



City and County of San Francisco
DEPARTMENT OF PUBLIC HEALTH
POPULATION HEALTH DIVISION

Communicable Disease Control and Prevention in Action

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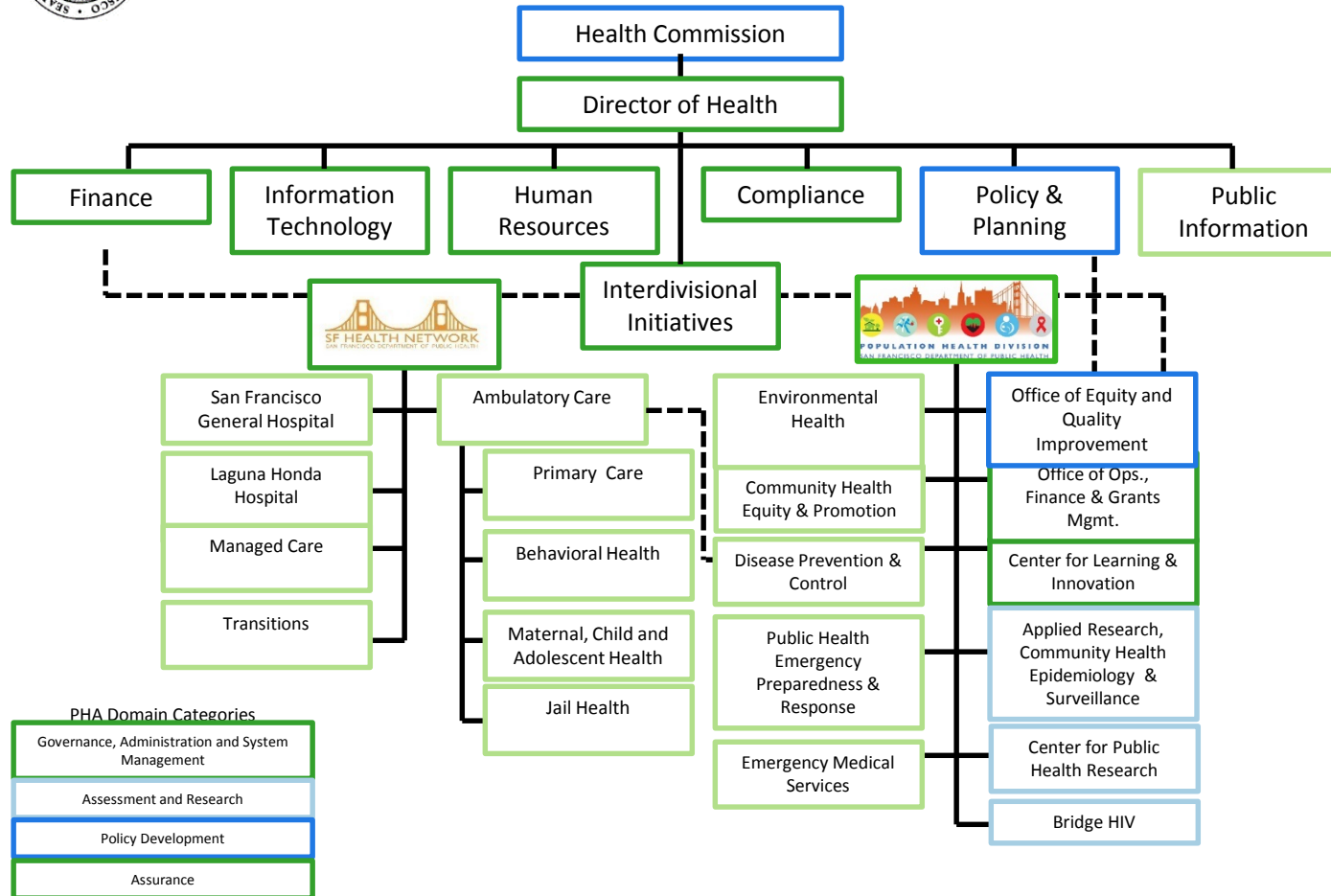
Public Health Committee Meeting
San Francisco Health Commission
Tuesday, April 18, 2017

