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What's Inside…

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Improving Emergency Response and Efficiency by Developing an Electronic ICS-213 (e213) System

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Harris County, Texas, the third-largest county in the country, is located along the Gulf Coast, where human health and wellbeing are continuously impacted by intricately intertwined, man-made and natural events. Harris County Public Health (HCPH) is the local health department for the county's unincorporated areas and 33 municipalities located outside the City of Houston. HCPH provides comprehensive health services and programs dedicated to improving the health and wellbeing of Harris County

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residents and the communities in which they live, learn, work, worship, and play. HCPH's jurisdiction serves approximately 2.3 million people within Harris County, not including the City of Houston. For certain public health services, such as mosquito control, Ryan White/Part A HIV funding, and refugee health screening, HCPH's jurisdiction encompasses the entirety of the county, including the City of Houston, thus providing services to 4.7 million people in total.

In 2017, as part of the disaster response to Hurricane Harvey, it became evident to HCPH leadership that a centralized process for creating, approving, and fulfilling resource requests using the Incident Command System (ICS) 213 form was needed. While activated staff were dispersed across the county at various county offices, emergency shelters, and remote locations, the paper-based system being used proved to be outdated and inefficient. This paper-based ICS-213 system of tracking requests is an antiquated format that provides many opportunities for errors, missed protocols, lack of proper documentation, and communication gaps. Without adequate documentation, HCPH risks not being reimbursed for disaster-related costs, further hindering its ability to provide services to the community.

The electronic ICS-213 (e213) web-based application was developed by multiple departments within Harris County Public Health including Environmental Public Health (EPH), Office of Public Health Preparedness and Response (OPHPR), Project and Business Technology (PBT) , and HCPH divisional leadership over a span of 2–3 weeks. The e213 application needed to be developed quickly because of the rapid nature of the Hurricane Harvey response. The initial e213 application development was a first step in making the ICS-213 form and approval process digital but would later be significantly enhanced for, and beneficial to, the COVID-19 response. What was ultimately needed during the extended COVID-19 response was a centralized system available to multiple users, with the ability to track the progress of requests and maintain a historical record of response-related information.

When the application was initially created in 2017, it contained basic fields listed on the ICS-213 form. The components included what was requested and for what activity, the reason for the request, delivery or reporting location, and whom to report to. Though the application served its purpose for the Hurricane Harvey response, during the after-action review (AAR), it was determined that some enhancements were needed. The fields on the e213 form were open text fields, none of which were required for submission or approval, and thus had a high susceptibility for user errors and incomplete information. When the application was revisited in early 2020, as the COVID-19 response was ramping up, it was apparent that the application would need updates to improve functionality and efficiency.

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HCPH sent out its first official notice to regional healthcare partners about COVID-19 on January 9, 2020, with the first cases of COVID-19 in the county following in late February. On March 4, Harris County activated the Incident Command System, and on March 11, a Local State of Disaster was declared for the county. The health department quickly assembled its COVID-19 response team; ramped up staffing; tightened alliances with local government and community partners; facilitated mass testing; increased surveillance of COVID-19 cases and data; and strengthened community outreach and communications. Within HCPH's expansive and ongoing COVID-19 response, the e213 program has served as a valuable tool for employees at all response levels and ultimately allows the Administrative/Finance Section to track and document expenditures for reimbursements efficiently.

Users with access to the application are assigned a role based on where they are positioned in the ICS, to obtain the appropriate supervisor's approval. Based on the type of request (equipment, personnel, supplies, services, and communication), approvals are routed to the appropriate section for additional approval and fulfillment. The platform makes it easy for users, even those new to ICS or the COVID-19 response, to put in a request. Specific fields are marked as "required," which helps users identify the details necessary for completing a request, such as requester contact information and request justification to ensure fulfillment and reimbursement. When a request is completed, the program generates a pre-filled ICS-213 form that contains request details and includes the approval history. This form is later printed along with any associated invoices or service contracts as part of the FEMA reimbursement package. All requests are maintained in the application, thus providing a historical backup record should any physical documents go missing. Lastly, reports can be downloaded for additional reporting needs.

Through lessons learned during the COVID-19 response, HCPH has advanced the health department's capacity to respond to future disasters by standardizing the communication and documentation of internal ICS-213 resource requests and ensuring that HCPH maximizes reimbursements for disaster-related expenses. Public health is one of the most underfunded programs in the country, therefore, public health entities must ensure reimbursement for expenses during the COVID-19 response. These reimbursement protocols protect and allow HCPH to continue providing valuable services for all members of the Harris County community.

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Collaboration to Advance Mobile COVID-19 Testing in Underserved Communities

By Charles H. Welge, MBA, Director of Public Health Planning and Education, Albany County Department of Health (NY)

Albany County is in eastern New York State, 136 miles north of New York City. Covering approximately 525 square miles, its urban center sits along the Hudson River surrounded by suburban municipalities and rural hill towns. As home of the state capital, much of Albany's population is employed by the government, health, finance, education, and business sectors.

The county population is 305,506. Residents are predominantly white (75.8%), and the largest minority groups include Black (14.1%), Asian (6.8) and Hispanic/Latino (6.3%) persons. Minority populations are concentrated in urban areas.

Disparity in the distribution of COVID-19 exists within Albany County. During the April 15, 2020–November 30, 2020 period, the likelihood of SARS-CoV-2 infection in very high-deprivation areas of Albany County (the cities of Albany, Cohoes, and Watervliet) were measurably higher than those in very low-deprivation areas. These communities are characterized by larger proportions of non-White residents, persons working in manual, essential, and public-facing sectors, more crowded housing, and food and healthcare insecurity.

At the outset of the COVID-19 pandemic, it became evident that timely testing

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was critical to successful mitigation efforts and that lower income and minority communities faced significant challenges in accessing testing services. Albany County advocated for New York State to establish a drive-through testing site in Albany County; however, this and other early sites were in suburban areas, limiting access for at-risk urban residents without personal transportation.

Planning

Recognizing this access issue, the Albany County Executive's Office and the Albany County Department of Health (ACDOH) partnered with Whitney M. Young Jr. Health Services (Whitney Young), a federally qualified health center (FQHC), to implement multi-site mobile COVID-19 testing services targeting low income and minority communities. These sites were designed to be pedestrian-focused and in areas readily accessible via public transportation.

Goals of the mobile COVID-19 testing program are to operate an FQHC-managed, free mobile COVID-19 testing unit; foster community involvement in the location(s) of mobile COVID-19 testing and the referral process; provide culturally and linguistically sensitive health education specific to COVID-19; and identify individuals at risk for COVID-19.

