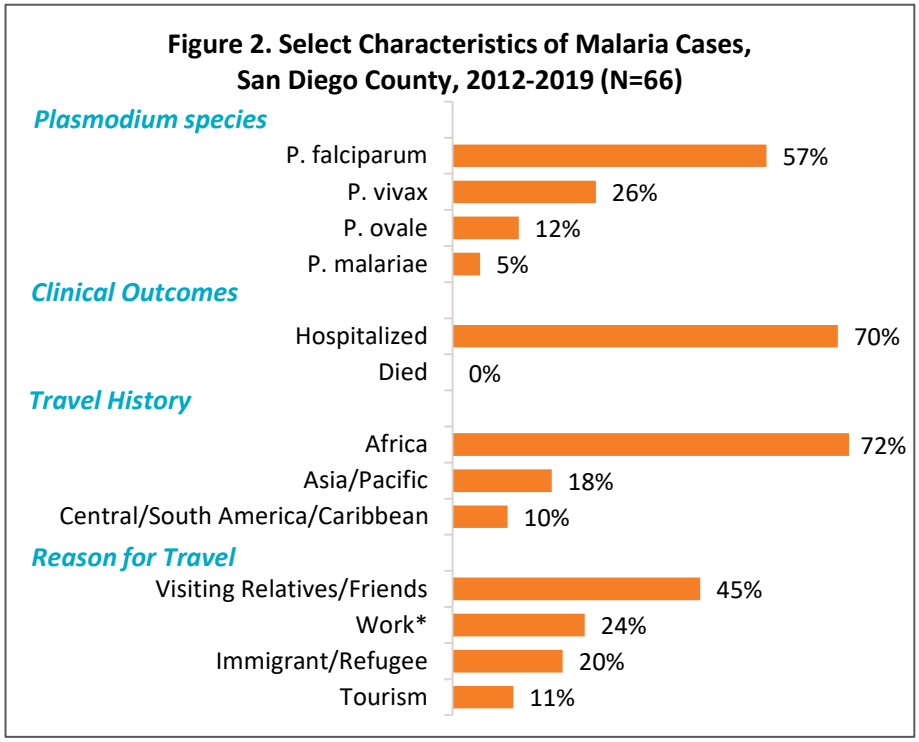
In the United States, about 2,000 people are diagnosed with malaria each year. In San Diego County, there have been 66 malaria cases from 2012-2019, an average of eight cases per year. Of these, 62% were male, and 62% were adults aged 25-64 years. Only 31% of the cases had taken anti-malarial drugs to prevent infection, the majority of whom did not take all doses as directed.

Resources

- Centers for Disease Control and Prevention Malaria website
- California Department of Public Health Malaria website



*2020 data are year-to-date; current as of 5/10/2020. Data are provisional and subject to change as additional information becomes available. Grouped by CDC disease years.



*Includes business, military, Peace Corps, missionary work
Percentages calculated based on cases with available information; denominators range from 55 to 64.

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.

