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From the Field: Improving Immunization Coverage and Services at the Local Level



A Collection of
Local Health Department
Immunization Initiatives

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This document was developed by the National Association of County and City Health Officials (NACCHO) using stories written by and told from the perspective of the local health department (LHD) staff that participated in NACCHO’s 2017 Assessment of Local Health Department Immunization Programs and follow-up interviews. Each story highlights a local immunization challenge and the initiative implemented by the LHD to address the overarching need to increase local immunization coverage rates. With this document, NACCHO hopes to strengthen the capacity of LHDs to provide comprehensive immunization services by facilitating information exchange and peer learning.

Please note that the data referenced in the stories may have changed since they were submitted to NACCHO for publication. For more information about NACCHO’s Immunization Program or to inquire about any of the stories in this compendium, please contact immunization@naccho.org.

To learn more about NACCHO’s immunization activities, visit the Immunization Program webpage at: <https://www.naccho.org/programs/community-health/infectious-disease/immunization>.

DISCLAIMER

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INTRODUCTION

Immunization is one of the safest and most effective public health measures available, with an unparalleled record of disease reduction and prevention. Despite evidence that immunizations are one of the most successful and cost-effective mechanisms to prevent infectious disease, efforts to promote vaccination are needed more now than ever. Within recent years, there has been a significant resurgence of diseases such as measles and mumps, as well as emerging domestic and global health threats such as influenza. Recent outbreaks of vaccine-preventable disease are evidence that pockets of under- and un-immunized populations exist. Though immunization data reflect that overall immunization rates remain steady across the country, data also reveal that disparities in immunization coverage by factors such as socioeconomic status, race, and geographic location continue to persist.

NACCHO works with local health departments (LHDs) to increase their capacity to prevent and control vaccine-preventable diseases, increase immunization coverage in local communities, and meet nationally established immunization standards. LHDs serve as safety net providers in many communities, and therefore play a critical role in providing and connecting people with immunization services and counseling. As community chief health strategists, LHDs are also uniquely positioned to improve the capacity of the healthcare system for delivering immunizations by strengthening the coordination between public, professional, and private sector stakeholders. These local agencies work with stakeholders to assure effective immunization practices, disease surveillance and reporting, education and outreach, and program oversight.

According to NACCHO's 2016 *National Profile of Local Health Departments*, nearly all LHDs provide immunization services, with 90% providing services for adults and 88% providing services for children¹. To further explore the capacity of LHD immunization programs, NACCHO conducted the 2017 *Assessment of Local Health Department Immunization Programs* (see Appendix A). The assessment and in-depth interviews aimed to document the national landscape of local vaccine-preventable disease prevention and control activities, immunization services and counseling, and local immunization program infrastructure.



Figure 1. Partial Infographic of Findings from the 2017 Assessment of LHD Immunization Programs

Read on to view a series of “stories from the field” that explore how local health departments across the nation are working to improve immunization coverage and services in their communities.

Win/Win/Win Against HPV

Norwalk Health Department (Norwalk, CT)

By Darleen Hoffler, MHA, BSN, RN
Supervisor of Clinical Services

The Challenge

The morbidity and mortality associated with human papillomavirus (HPV) infection is a major concern, especially because it's preventable. According to the Centers for Disease Control & Prevention (CDC), about 14 million people, including teens, become infected with HPV each year. HPV infection can cause a variety of different cancers in both men and women, such as penile, throat, anal, cervical, vaginal, and vulvar cancers, as well as genital warts.

In the state of Connecticut, vaccination rates for the HPV vaccine are improving slowly but still fall far below the vaccination rates for the other vaccines administered to adolescents. In particular, HPV vaccination rates continue to lag far behind Tdap (tetanus, diphtheria, and acellular pertussis) and MenACWY (meningococcal conjugate) vaccination rates for both boys and girls.² According to the Centers for Disease Control and Prevention, the vaccination rate for the HPV vaccine administered to adolescents in Connecticut is reported to be 71.3%, while the rate of vaccination for Tdap and MenACWY are both 94.9%.³ The rate of completion of the HPV vaccine series is far less.

Much of this has to do with parental concerns about HPV vaccine safety and the vaccination being viewed as parental admission that the child is or will soon be sexually active instead of being viewed as a vaccine to prevent cancer. Additionally, the vaccine is not yet part of the required vaccine schedule. It's important that healthcare providers discuss and recommend the HPV vaccine which would result in more parents agreeing to their children being vaccinated.

Recognizing that both parents and providers would benefit from education and outreach about the HPV vaccine, the Norwalk Immunization Action Plan (IAP) Program decided to make an effort to increase awareness of HPV among these groups in the Norwalk community and surrounding areas.



The Solution

The Norwalk Immunization Action Plan Program developed an initiative to increase awareness about the HPV vaccine for the middle school-aged children in the Norwalk area. The campaign is entitled "Win/Win/Win" because it offers opportunities to win an iPad for a student, win lunch for provider offices, and win immunity for the child and the community. The initiative is fully supported by the Connecticut Department of Public Health's Immunization Program.

