



Communicable Disease (CD) Quarterly Report

San Francisco Department of Public Health
 Quarter 3 | July 1 through September 30, 2019

Disease Reporting: 415-554-2830 (phone); 415-554-2848 (fax); <http://www.sfcddp.org>

Tomás Aragón, MD, DrPH, Health Officer

Juliet Stoltey, MD, MPH, Director, Communicable Disease Control and Prevention

The **Communicable Disease Control Unit** receives and responds to reports of communicable diseases. For urgent reports during business hours, please call (415) 554-2830. For urgent or emergent reports after hours, please call (415) 554-2830 and follow instructions to contact the on-call physician. For non-urgent reports, please fax a Confidential Morbidity Report (CMR) to (415) 554-2848.

Please see our website for more information: <http://www.sfcddp.org>

Confidential Morbidity Report (CMR): <http://www.sfcddp.org/cmrr>

Sign up to receive Health Alerts at: <https://www.sfcddp.org/health-alerts-emergencies/health-alerts/register-for-health-alerts/>

Table 1: Number of Selected Reported Communicable Disease Cases

	2019		2018	
	Q3	YTD [§]	Q3	YTD [§]
Botulism	1	2	0	0
Campylobacteriosis	114	348	114	357
Giardiasis	49	143	67	176
Hepatitis A	1	10	1	4
Hepatitis B, Acute	1	4	1	3
Influenza Death (0–64 yrs)	0	0	0	4
Invasive Meningococcal Disease	1	1	0	0
Measles	0	1	0	0
Meningitis— Bacterial [#]	1	3	1	7
Meningitis— Viral	2	13	6	14
Mumps	3	10	7	13
Pertussis* (all ages)	10	35	12	25
Pertussis* (<4 mos of age)	1	1	0	0
Rabies, animal ^{***}	2	3	0	1
Salmonellosis	48	136	48	102
Shiga toxin-producing <i>E. coli</i> ⁺	33	74	20	48
Shigellosis	51	195	72	201
Vibriosis (Non-cholera)	8	10	6	7
Zika	1	5	2	8

Table 2: Number of Selected Reported Outbreaks

	2019		2018	
	Q3	YTD [§]	Q3	YTD [§]
Gastrointestinal	3	14	5	19
Respiratory	1	18	0	18
Confirmed Influenza	0	13	0	17

Excludes Meningococcal Meningitis ** Includes confirmed cases only
 ^ Only detected in bats; no other animals * Includes confirmed, probable, & suspect cases
 + Includes Shiga toxin in feces & *E. coli* O157
 § YTD refers to data from the beginning of the year to the end of reporting quarter (Jan 1–Sep 30 of 2018 and 2019, respectively)

Notes: Data include San Francisco cases and outbreaks by the earliest of the following dates (if available): onset date, diagnosis date, date of death, laboratory specimen collection date, or date report received. Unless otherwise noted, confirmed and probable cases and confirmed, probable, and suspect outbreaks are included. For outbreak definitions, please see the most recent Annual Report of Communicable Diseases in San Francisco, available at: <https://www.sfcddp.org/about/publications-data-and-reports/>. Numbers may change due to updates to case status based on subsequent information received and/or delays in reporting.

Authors: Yanyuan Liu, Wendy Lu, Melissa Ongpin, David Stier, & Juliet Stoltey

Options for Hepatitis B Vaccination of Adults

Hepatitis B (HepB) vaccination is recommended for all adults at risk for hepatitis B virus (HBV) infection, including household or sexual contacts of HBV-infected persons, health care personnel, men who have sex with men, international travelers to countries with endemic HBV, and persons who seek care for an STD, inject drugs, undergo hemodialysis, are incarcerated, or who have diabetes, chronic liver disease, HIV, or HCV infection. Anyone wishing protection from HBV should be vaccinated even if a specific risk factor is not acknowledged. See <https://www.cdc.gov/mmwr/volumes/67/rr/rr6701a1.htm>.

Engerix-B® (GSK) and Recombivax-HB® (Merck) are recombinant HepB vaccines that contain an aluminum adjuvant. They are interchangeable within the standard series of 3 doses given at 0, 1, and 6 months (although whenever possible, the same vaccine should be used for series completion). A third option, Twinrix® (GSK) combines hepatitis A and B protection into one vaccine and is given on the same schedule. These vaccines achieve HepB seroprotection rates of over 90% after series completion among healthy adults under age 40 years. Immune memory remains intact for decades in those who responded, making routine booster doses unnecessary. Serious vaccine-related adverse events are extremely rare, and all 3 vaccines are considered safe during pregnancy.

While highly effective and safe, the recombinant vaccines have some limitations. All 3 doses are needed to achieve full immunity, and a minimum 4-month interval is required between series initiation and completion. Vaccine non-response rates are higher for patients with diabetes and in those with advancing age. Patients on hemodialysis are already recommended to receive a higher vaccine dose to achieve protection.

In 2017 a new HepB vaccine, Heplisav-B® (Dynavax), containing a novel adjuvant, CpG 1018, was approved for persons age 18 years and older. Heplisav-B can help adult patients achieve more rapid HBV protection while minimizing series non-completion. With a standard 2-dose series given at 0 and 1 month, it results in seroprotection rates higher than those of Engerix-B. Doses are not interchangeable; if Heplisav-B is used, the series is valid only if at least 2 doses of Heplisav-B were given at least 4 weeks apart. The vaccine's adverse event profile was reassuring in clinical trials. Published prices are higher for the 2-dose Heplisav-B series than for the 3-dose Engerix-B series. CDC does not express a preference for Heplisav-B but recommends it as an option for HepB prevention in adults, with the caveat that pregnant women should be vaccinated with another brand until more safety data become available. See <https://www.cdc.gov/mmwr/volumes/67/wr/mm6715a5.htm>.

Resource

CDC: The Epidemiology and Prevention of Vaccine-Preventable Diseases (The Pink Book), Hepatitis B chapter, 2019
<https://www.cdc.gov/vaccines/pubs/pinkbook/hepb.html>