Table 1. Select Reportable Diseases		2020			Prior Years		
Disease and Case Inclusion Criteria (C,P,S)		Current Month	Prior Month	Year-to-Date (YTD)	2019 YTD	Avg YTD, Prior 3 Years	2019 Total
Botulism (Foodborne, Infant, Wound, Other)	C,P	0	0	0	0	3.3	2
Brucellosis	C,P	0	0	0	1	1.7	1
Campylobacteriosis	C,P	33	31	168	280	246.7	996
Chickenpox, Hospitalization or Death	C,P	0	0	0	1	0.3	2
Chikungunya	C,P	0	0	0	0	0.3	3
Coccidioidomycosis	C	0	0	13	134	98.7	389
Cryptosporidiosis	C,P	1	4	15	17	14.0	98
Dengue Virus Infection	C,P	0	0	2	2	2.7	29
Encephalitis, All	C	0	1	8	14	17.0	41
Giardiasis	C,P	8	10	41	87	95.3	218
Hepatitis A, Acute	C	1	2	13	8	38.3	15
Hepatitis B, Acute	C	0	0	2	2	4.3	7
Hepatitis B, Chronic	C,P	25	64	230	321	300.3	904
Hepatitis C, Acute	C,P	0	6	24	22	8.0	76
Hepatitis C, Chronic	C,P	129	241	1,141	1,355	1,237.7	4,175
Legionellosis	C	3	2	11	17	19.3	61
Listeriosis	C	0	0	0	2	2.7	9
Lyme Disease	C,P	0	0	1	1	3.0	4
Malaria	C	0	1	5	2	2.0	7
Measles (Rubeola)	C	0	0	0	0	0.7	2
Meningitis, Aseptic/Viral	C,P,S	3	10	21	43	35.7	182
Meningitis, Bacterial	C,P,S	1	0	8	14	16.0	34
Meningitis, Other/Unknown	C	0	0	1	14	9.7	26
Meningococcal Disease	C,P	0	2	4	6	3.0	8
Mumps	C,P	1	3	16	8	5.7	66
Pertussis	C,P,S	10	41	201	202	278.0	815
Rabies, Animal	C	0	0	1	0	3.0	7
Rocky Mountain Spotted Fever	C,P	0	1	1	0	0.3	1
Salmonellosis (Non-Typhoid/Non-Paratyphoid)	C,P	20	23	110	151	149.0	654
Shiga toxin-Producing *E. coli* (including O157)	C,P	2	4	30	57	33.0	244
Shigellosis	C,P	9	14	77	116	90.0	427
Typhoid Fever	C,P	1	0	2	6	2.7	7
Vibriosis	C,P	0	2	6	12	10.0	58
West Nile Virus Infection	C,P	0	0	0	0	0.0	3
Yersiniosis	C,P	4	2	10	18	14.3	53
Zika Virus	C,P	0	0	0	3	3.0	8