To kick off the awareness campaign each year, Norwalk Health Department sends informational mailings to the 5th- and 6th-grade parents in Norwalk's public, parochial, and magnet schools. The materials provide information about the required and recommended adolescent vaccines, highlighting the HPV vaccine. HPV pamphlets in both English and Spanish are also included. Parents are informed that they can enter a drawing for an iPad when they discuss the HPV vaccine with their medical provider. To increase the reach of the campaign, school nurses and administrators are informed and asked to spread the word in their schools. Representatives from Parent/Teacher and Parent/Teacher/Student Organizations (PTOs/PTSOs) are also contacted and asked to share information about the campaign via their school newsletters, Facebook pages, etc.

When a child receives a recommendation from their provider about the vaccine or receives a dose, they complete a raffle card for an iPad. The provider offices are categorized as either small/medium or large, and the office in each category that collects the most raffle card entries wins a free lunch for their staff. More importantly, the child receives protection from the HPV virus, decreasing the disease burden in the community.

The campaign culminates with the drawing for an iPad. The Mayor is invited to draw the lucky winner, and the local media are invited to cover the event, which increases awareness about the importance of the HPV vaccine.

The Results

The participation and reach has increased each year. There were 52 postcard submissions in 2015, 580 submissions in 2016, and 792 submissions in 2017. The first year, the program received a monetary donation from a local private business, which financed a significant portion of the campaign. During the subsequent years, the campaign was deemed important enough that the program budget was structured to support it.

During campaign year 1, the campaign ran only during the summer months (June-September), which is a busy time for physician offices. The postage-paid post cards were mailed to parents with a letter instructing them to bring the cards to their child's doctor's office, which would in turn be asked to return them to the local health department. We did not have a provider incentive to participate that year, and, from the results, we realized that we'd have to make some changes to obtain better outcomes.

During campaign year 2, we changed the time of year to February through June and decided it was key to give the doctor's offices an incentive to participate: free lunch for the highest participation. We also decided to brand the campaign; it became a Win/Win/Win campaign. The health department delivered the raffle postcards to physician offices, along with a collection box, instead of mailing them to parents. At the end of the campaign, IAP staff would pick up the boxes filled with the raffle cards from the physician offices. These changes resulted in a sizable increase in the number of submissions received.

Prior to campaign year 3, we decided to survey the providers, requesting feedback on aspects of the campaign that they liked, didn't like, and thought could be improved. Some of the responses indicated that they liked the campaign, that it helped them with their discussion and recommendation, and that it should run for a longer period of time. From this feedback, we decided to extend the campaign so that it ran from March to September. We also conducted follow-up with the providers during the campaign and found that they would often forget to complete the postcards. To address this, we decided to staple the postcards to the HPV Vaccine Information Statements to make it easier for them to remember to complete them. At the end of the campaign, the total number submitted had increased from the previous year.

The Lessons Learned

- **Make getting immunized a priority.** Everyone is busy, and priorities vary. It is important to promote that immunizations are an important facet of preventive healthcare. In recognizing this, it is necessary to make getting immunized simple and rewarding when possible.
- **Collaboration is key.** Enlisting the assistance of relevant parties is necessary. Bringing everyone to the table to work out how to best carry out the initiative allows for buy-in. Listening to your partners ensures a greater chance of success.
- **Being flexible and responsive is necessary for a successful initiative.** It's important to evaluate the campaign and to be open to making adjustments as necessary.

To learn more about the Immunization Action Plan Program, visit www.norwalkct.org/803/Immunization-Action-Plan-Program. To view a local news story about the program, visit <https://news.hamlethub.com/sono/life/2509-adolescent-immunization-campaign-a-win-win-win>.

No Shot, No School! New Iowa Vaccination Law Creates Unexpected Opportunities

Polk County Health Department (Des Moines, IA)

By Carmin Hutch, RN, Clinic Supervisor, and Susan Brooks, RN, Health Services Coordinator

The Challenge

In 2017, Iowa passed a new law to require all incoming 7th and 12th graders to have the meningococcal vaccination. The law was announced only 175 days before the start of the next school year, with 94% of all 12th graders and 96% of 7th graders in Polk County still needing the vaccination. School nurses were overwhelmed. Elected officials were receiving calls from concerned parents about the new law, which added “teeth” – students who had no dose of meningitis vaccine could not start school nor participate in programs like sports or music.



The approach that many of Polk County’s nine public school districts were pleading for called for school-based clinics to vaccinate the 8,400 7th and 12th graders in need. We knew that Polk County Health Department lacked the labor capacity to staff such clinics. Moreover, we knew that we had little leverage to attract families to show up for vaccinations during the summer recess. For these reasons, we rejected the clinic idea as impracticable and out of principle for Polk County Health Department.

The Solution

In order to get that many children vaccinated, we would need many people to work together to motivate families and to administer the vaccinations. What we needed was a robust and committed partnership, and we believed this could be built by

engaging public health professionals, medical providers, schools, and families.

The plan was straightforward: we would perform the standard public health functions of convening conversations with stakeholders, developing a strategy to vaccinate within the allowable time, and then evaluating and communicating results.

Beginning in March 2017, health department staff visited with every single school district to show them a plan we formulated for the remainder of the school year and the summer. The plan included a communication schedule, a list of people of influence (e.g., teachers and coaches) who could help carry informal messages, a description of a partnership among major health systems for a formal *No Shot, No School!* media campaign, and a target goal to have 50 percent of the vaccinations completed by the end of the current school year and avoid having any kids excluded from class on Day 1 of the upcoming year—all without special large-scale meningitis vaccination clinics.

