

Leveraging Delaware’s Public Health Resources to Mitigate Spread of Communicable Diseases in Congregate Settings

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Abstract

While resources available to public health entities increased during the COVID-19 pandemic, the need to focus mitigation efforts on Delaware’s most vulnerable citizens was evident. The higher risk of community-spread and complications resulting from COVID-19 associated with individuals residing in congregate settings such as homeless shelters and encampments prompted the Delaware Division of Public Health to leverage existing and new resources to provide technical assistance, education and to build valuable partnerships with community-based homeless service providers to reduce the public health threat to those experiencing homelessness.

Introduction

From 2020 to 2022, the number of people experiencing homelessness in Delaware more than doubled, according to the Housing Alliance of Delaware’s annual point-in-time count. On the evening of February 23, 2022, the annual count yielded 2,369 people experiencing homelessness in Delaware, compared to count of 1,165 individuals conducted in 2020.¹

Homeless people are vulnerable to disease due to their increased exposure to environmental risk factors. This presents specific challenges to mitigating infectious disease spread within emergency shelters and encampments.

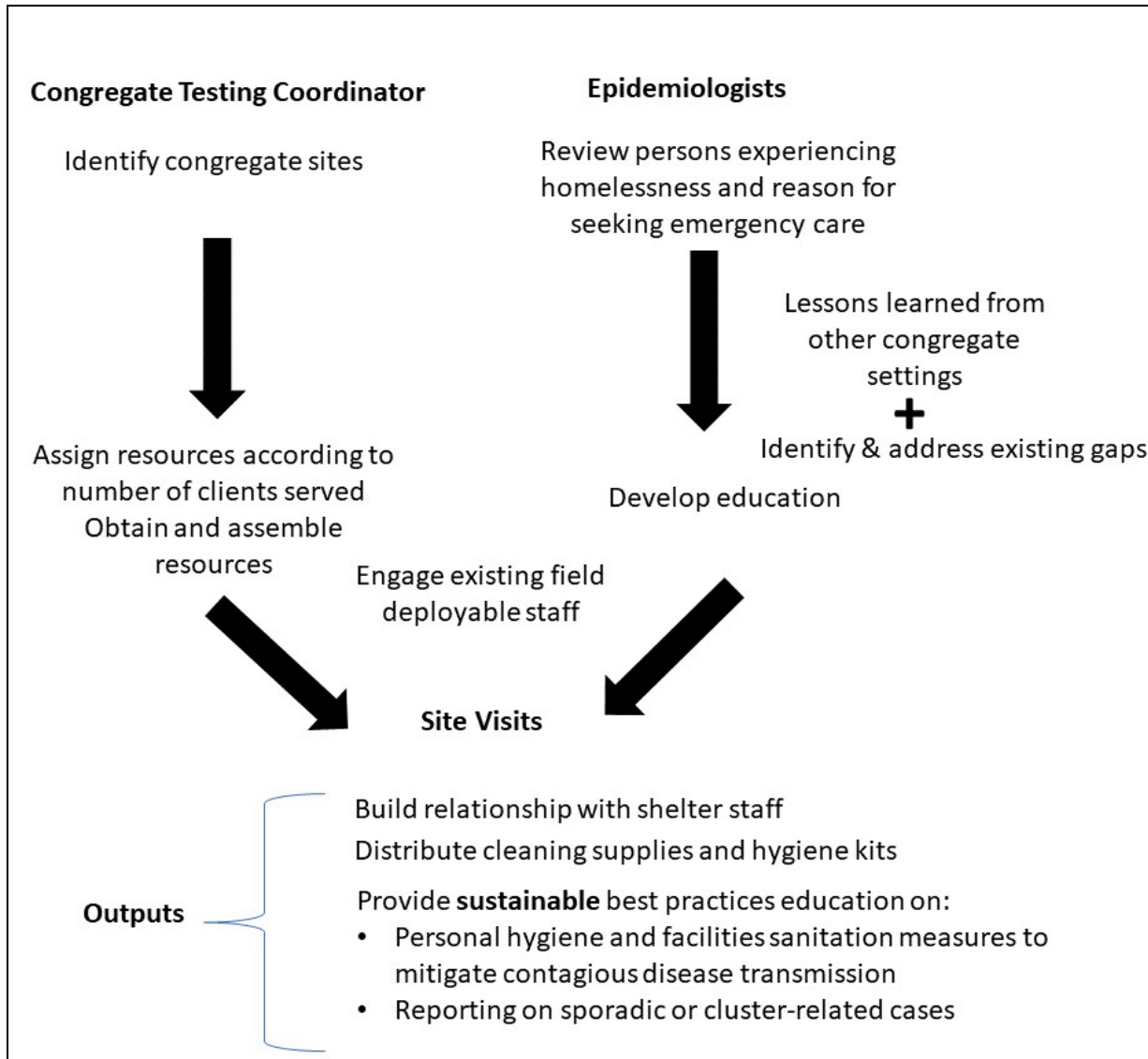
The Delaware Department of Health and Social Services (DHSS), Division of Public Health (DPH), Emergency Medical Services and Preparedness Section (EMSPS) focused its resources and efforts to protect homeless vulnerable populations from COVID-19. Following the state’s vaccination response, in 2021 EMSPS applied for the Centers for Disease Control and Prevention (CDC) grant, *Detection & Mitigation of Covid-19 in Homeless Service Sites and Other Congregate Living Facilities Project E: Emerging Issues*, supported through the American Rescue Plan Act of 2021. In July 2022, CDC awarded DPH a two-year \$450,000 grant aimed at mitigating the spread of COVID-19 and communicable diseases that are prevalent in congregate settings. The grant award allowed DPH’s Office of Infectious Disease Epidemiology (OIDE) and EMSPS to develop a comprehensive workplan supporting the homeless and included homeless service sites, encampments, and group homes (Figure 1).