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 2019 – April 2020

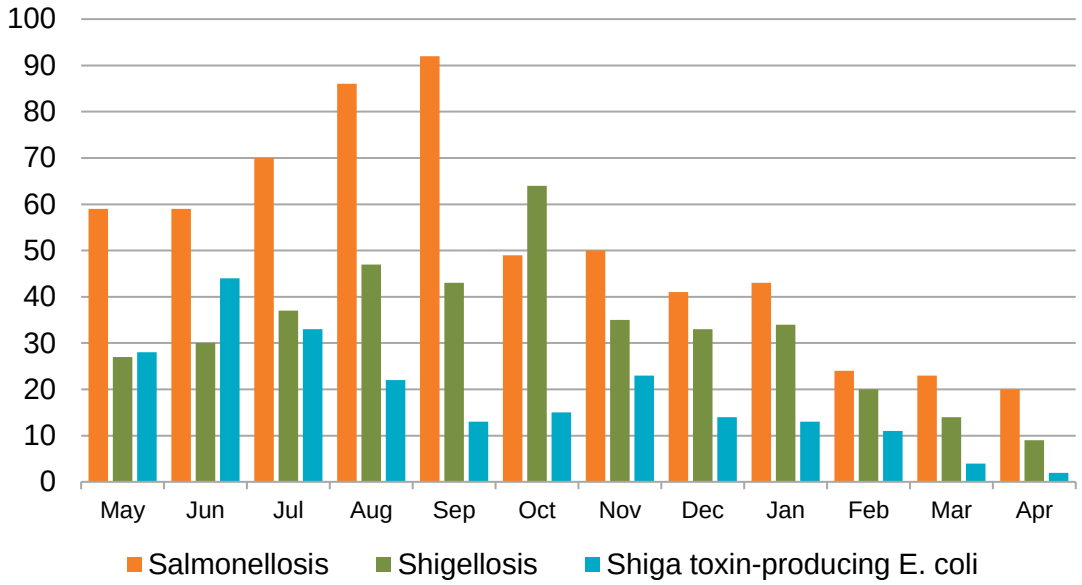


Figure 4. Select Vaccine-Preventable Infections by Month
May 2019 – April 2020

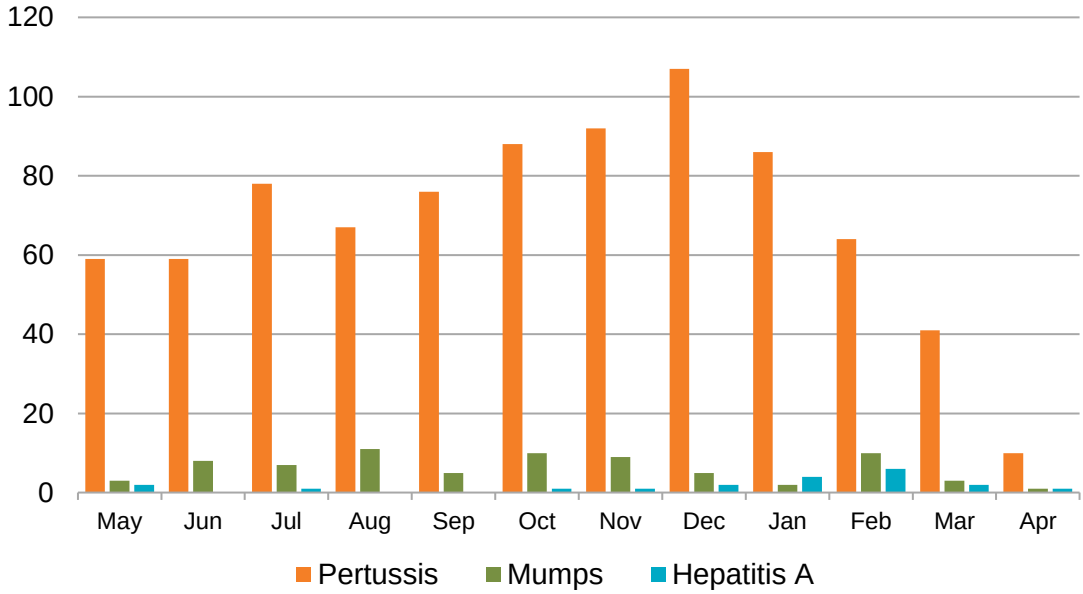


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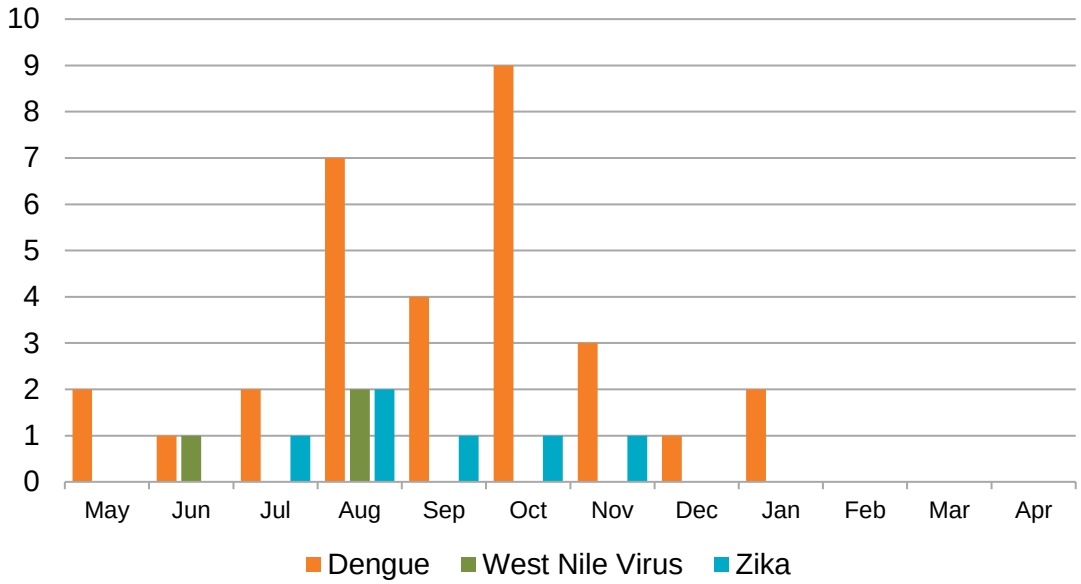
Figure 5. Select Vector-Borne Infections by Month
May 2019 – April 2020



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.