## Program Element # 25: Enhanced Communicable Disease Epidemiology Activities

#### **OHA Program Responsible for Program Element:**

Public Health Division/ Center for Public Health Practice/Acute and Communicable Disease Prevention Section

- 1. **Description.** Funds provided under this Agreement for this Program Element may only be used in accordance with, and subject to, the requirements and limitations set forth below, to deliver Enhanced Communicable Disease Epidemiology Activities and outcomes related to projects funded through cooperative agreements between the Oregon Health Authority (OHA) Acute and Communicable Disease Prevention section (ACDP) and the federal Centers for Disease Control and Prevention (CDC). Overarching goals include establishing and conducting enhanced surveillance; supporting special studies for expanded surveillance, disease prevention interventions, or policy development; and generally supporting Oregon's flexible response to emerging pathogens.
  - **a. Enhanced Pertussis Surveillance.** Establish and conduct among residents of Multnomah, Washington and Clackamas Counties enhanced surveillance for pertussis and enhanced investigation of pertussis cases reported to specified Local Public Health Authorities (LPHAs) by medical laboratories and providers.
    - Expand pertussis surveillance activities in the Portland Metropolitan Area;
    - Determine the epidemiology of pertussis in the Portland Metropolitan Area;
    - Correlate laboratory data with clinical and demographic data, including age, vaccination status, and duration of cough illness, etc.;
    - Encourage physicians, physician assistants and nurse practitioners to test for pertussis including with culture, on patients with appropriate clinical symptoms;
    - Conduct special studies of pertussis and its control; and
    - Support OHA ACDP or Immunizations programs in the investigation and control of unusual pertussis activity or outbreaks in Oregon outside the Portland Metropolitan Area.
  - **b. Foodborne Disease Active Surveillance Network (FoodNet).** Support ascertainment of additional exposures of interest among cases of salmonellosis and campylobacteriosis throughout Oregon; enter data into Orpheus.
  - **c. Data quality review.** Enter data for above activities as required by project protocols. Assure information quality for ACDP Emerging Infection Program Activities (EIPAs) and special studies through chart abstraction quality assurance reviews; conduct data cleaning, and prepare summaries detailing areas for further training to improve accuracy of chart abstractions as needed.
  - **d. Other Activities.** Assist with data collection, entry, cleaning, and analysis as needed for other ACDP Activities to address emerging data needs.

This Program Element addresses multiple activities funded by CDC and overseen by ACDP and is designed to provide additional support required to meet the needs of OHA's Communicable Disease Control foundational program; OHA's foundational capabilities of Assessment and Epidemiology, Policy and Planning; and Emergency Preparedness and Response. The additional staffing provided allows ACDP to maintain core surveillance for pertussis and foodborne illness. It provides ACDP with additional assistance essential to providing surge response as needed for emerging pathogens and as needed to meet CDC funding requirements.

All changes to this Program Element are effective the first day of the month noted in the Issue Date of Exhibit C of the Financial Assistance Award unless otherwise noted in Comments and Footnotes of Exhibit C of the Financial Assistance Award.

- 2. Definitions Specific to Enhanced Communicable Disease Epidemiology Activities.
  - **a. Pertussis** specific definitions are as follows:
    - (1) **Pertussis Case:** There are two categories of Pertussis Case, each with its own set of characteristics, as follows:

# (a) Pertussis Confirmed Case:

- i. Culture-positive and a cough illness of any duration, or
- ii. Polymerase chain reaction (PCR) positive and a cough illness lasting at least 2 weeks with any of the following:
  - paroxysms of coughing
  - inspiratory "whoop"
  - post-tussive vomiting, or
- **iii.** Epidemiologically linked to a case confirmed by either culture or PCR and a cough illness lasting at least 2 weeks *with* any of the following:
  - paroxysms of coughing
  - inspiratory "whoop"
  - post-tussive vomiting