The targets were intended both to set achievable goals and to inspire confidence.

The Results

We achieved our 50% vaccination goal by school’s end in 2017. Only an estimated 575 kids were identified as “excluded” on the first day of the 2017-2018 school year, with the majority of those being vaccinated on the first day and the rest over the next two days. This was made possible with commitments secured from the largest medical providers in the community to hold open 2,500 medical appointments over the first three days of school for excluded students.

How we hit the target, and how we showed incremental progress, was through consistent communication with the public, as well as school

nurses and providers. The public media campaign, which can be viewed at <https://www.youtube.com/watch?v=j-kQDtufbO4>, ended up being used in schools and medical clinics, on billboards, on TV ads, and featured in news stories across the state, which expanded the reach. Additionally, we requested weekly school nurse updates on the number of completed vaccinations by school. An important motivational component was that each school (and each administrator, as well) could see its progress alongside those of its peers. We also continually stressed the message to school nurses to send the students to their “family doctor.” In addition to getting kids vaccinated, we were reinforcing the important community value of having a medical home.

Now in the campaign’s third year, we continue to make annual site visits to school districts and medical providers to cement our relationships and reinforce an early visit to family doctors.

The Lessons Learned

- **It can take a public health team to build a larger community-wide team!** Our nurses, planning staff, educator, and director played critical roles in building and strengthening relationships with school nurses and administrators, as well as doctors and medical staff. We leveraged those relationships to solve problems within systems as they arose, based on trust we had established over time.



- **Collect data and share project successes.** By gathering careful information, we could reassure both school and medical partners that the campaign was working and that the necessary capacity existed to continue to send students back to their doctor, instead of to a vaccination clinic.
- **Careful tending of both message and method has resulted in more students being vaccinated sooner, instead of waiting until the last minute.** In the second year of the campaign, we reduced by more than half the number of kids excluded at the start of school and saw a corresponding decrease in legal, also known as “provisional,” delays in vaccinations.

Reaching A Vulnerable Population by Reducing Barriers to Immunization Access

Dakota County Public Health (West St. Paul, MN)

By Anna Terry, RN,
Public Health Nurse,
Disease Prevention and Control

The Challenge

Dakota County, MN does not have any federally qualified health centers or community clinics and has few low-cost clinics, which can make it difficult for people without insurance to access preventative care. Our public health department is the only underinsured and uninsured adult vaccine (UUAV) provider in the county, and we know many people are not aware of, or are unable to access, the immunization clinics held at our county offices. Many employers offer onsite flu shots to make it easy for their employees to get protection and pharmacies are successful at administering flu shots because it eliminates an extra trip to the clinic, but what about those who don't have insurance or an employer to make it easy? To address this concern, our health department wanted to identify a mechanism to reach individuals with limited or no access to preventative care and make receiving vaccinations easier.

The Solution

By hosting immunization clinics in the community, we aimed to make it easier for uninsured adults and people experiencing homelessness to get care. Dakota County Public Health nurses reached out to two local homeless shelters and three different food shelves to see if they would be willing to host immunization clinics for flu and other vaccines. Together with these partners, dates and times for the clinics were determined based on client traffic patterns. We created flyers announcing clinic dates in multiple languages for each agency to distribute.

From September to December 2018, Dakota County hosted a total of 15 off-site community clinics at the five partner locations. At each site, two nurses administered vaccinations and a community health worker helped with registration and recruitment. In addition to flu shots, we also offered Tdap, Hepatitis A and B, Shingrix, and MMR vaccines for adults without insurance. We utilized the state

immunization registry to determine vaccination status and provide recommended immunizations.

The Results

Our community outreach efforts allowed us to reach 97 people that may not have been vaccinated otherwise. Nurses administered a total of 191 vaccinations. Most of the clients seen were uninsured and unaware of the county immunization clinic services. After the initial visit at the community clinic, several clients returned to our county clinic to finish their vaccine series. Now, our community is better protected against the flu and other vaccine-preventable diseases. One client immediately took a picture of the Band-Aid on his arm after his flu shot to send to his mom; "She'll be so proud," he said, beaming. The community partners were happy to offer additional services to their clients, so plans to continue this partnership for next flu season are already underway.

The Lessons Learned

- **Removing some of the common barriers to getting a flu shot, such as time, transportation, and insurance status, allows us to serve people in our community who often have a hard time accessing care.** We found some clients responded better to a personal invitation. Having the nurses and community health worker ask clients if they'd like a flu shot while they were waiting for their food shelf appointment was effective. Finding a private space in each location was a challenge, but we could usually use an open office or conference room. This work could be replicated in other counties who face similar challenges to preventive care.
- **It's important to meet your community where they are.** Seeking partner locations where your target population already gathers may look different in each area, but the concept and impact are the same.

