**Project Name:**

Developing a dashboard to identify and visualize COVID-19 cases and outbreaks in high-risk correctional congregate settings in Washington State

**Project Description:**

The Washington State Department of Health (WADOH) Office of Communicable Disease Epidemiology proposes a cross-office collaboration with the Office of Public Health Outbreak Coordination, Informatics, and Surveillance (PHOCIS) to build an outbreak dashboard to identify and confirm COVID-19 cases and outbreaks in correctional settings. This project will be a pilot before expanding it to include additional high-risk congregate settings.

The dashboard will have two primary functions. The first is to identify new cases that are associated with correctional facilities that need additional investigation. These cases will be identified as associated with a facility if 1.) the patient or provider address submitted through electronic laboratory reporting match to a correctional facility address; 2.) interview data collected through case interviews and contact tracing mentions working or stay in a correctional facility; or 3.) corrections agencies (Washington State Department of Corrections, U.S. Immigration and Customs Enforcement) directly report cases to WADOH. The dashboard will notify public health partners of potential cases associated with correctional facilities for immediate follow up.

Second, the dashboard will use Washington State’s surveillance system (Washington Disease Reporting System (WDRS)) data to summarize outbreak information at each facility (e.g., count of new cases in last week, days since last case, attack rate compared to community rates, vaccination status, reinfection status, hospitalizations, deaths, demographics, and sequencing details). The user will be able to pull up the outbreak ID for the facility and see summary details about the cases and outbreak at the facility, which is a helpful tool during coordination calls with stakeholders during an outbreak response.

To complete the project, the team will leverage the existing data sources mentioned above to combine them into a useable and meaningful data visualization. Additionally, the team will automate existing data processes to reduce effort and increase timeliness of information to ensure the dashboard reflects actionable information.

Our five-person data science training team (DSTT) has experience in informatics, dashboard development, outbreak investigations, surveillance, and subject matter expertise with COVID-19 in correctional settings. This project will streamline and integrate multiple existing data processes across WADOH teams to improve efficiency and data quality. It will more rapidly identify COVID-19 outbreaks in high-risk correctional congregate settings to improve outbreak response. Last, the visual summarization of outbreak data will provide quick top-level statistics that will help state, local, and tribal public health partners during outbreak response. This project is ready to start on Day One of the program.

**Team Members:**

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