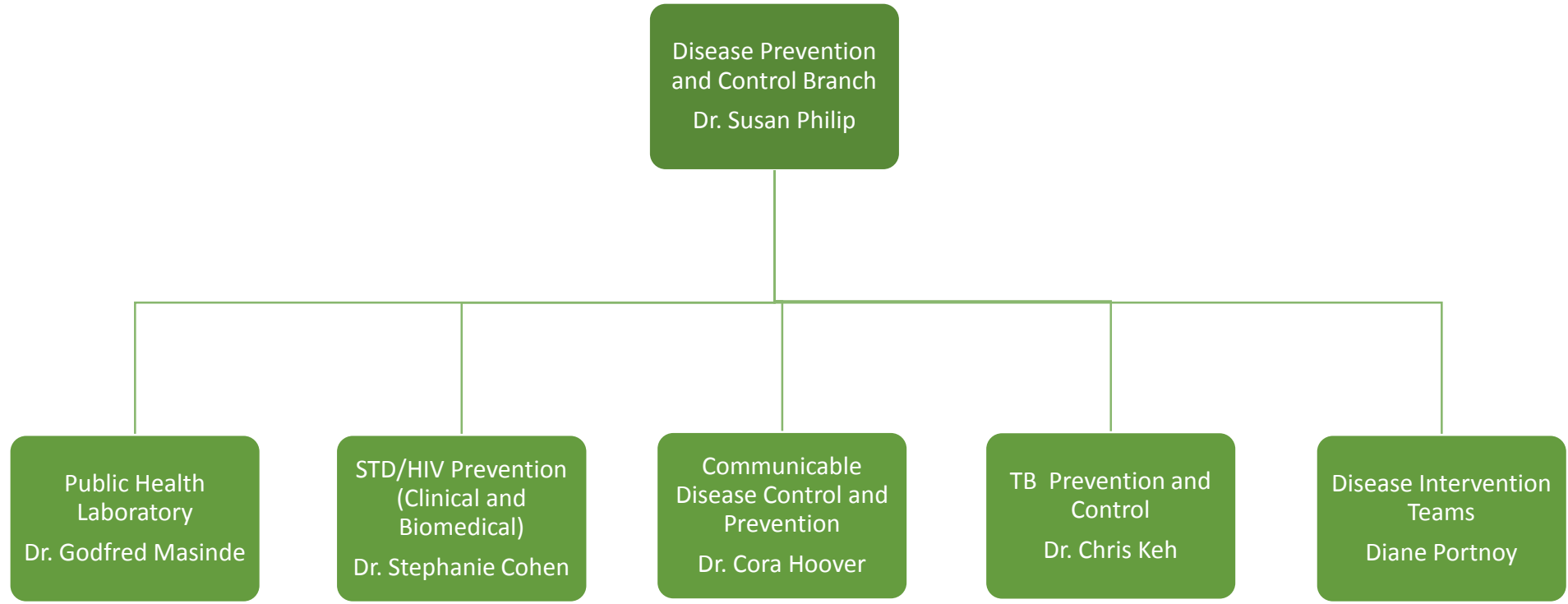


POPULATION HEALTH DIVISION
SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH



San Francisco Department of Public Health







OUR MISSION

Drawing upon community wisdom and science, we support, develop, and implement evidence-based policies, practices, and partnerships that protect and promote health, prevent disease and injury, and create sustainable environments and resilient communities.

Our Vision

To be a community-centered leader in public health practice and innovation.

STRATEGIC DIRECTIONS

PHD STRATEGIES AND PERFORMANCE MEASURES 2012-2015

PUBLIC HEALTH ACCREDITATION (PHA) DOMAIN CATEGORIES

ASSESSMENT / RESEARCH

1. Superb knowledge management systems and empowered users

STRATEGY 1: Build an integrated information and knowledge management infrastructure that enables us to monitor health, to inform and guide activities, and to improve staff and systems performance.

PERFORMANCE MEASURES:

- 1.1. Build a strong, highly functional information technology (IT) and technical assistance infrastructure in alignment with Department of Public Health IT strategy.
- 1.2. Establish a highly functional, integrated infectious disease system to collect and report data and to deliver and monitor public health actions.

2. Assessment and research aligned with our vision and priorities

STRATEGY 2: Integrate, innovate, improve, and expand efforts in community and environmental assessments, research, and translation.

PERFORMANCE MEASURES:

- 2.1 Create an action plan that supports division priorities.
- 2.2 Build cross-section interdisciplinary teams to improve health outcomes and programmatic activities.

POLICY DEVELOPMENT

3. Policy development with collective impact

STRATEGY 3: Conduct effective policy and planning that achieves collective impact to improve health and well-being for all San Franciscans.

PERFORMANCE MEASURES:

- 3.1 Establish a division-wide Performance Management, Equity and Quality Improvement Program.
- 3.2 Establish systems and partnerships to achieve and maintain Public Health Accreditation.
- 3.3 Develop a prioritized legislative agenda and strategic implementation plan to address health status and inequities.

ASSURANCE

4. Assurance of healthy places and healthy people

STRATEGY 4: Lead public health systems efforts to ensure healthy people and healthy places

PERFORMANCE MEASURES:

- 4.1 Establish community-centered approaches that address the social determinants of health and increase population well-being.
- 4.2 Sustain and improve the infrastructure and capacity to support core public health functions, including legally mandated public health activities.