Leveraging Partnerships to Establish Immunization as an Integral Component of Comprehensive Adolescent Health

Lake Region District Health Unit – Ramsey County (Devils Lake, ND)

By Annette Groves, RN Public Health Nurse, Director of Nursing, and Lori Stevenson, LPN, Family Planning Nurse & Educator

The Challenge

Lake Region District Health Unit (LRDHU) is a four-county district health unit comprised of Benson, Eddy, Pierce, and Ramsey Counties. LRDHU serves a predominantly rural community located in north central North Dakota. Lake Region's 2016 Community Health Needs Assessment revealed that, according to county health rankings data, population health outcomes for the region lag behind the state average, and there was a significant need to improve health behaviors, access to clinical care, social and economic factors, and the physical environment. In addition to addressing these social determinants of health, LRDHU has also identified a need to specifically address comprehensive adolescent health including poverty, injection drug use, disproportionately high sexually transmitted infection rates, and immunization coverage.

In effort to address immunization coverage among adolescents throughout the state, school immunization requirements were increased during the 2018-2019 school year. Though meningococcal vaccine (MCV4) and tetanus, diphtheria, and acellular pertussis vaccine (Tdap) were required for school entry since the 2008-2009 year, both vaccines have only been required for entry into the seventh grade. Starting with the 2018-2019 school year, one dose of MCV4 was required for all students eighth through tenth grade, if missed at seventh grade, and one dose of Tdap was required for all students eighth through twelfth grade, if missed at seventh grade. Currently, the state has no school entry requirement for human papillomavirus (HPV) vaccine.

Much of the Lake Region area is rural, and access to medical providers and schools is often a challenge. In some communities there are few medical providers and schools can be as far as 90 miles away. Though schools can serve as an ideal and convenient location to reach adolescents, planning, implementing, and staffing school immunization clinics can pose a challenge.

The Solution

To collaboratively address comprehensive adolescent health and facilitate students' ability to meet the newly implemented school immunization requirements, the LRHDU – Ramsey County Immunization Clinic partnered with the health district's Family Planning Clinic in 2017. Collectively, we implemented an outreach effort targeted to addressing adolescent and young adult health.

As a component of our adolescent health efforts, we have extended our partnership to include the local middle and high schools. Eighth-grade students in the county have an open invitation to visit the Family Planning Clinic Office where they receive information about the clinic's services, suicide prevention, tobacco and vaping, and important adolescent vaccines, such as HPV. If students are not up-to-date on any vaccines, such as HPV or MCV4, the Immunization Clinic staff are on-hand to administer those needed vaccines. To alleviate some of the barriers' students encounter in accessing medical services and information, health department staff also conduct regularly scheduled clinics and in-class presentations, including in the 10th, 11th, and 12th grade "Resource and Life Skills" classes.



This outreach provides an important opportunity for students to discuss questions and concerns on adolescent health topics, while also giving them the opportunity to meet the newly implemented vaccine requirements and hear the importance of receiving the HPV vaccine. The schools have been instrumental in the success and functioning of the program and are tasked with distributing and collecting consent forms for students to participate in the initiative.

The Results

Addressing adolescent health and immunization throughout LRDHU's four counties has been successful in increasing adolescent students' compliance with newly implemented school immunization requirements and increasing uptake of the HPV vaccine. Though HPV is not a school-required vaccine, the North Dakota Immunization Information System shows a significant increase, as much as 8%, in HPV vaccination series completion since the four counties implemented school-based education and clinic activities.



Specifically, in Ramsey County schools, we have provided education and/or vaccines to approximately 225 students during school presentations and clinics, and more than 110 students have visited the Family Planning Clinic since the inception of the program. The percent of adolescents up-to-date with the complete 1:1:2 (Tdap, MCV4, Varicella) vaccine series has also increased from 89.2% to 99% and currently the HPV up-to-date rate has increased among males and females to 86.8% and 89.5% respectively.

Relationships with the local schools have also been strengthened due to this partnership. Both parties rely on each other to ensure that students are compliant with school immunization requirements and that their parents and guardians are aware of the importance of on-time and complete vaccination.

The Lessons Learned

- **When targeting adolescents, partnering with other public health programs that provide adolescent health services can increase the success of immunization programs.** Given that our immunization program had a need to both ensure compliance with new school vaccine requirements for adolescents and increase HPV vaccination coverage, it was a natural fit to partner with another internal health department program that had a similar focus and challenges. We were able to jointly leverage our expertise and resources to successfully reach this population.
- **Maintaining successful relationships with local schools can facilitate increasing immunization coverage and provide convenient access to immunizations.** Since much of Lake Region is rural, there are significant barriers (i.e., access, time, and transportation) to individuals obtaining medical care, including immunizations. Identifying and collaborating with champions within the schools has been instrumental to this initiative and to providing adolescents with health information and services in a convenient, safe environment. Take every opportunity to get to know local education officials and partner with schools!
- **Although the conversation can start in the classroom, it won't end there.** Among today's youth, messages are communicated quickly, either by word of mouth, electronically, or other social media. We want them talking and sharing, but also using accurate and appropriate information. Educating one adolescent about the importance of adolescent health, including immunizations, means that several others, including parents/guardians, will receive that important message as well.

Schools Who Are Wise Immunize: Curbing Flu with School-Based Flu Clinics

By Kathleen L. Percacciolo BSN, RN,
Supervising Public Health Nurse

Putnam County Department of Health (Brewster, NY)

The Challenge

The entire population of a community can suffer the impact of a bad flu season. Influenza can result in lost work time, lost school time, and an increase in the overall burden on our healthcare system. Plus, influenza can lead to secondary infections such as pneumonia, increased risk of hospitalization, and even death.

