Meeting the Needs of At-Risk Populations During the 2009 H1N1 Pandemic Response

A Look at Key Strategies, Successes and Challenges

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The Center for Infectious Disease Research and Policy (CIDRAP)

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CONTENTS

Introduction				
Key Themes				
	1.	Strong Leadership	6	
	2.	Effective Partnerships	7	
	3.	Adaptable Approaches to Funding	9	
	4.	Well-Planned Communications	11	
	5.	Partner-Oriented Vaccination Strategies	13	
Promising Practices				
	Oregon			
	Arizona			
	Florida			
	Mi	nnesota	17	
Acknowledgments				
Projec	Project Staff			

Introduction

The arrival of an influenza pandemic in April 2009 made outreach and care for under-resourced people throughout the United States an urgent public health priority. At-risk populations—individuals who are most at risk for severe social, economic and health-related consequences from a pandemic—needed information, messages they could trust and key services to receive antivirals and vaccine. State and local health agencies initially responded to an emergency of unknown severity and magnitude, at a time when staffing levels were often frozen and funding gaps were growing. This context influenced response. Public health agencies responded to the needs of at-risk populations in a variety of new and innovative ways. Other solutions, though not new, yielded valuable reminders and lessons that merit attention. The leadership, flexibility and creativity of many public health agencies should be noted and congratulated; the resulting strategies can be applied to everyday work and response to future public health emergencies.

The Center for Infectious Disease Research and Policy (CIDRAP), on behalf of the Association of State and Territorial Health Officials (ASTHO), contacted public health staff in several states to learn about key H1N1 response activities for at-risk populations. This review was a follow-up activity to the development of national guidance on this topic in 2008. For this report, CIDRAP staff conducted site visits with public health staff at the Arizona Department of Health Services, the Minnesota Department of Health, and the Oregon Public Health Division to explore strategies and tactics that helped public health agencies better respond to the needs of the under-resourced. In addition, phone interviews were conducted with staff at the Florida Department of Health and the Texas Department of State Health Services. Individuals interviewed were often senior staff in the areas of emergency preparedness, epidemiology and communications. Furthermore, during some site visits, CIDRAP staff contacted local health department staff, tribal leaders and community-based organizations to hear their perspectives on what strengthened partnerships and how to improve response. A full listing of individuals who participated in the project is provided at the end of this report.

Drawing on data collected during more than 30 of these key informant interviews, discussions and presentations, project staff analyzed the information for exceptional findings, key themes, lessons learned and areas that deserve further review and improvement. What follows is the distillation of that inquiry. The experiences described by public health staff and partners during H1N1 pandemic responses supported the detailed recommendations and strategies outlined in the national guidance document.

Lessons learned generally fell within the following themes:

- 1. **Strong leadership.** The H1N1 pandemic helped to illustrate the value of clear leadership and direction during a public health emergency.
- 2. **Effective partnerships**. There is an art to finding and keeping the right partners during periods of fluctuations in funding and priorities. The pandemic strengthened some existing partnerships and led to the creation of many new relationships that may be beneficial in the future.

- 3. Adaptable approaches to funding. Funding is an ongoing constraint in public health. Agencies demonstrated some strong tactics to surmount funding challenges, and they identified additional ways the federal government could improve the processes and produce more effective and efficient programming at the state and local level.
- 4. **Well-planned communications.** Reaching at-risk populations with the right message at the right time is a multilayered challenge that involves quality control, timely translation, appropriate spokespeople, understanding of highly segmented audiences, and effective and efficient coordination of information.
- 5. **Partner-oriented vaccination strategies**. Many health officials credit a focus on specific partners and populations with their successes, such as rethinking allocation strategies for tribes and finding safe havens for vaccine clinics.

The importance of building trust is an overarching theme and is integral part of response for public health emergencies. Lessons learned in each topic underscore the importance of embodying the credibility and respectfulness required to foster trust.

In many cases, the lessons had been learned before the pandemic or represent incremental shifts in practice. What distinguishes much of what is highlighted in the following pages are not the concepts themselves, but rather the exemplary ways that agencies demonstrated leadership, commitment and confidence to act effectively on the concepts and enhance agency response. This post-pandemic moment provides a valuable window of time to understand and internalize what responses worked and to identify and resolve the remaining gaps. Additionally, these lessons and promising practices have relevance for everyday public health activities and other public health emergencies. As one public health official said, "H1N1 was less a disaster than a training event to test the entire system." The hope is what was learned in this event can help public health agencies meet the challenge of the next test, whatever that may be.