Implementation

To achieve these goals, the following actions were taken:

1. Albany County collaborated with Whitney Young to use the WOW van for provision of COVID-19 testing. Whitney Young operated the mobile COVID-19 testing site by providing staff, equipment, select supplies, and laboratory coordination. Albany County covered expenses for persons without health insurance.
2. ACDOH consulted with community- and faith-based organizations, employers, healthcare systems and providers, policymakers, and others regarding the location(s) and design of mobile COVID-19 testing services. Albany County identified mobile testing sites and planned COVID-19 testing publicity on the county webpage and other community facing locations. The City of Albany provided security and promoted the importance of COVID-19 testing to control the spread of the virus. Whitney Young established pre-registration and screening protocols and identified resources required including staff, equipment, and select supplies. Additional community partners provided funding, personal protective equipment, testing locations, and community outreach.

3. Whitney Young employs culturally diverse support staff and used interpreters and a dedicated Language Line.
4. Pre-registration, including requisite screening questions, were used to schedule appointments for persons eligible for testing.

Results and Outcomes

For the April–November 2020 period, 5,085 COVID-19 tests were administered in high-deprivation areas at mobile sites including community-based organizations, public housing, recreational facilities, schools, primary

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Hospitalizations and Deaths of COVID-19 Cases in Albany County

Please Note: not all cases have complete demographic information available; cases with missing data are excluded in the figures below.

Data Last Updated: December 26, 2020 at 06:00pm

Current Mandatory Quarantines = 3087

% Cases in Healthcare Occupations = 11.49%

	Deaths		Currently hospitalized		Ever hospitalized		Ever ICU		County demographics***
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Percent
Total	**206**	**100.0%**	**116**	**100.0%**	**886**	**100.0%**	**196**	**100.0%**	**100.0%**
Male	93	45.1%	62	53.4%	451	50.9%	109	55.6%	50.0%
Female	113	54.9%	54	46.6%	431	48.6%	87	44.4%	50.0%
<25	0	0.0%	<5	NA	27	3.0%	5	2.60%	33.0%
25-49	<5	NA	9	7.80%	144	16.3%	23	11.70%	30.2%
50-74	61	29.6%	50	43.10%	432	48.8%	98	50.0%	29.3%
75+	143	69.4%	56	48.3%	283	31.9%	70	35.7%	7.2%
Hispanic or Latino	6	2.90%	<5	NA	45	5.1%	9	4.60%	6.1%
White	177	85.9%	81	69.80%	552	62.3%	122	62.2%	71.6%
Black or African American	21	10.2%	25	21.6%	197	22.2%	45	23.0%	11.4%
Asian	<5	NA	<5	NA	42	4.7%	12	6.10%	7.0%
AI/AN*	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.1%
NH/OPI**	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.3%
Other	<5	NA	6	5.2%	27	3.00%	6	3.1%	3.50%
Unknown	<5	NA	0	0.0%	21	2.40%	<5	NA	NA

* American Indian and Alaska Native

** Native Hawaiian and Other Pacific Islander

***Demographics obtained from the 2018 ACS 1-Year Estimates

care practices, and municipal offices. Most significantly, the mobile testing intervention addressed, in part, COVID-19 racial disparities (exemplified in hospitalizations). Black people represent 11.7% of the Albany County population; 22.2% of persons ever hospitalized for COVID-19 for April–November 2020 period were Black. Yet —with the contributions of purposeful scheduling, siting, and collaborations —43% of persons receiving COVID-19 testing through the mobile program were Black.

Regular conference calls facilitated communications about program challenges and successes; promoted a closer working relationship between ACDOH and Whitney Young; and contributed to shifting resources and efforts to improve mobile COVID-19 testing operations.

Resources were quickly reallocated in instances where few people pre-registered for select days and times to maintain and improve the value of the program by modifying the testing schedule and utilizing stakeholders to promote the program through various media outlets.

The adaptability of the mobile COVID-19 testing program became ever more apparent following public demonstrations in support of racial justice in June 2020. The WOW van became a critical testing resource to persons potentially exposed to COVID-19 during these demonstrations, including first responders. For several days following the protests, the mobile testing sites expanded beyond their

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standard appointment-based system and allowed anyone who attended the demonstrations to walk up and get tested at no charge.

Several new partnerships directly contributed to the successful implementation of the mobile COVID testing program. Health insurers and philanthropies provided financial support by underwriting mobile COVID-19 testing services; private businesses offered meals for WOW staff during mobile testing site operations; mobile COVID-19 testing services were expanded to additional disadvantaged Albany County communities across the area.

Looking Ahead

To successfully implement new public health practices, such as mobile COVID-19 testing in disadvantaged neighborhoods, it is important to set realistic expectations and to be innovative, flexible, and diligent in meeting the evolving health needs of local communities. It is imperative to invest the time necessary to build relationships and understand each organization or community's concerns, and to establish a process for adopting new approaches based on those concerns, such as alternative locations or cost-sharing waivers for uninsured or underinsured individuals. Partners must identify multiple champions within coalitions and various levels of an organization, including chief elected officials, nurses, or public safety personnel, to create layers of support to meet the shared vision. Most importantly, clear communication with partners is critical to build support, generate ongoing intrinsic motivation, and facilitate sharing of successes and challenges.

Replicability

Mobile COVID-19 testing demonstrates an innovative means of providing equitable services to disadvantaged communities. It is a model that subsequently has been a key and meaningful tool in providing COVID-19 vaccinations to multiple underserved areas of Albany County, including medically underserved rural and urban settings. As of October 2021, 66.0% of Albany County residents have completed the COVID-19 vaccine series. Albany County's COVID-19 testing experience regarding resource deprivation has also been realized in COVID-19 vaccination rates. High-deprivation urban communities (i.e., cities of Albany, Cohoes, Watervliet) have measurably lower COVID-19 vaccination completion rates (range 45.6%–51.5%) as do the high-deprivation rural, hill town communities (i.e., range 32.2%–57.5%). Albany County has leveraged its partnerships with health insurers and providers to provide vehicles; used Medical Reserve Corps volunteers to supplement staffing; and relied on host locations (faith communities, schools, parks, etc.) to effectively operationalize "pop-up" COVID-19 vaccination clinics. With demands for COVID-19 testing surging, Albany County is revisiting its interest in providing mobile COVID-19 testing services as well.

For more information, contact Charles H. Welge at Charles.Welge@albanycountyny.gov.