Schools present the perfect environment for a life-size petri dish because kids share everything – their snacks, their coughs, their tissues, and their germs. Schools are in session for 180 days, approximately 36 weeks (5 days per week), and more than twenty of those weeks are during flu season! According to Dr. Ann Schuchat of the CDC, “Studies have shown that healthy children bear a significant burden from influenza disease and are at increased risk of needing influenza-related medical care. In addition, there is evidence showing that reducing influenza transmission among children has the potential to reduce influenza among their household contacts and within the community.”⁴

Thus, we recognized that increasing seasonal flu vaccination rates among school-aged children would directly impact the health of the surrounding community.

*...kids share everything –
their snacks, their coughs, their tissues,
and their germs!*

The Solution

In order to get that many children vaccinated, we would need many people to work together to motivate families and to administer the vaccinations. To decrease the incidence of influenza in the school population, the Putnam County Department of Health (PCDOH) and Putnam County school districts initiated a partnership in 2010 to provide free flu vaccination to all school-age children attending

school in the county. There are over 16,000 school-aged children in Putnam County. The Putnam County Legislature provides the program funding.

We developed an action plan in partnership with each school district. Participation was sought prior to program implementation through education of the school administration, meetings with school supervisors and school nurses, Boards of Education, and Parent/Teacher Organizations (PTOs). Older students are invited, when available, to assist at clinics to increase their knowledge about flu prevention and help allay the fears of the younger students. This also helps students to fulfill their community service requirement. At the beginning of this program, information and consent forms were sent home with students via backpack. We worked closely with the schools to secure dates by the end of the previous school year and clinic dates are now posted on the school calendar. Consent forms and vaccine information statement (VIS) fact sheets are posted on the school websites.

This program allows PCDOH to repeatedly test and evaluate our ability to immunize school-aged



children during school hours, with prior informed consent by a parent or guardian, while increasing seasonal flu vaccination rates. This is a valuable opportunity for the local department of health to gain entry into the schools during regular school hours, which enhances our working relationship with school administration and nurses and helps develop trusting relationships with the students.

The Results

Our school-based flu vaccination clinics were implemented in 2010 and have continued annually. During our first year, only two school districts (11 schools) participated, and we administered a total of 1,247 flu shots. Vaccines were offered to staff and students. Many of the school administrators and nurses responded that they did not want the children to associate going to school with getting a shot. They felt it would be too traumatic, especially not having their parents there, and chose not to participate. However, most parents expressed being thankful that they did not have to miss work time, and some even wished us good luck because their child gave them such a hard time when getting a shot!

By 2013, the fourth year of the program, all six school districts (20 schools in total) were on board, and we administered 2,226 flu vaccines. The children behaved beautifully and supported each other with words of encouragement, holding hands, and cheering each other on. Older siblings sometimes accompanied younger ones, and teachers let their students watch them get vaccinated. Additional education was provided to participants on flu prevention with incentives, which included magnets, stickers, pencils, posters, and coloring books. We also took the opportunity to educate middle school students on the importance of HPV vaccine.

Overall, this partnership enabled us to increase the reach of our vaccine education, strengthened the relationship between the schools and the health department, and, most importantly, greatly increased the number of school-aged children immunized against the flu.

The Lessons Learned

- **Utilize immunization information systems as a mechanism to track vaccines administered.** Vaccines administered in New York should be entered into the New York State Immunization Information System (NYSIIS). The system is easily accessible to vaccine providers, and are reliable sources to access a patient's vaccination history.
- **Support of our county government was vital for program implementation.** We do not have an immunization billing program in Putnam, but another way to replicate the program would be to waive the copay and bill insurance for the allowable fee.
- **School-based vaccination clinics improve the health of the community, provide the opportunity for children to be vaccinated without losing time from school, and help parents avoid losing time from work.** We need to work on increasing the number of students getting the seasonal flu shot, as we have seen bigger growth in the school-aged group. In looking at the number of school-aged children receiving the seasonal flu shot, per NYSIIS data, our school-based flu clinics account for approximately 20% of the total number vaccinated. Preventing flu decreases school absenteeism, thereby increasing education time for students. The presence of the local health department in the school improves working relationships with the school population and allows us to build rapport with the students and staff. They know who we are when a real emergency happens!

Taking the Sting Out of Vaccines with Fun Band-Aids

Langlade County Health Department (WI)

By Sheila Rine, Administrative Assistant

The Challenge

Low immunization coverage is an issue that impacts the entire Langlade County community. Increasing and maintaining optimal vaccination coverage is a priority for us, however vaccine hesitancy can be a significant barrier to achieving desired immunization rates.

Langlade County Health Department often sends letters home with every student located in our jurisdiction's elementary schools to provide information about the importance of vaccinations and explain that vaccines are one of history's most successful and cost-effective measures for the prevention of serious diseases and possible death.

But despite parents and guardians receiving information about the importance of vaccinating children of all ages, vaccine hesitancy remains a significant barrier to increasing immunization uptake – whether due to parental concerns or the child's own fear of, or discomfort with, getting a shot.

