Program Element #77: Enhanced Healthcare-Associated Infections Epidemiology

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 Healthcare-Associated Infections Epidemiology and Infection Control 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 education and interventions, or policy development; and generally supporting Oregon's flexible response to emerging pathogens and healthcare-associated infections. LPHA agrees to conduct the following activities:

Section 1.1: Enhanced HAI Surveillance (PE 77)

- **a. Enhanced Invasive** *Escherichia coli* **Surveillance.** Establish and conduct among residents of Jackson County enhanced surveillance for Invasive *Escherichia coli* (*E.coli*) and enhanced investigation of Invasive *E.coli* cases reported to the specified Local Public Health Authority (LPHA) by medical laboratories and providers.
 - Expand Invasive *E.coli* surveillance activities among health care facilities and laboratories that serve Jackson County residents;
 - Determine the epidemiology of Invasive *E.coli* in Jackson County;
 - Correlate laboratory data with clinical and demographic data;
 - Encourage voluntary reporting of Invasive *E.coli* among laboratories and health care facilities that serve Jackson County residents;
 - Conduct special studies of Invasive *E.coli* and its control; and
 - Support OHA ACDP in the investigation and control of unusual *E.coli* activity or outbreaks in Oregon outside the Portland Metropolitan Area.
- b. Healthcare-Associated Infections and Antibiotic Resistance (HAI/AR) Surveillance and Special Studies. Conduct activities for enhanced surveillance and special studies to include chart reviews and abstractions; and review medical charts for HAI projects, including health care facility HAI prevalence surveys.
- **c. 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 activities funded by CDC and overseen by ACDP and is designed to provide additional support required to meet the needs of OHA's: 1) Communicable Disease Control

foundational program; 2) OHA's foundational capabilities of Assessment and Epidemiology, Policy and Planning; and 3) OHA's Health Security, Preparedness and Response Program. The additional staffing provided allows ACDP to maintain core surveillance and response capacity for Invasive *E.coli* and HAIs, and to enhance infection prevention and control activities within regions 3 & 5 healthcare settings. It provides ACDP with additional assistance essential to investigating outbreaks and providing surge response as needed for emerging pathogens.

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 Financial Assistance Award unless otherwise noted in Exhibit C of the Financial Assistance Award.

2. Definitions Specific to Enhanced Healthcare-Associated Infections Epidemiology and Infection Control Activities

- **a. Invasive** *E.coli*: *E.coli* organism with any resistance pattern (including non-resistance) isolated from a normally sterile site obtained from a resident of the surveillance area (Jackson County).
- **b. Normally Sterile Site**: Blood, cerebrospinal fluid, pleural fluid, pericardial fluid, peritoneal fluid, joint/synovial fluid, bone, internal body site, muscle, deep tissue, and other commonly sterile site.
- c. Healthcare-Associated Infections and Antibiotic Resistance (HAI/AR) Surveillance Databases: Data from HAI surveillance are typically maintained in Orpheus or in Microsoft Access® databases created by CDC and maintained by OHA staff to enter and track cases of laboratory-confirmed HAIs.
- **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_ma n ual.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	lation alth	Direct services services	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												
Invasive <i>E.coli</i>	*	X							X	X		
HAI-AR	*	X							X	X		

b. The work in this Program Element helps Oregon's governmental public health system

 $achieve \ the \ following \ Public \ Health \ Accountability \ Metrics, Health \ Outcome \ Indicators:$

Not Applicable

c. The work in this Program Element helps Oregon's governmental public health system achieve the following Public Health Accountability Metrics, LPHA Process Measures:

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. For Enhanced HAI Surveillance (Section 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 an epidemiologist to participate in surveillance and special studies; review quality of data collected by OHA Emerging Infections Program (EIP) staff; conduct chart reviews, abstractions and literature reviews; and conduct analyses for the EIP projects listed in Section 1.1.a.-c above.
- **b.** LPHA must establish and maintain a more detailed general surveillance system for individuals in Jackson County with Invasive *E.coli* as follows:
 - (1) Follow-up on reported cases
 - (2) Conduct medical record reviews for cases of Invasive *E.coli*
 - (3) Liaise with health systems about participation in the project
 - (4) Provide information to medical and laboratory communities about reporting procedures
 - (5) Coordinate submission to CDC of all Invasive *E.coli* isolates
 - (6) Participate in monthly conference calls with CDC and other staff
 - (7) Confer with OHA epidemiologists as requested regarding project data and progress
 - (8) Assist with investigation and control of *E.coli* outbreaks
 - (9) Participate in special studies with CDC related to Invasive *E.coli*
- **c.** LPHA may, as available, use funds for reasonable supervisory efforts.

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. Funds may be shifted between approved budget activities on file with OHA for this Program Element in an amount up to 10% of the total allocated for this Program Element

without requesting permission and approval from OHA.

6. Program Reporting Requirements.

- **a.** LPHA must submit all Invasive *E.coli* clinical data in the prescribed database, along with isolate shipments to OHA monthly, or at an interval otherwise determined by CDC. 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 epidemiology data.
- b. LPHA must provide written semi-annual progress reports that detail the work completed, the number of confirmed Invasive *E.coli cases*, isolates submitted, and any 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.
- c. LPHA epidemiologist must complete chart reviews and data entry of EIP-related surveillance and study cases within 30 days of receiving notification of assigned cases to be reviewed. LPHA must enter data monthly into a prescribed database for submission to CDC.
- d. LPHA epidemiologist must complete quarterly report on findings from data quality review, including number of cases reviewed from each surveillance system, number and nature of discrepancies, and provide recommendations to EIP staff for improving quality.

7. Performance Measures.

Not Applicable