It is imperative to invest the time necessary to build relationships and understand each organization or community's concerns, and to establish a process for adopting new approaches based on those concerns

COVID-19 Academic Detailing by ZIP Code

By Matthew Miller, Volunteer, County of San Diego; Willa Fields, DNSc, RN, FHIMSS, Medical Reserve Corps Volunteer, County of San Diego; Chiara Leroy, MPH, Community Health Program Specialist, County of San Diego; Erika Hernandez, MPA, Administrative Analyst, County of San Diego; Bessie Pineda, MPH, Community Health Promotion Specialist, County of San Diego; Sebastian Falcon, BA, Operations Research Analyst, County of San Diego; and Jennifer M. Tuteur, MD, Deputy Chief Medical Officer, Health and Human Services, County of San Diego

The COVID-19 pandemic highlighted health inequities throughout the United States. In San Diego County, disproportionate rates of COVID-19 infections, hospitalizations, and deaths were observed in ZIP codes with higher populations of color. Anticipating the importance of trusted health messengers, Academic Detailing by ZIP Code (ADZC) was designed and implemented to provide current, evidence-based information and local resources to healthcare practices located in underserved communities to reduce health disparities increased by SARS CoV-2.

San Diego County (County), with a population of 3.35 million,[1] is home to one of the largest U.S. Navy and Marine bases, 18 federally recognized Indian tribes, diverse racial and ethnic groups, and the busiest international land-border crossing. Although the County's Health and Human Services Agency (HHSA) is not a direct provider of primary care or medical inpatient services, the integrated agency serves over 1.1 million residents through ongoing outreach, education, and provision of public health, behavioral health, social services, and child welfare services. Through *Live Well San Diego*, the County's long-term strategic vision for Building Better Health, Living Safely, and Thriving Communities, HHSA is committed to promoting health, preventing chronic diseases, and reducing health disparities.

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COVID-19 Academic Detailing by ZIP Code

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Planning

In March 2020, the Healthcare Sector (Sector) was formed as part of the County's COVID-19 response to provide timely and accurate COVID-19 outreach and education to health professionals. The Sector's strategy was to listen, engage, and support its partners. The Sector observed COVID-19 disparities by race and ethnicity in the County, mirroring patterns across the United States. By October 2020, 39% of all COVID-19 cases lived in the lowest quartile of the Healthy Places Index (HPI).[2] While 33% of the County's population was Hispanic, by December 2020, Hispanics accounted for 58% of cases of COVID-19, 56% of hospitalizations, and 47% of COVID-19 deaths.[3] The Sector designed ADZC to educate health providers practicing in the County's most vulnerable areas and reduce COVID-19 disparities.

Modeled after pharmaceutical detailing,[4] a one-on-one technique used to educate a clinician about a product or guideline, ADZC was developed by engaging with health professionals, monitoring epidemiologic data, and collaborating with local professional organizations to bring COVID-19 education to healthcare providers. Sector staff recruited and trained graduate student workers and Medical Reserve Corps volunteers to serve as academic detailers.

Implementation

ADZC was piloted in September 2020 with healthcare practices in ZIP codes with the highest rates of COVID-19 in the County and expanded to engage practices in additional ZIP codes containing census tracts in the lowest HPI quartile. To reach as many trusted health messengers as possible, detailers contacted dental, medical, acupuncture, chiropractic, optometry, and other practices. Due to the nature of the pandemic, the program depended solely upon virtual training of staff and virtual communications between detailers and practices.

Weekly COVID-19 data reports identifying rates of new cases, hospitalizations, and mortality by ZIP code were used to determine the areas for ADZC expansion. A database was developed to track practice interactions, points of contact, barriers, and practice satisfaction polls. Speaking points were created to guide detailers' conversations with practices, with the goal of achieving meaningful communication and engagement between each practice and their detailer to address self-identified needs and challenges. Detailers concluded each practice engagement by providing clinical guidelines and local resources for COVID-19 testing, treatment, and vaccinations, temporary lodging, and personal protective equipment. The academic detailer served as a credible, single point of contact for each practice's COVID-19 concerns.

Clinical information and local resources were compiled and posted on the Sector's Health Professionals COVID-19 website and shared during the Health Professionals'telebriefings.[5] Newsletters containing clinical, regulatory, and local resource updates were also distributed to practices. The Sector cultivated multilingual patient education materials covering isolation and quarantine guidelines, Public Health Orders, temporary lodging programs for those needing quarantine or isolation, unemployment, and emergency rental assistance programs. The overall goal of an ADZC call was for an engaged provider to utilize updated public health guidance to better serve and connect their patients and staff to available resources, while also providing the engaged practice continuous individualized support from detailers. Priority topics under this goal included COVID-19 vaccine hesitancy, clinical guidelines such as masking guidance for patients and staff, monoclonal antibody treatment, and access to public health isolation hotels, as well as testing and vaccine information.

Results and Outcomes

Academic detailers completed more than 1,400 calls, sent over 800 emails, and spent at least 2,701 minutes talking with practice staff and providers. As of

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The Sector's strategy was to listen, engage, and support its partners. The Sector observed COVID-19 disparities by race and ethnicity in the County, mirroring patterns across the United States.

COVID-19 Academic Detailing by ZIP Code

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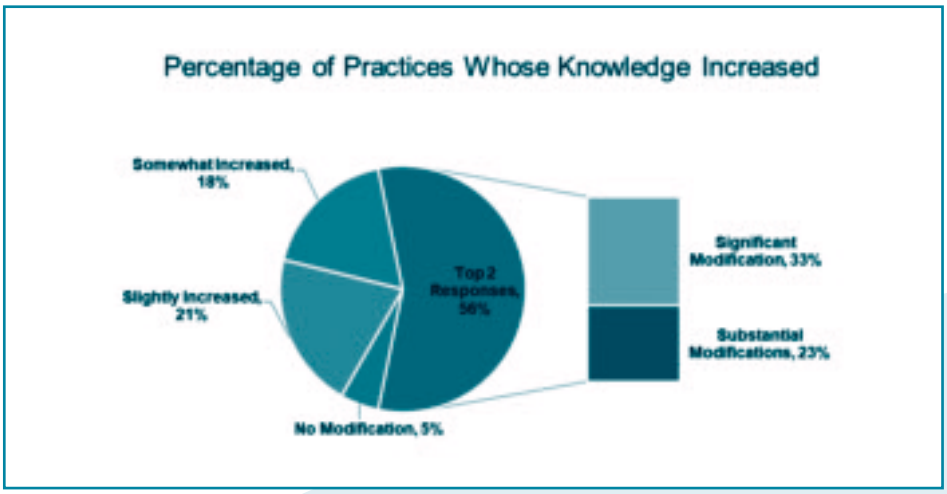

Figure 1: *Percentage of Practices Surveyed Whose Knowledge Increased due to Academic Detailing*