Key Themes

The following section covers (1) lessons learned, including examples from the field and (2) any areas for improvement that were identified.

1. Strong Leadership

The H1N1 pandemic helped to illustrate the value of clear leadership and direction during a public health emergency. "An agency's ability to be nimble in a situation like this is huge," said a veteran state public health preparedness employee.

Lessons Learned

A public health emergency demands an "across-the-board" response.

- The Arizona Department of Economic Security (DES) cross-trained employees so those with similar skills could assume integral service functions when others were absent. The DES prioritized key services and cross-trained employees who had similar job functions. For instance, many administrative personnel were cross-trained to work in DES-affiliated agencies such as Child Protective Services, because they had already passed the necessary background checks.
- Health agency employees noted that creating a division of labor based on expertise bolstered the efficiency of response in Minnesota. For example, communications staff members at the Minnesota Department of Health were free to develop content for messages, while one communications employee took responsibility for reaching out to limited-English populations to determine their needs and preferred methods for receiving those messages. A diffuse model for outreach to at-risk populations may make sense in many places because, as a refugee outreach coordinator said, "The at-risk community is so large that no one can possibly reach everyone."

Administrative strategies can bolster response.

- From its extensive population data, the Florida Department of Health consolidated key data and provided the information to county health agencies to help them analyze their at-risk populations and estimate vaccine needs.
- The Minnesota Department of Health prioritized approval processes for H1N1 communications materials to shorten the standard administrative approvals timeframe.
- The Minnesota Department of Health also funds a position for outreach to refugee communities. It has been held by the same person for more than four years, and she provided deep institutional knowledge on outreach during the pandemic. "She knows who is who in all of those groups. That is a powerful position," a senior public health employee noted.

Incident command is shifting organizational culture and helping people see their response roles more clearly.

• The Minnesota Department of Health has incorporated incident command into planning for events ranging from pandemic influenza and flooding to a nursing strike. Health agency leaders made it clear that although people might have their regular jobs, they must also perform incident command roles during the influenza pandemic. This clarity in direction and priorities was a vast improvement over previous response efforts, a senior employee noted.

2. Effective Partnerships

There is an art to finding and sustaining the right partners during periods of fluctuations in funding and priorities. The pandemic strengthened some existing partnerships and led to the creation of many new relationships that should be beneficial in the future. Examples of strong partnerships occurred between state health agencies and tribal nations, schools and school systems, pharmacy chains, dentists and community-based organizations.

Lessons Learned

Building and maintaining partnerships is an ongoing process. Ideally, partnerships should begin before the emergency and outlive it.

- Some staff of community-based organizations expressed concern about their organizations' roles in emergencies. The community will be at [our] door in an emergency, so it is important for state and county public health to recognize this reality and work proactively with such agencies.
- It is important to realize that relationship development is an ongoing process that does not follow the timelines of emergencies. One emergency preparedness expert described having a difficult time at an initial meeting with community leaders and partners that eventually led to a number of helpful conversations over the following summer. By fall 2009, those partners were fully engaged in response. He noted, "Partnership building isn't easy, but it's wonderful. Those partnerships must be maintained. They can't be allowed to stagnate.'
- One agency has strong partnerships with tribes built largely through the efforts of one dedicated employee. That employee is facilitating networking between her colleagues and tribal contacts to increase the number of relationships with tribes and reinforce that there are many roles at the agency that can partner well with tribes.
- The Florida Department of Health had successful partnerships with K to 12 schools, university and community colleges, the education department and the board of governors. As a result, a work group was formed that allowed the entire educational system to be looped into the H1N1

response. Later, a subgroup of student health center directors was created to provide vaccinerelated information for colleges and universities.

- An unusual multipartner project between Multnomah County Health Department and service providers in Oregon led to the creation of an access-to-care project for very low-income and homeless people. The project included (1) a paid contract with a 2-1-1 nurse triage phone line so callers could seek medical advice, (2) donated clinic care visits to reduce the burden on hospital emergency departments, and (3) the development of a Google app to track where patients were actually seen.
- Staff from the Arizona Department of Health Services provided educational materials and infection control guidelines at Women, Infants & Children (WIC) outreach clinics, developed contingency plans to ensure that food would be available for families in need and held vaccination clinics at WIC centers.
- One community-based organization project director described her approach to outreach into communities as: "Come humble and meek and small."

