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. Mpox Surveillance.** Establish and conduct among residents of Multnomah and Lane Counties special surveillance for mpox to estimate the effectiveness of JYNNEOS vaccine in preventing laboratory-confirmed or probable symptomatic mpox infection among adult (≥18–49 years) gay, bisexual, other MSM, and transgender individuals.
- 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 (ORS 431.141); and OHA's foundational capabilities of Assessment and Epidemiology, Policy and Planning; and Emergency Preparedness and Response (ORS 431.131). 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 requirements that attend CDC funding.

This Program Element and 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. Acute cough illness of any duration, with isolation of Bordetella pertussis (B. pertussis) from a clinical specimen, or
 - ii. Polymerase chain reaction (PCR) test positive for. B. pertussis
 - (b) Pertussis <u>Probable Case</u>:

In the absence of a more likely diagnosis, an acute cough illness

- lasting at least 14 days, or
- of any duration in a person epidemiologically linked to a confirmed case of pertussis; and any of the following
 - o paroxysms of coughing;
 - o inspiratory "whoop";
 - o post-tussive vomiting; or
 - apnea (with or without cyanosis).
- (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. Mpox-specific definitions are as follows:**
 - (1) Mpox control:
 - (a) Inclusion criteria:
 - Identifies as gay, bisexual, other MSM, or transgender person
 - Aged 18-49 years, inclusive
 - Symptomatic confirmed or probable monkeypox infection with known approximate date of illness onset on or after August 19, 2022
 - 1 or more sexual partners within the 3 months prior to symptom onset (cases) or date of clinic visit (control)
 - Access to a mobile phone for SMS communications or access to the internet, email, or phone
 - (b) Exclusion criteria:

- Unable to understand or respond to questions in English or Spanish
- Unable to complete the questionnaire
- Have not attended an STI or HIV clinic or a healthcare setting where PrEP is (or has previously been) administered since August 19, 2022
- Ever had confirmed or probable mpox
- Had suspect mpox since May 1, 2022
- **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 Public Health Modernization Manual at, http://www.oregon.gov/oha/PH/ABOUT/TASKFORCE/Documents/public_health_modernization_manual.pdf:

a. Foundational Programs and Capabilities (As specified in Public Health Modernization Manual)

Program Components	Foundational Program				Foundational Capabilities							
	CD Control	Prevention and health promotion	Environmental health	Population Access to clinical Health preventive	ices	Leadership and organizational competencies	Health equity and cultural responsiveness	Community Partnership Development	Assessment and Epidemiology	Policy & Planning	Communications	Emergency Preparedness and Response
Asterisk (*) = Primary foundational program that aligns with each component					X = Foundational capabilities that align with each component							
X = Other applicable foundational programs					•							
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. Pertussis Studies

- (1) 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.
- (2) As available, funds may also be used for reasonable supervisory efforts.
- (3) LPHA must establish and maintain a more detailed general surveillance system for individuals in the Portland Metropolitan Area reported with pertussis as follows:
 - (a) Follow-up on reported cases (confirmed and probable using CSTE definition of pertussis), as well as on any patients reported based on serologic testing alone.
 - (b) Complete case investigations on the confirmed and probable cases using Orpheus.
 - (c) Document duration of cough on all cases by following up for at least 14 days after cough onset.
 - (d) When reported, collect epidemiologic information and specimens on cases with non-pertussis Bordetella species (e.g., B. parapertussis, B. bronchiseptica, B. holmesii).
 - (e) Follow-up on Pertussis Close Contacts using Orpheus.
 - (f) Conduct medical record reviews for all cases hospitalized with pertussis using Orpheus.
 - **(g)** Attempt to collect nasopharyngeal (NP) specimens from cases and symptomatic Pertussis Close Contacts as described in the OHA Pertussis Investigative Guidelines www.healthoregon.org/jguides.
 - (h) Provide to medical and school communities additional education and outreach activities regarding diagnosis and reporting of pertussis.
 - (i) 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.
 - (j) Coordinate submission to CDC of all Bordetella pertussis isolates by working with Oregon State Public Health Laboratory personnel and providing necessary data (see Program Reporting Requirements in 6b, below).
 - (k) Participate in monthly conference calls with CDC and other staff involved in the enhanced pertussis surveillance project.
 - (l) Confer with OHA Epidemiologists as requested regarding study data and progress.
 - (m) Assist with investigations and control of pertussis outbreaks. As position allows, may also assist other counties in outbreak investigations of large pertussis

clusters.

(n) Participate in special studies with CDC and other enhanced pertussis surveillance sites.

b. Mpox study

- (1) Identify and perform outreach to potential controls and distribute incentive cards to individuals participating in the case-control study.
- c. Contingent upon funding and available staff and as directed by ACDP staff, LPHA must interview cases of other diseases reported from throughout Oregon, collecting required data, and entering the data into Orpheus or other prescribed database. LPHA must assign adequate staff to conduct the additional work described, and as compensated by available funding..

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. A separate report must be filed for each applicable Program Element and any sub-elements. These reports must be submitted to OHA each quarter on the following schedule:

Fiscal Quarter	Due Date
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. Program 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:	nte:											
State	State State ID 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					