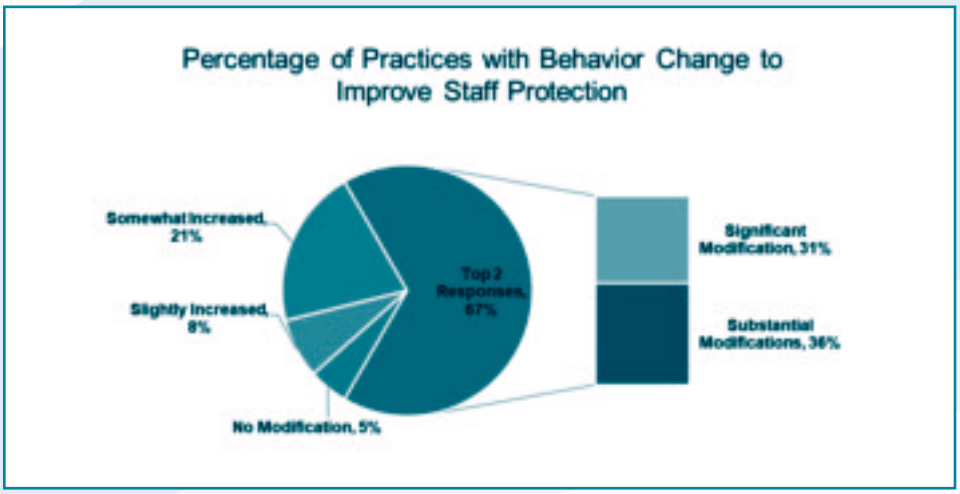

Figure 2: *Percentage of Practices Surveyed who Changed their Behavior to Improve Staff Protection*

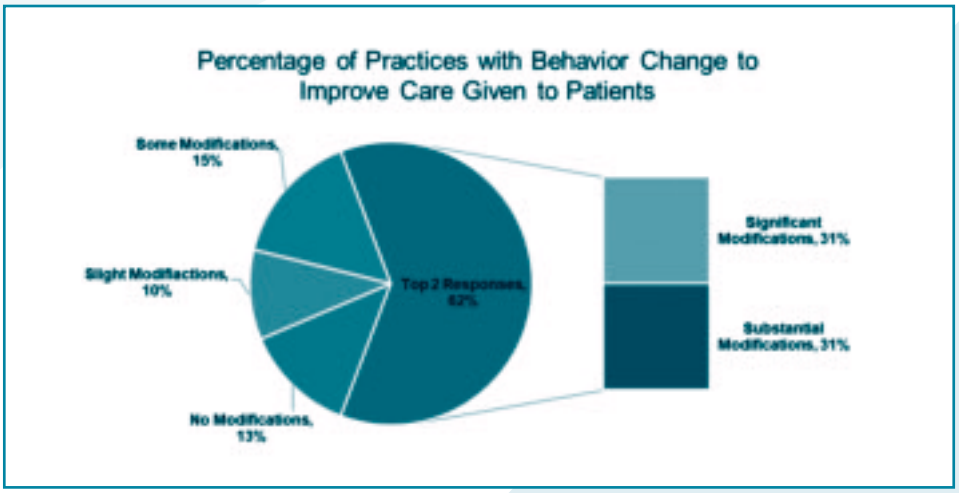

Figure 3: *Percentage of Practices Surveyed who Changed their Behavior to Improve Care Given to Patients*

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COVID-19 Academic Detailing by ZIP Code

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Figure 4: *Ways Practices Utilized the Information Shared by Academic Detailers*

Figure 5: *Ways Practices Were Able to Connect Patients with the Resources Shared by Academic Detailers*

September 5, 2021, ADZC successfully engaged 85% (516/607) of practices in 20 of San Diego County's ZIP codes most impacted by COVID-19. Of those practices responding to satisfaction polls, 95% responded that their knowledge increased because of academic detailing, 95% reported changing behavior to improve protection for staff, and 87% reported modifying clinical behaviors to improve patient care (Figure 1, 2, and 3).

Specifically, providers indicated that they shared information with their staff (95%), they were able to obtain and properly use PPE (82%), and they shared information with patients/clients (74%) (Figure 4). As a result of ADZC, providers were able to connect their patients/clients with resources such as COVID-19 vaccination (79%), testing (69%), and health education materials (56%). Food and housing were other resource connections indicated by providers polled (Figure 5).

Looking Ahead

ADZC demonstrated that telephonic academic detailing was a successful method to disseminate information to healthcare practices serving disadvantaged areas, resulting in improved provider knowledge and instigating behavior change during the COVID-19 pandemic. Looking ahead, a virtual approach to academic detailing might be extended beyond COVID-19 to address other conditions exhibiting health disparities in San Diego County, such as tuberculosis infection.

Replicability

The Sector developed tools to train and support staff, identify practice needs, and record data shared with practices. All tools including orientation slides, training videos, the database, and email communication templates were accessible online. Tools were updated based on the team's needs as expressed during weekly ADZC team meetings. Due to the virtual nature of ADZC, other entities can replicate this project to connect practices to academic detailers, who can share COVID-19 information and resources with healthcare practices located in our most vulnerable communities.

For more information, visit Health Professionals (sandiegocounty.gov).

References

1. QUICKFACTS: San Diego County. U.S. Census Bureau. Retrieved from https://www.census.gov/quickfacts/fact/table/sandiegocountycalifornia,CA/PST045219. Accessed September 23, 2021.
2. The California Healthy Places Index (Public Health Alliance of Southern California). Retrieved from https://healthyplacesindex.org/. Accessed September 23, 2021.
3. Larson K, Levy J, Rome MG, Matte TD, Silver LD, Frieden TR. Public health detailing: A strategy to improve the delivery of clinical preventive services in New York City. Public Health Reports. 2006;121(3):228-234. doi:10.1177/003335490612100302
4. COVID-19 in San Diego County. Local Situation. Retrieved from https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/community_epidemiology/dc/2019-nCoV/status.html?sourceNumber=. Accessed September 23, 2021.
5. Health professionals. http://www.sandiegocounty.gov/COVIDHealthProfessionals. Accessed September 23, 2021.

Healthy Farmers Markets

By Jill Bonczynski, RD, MS, and Judy Fowler, RD, MS, Tri-County Health Department

Tri-County Health Department (TCHD), Colorado's largest local health department, is located in the Denver metro area serving Adams, Arapahoe, and Douglas counties, which includes 26 municipalities and 1.5 million residents. In Adams County, with a population of 511,469, 49.4% identify as White Non-Hispanic, 40.4% identify as Hispanic, 3.1% identify as Black, and 3.6% identify as Asian. In 2018, the TCHD Nutrition Division piloted a Healthy Farmers Market ("the Markets") with local partners to serve community members of southwestern Adams County that are unable to access healthy food resources through a grocery store, farm stand, or local market.