Important just-in-time relationships and activities will also evolve in emergencies as vulnerability or outreach needs change.

- Children, Adults, and Families and Seniors and People with Disabilities—two units within the Oregon Department of Human Services—had tried for years to forge a stronger bond with other public health units with little or no success, until the pandemic hit. The pandemic brought those agencies together for targeted response and prompted an ongoing dialogue about strengthening the partnership.
- To help put partners on the same page, the Minnesota Department of Health hosted a statewide community meeting and training sessions for more than 100 representatives of agencies and media outlets serving immigrant and refugee communities. Sessions were teleconferenced to eight locations statewide.
- The Arizona Department of Health Services used Public Health Emergency Response funds to hire a temporary employee to educate state board of pharmacy members on vaccination protocols. Pharmacies coordinated redistribution of unused vaccine and helped with school vaccination clinics. Dental providers were integrated into vaccination efforts later but will be involved more in future responses.
- The Florida Department of Health worked with the Department of Juvenile Justice to develop a system that would minimize the number of times staff needed to obtain consent for vaccinations from a parent or guardian who might not be in the same city as the child.

Areas for Improvement

Shrinking the gulf between public health and social services agencies.

Some states have robust coordination mechanisms between public health and social services. For example, the Arizona Department of Economic Security (DES) employs an emergency coordinator. DES requires affiliated agencies to have pandemic preparedness plans as part of their contracts, and every DES-affiliated agency has a pandemic influenza coordinator. Other states described the success of such interagency partnerships as depending on individuals who work well together. For example, the Oregon Public Health Division organized a work group of people from county health agencies and the Children, Adults, and Families division of the Department of Human Services to conduct a needs assessment and further strengthen their collaboration.

Reaching seniors.

Many interviewees described seniors of a variety of racial, ethnic and socioeconomic backgrounds as being hard to reach.

Clarifying the role of home health workers.

Some interviewees reported a need for further guidance for home health workers during a pandemic, particularly related to personal protective equipment and vaccine. For example, more than 12,000 home health workers in Oregon are vital to the health and safety of at-risk populations.

3. Adaptable Approaches to Funding

Adequate and timely receipt of federal funding and expeditious procurement and acquisition of goods and services during a public health emergency is an ongoing area of concern. Some agencies have shared successes in overcoming or working around these administrative challenges. Changes at the federal level could also improve the processes and lead to more effective and efficient programming at the state and local level.

Lessons Learned

Involve finance and administration personnel in planning and response early. Response partners should understand the possibilities and limitations of various funding sources.

- The Florida Department of Health developed a specific competitive request for bids so counties could use it to contract with different staffing agencies without having to negotiate individual contracts. This streamlined the staffing-up process for counties, which was especially helpful for running efficient vaccination clinics.
- The 2009 H1N1 pandemic prompted the Minnesota Department of Health to identify what kind of emergency purchasing authority it needed and how to obtain it ahead of time.

- Planners from the Fort Mojave Indian Reservation reported their success in contracting with the Arizona Department of Health Services to coordinate statewide tribal preparedness as a result of the tribe's clear understanding of the state's hiring and contracting practices and funding restrictions as well as an in-depth understanding of the differing tribal structures.
- The Oregon Public Health Division reported great benefit in providing mini grants. It funded six organizations representing a diverse group of racial and ethnic minorities.

Health officials have found creative ways to successfully leverage available funds and resources in other public health and safety areas.

- Funds from the American Recovery and Reinvestment Act (ARRA) were used to support a collaborative partnership between the Oregon Department of Human Services and the Oregon Public Health Division on a tobacco-control integration project. The partnership allowed the state's preparedness team to reach out to the 600,000 low-income residents of the state who are part of the human services database.
- The Oregon Public Health Division Immunization Program oversees the distribution and allocation of vaccines as well as the state's resources from the Strategic National Stockpile. In the summer of 2009, Oregon used ARRA funds to support prophylaxis planning around H1N1 that included the task of prioritizing at-risk groups (state youth authority, state corrections and state hospitals). The local health jurisdictions chose how to allocate resources while the state served in the role of technical adviser.
- A national program for school safety was eliminated in 2009 budget cuts, so the Arizona Department of Health Services issued competitive grants for 14 schools to build their safety and preparedness infrastructures. Administration of funding also allowed Arizona to build stronger relationships with individual schools.