# (b) Pertussis <u>Probable Case</u>:

An illness compatible with pertussis but neither laboratory confirmed nor in a Pertussis Close Contact of a confirmed case. A compatible illness is defined as cough lasting at least 2 weeks with any of the following:

- i. paroxysms of coughing
- ii. inspiratory "whoop"
- iii. post-tussive vomiting
- (2) Pertussis Close Contacts: Close contacts are defined to include immediate family members (those who spend many hours together or sleep under the same roof) and anyone who had direct contact with respiratory secretions. Although obviously these are somewhat arbitrary distinctions, "close contacts" should also include those who shared confined space (within ~6 feet) for >1 hour during the communicable period. These might include, for example, close friends and other social contacts in childcare, school, or work settings; co-participants in certain extra- curricular activities or outings; and healthcare workers caring for a case without wearing a mask. Schoolchildren sitting within ~3 feet of a case (i.e., adjacent seating) can also be included. High-risk close contacts comprise infants (<1-year-old) and pregnant women in the third trimester.
- **b. FoodNet:** The Foodborne Diseases Active Surveillance Network, or FoodNet, has been tracking trends for infections transmitted commonly through food since 1996. FoodNet provides a foundation for food safety policy and prevention efforts. It estimates the number of foodborne illnesses, monitors trends in incidence of specific foodborne illnesses over time, attributes illnesses to specific foods and settings, and disseminates this information.
- **c. Portland Metropolitan Area:** For the purposes of this Program Element 25, the populations of Clackamas, Multnomah, and Washington Counties and their respective LPHAs.

- **d. Orpheus:** A public health condition surveillance database developed and maintained by OHA whose functionality includes reporting of cases of communicable diseases electronically from LPHAs to OHA and from OHA to CDC.
- 3. Alignment with Modernization Foundational Programs and Foundational Capabilities. The activities and services that the LPHA has agreed to deliver under this Program Element align with Foundational Programs and Foundational Capabilities and the public health accountability metrics (if applicable), as follows (see <a href="Oregon's Public Health Modernization Manual">Oregon's Public Health Modernization Manual</a>, (<a href="http://www.oregon.gov/oha/PH/ABOUT/TASKFORCE/Documents/public\_health\_modernization\_manual.pdf">http://www.oregon.gov/oha/PH/ABOUT/TASKFORCE/Documents/public\_health\_modernization\_manual.pdf</a>):
  - **a. Foundational Programs and Capabilities** (As specified in Public Health Modernization Manual)

Program Components		Foundational Program				Foundational Capabilities					
Asterisk (*) = Primary foun		Prevention and health promotion	Environmental health	Population Access to clinical Health preventive Direct services services		Health equity and cultural responsiveness	Community Partnership Development	Assessment and Epidemiology	Policy & Planning	w Communications	# Emergency Preparedness and Response
aligns with each component			each component								
X = Other applicable found	ation	ial prog	rams								
Pertussis	*	X						X	X		
FoodNet	*	X						X			X
Data Quality	*	X						X			

- b. The work in this Program Element helps Oregon's governmental public health system achieve the following Public Health Accountability Metric, Health Outcome Measure:

  Not applicable
- c. The work in this Program Element helps Oregon's governmental public health system achieve the following Public Health Accountability Metric, Local Public Health Process Measure:

Not Applicable

- **4. Procedural and Operational Requirements.** By accepting and using the Financial Assistance awarded under this Agreement and for this Program Element, LPHA agrees to conduct activities in accordance with the following requirements:
  - a. LPHA must assign adequate staff to conduct the work described and as compensated by CDC funding through its cooperative agreements with ACDP. Assigned staff must include a Community Health Nurse to conduct investigations of individuals reported with pertussis.