Food insecurity, a social determinant of health and essential human need, disproportionately affects those who are lower income and has negative consequences on the health and wellbeing of these individuals. The Markets are a unique approach to food security developed to address broader social determinants of health through a whole-person health lens. The Markets strive to position resources in locations that are accessible, safe, and emphasize community connection. By supporting equitable access to food systems utilizing federal nutrition assistance programs, farmers markets can work towards abolishing the stigma around food insecurity.

Planning

The Markets are a collaborative partnership between Tri-County Health Department (TCHD), American Heart Association (AHA), Anythink Libraries, City of Thornton, and Lulu's Farm to address food insecurity and chronic disease in low-income areas. This model not only works to connect communities to healthier food choices, but also to community resources linked to improving health outcomes. These include, but are not limited to, free dental screenings for children, registering for classes with the

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Healthy Farmers Markets

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Diabetes Prevention Program, nutrition education classes with Cooking Matters, and COVID-19 vaccinations.

AHA has been the primary fiduciary sponsor of the Markets. An initial grant of $10,000, provided by an anonymous donor, has subsidized farmers, provided marketing materials, and aided in market expansion and replication. Various grant opportunities pursued by each of the partner organizations have been additional funding streams for the Markets. Buy-in from stakeholders comes from the mission to connect our community to health through food by using nutrition education to combat chronic disease outcomes.

Implementation

The Markets stand out from other farmers markets because the goal is to be an integrated health hub within underserved communities for residents to access affordable, culturally relevant and healthy food, food and health education, and preventative health services all in one location. Being located at a trusted community space, such as the Anythink Libraries, this cross-sector partnership makes this model particularly effective to bring diverse resources and perspectives to serving the residents of Thornton and surrounding areas. The implementation of the Markets would not have been possible without the recognition on the importance of food security to address chronic disease outcomes and improve accessibility to healthy food.

One of the largest barriers the Markets faced was operating during a global pandemic. The presence of COVID-19 required further innovation to the Markets model, as there were several recommendations and guidelines for hosting an outdoor community event. Operational challenges in 2020 included the program becoming more of an emergency food resource instead of a traditional community farmers market.

Results and outcomes

Integration of the ArcGIS Survey123 application attributes to the success of the Markets. Intended as a screening tool for produce voucher eligibility, the survey is also able to build an evidence base for the practice based on our geographic reach in the community as well as marketing strategies used most by our populations. These groups include those who receive federal food assistance, WIC and/or SNAP, as well as adults over the age of 55. In 2020, out of the 2,528 residents that received produce vouchers, 72.7% were older adults, 15.5% were WIC recipients and 11.8% were SNAP participants, redeeming

a total of $54,991 in $25 vouchers. The City of Thornton secured funding for this incentive through the 2020 CARES Act.

Looking ahead

As a collaborative effort of community and national partners and resources, the Markets combat health inequities to make a difference in population health. By providing a produce voucher incentive and having a farmer that accepts SNAP/Double Up Food Bucks and WIC, the program aids in the efforts for increasing access to healthy food as a priority for TCHD's Public Health Improvement Plan. As a health department, community programs can meet people where they are geographically, socioeconomically, and socially to diminish the barriers coinciding with the social determinants of health. In the 2021 season, the Markets continue to strive to build an environment that improves the knowledge of resources and health literacy for our community to address chronic disease outcomes for individuals across the lifespan. By emphasizing the holistic approach to further connections to healthy living, the Markets are determined to be sustainable and are currently seeking sponsorships to maintain the program's produce voucher incentive, as well as hire a market manager.

Replicability

Determining core strategies for measurable outcomes is key to operating a farmers market that seeks to address the lack of health equity. The first step is conducting a needs assessment to determine the core populations and demographics that need greater access to fresh, healthy food. Communities have similar needs, but the execution of those needs can vary depending on multiple factors such as built environment, culture, and income. Sustainability planning is another key component when seeking to establish an equitable farmers market. Research farmers markets established in your municipalities or state to determine average operational and in-kind cost. From there, search for long-term funding opportunities through grants, public versus private, or local sponsorships. Securing a sustainable funding model will help to build capacity for other operational components including organizational structure, marketing efforts, data collection capabilities, vendor recruitment, and implementation of equity strategies. Creating this environment with these components in mind will help to streamline efforts for implementing a farmers market dedicated to reducing disparity and promoting the full potential for one's health.

For more information, contact Judy Fowler at jfowler@tchd.org.

Mitigating the Spread of COVID-19 in People Experiencing Homelessness

By Melissa Van Bruggen, MHA, Clinical Health Services Director, Florida Department of Health in Pinellas County

The Florida Department of Health in Pinellas County (DOH-Pinellas) serves one of Florida's largest counties, with a population of approximately 960,000 residents. The Pinellas population is 73.9% White, 9.8% Black, and 10.7% Hispanic, with a median age of 48.9, 11% poverty rate, and 11.4% uninsured rate.[1] Pinellas County had 2,226 homeless individuals in 2020, the second largest Point-in-Time count of homeless individuals in Florida in the same year.[2] In March 2020, Pinellas identified the need for a process for non-congregate sheltering of homeless individuals and families to mitigate the spread of COVID-19. Sheltering during COVID-19 quickly exceeded previously planned targeted sheltering capacity for infectious disease outbreaks among small groups of individuals. Additionally, an emerging issue arose related to hospital capacity limits and hospitals needing a safe option for discharging homeless patients needing to isolate or quarantine.

DOH-Pinellas supported Pinellas County Human Services in implementing a collaborative project with nontraditional public health partners through pooled community resources and funding to mitigate the spread of this emerging infectious disease in people experiencing homelessness. The goal of this project was to create a process to identify COVID-19 cases and contacts needing a safe place to isolate or quarantine due to homelessness, assist in meeting their needs during isolation and quarantine, connect them to ongoing health and behavioral healthcare services, and discharge them to a safe place. Pinellas County Human Services secured funding for hotels for isolation and quarantine for this population through FEMA and food through food pantry donations. The Homeless Leadership Alliance of Pinellas provided central intake, operating a hotline number for hospitals and COVID-19 testing sites to make referrals into the project. Directions for Living provided transportation at intake and discharge, along with case management

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Mitigating the Spread of COVID-19 in People Experiencing Homelessness

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services including linkage to shelter at discharge. DOH-Pinellas conducted case investigations, surveillance, telephone check-ins, COVID-19 testing and vaccinations, and linkage to medical care. Additionally, DOH-Pinellas created a shelter liaison position to complement this project and serve as a dedicated COVID-19 case investigator for homeless emergency shelters and other locations with an elevated number of individuals experiencing homelessness, such as residential behavioral health facilities, group homes, and correctional facilities. In addition to case investigations and contract tracing, this position provided facility infection control assessments, hygiene recommendations, and ongoing education and guidance.

