

Louisiana Expands Access to Flu Vaccines and Creates Robust Response Capability Through Emergency Preparedness and Immunization Collaboration

Louisiana Department of Health and Hospitals is expanding access to flu and other vaccines through pharmacies, allowing for real-time information on vaccine use across communities and flexible response systems to health emergencies.

The success of Louisiana's flu prevention and emergency preparedness efforts are building upon each other to expand flu vaccine access across the state. Many elements play a key role in Louisiana's success, including updated legislation based on a 2009 H1N1 public health executive order, immunization registry advancements, and partnerships with pharmacists. Prior to 2009, annual pharmacist-provided flu vaccines were given to tens of thousands of people across the state. These vaccinations required individual physician orders and were rarely captured in the Louisiana Immunization Network for Kids Statewide (LINKS), the state's lifetime immunization registry. Today, pharmacists administer over 200,000 flu vaccines per year, with both the number and types of vaccine expected to increase. Pharmacists now must report vaccinations to LINKS, allowing Louisiana to safely expand vaccine access for state residents and offer public health access to near real-time data on how vaccines are used. In addition, this work has advanced tools, partnerships, systems, and cultural practices that will help Louisiana better respond to future health emergencies. Integration of immunization program routine operations with emergency preparedness and emergency response efforts and resources is helping lead to this success.

- ACT 287 provides Louisiana residents with better access to flu vaccine.
- Certified pharmacist vaccinators are now practicing at 232 pharmacy locations across Louisiana.
- Vaccine data feeding into the immunization registry provides near real time visualization on flu vaccine use.

Steps Taken:

- During H1N1, Louisiana's state health officer issued an executive order allowing pharmacists, designated by the board of pharmacy as certified vaccinators, to provide flu vaccine (seasonal and H1N1) to anyone seven years of age or older. Vaccine administered under this order had to be reported to LINKS, and any adverse events were reported through the Vaccine Adverse Events Reporting System (VAERS).
- Before the 2009 H1N1 pandemic, a special LINKS mass immunization module, flexible enough to track a variety of countermeasures, was developed with preparedness funding. Using the module, 2009 H1N1 vaccination data were captured and loaded directly into LINKS to improve the tracking and reporting capability of the full registry.
- Building on that success and working with a variety of partners (State Board of Pharmacy, Association of Retail Chain Pharmacies, Board of Medical Examiners, Association of Independent Pharmacies, Louisiana State Medical Society, Louisiana State Board of Nursing, and medical

professional associations), Louisiana's legislature successfully modified state code through [Act 287](#) allowing pharmacists to administer flu vaccine without a physician order and requiring that vaccination data be reported to the state registry. Subsequent modifications added pneumococcal, shingles, and Tdap vaccines.

- Registry advancements allowed flu administration in pharmacies to be reported through automatic upload of pharmacy billing data directly into LINKS. Verification studies show improved data accuracy from use of vaccine billing data.
- During H1N1, the registry's mass immunization module was upgraded using H1N1 pandemic funding. The module is now maintained through the immunization program as a part of the registry and can be easily activated to capture data on almost any countermeasure that might be administered through pharmacies in an emergency.
- A registry dashboard view of data received is now available in the state's emergency operations center and provides countermeasure situational awareness during events.
- The registry also has an ongoing communications tool that links the state health agency and pharmacies across Louisiana.

Results:

- Prior to H1N1, Louisiana pharmacists worked under a physician order vaccinating only 10,000-20,000 persons annually. At this time, the flu vaccine was the only vaccine administered in pharmacies.
- Through a 2009 state executive order, trained pharmacists rapidly joined the H1N1 vaccination effort to vaccinate 112,000 residents against seasonal and H1N1 flu and had no identified adverse events.
- With data entered into LINKS, vaccine use in target populations could be visualized and speed of provider supply use could be tracked. Pharmacists were among the most frequent users of vaccine.
- Over 200,000 pharmacist-delivered vaccinations a year are now being reported to LINKS.
- LINKS currently has 232 pharmacy sites (some with multiple certified pharmacists registered as providers), with many others signing up each week.
- Given this level of reporting, data on flu vaccine use across communities can be viewed more fully than ever before, specifically by target group and location.
- Due to an increasing number of adults in the registry, adult reminder-recall may soon be an option.
- Early data suggest an approximate five percent increase in vaccination of young, healthy adults in recent years. While many factors influence flu vaccination rates, pharmacy vaccinators likely play some role in this increase.

Lessons Learned:

- Practices from routine operations can be used to bolster emergency response.
- Strengthening routine operations can effectively advance disaster response capability.
- Pharmacy based vaccination can be timely, safe, and convenient. In Louisiana, all family members, including children seven years of age or older, can now be vaccinated against

influenza during the same visit. Advance appointments are not needed and pharmacies are widely accessible in terms of location and hours.

- There are hopes to incorporate additional vaccines in the years to come. Incremental changes with regular reporting of results have proven to be an effective strategy.
- Assuring pharmacy based vaccination data is captured in immunization registries enables exchange of data with primary care providers. It also allows public health to better visualize how flu vaccine is used across communities, which is important because the majority of flu vaccines are administered in the private sector. The dashboard tool in LINKS is beneficial during regular flu season and during an emergency.
- Pharmacy vaccine data reported to the registry helps populate immunization registries with adult immunization data.
- Collaboration between emergency preparedness and response programs and immunization programs can result in advancements to both seasonal and pandemic preparedness.

Such efforts advance pandemic preparedness in many ways:

- A network of trained and experienced pharmacists, certified in delivering immunizations, is maintained active and available.
- Electronic linkages between pharmacists and the immunization registry are pre-established, enabling countermeasure administration and use to be tracked in near real-time across a community.
- Residents become familiar with use of pharmacies as a vaccine access point.
- Increasing the number of individuals who routinely receive seasonal flu vaccine is expected to enhance uptake of flu vaccine in a pandemic.¹
- Trust is built and working relationships between public health and pharmacies are maintained in advance of an event. This enhances effectiveness as well as flexibility of disaster response systems.

Tools You Can Use:

Louisiana Board of Pharmacy Orders to Administer Medications:

<http://www.pharmacy.la.gov/assets/docs/pharmacist/521MedicationAdministration.pdf>

Louisiana Immunization Network for Kids Statewide (LINKS):

<https://linksweb.oph.dhh.louisiana.gov/linksweb/main.jsp>

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¹ Maurer J, Harris KM, Parker A, *et al.* "Does receipt of seasonal influenza vaccine predict intention to receive novel H1N1 vaccine: evidence from a nationally representative survey of U.S. adults." *Vaccine*. 2009. 27(42):5732–5734. Available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2771376/>. Accessed 5-5-2014.