- **b.** As available, funds may also be used for reasonable supervisory efforts.
- **c.** LPHA must establish and maintain a more detailed general surveillance system for individuals in the Portland Metropolitan Area reported with pertussis as follows:
  - (1) Follow-up on reported cases (confirmed and probable using CSTE definition of pertussis).
  - (2) Complete case investigations on the confirmed and probable cases using Orpheus.
  - (3) Follow-up on Pertussis Close Contacts using Orpheus.
  - (4) Conduct medical record reviews for infants hospitalized with pertussis using Orpheus.
  - (5) Attempt to collect nasopharyngeal (NP) specimens from cases and symptomatic Pertussis Close Contacts as described in the OHA Pertussis Investigative Guidelines <a href="https://www.healthoregon.org/iguides">www.healthoregon.org/iguides</a>.
  - (6) Provide to medical and school communities additional education and outreach activities regarding diagnosis and reporting of pertussis.
  - (7) Encourage physicians, physician assistants and nurse practitioners to test for pertussis patients with appropriate clinical symptoms and encourage specimen submission to the Oregon State Public Health Laboratory.
  - (8) Coordinate submission to CDC of all *Bordetella pertussis* isolates.
  - (9) Participate in monthly conference calls with CDC and other staff involved in the enhanced pertussis surveillance project.
  - (10) Confer with OHA Epidemiologists as requested regarding study data and progress.
  - (11) Assist with investigations and control of pertussis outbreaks. As position allows, may also assist other counties in outbreak investigations of large pertussis clusters.
  - (12) Participate in special studies with CDC and other enhanced pertussis surveillance sites.
- d. Contingent upon funding and available staff and as directed by ACDP staff, LPHA will interview cases of salmonellosis and campylobacteriosis throughout Oregon, collect enhanced data regarding exposures, and enter the data into Orpheus. LPHA must assign adequate staff to conduct the FoodNet work described, and as compensated by CDC funding through its cooperative agreements with ACDP. Surveillance includes infections caused by *Campylobacter*, *Cyclospora*, *Listeria*, *Salmonella*, Shiga toxin-producing *Escherichia coli* (STEC), *Shigella*, *Vibrio*, and *Yersinia*.
- **5. General Revenue and Expense Reporting.** LPHA must complete an "Oregon Health Authority Public Health Division Expenditure and Revenue Report" located in Exhibit C of this Agreement. These reports must be submitted to OHA each quarter on the following schedule:

Fiscal Quarter	<b>Due Date</b>
First: July 1 – September 30	October 30
Second: October 1 – December 31	January 30
Third: January 1 – March 31	April 30
Fourth: April 1 – June 30	August 20

**a.** Detailed Budget Expense Reports for each activity will need to be submitted to OHA in addition to the quarterly Expenditure and Revenue Report.

**b.** Funds may be shifted between approved budgets on file with OHA up to 10% without requesting permission.

### 6. Reporting Requirements.

- a. LPHA must submit all pertussis clinical data in the prescribed Excel® database, along with pertussis isolate shipments (using the isolate spreadsheet and protocol Attachment 1 "Enhanced Pertussis Surveillance Spreadsheet") to OHA every other month. Measures of performance: completeness of data, timeliness of reporting, proportion of cases with isolates sent to CDC and percent of isolates that can be linked to the enhanced epidemiologic data.
- b. LPHA must provide written semi-annual progress reports that detail the work completed, the number of confirmed and probable cases for the year to date, characteristics of individuals with confirmed or probable pertussis diagnoses, and such additional information as may be required by CDC. LPHA must submit the progress updates in accordance with a format and reporting schedule determined by OHA in consultation with LPHA.

#### 7. Performance Measures.

Not Applicable

# Attachment 1 Enhanced Pertussis Surveillance Spreadsheet (Example)

Enhanced Pertussis Surveillance Isolates: Oregon  Date:										
State State ID Acces		Accession #	Bacterial Species 1=Bordetella pertussis 2=Bordetella parapertussis 3=Bordetella bronchiseptica 4=Bordetella holmesii	Specimen Source 1=NP Aspirate 2=Swab	Collection Date	Date Sent to CDC	State PFGE			