The project had a strong public health impact, with limited COVID-19 outbreaks or secondary transmission among identified COVID-19 cases in residents at homeless shelters in Pinellas County. By providing a shelter liaison, homeless shelters were able to efficiently notify DOH-Pinellas when they had a confirmed or probable case and receive guidance and/or incorporate the procedures previously identified for their shelter to prevent further spread within the facility without delay. The project has been able to safely isolate and quarantine 308 homeless individuals via hotel to date. Further, the project connected nearly 50% of participants to ongoing healthcare and/or housing. 31% of individuals who were uninsured at the time of referral into the project were enrolled in Pinellas County's Health Care for the Homeless Program. 70% of individuals who were street homeless at the time of referral into the project were discharged to a shelter or housing. The keys to this project's success were communication, collaboration, community partnerships, and continual efforts to improve the process. Project partners met via telephone three times per week to discuss planning and quality improvement efforts along with individual client updates.

The project has had ebbs and flows in usage and capacity at various times throughout this unprecedented pandemic, with challenges such as shortages in hotel availability and staffing from partner organizations. The hotel portion of the project was discontinued in July 2021 due to low case counts and demand in the county. However, due to a rapid surge in COVID-19 positivity rates and hospitalizations beginning later that month, the hotel was re-opened to intakes in August 2021 and continues to accept referrals to date. Project partners plan to continue these collaborative efforts to mitigate the spread of COVID-19 in people experiencing homelessness, if funding and community need remains.

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References

1. United States Census Bureau. Accessed on September 27, 2021. Retrieved from https://data.census.gov/cedsci/all?q=pinellas%20county.
2. Florida's Council on Homelessness Annual Report 2021. Accessed on September 27, 2021. Retrieved from https://www.myflfamilies.com/service-programs/homelessness/docs/2021CouncilReport.pdf.

Managing Asthma Triggers at Home: A Collaborative Effort

By Sam Rubens, MPA, REHS, Manager, Summit County Public Health (OH)

In 2017, Summit County, Ohio experienced the loss of a child due to an asthma attack. In response to this tragedy, Summit County Public Health (SCPH) elevated asthma to a high- priority item in the 2017 Community Health Improvement Plan.[1] In its 2018 report, "Asthma Capitals 2018," the Asthma and Allergy Foundation of America stated that Akron, Ohio was the 14th most challenging place to live if you suffer from asthma.[2] In 2015, Akron Children's Hospital (ACH) began a steering committee focused on comprehensive treatment of asthma throughout the hospital system. In the summer of 2017, a collaboration between SCPH and ACH was formed to tie together the medical treatment of children with asthma and the management of environmental factors at home triggering their asthma attacks. Out of this collaboration came the pilot project, Managing Asthma Triggers at Home (MATH).

Due to the acknowledgement of childhood asthma as a priority by both ACH and SCPH, the pilot project was launched, designed to assist children with high-risk asthma in identifying and reducing their exposure to asthma triggers in their home environment. High-risk asthma (HRA) for this project was defined as children with: any intubation for asthma; two or more hospitalizations or three or more Emergency Department visits in the past 12 months for asthma; Pediatric Intensive Care Unit admission for asthma within the past 24 months; or physician-identified high-risk asthma due to the amount of intervention needed to manage the child's asthma.

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Following the research, [3, 4, 5] a multi-tiered approach to assisting the families was the best protocol. Providing education about asthma triggers, equipment to reduce trigger exposures, and targeted engagement with the families allowed the MATH staff to keep participation in the program high and the children benefitted. The program was self-funded using existing funds for air quality issues in a three-county region (Medina, Portage, and Summit Counties in Northeastern Ohio).

The children were identified by their pediatrician or asthma subspecialist based on hospital records and referred to the MATH program staff for enrollment. The enrollment criteria were: ACH patients between 4–18 years of age and identified as having HRA who lived in the three-county region. The MATH staff contacted the families and enrolled them into the program. Once enrolled, the family received a suite of equipment to address asthma triggers in the home: a HEPA air purifier, a dehumidifier, bed and pillow bags, a carbon monoxide detector, an extra spacer to use with appropriate inhalers to better disperse the inhaled medicine, a HEPA vacuum, and furnace filters. The staff educated the families on how to use each of the products and what benefit they would provide in reducing triggers with the aim of helping the child breathe easier with reduced asthma attacks requiring hospital services.

The program started enrolling clients in the summer of 2018 with a goal of 100 clients over a two-year period. Due to COVID limitations, the enrollment fell a bit short, but 88 clients participated in the program. Data was collected for each client's hospitalization and emergency department usage in the year prior to engagement, the year of engagement, and the year after the client ended the program. The data is still being collected, but is showing very positive results. Clients have seen a 52% decline in hospitalizations and a 32% decline in emergency room visits. Additionally, the client's asthma control test scores increased by a significant amount, which indicates an improvement in how well the client feels their asthma symptoms are being controlled. For an equipment cost of roughly $1,100 per client, medical costs have declined approximately $4,700 per client per year.

In 2021, SCPH was honored to be recognized by NACCHO as a Model Practice for the MATH program. By bringing the hospital and the health department together to focus on children with high-risk asthma, great strides were made in helping these families live healthier lives. Next steps include involving the schools and our metropolitan housing authority. Plans are also being made to expand the service area of the program within the hospital's region and include other health departments in the project. The success of our collaboration was due to the universal acknowledgement of asthma as an important public health issue, the desire of the partners to assist these clients in improving their lives, and the availability of funding to make the program possible.

For more information, contact Sam Rubens at srubens@schd.org.

References

1. Summit County Public Health. (2017). Community Health Improvement Plan. Retrieved from https://www.scph.org/sites/default/files/editor/2017_CHIP_111517.pdf

2. Asthma and Allergy Foundation of America. (2018). Asthma capitals 2018: The most challenging places to live with asthma. Retrieved from https://www.aafa.org/media/2119/aafa-2018-asthma-capitals-report.pdf

3. Green & Healthy Homes Initiative. (2018). Lessons learned: Asthma healthy homes pilots. Retrieved from https://www.greenandhealthyhomes.org/publication/lessons-learned-asthma-healthy-homes-pilots/ on 2/3/2020.