The Solution

To tackle children's fear as a potential reason for low uptake, the Langlade County Health Department partnered with the Langlade Immunization Coalition, county schools, and other stakeholders to do a fun band-aid campaign as part of larger activities to promote National Infant Immunization Week (NIIW).

As a part of the week's activities, the group implemented the "Fun Band-Aids" campaign, which encouraged students and families to donate kid-friendly band-aids as a means to 'take the sting out of vaccine.' The campaign's first year focused on elementary school students in kindergarten through sixth grade. Langlade County elementary schools were given letters to be sent home with all students re-enforcing the importance of immunization and informing them of the fact that low immunization coverage is an issue that impacts the entire community.

Parents were encouraged to take their children shopping for band-aids that would be attractive to children and donate them to their participating school as a means to encourage immunization and reduce fears associated with vaccines. To incentivize the

campaign, local stakeholder Culver's Restaurant agreed to donate an ice cream party to the school that brought in the most boxes of band-aids, and McDonald's donated individual ice cream sundae coupons to all students that participated.

The Results

A total of 354 boxes of band-aids were donated by students and their families, with the winning school donating 90 boxes. As a reward for their efforts, Spring Valley Elementary received a school-wide ice cream party and the "Fun Band-Aids" campaign was featured in a local newspaper. The boxes of band-aids were distributed to the participating schools, local general clinic, health center, hospital, and health department.

Four years later, we repeated the campaign, expanding the donations to also include Kleenex tissue boxes. We added Kleenex recognizing that the schools, as well as the local health department and provider clinics, go through a lot of tissues. That year, a total of 277 boxes of band-aids and 192 boxes of Kleenex were collected. Culver's Restaurant again donated ice cream to the winners, Pleasant View Elementary School.

As of 2018, 91.9% of all children enrolled in Langlade County children enrolled in school programs met state immunization requirements.

The Lessons Learned

- **Engage community stakeholders to increase the effectiveness and reach of your immunization efforts.** This was a fun community-wide effort that involved many local stakeholders and allowed local public health to serve as champions in the community.
- **Be creative in your outreach efforts to address vaccine hesitancy concerns.** This campaign highlighted the importance of immunizations and was a stepping stone to addressing vaccine hesitancy among children. The children enjoyed selecting fun boxes of band-aids, the ice cream was a bonus, and the fun-band aids alleviated some of the students fears and hesitation.

Protecting Grizzly Youth Academy Students from Flu & More

San Luis Obispo County Public Health Department (CA)

By Christine Gaiger, PHN, Supervising Public Health Nurse, Communicable Disease Manager

The Challenge

In 2009, San Luis Obispo County's first cluster of H1N1 cases occurred at the Grizzly Youth Academy, a military-style public high school. Run in partnership by the California National Guard and the Grizzly Challenge Charter School, Grizzly Youth Academy is a public high school for students who have dropped out or are at risk of dropping out from traditional high schools across Central California. It's located at a National Guard camp outside San Luis Obispo city.

Two cohorts of students, ranging in age from 16 to 18 years, complete the academy each year. While many students have health coverage through Medi-Cal, some have had limited access to healthcare prior to their arrival. Logistics also make it difficult for the Academy to transport students to pharmacies or health clinics in town for vaccines or services such as tuberculosis (TB) tests. Students live in dormitories at the Academy, increasing the potential for illnesses like influenza to spread quickly.

The Solution

Following the cluster of H1N1 cases at the Academy in 2009, the Public Health Department and the Grizzly Youth Academy developed an ongoing relationship to support student health and prevent outbreaks of illness. Each year, Public Health Department nurses either visit the Academy to administer flu shots to students or provide vaccines that can be administered by staff at an on-site clinic. When San Luis Obispo County experienced a pertussis outbreak in 2010, the Public Health Department visited the Academy to provide Tdap vaccines. In time, the Department and the Academy naturally found more ways to collaborate. For example, when students had community volunteer opportunities that required a TB test, the Public Health Department worked with the Academy to test and read tests for all the students at once. When the Department's emergency preparedness team had an opportunity to participate in a statewide exercise related to anthrax response, the Grizzly Youth Academy took part in the drill and engaged students in emergency preparedness.



The Results

Our collaborative partnership serves approximately 150-200 students per cohort. With two cohorts per year, we've been able to reach 300-400 students annually, providing health education and services to a population whose health access is otherwise limited. Through our activities, the department has developed an ongoing relationship with the Grizzly Youth Academy to continue supporting students in staying healthy from flu (and much more) during a critical time in their growth and development.

The Lessons Learned

- **Explore various partnership opportunities, including non-traditional partners.** This collaboration developed naturally out of mutual interests and goals: both the Public Health Department and the Grizzly Youth Academy want to support students' health and prevent infectious disease.
- **Partnerships should be motivating and practical.** The Public Health Department works to make it practical and efficient for the Grizzly Youth Academy to provide vaccines and other supports as needed for students. The Health Department has been adaptable in recognizing the logistical constraints the Academy faces.

Power of Partnerships: Collaborating to Ensure Access to Immunization Records into Adulthood

Bell County Public Health District (TX)

By Kathy Carlisle, LVN,
Immunization Coordinator

The Challenge

Bell County Public Health District is located in an area where several colleges and a large university operate. Our county is home to many uninsured and transient citizens, and many individuals in the community are starting college later in life as non-traditional students. Given that many of these adult students received immunizations years ago, many of them are faced with the dilemma of not having access to immunization records for college entry.