Areas for Improvement

Enhancing flexibility

Each phase of PHER funding required counties in one state to send new purchase orders and new budgets to the state to review for contract reimbursement approval, resulting in additional administrative burden and time spent with 52 additional contracts for the state to review. More streamlined federal mechanisms should be put in place to award and prioritize supplemental emergency funding.

Streamlining third-party insurance processes

In one state, counties were frustrated with limitations placed on third-party insurance billing, especially for school vaccination clinics.

4. Well-Planned Communications

Reaching at-risk populations with the right message at the right time is a multilayered challenge that involves quality control; timely translation; appropriate spokespeople; understanding of highly segmented audiences; and effective, efficient coordination of information to partners and the public.

Lessons Learned

Harmonizing communications processes and needs across public health agencies and community-based organizations is a persistent challenge. Understanding the different messaging priorities of communications partners may reduce friction.

- The Arizona Department of Health Services organized a Joint Information System to formalize information flows within three main areas (clinical guidance and health alerts, media information, and advertising and social marketing). Early identification of the different communication types, roles and responsibilities expedited the approval process.
- Communications staff at the Arizona Department of Health Services struggled with how to frame messages about vaccine when supplies were variable and many who might hear the messages did not fall into the priority groups to receive vaccine. They settled on this approach: "Get vaccinated when your turn comes up," and they focused subsequent and localized messaging on whose turn it was at a given time.
- The Minnesota Department of Health created a specialized translation grid that helped the agency refine the priority of language groups needing translated materials, thus saving money and time. In designing the grid, public health planners considered factors that may determine the need for translation of a particular language, including community population estimates, English literacy, recent arrival status, and literacy in first languages.
- Many agencies and community-based organizations reported *repackaging* or changing messages to be more relevant to their local audiences. All agreed that the less reworking of messages, the faster they can be shared. However, community-based organizations' outreach staff cautioned that partners who insist that messages must be translated or disseminated verbatim might be doing a disservice to individual audiences with specific communication needs.
- The Texas Department of State Health Services held statewide conference calls weekly for 1,000 to 1,500 participants whose fields ranged from emergency management and public health to direct medical care and education.

Leveraging partners' outreach channels is an efficient communications approach.

- The Oregon Public Health Division sent mailings to licensed and unlicensed childcare providers, parents, and Head Start providers and parents statewide, reaching more than 70,000 households and organizations. "It was the most satisfying experience because all partners were so enthusiastic about the collaboration and people put in a lot of extra time. We have since used the system to alert childcare providers and parents about [other] potential dangers," a public health employee said.
- The Arizona Department of Health Services collaborated with the American Congress of Obstetricians and Gynecologists (ACOG), the Arizona Partnership for Immunization and providers to issue important information about H1N1 vaccination for pregnant women. Health department staff located obstetricians by consulting the membership of medical boards and professional organizations in the state. Obstetricians were added to Arizona's Health Alert Network, and they became a part of public health response activities via the receipt of regular updates.
- The Minnesota Department of Health was approached by a local community-based organization specializing in outreach and communication to the Deaf and hearing-impaired communities, which resulted in the organization creating a number of outreach materials on H1N1 for its core audience.
- Many states mentioned the value of tapping into their partners' existing communications structures, from listservs to special-needs registries.

Areas for Improvement

Maximizing the efficiency of translation.

A great deal of time and money could be saved if states and localities had a way to share translated materials efficiently and effectively. Key informants repeatedly expressed a need for communications materials that are produced quickly, offer flexibility in branding and wording and are publicly available (no copyright issues). There appears to be widespread demand for a real-time clearinghouse of communications materials with federally approved messages. The Immunization Action Coalition is a national resource that translated vaccine information statements into four languages. It was cited as a great model. One person said staff lobbied CDC to take leadership on translating so not every state was spending money to translate materials. CDC was eager to do it and had people assigned, but some of those materials were not available until July 2010.

Defining and enumerating those at risk.

The ASTHO national planning guidance for state, territorial, tribal and local health departments defines at-risk populations as those most at risk of severe consequences from a pandemic, including societal, economic and health-related effects. Many people interviewed for this project defined the concept of "at-risk populations" in different ways. Although there was a great deal of overlap, it is clear there is no one-size-fits-all definition yet.