4. Green & Healthy Homes Initiative. (2019). Recommendations for evaluation metrics for asthma home visiting programs: Measuring environmental management and health outcomes. Retrieved from https://www.greenandhealthyhomes.org/wp-content/uploads/GHHI_EMHOME_Publication_2019.pdf on 2/9/2020.

5. Ohio Department of Health. (2017). Recommended Asthma Home Visit Design. Retrieved from https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/asthma-program/media/asthma+home+visit+design on 8/25/21.

Online Naloxone Training in Alabama

By Sarah Estopinal Howell, FNP-CRNP, Jefferson County Department of Health

Located in north-central Alabama, Jefferson County contains the county seat city of Birmingham, the surrounding metro area, and outlying rural area. It is the most populous county in Alabama with roughly 660,000 residents; Birmingham is the largest city in Alabama. The population identifies 52.7% female and 47.3% male. Racial demographics of Jefferson County are 53.1% white, 43.5% black, and 4.1 % Hispanic or Latino.[1] The *Jefferson County Community Health Equity Report 2018* shows the county has a higher percentage of people under the age of 65 without health insurance compared to the national average (11.1% vs 9.5 %).[1] The county also has a higher percentage of residents living in poverty compared to the national average (17.0% vs 12.3%).[1] The majority of the population is between 19–65 years old. Life expectancy in Jefferson County was 74.4 years in 2017.[2] According to the National Center for Health Statistics, the national life expectancy at birth in 2017 was 78.6 years. Life expectancy for residents of Alabama was 75.5 in 2017, making it almost a year longer than average Jefferson County life expectancy.

Echoing national trends, drug overdose is a persistent public health issue in Jefferson County. For the 12-month period ending in December 2020, the United States reported 92,183 provisional drug overdose deaths (252 deaths per day).[3] This was the highest number of overdose deaths recorded in a 12-month period. Data provided by the Jefferson County Coroner/Medical Examiner's Office shows Jefferson County had 302 overdose deaths in 2020, an increase of 35.4% from 2019. Of the 302 overdose deaths, opioids caused 237 deaths and of that number, fentanyl was the primary cause of death for 190. Jefferson County saw a doubling of fentanyl overdose deaths from 2019 to 2020.

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As the rate of opioid overdoses rose in Jefferson County, the need for naloxone increased. Opioid overdose deaths are preventable with timely administration of naloxone after overdose. At the onset of the COVID-19 virus in the U.S., naloxone was available for residents of Alabama through the Standing Order of the State Health Officer (Alabama HB379) through licensed personnel. The Jefferson County Department of Health (JCDH) historically relied on in-person training as the method to distribute naloxone kits. However, as knowledge of COVID-19 transmission became evident, the existing model of in-person training and distribution failed social distancing requirements. Jefferson County had the highest amount of positive COVID cases in Alabama over the course of the pandemic and according to Johns Hopkins University, in December 2020, Alabama ranked sixth on a list of states with the highest number of new cases of COVID per week.[4] Thus, the practice developed to address the ongoing needs of the community while maintaining safety when responding to the rapidly increasing overdose numbers.

Based on JCDH surveillance data and existing external partnerships, an internal team proposed an online platform to expand distribution efforts locally and across the state. Our team initially consisted of a physician director, nurse practitioner, registered nurse, social worker, and interns. Close internal partnership with JCDH MIS guided the development of an online training module. JCDH General Services oversaw the mailing of kits and helped to establish a repeatable and trackable process. JCDH provided funding for the naloxone kits mailed within the county and the Alabama Department of Mental Health (ADMH) provided funding for kits mailed outside the county. AMDH was a key player in making statewide stakeholders aware of the new program.

Before implementation, JCDH needed to clarify that dispensing naloxone through mail was within the regulations of the Alabama Board of Medical Examiners (BME). In 2015 and 2016, the Alabama legislature enacted into law provisions that allowed for specific dispensing of opioid antagonists. Review by JCDH legal counsel found the statue to be unclear on the issue of physician ability to dispense (or mail) naloxone to non-patients without a personalized prescription. Thus, JCDH requested guidance from the BME on whether a health department physician, acting in accordance with this statute, had the ability to lawfully dispense naloxone, without a prescription, to non-patient third parties who are otherwise covered by the statute, but would not technically be getting a prescription for themselves. Through an emergency declaration on October 21, 2020, the BME approved the dispensing of naloxone to non-patients by mail from a health department physician, contingent on completion of the online training. Individuals had the option of coming to the local health department to arrange a contact-less pickup, pickup at a local pharmacy, or requesting direct mailing of the kit.

As of September 27, 2021, the program has mailed 1,903 kits to 63 of 67 counties in Alabama since launching in late 2020. Success of the program is measured by the greatly increased distribution of kits both in Jefferson County and statewide. The program continues as an essential part of JCDH overdose response activities. By not relying on in-person training, the program expands the reach of a small internal team. Additional measures of success come from newly generated community partnerships. JCDH created a task force with leaders from various community organizations to foster stakeholder collaboration through enhanced discussion about the increasing overdose rate and methods of naloxone delivery. Community partners promoted online naloxone training by sharing it with their networks and worked to decrease stigma surrounding carrying naloxone and its use.

Advice for implementation of the program comes from lessons learned along the way. The value of internal and external partnerships is essential to success of the program. Specifically, we have learned how to form and navigate internal and external partnerships quickly due to public health need; how to have an expedited public health ruling from the BME; how to promote a platform to reach an audience; and how to take and implement feedback from an external website, among many other lessons.

For more information, contact Sarah Estopinal at sarah.estopinal@jdh.org or visit www.jcdh.org/naloxone.

References

1. U.S. Census Bureau (2019) QuickFacts Birmingham city, Alabama. Retrieved from https://www.census.gov/quickfacts/fact/table/birminghamcityalabama/IPE120219

2. Community Health Assessment, 2019. [online] (1.0). Retrieved from https://jcdh.org/SitePages/Misc/PdfViewer?AdminUploadId=607. [Accessed 23 December 2020].

3. CDC – National Center for Health Statistics - Provisional Drug Overdose Death Counts. Accessed on 7/20/2021. Retrieved from https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm.

4.Associated Press. (29 December 2020). 'Like a bathtub filling up': Alabama is slammed by the virus. The Associated Press. Retrieved from https://apnews.com/article/alabama-coronavirus-pandemic-cullman-birmingham-07477ffb1763cdb73cfd9fd7d1798f6f.

5. Health Action Partnership, 2018. Community Health Equity Report 2018. [online] (1.0). Retrieved from https://www.jcdh.org/SitePages/Misc/PdfViewer?AdminUploadId=607. [Accessed 1 January 2021].

