Massachusetts Health Department Collaborates with Community Organizations to Increase Influenza Vaccinations Among Minority Populations

After finding that minority populations were hit hard by 2009’s H1N1 outbreak, Massachusetts launched an initiative and collaborative to increase flu vaccination among these at-risk groups.

Massachusetts has traditionally been one of the states with the highest rates of overall immunization. However, during and after the H1N1 influenza outbreak in the spring of 2009, the Massachusetts Department of Public Health (MA DPH) recognized that it needed to expand its efforts to reach multiple vulnerable populations, including hard-to-reach minority populations.

During the H1N1 outbreak, there were substantial disparities in rates of influenza hospitalizations, complications, and mortality by race and ethnicity. For example, black and Hispanic residents represented 19 and 21 percent, respectively, of confirmed cases, while comprising 6 and 8 percent of the population. Consequently, MA DPH determined that it needed a more specific and targeted approach to increase rates of immunization among minority populations. This led to two new programs: the Massachusetts Immunization Equity Initiative, and the Immunization Equity Collaborative.

Steps Taken:

- In 2010, the MA DPH launched its three-year Immunization Equity Initiative, through which the MA DPH Office of Health Equity (OHE) and the Massachusetts Immunization Program identified $200,000 of funding for eight community-based organizations. Using their funding, these organizations performed intensive outreach, education, and flu vaccination efforts in the diverse communities that were hard-hit during the H1N1 epidemic. The grantees were chosen based on demonstrated experience in reaching the target populations and the strength of their relationships within these communities.
- Grantees targeted unique populations: Young men of color, individuals with chronic diseases, recent immigrants, and gay, lesbian, bisexual and transgender youth.

Minority Populations Hard Hit During 2009 H1N1 Outbreak

- Black (14 per 100,000) and Hispanic (11 per 100,000) residents had more than 4 times the hospitalization rate of white residents (3 per 100,000).
- The mortality rate for H1N1 influenza were also substantially higher among Hispanic (6 times), Asian (4 times) and Black (3 times) residents compared to their white counterparts.

Source: The Massachusetts Department of Health Immunization Equity Initiative Targeting Underserved Populations, 2009-2012
To reach the targeted populations, the immunization equity grantees did outreach and education at day care centers, ethnic and religious festivals, gay bars, Head Start programs, ethnic food markets.

Grantees and local boards of health held vaccination clinics in both traditional and nontraditional settings, including apartment buildings, senior centers, needle exchange programs, local food pantries, homeless shelters, WIC programs, and family planning clinics.

The health disparity reduction program coordinator, housed in OHE and funded by a federal Office of Minority Health grant, led the initiative. Later, the initiative became an integral part of the work under OHE’s Cultural and Linguistic Appropriate Services (CLAS) Initiative.

After the first and second years of the immunization equity initiative, OHE conducted learning labs to identify successful strategies and identify opportunities for improvement and approaches to overcoming challenges and barriers.3

As a result of the recommendations obtained during the first learning lab, OHE convened an immunization equity team that included staff from OHE and other MA DPH bureaus, including from communications, healthcare quality, and infectious disease epidemiology immunization, as well as a representative from the Massachusetts League of Community Health Centers and a representative from Masspro, a performance improvement organization focused on advancing healthcare quality. The team’s primary goals were to (1) develop longer-term objectives and strategies to increase immunization among hard-to-reach populations, (2) coordinate and support immunization activities at the community level through partnerships of local boards of health and community-based agencies, and (3) develop a sustainable infrastructure for eliminating immunization disparities.

Together, OHE and the immunization program developed a comprehensive guide to reaching and engaging diverse communities, *Flu Vaccine for Everyone! A Guide to Reaching and Engaging Diverse Communities*. It was released in September 2011 in both English and Spanish.4 This guide includes sections on engaging different components of the community, including faith-based organizations, schools, workplaces, homeless populations, and ethnic groups. It also includes sections on flu beliefs and perceptions that have an impact on the effectiveness of public education efforts, as well as recommendations on language, translation, and publicizing and disseminating flu messages. Finally, it has technical assistance resources organized in an easy-to-use toolbox format.

MA DPH developed a dissemination plan for the flu guide that took advantage of existing channels of communication and developed new ones:

- *Flu Vaccine for Everyone!* was distributed to all 351 local boards of health in the Commonwealth, and was introduced in a state-wide conference call.