As a Vaccines for Children (VFC) and Adult Safety Net (ASN) Immunization Program provider, Bell County Public Health District is well-positioned to help uninsured individuals access immunizations, including those that are required for college entry or for specific college courses. To better assist these students, we have partnered with the local colleges over the last few years to help get their uninsured students immunized for their chosen career paths, but have been unable to get immunization records for them.

Texas is considered an “opt-in” state, which means that, although childhood immunization records are maintained in the state immunization information

system, ImmTrac, individuals must specifically provide consent as an adult to have their immunization records remain in the state registry. By consenting to remain in the registry, individuals will have access to their immunization histories throughout adulthood.

Due to students’ inability to access their immunization records, the health department has had to repeat vaccines that were likely administered previously for school entry during childhood or adolescence. This can be considered a significant waste of public health resources and possibly undermines the public’s perception of vaccine efficacy and safety.

The Solution

Though partnering with the local colleges has been impactful, we wanted to identify a mechanism to speak with students before they entered the workforce or college. After several different interventions, we identified a local school district, Belton Independent School District, which provided a gateway for the health department to reach their graduating classes during “Project Celebration.”

“Project Celebration” is a graduation activity where participating students can celebrate in a safe location and environment. A large percentage of the graduating seniors participate, so, with the school’s planning committee, we provided Adult ImmTrac consent forms to be signed by the senior students who were 18 or older. For seniors under the age of 18, we provided instructions to complete the consent form and return it to the local health department when the student turned 18. The high school we partnered with has approximately 500 seniors each year. Through “Project Celebration,” we received approximately 200 consents from one graduating class. This confirmed that high school was definitely the place to effect the most change, but we still wanted to reach more students.



With the consent of the school principal and counselors, our local health department staff increased our reach by providing ImmTrac information to seniors during school assemblies. Recognizing that not every student attended the assemblies or interacted with the principal or counselor before graduation, we also wanted to identify a location where all seniors pass through before graduation. The solution was to partner with the school nurses because all graduating seniors are required to visit the nurse to graduate.

We were lucky to have the high school's nurse team believe in the benefits of ImmTrac, and they agreed to have each senior review the ImmTrac adult consent form. If the students ages 18 and older chose to participate, the nurse would collect the form and attach a copy of the student's immunization record. Students under the age of 18 were asked to review, complete, and return the form to the local health department when they turned 18. At the conclusion of the school year, the school nurse returned the collected forms to the local health department office, where our staff would consent these young adults into the registry and enter their immunization histories.

The Results

Now that we have established a relationship in this particular school district, the school nurses continue to work with us each year. We receive about 300 consents each year directly from the nurses. We only receive about 25 consents from students that have turned 18 after the school year ends, so we are still looking for a better way to reach those students. We have found one other small school district willing to work with us in this way.

We have seen a decrease in college students needing to repeat childhood immunizations due to no documentation of immunizations. We are continuing to partner with the local colleges to sign up their students for ImmTrac. This is especially beneficial to people going into the medical field, who find they need documentation of vaccination throughout their working life.

The Lessons Learned

- **Don't give up, even when it takes multiple attempts to find the right intervention.** We have learned through this process that the solution that appears to be the perfect answer often turns out not to be; but never give up. It took us numerous attempts to address this problem, and we are still adjusting the intervention to reach more people.
- **Consider ways to extend the intervention beyond the original scope.** Traditionally, as VFC providers, we focus on small children; however, there is a need to continue to aid these same children as they enter adulthood. We continue to search for additional interested school districts and also continue to partner with the local colleges to enroll their students in ImmTrac.

Breaking Down Barriers: Increasing Immunization in a Hard-to-Reach Community

St. Mary's County Health Department (MD)

By Terry Gray Prochnow, RN, MSN, MBA, Director of Public Health Preparedness and Response, and Patricia Hall, RN, BSN, Infectious Disease Program Supervisor

The Challenge

In 2013, the St. Mary's County (MD) pertussis rate was 3.0 (per 100,000) and continued to rise to an alarming rate of 6.4. After further investigation, it was determined that the majority of the pertussis cases resided within our county's large Amish community. With an estimated population of over 1,400, the Amish are active members of the community and provide many goods and services to the residents of Southern Maryland.

To them, someone is healthy if they "look well, maintain a good appetite, and can function physically," while an unhealthy person is "unable to perform daily work and contribute to their family and community." The Amish believe that childhood diseases, such as chicken pox and pertussis, provide natural herd and lifelong immunity. The community traditionally uses holistic and alternative medicine and, as devout Christians, believes in the power of prayer for healing.

Historically, the Amish do not vaccinate their children, but some members of the community have begun to do so. While cases typically go unreported, a recent case of pertussis within the community resulted in lifelong health complications for the patient, triggering concern. In addition, an annual school immunization survey submitted to Amish Elders indicated high percentages of non- or under-vaccinated children. These recent events, as well as a measles outbreak in 2014, have resulted in members of the community approaching St. Mary's County Health Department (SMCHD) for preventive services.