According to the CDC, the risk of COVID-19 transmission is higher in these settings compared with the general population. In addition, there is a high prevalence of certain medical conditions

associated with severe COVID-19 among people experiencing homelessness and among people who are incarcerated, increasing the risk for severe outcomes from COVID-19 in these populations.²

This project aligned with DPH’s mission to protect and promote the health of all people in Delaware and the overall DHSS mission to improve the quality of life for Delaware’s citizens by promoting health and well-being, fostering self-sufficiency, and protecting vulnerable populations. Delawareans living in congregate shelters represent a targeted vulnerable population due to increased environmental risk factors for spreading infectious disease.

Figure 1. Delaware Communicable Disease Mitigation Workflow for Congregate Settings, 2022



Homelessness Interventions to Mitigate Spread of COVID-19 in Delaware

The term ‘homeless service sites’, as defined by the CDC, includes emergency night shelters, day shelters, meal service sites, transitional housing, permanent supportive housing sites, and other sites that provide services to people experiencing homelessness. The term ‘encampment’ is defined as an outdoor location not intended for human habitation where at least one person is residing and may also include locations where people experiencing unsheltered homelessness

gather during the day.³ Encampments in Delaware, specifically in rural Sussex County, increased from 2020 to 2021. Causes potentially attributed to the increase include rising rental rates and a shortage of affordable housing prior to and during the pandemic. An additional challenge is the limited resources and capacity of organizations supporting those experiencing homelessness.⁴

EMSPS acknowledged early in the planning process the long-standing challenge for DPH to effectively engage non-state regulated agencies and other charitable organizations supporting individuals and families experiencing homelessness. Proposed activities were based foundationally on increased engagement and interaction with existing and new community-based partners to meet the overall goal of mitigating the spread of COVID-19, and by default, reducing the spread of other communicable infectious diseases common in congregate settings.

Three main high-engagement objectives guided the workplan's development. First, EMSPS would consistently complete the resource request process for over-the-counter COVID-19 testing kits on behalf of community-based homeless sheltering partners during the Public Health Emergency. Second, EMSPS would purchase, assemble, and deliver DPH personal hygiene care packages to homeless sheltering partners for distribution to individuals experiencing homelessness. Third, DPH would develop and disseminate information and sanitation supply toolkits to homeless sheltering partners. These toolkits would include Best Management Practices (BMPs) on how to effectively engage with DPH for infectious disease testing and reporting. Additional training toolkits focused on the implementation of a train-the-trainer model education for staff and volunteers on preventative sanitation measures to mitigate spread of respiratory diseases and diseases spread by fomites (surfaces or objects that are likely to carry diseases or transmit it), foodborne or waterborne, blood or bodily fluids.

Statewide Effort of Partner Engagement

In October of 2021, DPH began the workplan development required for submission of the grant. Provider networks that support encampments, food pantries, and soup kitchens were included on the list of engagement partners in addition to the list of traditional emergency shelters within Delaware.

Leading the list of activities from the workplan was creating a full-time COVID-19 mitigation coordinator position to coordinate resources, develop strategies, and support relationships with homeless shelters, encampments, and service providers. This new position of Congregate Testing Coordinator was created and hired to oversee the coordination of testing within all congregate settings, order supplies, and maintain relationships with facilities. Additional existing clinical support staff facilitated testing within all congregate settings.