Assuming a definition is developed, the next step—counting those at risk to enable effective planning and response—is also daunting. In some cases, simply enumerating the total population for which a public health agency has responsibility is challenging even before determining the subset of the population considered at risk. For instance, in Arizona, planners estimate that at any moment 10 percent to 30 percent of its population cannot be considered permanent residents, yet the state does not have funding to identify these members of its population. Another estimate the state has used: up to 400,000 people in Arizona are undocumented. The Fort Mohave Indian Reservation similarly finds that although only about 800 residents live on tribal lands, its medical center, which accepts patients from across the country, has 1,500 patients on record at any given time.

5. Partner-Oriented Vaccination Strategies

Many health officials credit a focus on partners and populations with their successes, from rethinking allocation strategies for tribes to finding safe havens for vaccine clinics.

Lessons Learned

Nontraditional partnerships, even within health agencies, can reap benefits.

- In Arizona, the Maricopa County Department of Public Health worked with the Mexican Consulate to hold vaccination clinics on the consulate's grounds, which fostered a sense of safety among documented and undocumented individuals.
- The Oregon Public Health Division piloted a program with Meals on Wheels partners to promote H1N1 vaccination to homebound people. Those agreeing to vaccination were reached through a prearrangement with local emergency medical technicians.
- The Florida Department of Health collaborated successfully with HIV/AIDS programs because the agency has extensive resources and systems for community outreach.
- The Texas Department of State Health Services launched a thorough initiative to establish partnerships with pharmacies, which led to more than 1,300 independent and chain pharmacy locations prepared to distribute antiviral drugs.

Plan for nuanced vaccine scenarios.

• Two states said that as a result of the mismatch between vaccine demand and availability, they have shifted their planning to fit four scenarios:

Scenario	Low Disease	High Disease
	Consequence	Consequence

High Vaccine Supply	1	2
Low Vaccine Supply	3	4

- Tribal members represent 4 percent to 5 percent of Arizona's population, but the state opted to allocate 10 percent of vaccine straight off the top of daily state vaccine allocations due to early H1N1 epidemiology reviews. Those doses were divided equally between Indian Health Service facilities and counties for vaccinating tribal members. This was a new arrangement for the state, and it continued until providers said tribal members had been served. Remaining doses were then distributed back to the counties.
- A large inpatient hospital in Pinal County, Arizona, serves clients who receive services from the DES and are unable to leave the campus. DES worked closely with the county health agency to adjust the priority group system and provide residents with vaccine from the county allocation due to unique logistical considerations.

Promising Practices

In addition to lessons learned, CIDRAP project staff collected a number of potential promising practices for online sharing through the ASTHO/CIDRAP Public Health Practices Web site (www.PublicHealthPractices.org). The following candidate practices are currently under review:

Oregon

Health Agency Response Activities: Partnerships, Vaccine Distribution and Communications

- The Oregon Public Health Division (ORPHD) trained college students to administer vaccine and to conduct vulnerable populations outreach for the under-resourced.
- ORPHD developed a mitigation menu of disease countermeasure options for isolation, quarantine, social distancing, closing facilities, personal protective equipment, vaccination and antivirals.
- ORPHD created the following preparedness resources for at-risk populations: "Ready Book,
- ' a step-by-step preparedness guide for seniors and people with disabilities; "Creating a Disaster Plan for Your Group Home or Adult Foster Home," a planning template for group living facilities; and the "Family Child Care & Child Care Center Emergency Planning Workbook".
- ORPHD developed a Memorandum of Agreement—Alternate Facility Emergency Transfer Agreement between Long-Term Care Facilities—to enable transfer of residents from group living facilities during emergencies.
- ORPHD disseminated H1N1 Outreach and Prevention for Vulnerable Populations grants to community-based organizations.
- The Northwest Oregon Health Preparedness Organization conducted an Access to Influenza Care project and follow-up report.

County Health Agencies: Community Partnerships to Serve At-Risk Populations

 Multnomah County Health Department held an emergency management exercise and discussion for people with disabilities and first responders.

Arizona

Health Agency Response Activities: Partnerships, Vaccine Distribution and Communications The Arizona Department of Health Services built strong relationships with organizations that serve pregnant women (eg. American Congress of Obstetricians and Gynecologists, Arizona Partnership for Immunization, and several Maricopa County providers) by developing and updating a list of OB/GYN offices, disseminating information via medical and nursing boards and using its robust Health Alert Network.