GOVERNANCE, ADMINISTRATION, AND SYSTEMS MANAGEMENT

5. Sustainable funding and maximize collective resources

STRATEGY 5: Increase administrative, financial and human resources efficiencies within the division

PERFORMANCE MEASURES:

- 5.1 Establish a centralized business office for the division.
- 5.2 Appropriately address the human resource issues regarding civil service and contract employees.
- 5.3 Establish a centralized grants management and development system for the division.

6. Learning organization with a culture of trust and innovation

STRATEGY 6: Build a division-wide learning environment that supports public health efforts.

PERFORMANCE MEASURES:

- 6.1 Establish a division-wide Workforce Development Program.

Communicable Disease Control and Prevention (CDCP): Scope

- 70+ communicable diseases (and counting...)
- Emerging infections: preparedness and response
 - Ebola traveler monitoring; Zika response; “rule-outs” of other diseases
- Enteric bacterial infections; Vector-borne diseases; Vaccine-preventable diseases
- Outbreaks (For example: Restaurant-associated outbreaks; Influenza and viral gastroenteritis outbreaks in Skilled Nursing Facilities)



What is the Role of CDCP?

- Prevent disease by promoting access to immunizations in San Francisco; distribute vaccines to safety net providers (>40K flu shots/year)
- Case management of pregnant patients with Hepatitis B infection
- AITC Immunization and Travel Clinic
 - Full menu of adult and teen vaccines
 - Travel vaccines
 - TB testing
 - Blood testing
- Receive communicable disease reports from labs and medical providers
- Investigate cases (medical records, interviews)
- Take action to interrupt transmission (depends on public health significance of the disease)
- Compile surveillance data; report to California Department of Public Health
- Act as liaison between medical community and CDPH/CDC

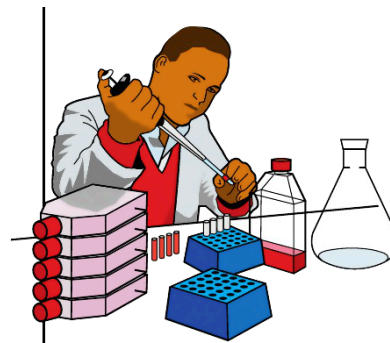
CDCP Team and Partners

- Director/CD Controller
- Medical Epidemiologist/AITC Immunization and Travel Clinic Medical Director
- Immunization Coordinator
- AITC nursing and clerical staff
- Disease Intervention Coordinator (cross-Branch)
- Program Coordinators
- Disease Investigators
- Public Health Nurse
- Epidemiologists
- Health Educator



SFDPH partners

- Public Health Lab
- PHEPR
- Environmental Health
- Maternal, Child, Adolescent Health



Informing the public and medical providers

Communicable Disease Control and Prevention
San Francisco Department of Public Health

Search the site GO

Home | Disease Reporting & Control | Immunizations | AITC Immunization & Travel Clinic | Health Alerts & Emergencies | Infectious Disease A to Z | Tuberculosis Control



We prevent the spread of disease in San Francisco by investigating cases and outbreaks, promoting vaccination, and planning for infectious disease emergencies.

Learn more about what we do. 

Quick Links

- Report a Disease
- Confidential Morbidity Report (CMR) Form
- PUBLIC HEALTH LABORATORY
- AITC Immunization and Travel Clinic
- Health Alerts
- Vax Fax - Vaccine Updates
- Publications
- Pertussis (Whooping Cough)
- Tuberculosis Control
- CDPH Interfacility Transfer Form

Flu Season 2016-2017

Influenza season is here. All people age 6 months and older should get a flu vaccine every year. Most health care providers and clinics have vaccine available in their offices. Contact your doctor now to schedule your flu vaccine appointment. If you do not have a health care provider, many pharmacies and drop-in clinics have flu vaccine available.

For more information about influenza, including prevention measures, where to find a flu vaccine in San Francisco, and what to do if you are sick, visit the [San Francisco Department of Public Health \(SFDPH\) Flu webpage](#).

Medical providers:

- [Health Update: Influenza and Respiratory Illness 2016-2017](#)
- [Read the latest information about influenza on our Flu Information for Health Care Providers webpage.](#)



Zika Virus Information

CDCP Zika Response: Health Alerts



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HEALTH UPDATE: ZIKA VIRUS SEPTEMBER 20, 2016 (UPDATED FROM JULY 28, 2016)

WHAT HAS CHANGED

Several commercial laboratories now offer the convenience of Zika RT-PCR testing and/or Zika IgM antibody testing, and so clinicians may opt to order Zika testing through a commercial lab.

Due to the complexity of CDC Zika testing guidance, providers ordering testing through commercial labs should contact their lab to ensure the appropriate test is available and should order testing according to the recommended testing algorithm (see next page).