While limited, community members may use the larger healthcare system under certain circumstances after consultation and approval by Amish Elders. But, similar to the general population, Amish people who pursue healthcare services face



barriers, including culture and beliefs, language and communication, health literacy, lack of insurance, high costs, and access to care. As such, SMCHD sought to cut out some of those barriers by bringing clinical services directly to the community.

The Solution

To reduce barriers to access and expand outreach to underserved populations within the county, SMCHD developed a mobile, home-based clinic model for implementation in the Amish community. The primary objective of the clinic was to provide community-wide immunizations for infants, children, and adults in a manner that was sensitive to the cultural identity of the Amish community and delivered at no cost.

To achieve this goal, SMCHD has worked collaboratively with an Amish holistic health worker and Amish Elders, as well as contracted with a local pediatrician, who is well-known among the Amish community, to staff the mobile clinic. Local health department staff are charged with operating the clinic, maintaining records, and completing immunization record books. All supplies, including vaccines, as well as on-going follow up and health

promotion services, are also provided by SMCHD at no cost to the Amish community. Throughout the year, follow-up clinics have been scheduled and are held on a semi-annual basis.

The Results

All community partners worked diligently on assisting the Amish through cultural acceptance, collaboration, communication, and trust. Barriers have been broken down, and the clinic remains thriving and successful. The Mobile Amish Immunization program assisted in addressing the needs of an identified population, promoted and fostered collaboration, ensured effectiveness of use of resources, and provided a strong framework to build other programs to be just as successful and sustainable.

Additionally, there is a local pediatrician in the county that has gained the Amish community's trust. The doctor and his staff are committed to collaborating with SMCHD to conduct the Amish Mobile Clinic. We have established a written contract that is renewed every two years regarding the Amish Mobile Clinic.

The Lessons Learned

- Scheduling should accommodate large-scale Amish community activities such as "market days" and wedding season.
- Clinics must be prepared to handle vaccination of adults in addition to children.
- Processes that reduce paperwork should be implemented to facilitate clinic efficiency and communication.
- Adapting the electronic medical record (EMR) system will help maximize effectiveness of prevention and wellness services in mobile-clinic settings.
- Advanced communication - via letters, in this case - to the Amish community every March and October helps to plan for the date that the clinic can be held.

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Appendix A: Infographic: An Assessment of Immunization Programs at Local Health Departments



IMMUNIZATION PROGRAMS At Local Health Departments

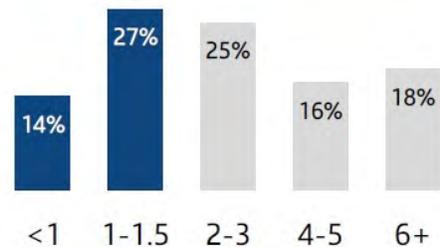
The 2017 National Assessment of Local Health Department (LHD) Immunization (IZ) Programs explored LHD efforts to provide immunization services and control vaccine-preventable diseases (VPDs) in their jurisdictions. The assessment was distributed to 2,238 LHDs, and NACCHO received responses from 517 (23%) participants. These findings present the most current view of immunization program activities and services at LHDs across the country.

INFRASTRUCTURE

LHD Respondent Demographics

-  **52% SMALL LHDs**
(serve fewer than 50,000 people)
-  **38% MEDIUM LHDs**
(serve 50,000 to 499,999 people)
-  **10% LARGE LHDs**
(serve 500,000 or more people)

41% of respondents have fewer than 2 FTEs performing IZ activities. Since 2016, 25% reported a decrease in staffing, while only 7% reported an increase.



ACTIVITIES

Top Five IZ Program Activities

-  **76%** host IZ-specific clinics
-  **74%** conduct education & outreach
-  **69%** collaborate internally
-  **67%** provide IZ for children & adolescents
-  **67%** conduct communication campaigns

Top Five IZ Program Barriers

-  **56%** vaccine hesitancy
-  **44%** insufficient staffing
-  **37%** lack of vaccine education & confidence
-  **27%** lack of funding
-  **24%** increase in VFC requirements

BILLING

LHD IZ Program Billing Capability



56% private insurance



80% public payers

Some respondents reported an inability to bill public (20%) or private (43%) payers for IZ services or counseling which may limit vaccine availability for the community.

PARTNERSHIPS

Top Five Types of Partners



34%
schools



30%
other health
departments



29%
individual
healthcare providers



27%
healthcare
clinics



22%
hospitals

RECOMMENDATIONS TO SUPPORT LHD IZ PROGRAMS



Many LHDs are operating at a diminished capacity due to budget pressures on federal, state, and local governments. Advocating for the provision of funding to sustain immunization program staffing, activities, and services is essential.



LHDs are leaders in disease prevention through immunization administration, promotion, and outreach. Providing capacity building assistance through evidence-based practices for LHDs to address challenges and barriers is vital in ensuring that they can best serve their communities.



LHDs vaccinate people in their communities, providing one of the most successful and effective services to prevent disease and death. Addressing billing challenges that threaten their ability to provide this service is critical.



LHDs cultivate many types of partnerships within their communities. Further exploration of new and non-traditional partnerships will be essential to meeting community health needs.



LHDs are instrumental in monitoring administered vaccines and identify IIS as a priority. Improving and strengthening data systems to enhance vaccine delivery and surveillance is key within immunization programs.