Implementation of regular COVID-19 screening and diagnostic testing for homeless service site clients, homeless service site staff, people experiencing unsheltered homelessness, and outreach staff started with assessment of current provider networks. The Coordinator assessed the various sites and identified gaps within existing programs. At the time of the initial assessment, there were at least four State Service Center voucher program hotels identified; the New Castle County Hope Center, a referral program based in a former Wilmington hotel; approximately 20 statewide homeless shelters operated by organizations such as the Salvation Army and Catholic Charities; at least six known homeless encampments; and multiple Code Purple shelters in each county. Clinical Support staff was responsible for facilitating testing and providing education to facility staff. Both the Coordinator and the Clinical Support maintained working relationships with the facilities and State stakeholders as needed. Currently, the State has Incident Response Teams or a Strike Team to re-deploy to assist with on-site testing and client education. Strike Team

deployment is an on-going resource provided to congregate settings and homeless service providers.

To respond to COVID-19 and other infectious diseases that may co-exist with COVID-19 within this population, the Congregate Testing Coordinator and DHSS Disaster Coordinator established and supported formal partnerships between DPH and other health departments, homeless service providers, health care providers, and relevant community organizations. These partnerships will continue throughout the duration of the grant, and beyond to address community needs.

Through the grant, DPH epidemiologists have access to various systems that allow for surveillance of people experiencing homelessness, including syndromic surveillance data to track Emergency Room visits associated to COVID-19 and other priority infectious diseases of interest among people experiencing homelessness. DPH established and supported processes to collect and report indicators on housing status and homelessness on COVID-19 and other infectious disease case report forms and in appropriate data collection systems. Additionally, epidemiologists created and developed a list of priority infectious diseases that may affect the population of interest.

To enable the swiftest response to cases and outbreaks, processes to share data with health departments, homeless service providers, and relevant public health agencies (including CDC) were established and supported. DPH epidemiologists developed a checklist to empower and guide shelter staff as they identify, mitigate, and report on sporadic or cluster-related cases; shelter clients received COVID-19 educational materials in multiple languages. Processes were established to allow for the timely reporting of cases, referrals to temporary housing and other related services, and communication related to clearance of cases. DPH epidemiological points of contact for COVID-19 and other infectious diseases was communicated. One mitigation activity was to support facility efforts to implement distancing and reduce overcrowding by decompression. The coordinator worked with the shelters to ensure that facilities were following CDC guidelines for congregate sheltering for social distancing. In addition, on-site technical assistance for implementing these guidelines was provided. DPH developed infection prevention and personal sanitation kits and provided them to partners for distribution to encampments, homeless shelters, and other homeless service sites. The kits included educational materials to underscore the importance of personal hygiene and sanitation measures that mitigate transmission. Clients may not otherwise have had access to such materials. Since homeless shelters rely on cleaning and sanitation supply donations, gaps in disinfection and sanitation processes may limit their ability to effectively mitigate COVID-19 transmission. Based on this assessment, the Congregate Testing Coordinator procured cleaning and sanitizing supplies for homeless service sites or encampments. Furthermore, best practices for cleaning and sanitation were developed, and educational materials on disinfection was provided to the shelters as references. Binders were created from current best practices and distributed to sheltering partners during grant implementation period.

DPH epidemiologists developed procedures to assist shelter staff identify, mitigate, and report on sporadic or cluster-related cases and promptly conduct contact tracing activities. OIDE quickly and efficiently responded to outbreaks in homeless shelters, encampments, and other congregate living facilities, including supporting individual-level or location-based contact tracing. As needed, during an outbreak, testing stations will be set up at encampments. OIDE developed three BMP guides for homeless sheltering partners to utilize: (1) Identifying, mitigating, and reporting of sporadic or cluster-related cases; (2) Contact Tracing and Clearance of Cases; and (3) Best Management Practices for Cleaning and Disinfecting Your Facility.

Effectiveness of Homelessness Interventions Still to Be Determined

DPH achieved its planned milestones and timelines from the initial workplan to include hiring of full-time Congregate Testing Coordinator. While there have been fewer reported cases of COVID-19 and other communicable diseases specific to homeless individuals, as of mid-March 2023 DPH had not yet conducted an interpretation of data as a result of these interventions. No adverse effects or unintended negative consequences to these intervention activities have been reported.

Leveraging existing and new resources from the grant award led to increased engagement between DPH and homelessness support providers and networks, which helps to lay the groundwork for continuing the relationship with homeless shelters.

Sustainability will rest upon utilization of the best practice resources provided to these partners. EMSPS plans to continue to aid in infectious disease mitigation, provide support during outbreaks, and further develop these new partnerships to promote the health of those experiencing homelessness.

Public health engagement with homelessness service providers and networks is critical to successful infectious disease mitigation efforts. Delaware partners were provided resources and best practices to reduce spread of COVID-19 and other communicable infectious diseases common to congregate settings at the base level, within their own facilities and operations. Continued engagement and promotion of best practices with community-based partners remains the responsibility of state and local health departments to address infectious disease control within vulnerable populations.

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