ACTIONS REQUESTED OF ALL CLINICIANS

1. **Counsel pregnant women in any trimester** to postpone travel to Zika transmission areas (www.cdc.gov/zika/geo/) and **counsel patients regarding prevention of sexual transmission of Zika virus**, especially pregnant women,

<http://www.sfdcp.org/healthalerts.html>

CDCP Zika response (MCAH collaboration): Health education materials

Zika Virus: Pregnant? Trying to get pregnant?

What is Zika?

- Zika is a disease you can get from a mosquito that carries the Zika virus.
- If a pregnant woman has Zika, the virus can cause serious birth defects in her baby.
- There is no vaccine to prevent or treatment to cure Zika virus.

What countries and areas have Zika?

- Right now, Zika is found mainly in Mexico, Central and South America, the Caribbean, some Pacific

How can I protect myself from mosquito bites?

If you are in an area where Zika is present, protect yourself from mosquito bites by:

- Wearing long-sleeved shirts and long pants
- Using insect repellent* with any of these ingredients:
 - DEET
 - IR3535
 - Picaridin
 - Oil of lemon eucalyptus

*You can buy these at Walgreens, Target or REI.

Zika virus basics

- Transmitted to humans by *Aedes* mosquitos
- Sexual transmission is unique to Zika (among mosquito-borne viruses)
- Most infections are asymptomatic
- Symptoms are fever, rash, joint pain, conjunctivitis
- Can be transmitted *in utero* to the developing fetus
- Causes a spectrum of birth defects if infection occurs during pregnancy
 - Stillbirth and miscarriage
 - Microcephaly
 - Other structural brain abnormalities
 - Ocular abnormalities; hearing loss
 - Limb contractures

Zika virus emergence

- Prior to 2007, circulated at a low level in Africa and Southeast Asia; scattered outbreaks 2007-2014
- Likely spread to Latin America in 2014; first cases noted in Brazil in 2015
- Current outbreaks in most countries or territories in Latin America and the Caribbean, including Puerto Rico and the U.S. Virgin Islands
- Local transmission in Florida and Texas



<https://wwwnc.cdc.gov/travel/page/zika-information>

Potential risk of birth defects due to Zika

- US Zika Registry data analysis
 - 6% of fetuses or infants had birth defects
 - If infection occurred in the first trimester, 11% had birth defects
- Brazil analysis—Bahia state (modeling)
 - 1-13% risk of microcephaly if infection occurred in the first trimester
- More detailed understanding is emerging over time



Honein et al. Birth Defects Among Fetuses and Infants of US Women With Evidence of Possible Zika during Pregnancy. JAMA. 2016 Dec 15.

Johansson et al. Zika and the Risk of Microcephaly. NEJM. 2016 May 25.

Zika by the numbers

United States	Total (as of 3/22/17)	5,158
	Pregnant (as of 3/14/17)	1,617
	Live-born infants with birth defects	54/1,228
	Sexually transmitted	45
	Locally acquired (FL; TX)	222
California (as of 3/24/17)	Total Zika cases	527
	Pregnant	102
	Live-born infants with birth defects	5
	Sexually transmitted	6
San Francisco (as of 12/31/16)	Zika testing requests tracked	849
San Francisco (as of 3/24/17)	Total Zika cases	34

<http://www.cdph.ca.gov/HealthInfo/discond/Documents/TravelAssociatedCasesofZikaVirusinCA.pdf>

<http://www.cdc.gov/zika/geo/united-states.html>

<http://www.cdc.gov/zika/geo/pregwomen-uscases.html>

<http://www.cdc.gov/zika/geo/pregnancy-outcomes.html>

SFDPH CDCP Zika response (1)

- Informing and supporting medical providers
 - Health Advisories
 - Respond to inquiries regarding travel and testing
 - Tracking public health testing requests
 - Act as liaison between providers and CDPH lab
 - Receive testing results and forward them to providers with interpretation
- Informing the public
 - FAQs
 - Zika webpage (<http://www.sfcDCP.org/zika>)
 - Meeting with community groups
- Case investigation; prevention of transmission
 - Interview cases
 - Counsel regarding prevention of sexual transmission and appropriate delay of conception
 - Male cases were offered participation in the “CDC Persistence of Zika Virus in Semen Study” (now closed)

SFDPH CDCP Zika response (2)

- Pregnant patients and their infants are referred to Maternal, Child and Adolescent Health for public health nursing follow up
 - Ensure enrollment of pregnant patients and their infants in the CDC Zika Pregnancy registry
- This month CDCP was awarded a Zika Response Grant from CDPH for \$225,000.
 - Planned enhanced activities:
 - Public Health Nursing investigation and follow-up of cases, with focus on pregnancies
 - Further education and outreach to medical providers
 - Data quality and timeliness
 - Mobile enabled online resources for providers and public

Thank you