

Communicable Disease (CD) Quarterly Report

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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 page 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.sfcdcp.org

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Table 1: Number of Selected Reported Communicable Disease Cases 2016 2015 Q4 Q1-Q4 Q4 Q1-Q4 **Botulism** 0 0 0 2 5 Invasive Meningococcal Disease 1 Meningitis— Bacterial# 3 8 3 4 Meningitis- Viral 1 10 8 3 Rabies, animal**^ 1 2 1 3 Rabies PEP recommendation 8 33 2 46

Table 2: Number of Selected Reported Gastrointestinal Disease Cases

	2016		2015	
	Q4	Q1-Q4	Q4	Q1-Q4
Amebiasis	12	50	14	58
Campylobacteriosis	85	453	132	517
Giardiasis	54	215	61	201
Salmonellosis [*]	40	151	55	181
Shiga toxin-producing E. coli ⁺	7	36	12	39
Shigellosis*	59	182	56	314
Vibriosis (Non-cholera)	0	4	5	24

Table 3: Number of Selected Reported Vaccine Preventable Disease Cases

	2016		2015	
	Q4	Q1-Q4	Q4	Q1-Q4
Hepatitis A	2	3	0	5
Hepatitis B, Acute	1	2	1	4
Influenza Death (0 - 64 yrs)	0	0	0	2
Measles	0	0	0	0
Pertussis [*]	1	13	9	70
Pertussis* (< 6 mos of age)	0	2	0	2

Table 4: Number of Selected Reported Outbreaks

	2016		2015	
	Q4	Q1-Q4	Q4	Q1-Q4
Gastrointestinal	3	15	8	20
Respiratory	5	15	0	13
Confirmed Influenza	4	10	0	13

- # Excludes Meningococcal Meningitis
- ^ Only detected in bats; no other animals
- + Includes Shiga toxin in feces & E. coli O157
- ** Includes confirmed cases only
- * Includes confirmed, probable, & suspect cases

Outpatient Antibiotic Stewardship: A New CDC Initiative

Antibiotic stewardship (AS) aims to maximize the benefit of antibiotic treatment and minimize harm to individuals and communities that may result from antibiotic treatment. According to the Centers for Disease Control and Prevention (CDC), AS is the effort to measure antibiotic prescribing, to improve antibiotic prescribing so that antibiotics are only prescribed when needed, to minimize misdiagnoses or delayed diagnoses leading to underuse of antibiotics, and to ensure that the appropriate drug, dose, and duration are selected when an antibiotic is needed. A central goal of AS is prevention of the development of multi-drug resistant organisms.

Until recently, AS efforts have focused on acute care settings and nursing homes. However, it has been noted that half of outpatient antibiotic prescriptions might be inappropriate, and at least 30% of outpatient antibiotic prescriptions in the United States are unnecessary. In 2016 the CDC released the <u>Core Elements of Outpatient Antibiotic Stewardship</u>. The four elements are commitment, action for policy and practice, tracking and reporting, and education and expertise.

- Commitment: All members of the healthcare team should commit to prescribe antibiotics appropriately and participate in AS. The commitment of the entire healthcare team helps set consistent expectations for clinicians and patients. It is helpful to identify a leader of AS within facilities, include AS related duties in position descriptions or job evaluations, and communicate with clinic staff to set patient expectations.
- Action for Policy and Practice: Clinicians and clinic leaders should implement evidence-based policies and procedures that foster appropriate antibiotic use. These policies can be prioritized based on feasibility, acceptability, available resources, and anticipated barriers.
- •Tracking and Reporting: Tracking of antibiotic prescribing can be done at the individual clinician level or the facility level. Tracking at the individual level is preferred, because it allows for individualized feedback and comparison with peers, an effective way to promote clinicians' adherence to guidelines. Tracking and reporting antibiotic prescribing for high-priority conditions (conditions such as sinusitis or pharyngitis for which clinicians commonly deviate from best practices) permits evaluation of antibiotic appropriateness and monitoring for complications of antibiotic use. Tracking facility-specific antibiotic resistance trends and making antibiograms available also offers useful information to clinicians.
- •Education and Expertise: Both clinicians and patients should be educated regarding AS. Education for patients should focus on informing them when antibiotics are appropriate and the potential harms of antibiotics. Effective clinician education addresses not only deficits in knowledge regarding appropriate antibiotic prescribing, but also the psychosocial pressures clinicians face, such as concerns regarding patient satisfaction. Providing clinicians with face-to-face training, continuing education activities, and access to infectious disease experts is helpful.

CDC: Antibiotic Resistance Threats in the United States, 2013 CDC: The Core Elements of Outpatient Antibiotic Stewardship CDC: Get Smart: Know When Antibiotics Work in Doctors' Offices

Notes: Data includes San Francisco cases and outbreaks through December 31, 2016, by date of report. Unless otherwise noted, confirmed and probable cases and confirmed and suspect outbreaks are included. For outbreak definitions, please see the most recent Annual Report of Communicable Diseases in San Francisco, available at http://www.sfcdcp.org/publications.html. Numbers may change due to updates to case status based on subsequent information received and/or delays in reporting.