- OHE and the emergency preparedness bureau worked together to identify multiple venues, such as statewide preparedness conferences, where they could reach local boards of health to present the flu guide and discuss how it could be useful to their work.

- OHE and the immunization program presented the equity initiative and the flu guide at national and state adult immunization conferences.

- CDC chose to include the flu guide as a resource in its national immunization campaign in 2011.
Building on what was learned in the Immunization Equity Initiative, such as the importance of developing community-wide emergency preparedness and immunization plans developed with community-based organizations, OHE and the immunization program collaborated with the emergency preparedness, healthcare quality, and safety bureaus to launch the Immunization Equity Collaborative in September 2013.

- The collaborative’s goal was to build the capacity of local boards of health to reach vulnerable populations with their immunization efforts.
- Funds from the federal Office of Minority Health were used to support a consultant to provide technical assistance to 10 communities’ local boards of public health.
- The collaborative applied two frameworks to guide their work:
  - The CLAS standards to help reach a low-vaccinating population.
  - A quality improvement plan, do, study, act (PDSA) program that allowed the boards to tackle manageable portions of work and share their learning.
- OHE convened regular sessions with the 10 local boards, which also included the immunization program and the emergency preparedness bureau, in an open forum for information sharing and addressing similar concerns.
- The technical assistance, provided individually and in groups, included information on billing and reimbursement, specific vaccines, and using the flu guide effectively.

Results:
- In year 1 of the effort, OHE grantees reached almost 3000 community members with their outreach and education efforts. In year 2, the grantees reached more than double that number of individuals.
- Massachusetts achieved the best overall flu vaccination rate in the United States for the 2011-12 season: 58 percent of Massachusetts residents were vaccinated, compared to 45 percent for the rest of the United States.
- For the 2011-12 flu season, 48 percent of black and 51 percent of Hispanic residents age 6 months and older received flu vaccine, compared to 51 percent of white residents—a significant improvement from prior years. In the 2010-11 flu season, the gap in flu vaccination rates between white and black residents was 10 percentage points.
- The Immunization Equity Initiative and Immunization Equity Collaborative were so well received that MA DPH chose to invest $100,000 from the state’s Prevention Block Grant to expand the technical assistance that it provides to other towns, as well as offer a modest stipend.

Lessons Learned:
- MA DPH demonstrated effective linkages among multiple bureaus, which allowed it to leverage already established community contacts and networks to improve dissemination of the vulnerable population flu information and resources.
• Incorporating reducing vaccination disparities into the other bureaus’ regular work ensures that disparity reduction is seen as a department-wide endeavor and is not restricted to the MA DPH OHE.

• OHE had an important role as a convener and facilitator of relationships between MA DPH and key community-based organizations, which helped to foster relationship building.

• Flu prevention strategies are most effective when they are begun prior to the onset of the flu season and when held in conjunction with other ongoing events.

• Sustainability of community flu immunization activities targeting vulnerable populations requires continued engagement of nontraditional partners who understand community norms, practices, and values.

• Having a designated community champion who has been immunized can improve the success of outreach efforts.

• It is crucial to include community residents in all phases of the design, implementation, and evaluation of immunization efforts so they can share valuable insights into their communities.

• Given the staffing and resources challenges faced by local boards of health, OHE found that using a quality improvement (QI) approach in the Immunization Equity Collaborative resonated with the local boards of health because they could focus on a finite project and document effectiveness and concrete improvements. Emphasizing small but achievable changes and avoiding unnecessary QI jargon make the work accessible and help local board of health staff incorporate the approach into their ongoing work.

• State health departments have unique roles in partnering with local boards of health:
  o Providing support and guidance to assist local boards of health in disseminating vaccine beyond the populations that are easier to target with limited staff and resources.
  o Providing technical assistance and infrastructure to address the common challenge of competing priorities disrupting advanced planning.

• Identifying best practices and publicizing positive results help support public health departments that may not have the resources to do it on their own.

Next Steps:

• OHE would like to expand its work to other immunizations and continue to provide technical assistance to local boards of public health. In addition, OHE would like to support the bureau of infectious disease’s in the implementation of the state immunization information system to help local boards and community partners to track their impacts.

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2 Ibid.
3 Ibid.