**Assignment Description**

The Philadelphia Department of Public Health (PDPH) Division of Disease Control (DDC) is responsible for the monitoring, control, and prevention of notifiable infectious diseases in the City of Philadelphia. The Division houses a number of program areas that address different aspects of this overall responsibility. The CSTE Fellow will work primarily from within the Acute Communicable Disease (ACD) Program and will be supported by the Epidemiology Unit which provides epidemiological support to all other Division Programs including the Sexually Transmitted Disease Control and Public Health Preparedness Programs. Within the PDPH Incident Command Structure (ICS) for COVID-19 response, the ACD Program is responsible for Surveillance and Investigation of COVID-19 cases and outbreaks and collaborates closely with other ICS areas including Epidemiology, Clinical Management, Community Containment, Planning, Operations, and Logistics.

**Day-to-Day Activities**

The Fellow will participate in disease investigations, data management, enhanced surveillance activities, and epidemiological studies for COVID-19. The Fellow will provide data management and analytical support to the PDPH Surveillance and Epidemiology COVID-19 Response Teams. The Fellow will support the Outbreak Response Team and work with healthcare and non-healthcare congregate settings (e.g., long-term care facilities, behavioral health facilities, shelters, group homes, etc.) to prevent, investigate, and contain outbreaks of COVID-19.

**Potential Projects**

<table>
<thead>
<tr>
<th>Surveillance Activity</th>
<th>COVID-19 Activity Surveillance of Home Health Agencies</th>
</tr>
</thead>
</table>

The Fellow will establish relationships with home-health agencies in Philadelphia and develop protocols for routine reporting and control of COVID-19 cases among home health agency workers and clients. The Fellow will be responsible for creating a REDCap database to monitor reporting, ensure agencies are reporting routinely, and identify cases for contact tracing referral in a timely manner. This activity may expand to other healthcare facility types including dialysis centers and hospitals.
### Surveillance Evaluation

**COVID-19 Outbreak Identification Evaluation**

The Fellow will assess methods utilized during the first wave of the COVID-19 pandemic to identify and monitor outbreaks of COVID-19 outbreaks in congregate settings in Philadelphia. The evaluation will assess completeness of case identification, timeliness of identification, and quality of data to inform improvements to PDPH’s procedures.

### Major Project

**Facility and Resident Characteristics Associated with Long-Term Care Facility (LTCF) COVID Outbreaks**

The Fellow will assess facility characteristics obtained from the state licensing agency, outbreak investigation documentation, and possibly an additional survey to examine facility characteristics associated with the magnitude of COVID-19 outbreaks in Long-Term Care Facilities (LTCF) in Philadelphia. The Fellow will also construct a dataset of LTCF residents using positive and negative laboratory results and possible additional sources (facility census). The dataset will be used to examine the incidence of COVID-19 among residents and individual-level characteristics associated with severe infections in an LTCF setting.

### Additional Projects

**Other COVID-19 Enhanced Surveillance Activities and Epidemiologic Studies**

The Fellow will have the opportunity to participate in data collection, database development, and dataset construction for other COVID-19 Enhances Surveillance Activities and Epidemiologic Studies. Proposed activities include surveillance of SARS-CoV-2 in wastewater, sero-surveys of select populations (e.g., congregate living, essential workers), and analyses of surveillance data to better examine severe illness and occurrence of COVID-19 among at-risk sub-groups. The Fellow will also participate in efforts to improve completeness of investigation information for COVID-19 cases including data matching and electronic surveys.

### Preparedness Role

The Fellow will participate in COVID-19 Planning, Operations, and Logistics activities led by the PDPH Preparedness Program when volunteers are needed (e.g., large-scale testing clinics, vaccination clinics for seasonal influenza and possibly COVID-19). The Fellow will also be available to support database and survey development for Planning, Operations, and Logistics section.
### Additional Activities

When COVID-19 activity declines and shift to routine activities occurs, the Fellow will be engaged in activities such as taking calls from providers pertaining to general communicable disease issues, reviewing case investigations, presenting at program meetings and/or grand rounds, and assisting in weekly trend report analyses. When outbreaks arise, the Fellow will be offered the lead role and will be supported by ACD Surveillance Coordinators and/or the primary mentor. The Fellow will also be given the opportunity to investigate outbreaks of norovirus and influenza in institutional settings.

In addition to these routine activities the Fellow will be expected to work on analytic and surveillance projects associated with fellowship competencies.

### Mentors

<table>
<thead>
<tr>
<th>Primary</th>
<th>Dana Perella, MPH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acute Communicable Disease Program Manager</td>
</tr>
<tr>
<td>Secondary</td>
<td>Claire Newbern, PhD, MPH</td>
</tr>
<tr>
<td></td>
<td>Epidemiologist</td>
</tr>
</tbody>
</table>