Veterans and Families in Our Neighborhoods: Knowing Who Served Us So That Local Health Departments Can Serve Them

By Susan Bockrath, MPH, Executive Director, Nebraska Association of Local Health Directors and Teri Clark, MEd; VetSET Program Director, Nebraska Association of Local Health Directors

"Who are the people in your neighborhood?" The people (and puppets) on Sesame Street have wanted to know the answer to this question for decades—and so have local public health departments. Community health assessment and improvement planning (CHIP) processes start with this question when convening partners for this core strategy work. We consider race, language, gender, ethnicity, religion, rural/urban, employment, but what about the military connection? In 2013, Nebraska's local health departments (LHDs) had an 'aha!' moment, noting that military-connected community members were not well-represented in CHIP processes or the resulting strategies. Plans for VetSET Nebraska began.

Since 2015, Nebraska's state association of county and city health official (SACCHO), the Nebraska Association of Local Health Directors (NALHD), has been implementing the unique, statewide VetSET Program that broadly applies public health approaches—and leverages the unique position and expertise of LHDs as chief health strategists—to engage and support veterans and military-connected families. VetSET broadly defines a veteran as one who served or is currently serving in the United States military. Participating LHDs prepare their teams and their communities to be 'set' (ready) to support connection, resiliency, and wellbeing of veterans and their families locally.

The needs of veterans and their families are frequently overlooked and unknown, in part because public health demographic data typically

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does not identify these populations. A growing body of research suggests that, when compared to the general population, veterans and their families disproportionately suffer from negative risk factors and health outcomes that impact overall community wellbeing—including staggering suicide numbers and behavioral health issues.[1]

These health issues often fall to local communities to address. Contrary to popular assumptions, many veterans and most of their family members are not eligible for Veterans Administration (VA) services and those who are, often choose to use services closer to home. Therefore, veterans and their families make up a significant proportion of the target population across all programs in every LHD in Nebraska and across the country. In Nebraska, approximately 50% of adults are veterans or veteran-connected family members. Additionally, 23% of school-aged children report their parent or guardian is connected to the military.[2]

Veteran-connected family members, who are often the first responders when veterans and service members are in crisis, deserve and need the attention of local public health systems. Nebraska's 2016 and 2019 Behavioral Risk Factor Surveillance System (BRFSS) data show that spouses and partners of veterans have significantly more poor mental health days and are more likely to have been told that they have depression than the population as a whole. Also, Nebraska students with a military connection (through their parent or guardian) are significantly more likely to report that they considered attempting suicide, attempted suicide, and engaged in self-harm. They are also more likely to use alcohol, tobacco, and prescription drugs.[2]

VetSET is working to ensure that veterans and their families are surrounded by whole communities of cross-sector organizations that are broadly aware of and working to address their challenges. Our strategies are workable options for LHDs nationally:

- **Embrace military cultural competence as part of the foundational skillset of the public health workforce.** In Nebraska, LHD staff participate in various Military 101 training and other awareness-raising events. Staff at the LHDs apply this knowledge in developing new community partnerships, with the purpose of serving veterans and families. Partner organizations also participate in VetSET trainings, thereby improving military cultural competence across the local public health system—among military-serving and civilian-serving providers.
- **Develop sustainable mechanisms for collecting, synthesizing, and sharing surveillance data on veterans' and families' health and wellbeing.** Nebraska LHDs encourage community partners to ask of their employees, students, and clients if they or a family member ever served in the military. The SACCHO (NALHD) led efforts to test and formalize additional questions (a Military Connection Screener) on the 2016 and 2018 Nebraska BRFSS survey. A similar screener was permanently added to the Nebraska Risk and Protective Factor Student Survey in 2018. These demographic questions, for the first time, allow LHDs to understand and track how veteran-connected family members are faring at a state level. These data help to guide community organizations to better serve their veteran-connected clients, patients, and students.
- **Build LHDs' suicide prevention ability, especially to reach veterans and their families.** NALHD championed veteran-focused suicide prevention workshops that include "Question. Persuade. Refer." (QPR) Gatekeeper training. This veteran-focused QPR Gatekeeper suicide prevention training raises local awareness and contributes to veteran-focused tactics across the state.
- **Facilitate connections between military and civilian sectors at the state level.** NALHD provides

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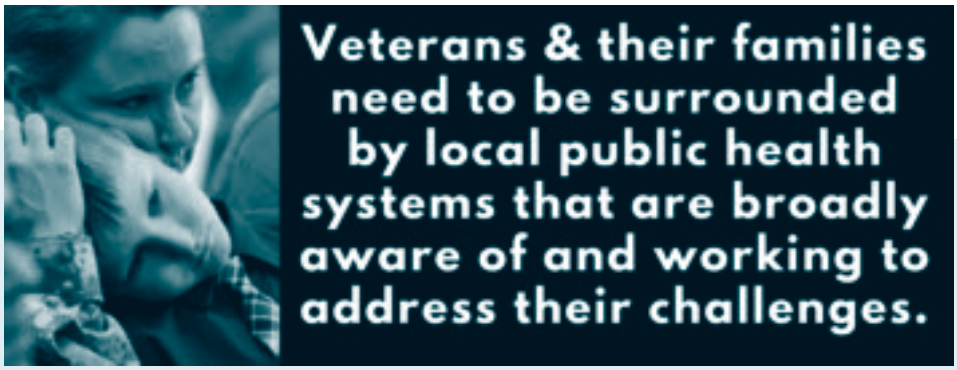
Veterans and their families make up a significant proportion of the target population across all programs in every LHD in Nebraska and across the country



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backbone support to the Nebraska Veteran and Family Task Force, a statewide, cross-sector group working to highlight issues and advance solutions in the veteran and veteran family space. This is a forum for a range of military, public health, and policymaking partners to learn together, coordinate efforts, and collaborate for strategic impact.

Since purposefully engaging military-connected individuals, partners, and families, Nebraska LHDs have seen, up close, the resilience of veterans and their families. Still, our public health data also point to areas of concern that whole communities can help to address. VetSET efforts are needed, not because veterans and their families are 'broken," but because they are part of our all our communities. Their military connection impacts their health. Supporting them requires knowing them better. Nebraska's LHDs have made significant progress in knowing their veterans and their families, and preparing their teams and their partners to serve them well.

For more information, visit https://nalhd.org/our-work/vetset/.

References

1. Nebraska Association of Local Health Directors. "A Public Health Approach to Supporting Veterans and Their Families." (2020). Retrieved from https://nalhd.org/our-work/vetset/.
2. University of Nebraska Medical Center. "Health-Related Risk Factors of Veteran- and Military-Connected." (2020). Retrieved from https://www.unmc.edu/publichealth/chp/_documents/Students_from_Military_Families_07_06_2020.pdf.

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