- Arizona Department of Health Services built relationships with pharmacies and dental offices to give them guidance on H1N1 vaccine, register them as vaccine providers and coordinate redistribution of unused vaccine.
- Arizona Department of Health Services worked closely with local resettlement agencies, clinics and other health partners to provide H1N1 information to refugee communities.
- An Arizona Department of Health Services and Department of Education intergovernmental service agreement allowed them to develop an eight-week curriculum in math and language arts for educating children during extended school closures.
- A school nurse consortium developed a program to monitor flu-like illness in 350 out of 1,900 total schools.

- Arizona Department of Health Services developed a new vaccine distribution arrangement, based on epidemiologic information, allocating 10 percent of vaccine for Native Americans.
- Arizona Department of Health Services sent postcards to parents of children with neurological disorders to remind them to get their children vaccinated and let them know how many doses would be required, worked with physicians seeing children with neurological disorders to register the physicians as vaccine providers, and developed a new working relationship with Children's Rehabilitative Services to communicate about the vaccine.
- Arizona Department of Health Services conducted outreach to WIC clinics/centers, including
 providing educational materials and infection control guidelines, doing contingency planning to
 ensure that food would be available for families in need and holding vaccination clinics.

Collaboration with Tribal Partners: Preparedness and Response Activities

- Fort Mojave Indian Reservation developed a pandemic flu plan, including a special needs plan, with the Colorado River Service Unit. A 2010 mass vaccination plan established small points for dispensing (POD) sites through an agreement with emergency medical services personnel who were trained as vaccinators.
- Arizona Department of Health Services worked with Fort Mojave to establish a tribal liaison position with the goal of promoting tribal preparedness among all Arizona tribes and communities using Fort Mojave's plan as an example.
- The formation of the Arizona Tribal Executive Committee allows tribes to collaborate with counties and the state to make more informed decisions during emergencies. Issues the committee addressed included providing care for an influx of tribal people from the reservation, moving to upfront funding for federal grants, and using a gap analysis to identify regional and county partners.
- Fort Mojave tribe developed the following preparedness materials: Tribal Public Health Emergency and Preparedness Response Plan (December 2005); Pandemic Influenza Phase II School Closing Tabletop Exercise and Evaluation; Influenza Pandemic Response Plan (with Mass Vaccination Plan added in November 2009); Mass Fatality Plan with cultural considerations; Mass Sheltering Plan; and Arizona Tribal Public Health Emergency Preparedness Program Strategic Plan Fiscal Year 2010–2013.
- Several tribes have held points of dispensing drills and school closure exercises.

County Health Agencies: Community Partnerships to Serve At-Risk Populations

- Maricopa County and International Rescue Committee conducted a survey regarding vaccination beliefs via community brokers, and the agencies worked with Mollen Immunization Clinics to establish two vaccination clinics for insured refugees.
- Maricopa County worked intensively with Asian Pacific Community in Action for a year to develop a community preparedness plan and call-down system.
- Maricopa County worked with the Mexican Consulate to hold H1N1 vaccination onsite clinics after noting that some Mexican nationals were wary of county sites.
- Maricopa County contracted flu response activities (including an assessment plan and clinic implementation plan) with Area Agency on Aging, Asian Pacific Community in Action, Center for African American Health, Concilio Latino de Salud, and International Rescue Committee in 2010-2011.
- In October 2010, Pima County Library collaborated with a local urgent care provider to offer information about and the administration of the H1N1 vaccine at a health fair specifically dedicated for refugees.

Arizona Department of Economic Security: H1N1 Response Activities

- The Arizona Department of Economic Security (DES) requires affiliated agencies to have pandemic preparedness plans and pandemic influenza coordinators as part of their contracts. These include human resources plans that prioritize services and cross-train employees, especially employees in Child and Adult Protective Services.
- DES conducted a tabletop exercise with Child and Adult Protective Services employees to train abuse hotline center employees to fill each other's roles during a pandemic.
- DES amended its contracts with adult community centers to emphasize their direct responsibility for H1N1 preparedness activities.
- The Tucson Child Protective Services office worked with judges to conduct hearings by phone during H1N1; its supervisors appeared for the phone hearings, while caseworkers conducted fieldwork.
- DES worked with an inpatient hospital and the Pinal County Division of Public Health to adjust the priority group system and provide hospital residents with vaccine from the county allocation. Much of the success of this practice was due to coordination between DES and Arizona Department of Health Services directors.

Phoenix Area Indian Health Service: Tribal Responses to H1N1

- Phoenix Area Indian Health Service held weekly conference calls with tribes to disseminate information, make plans for personal protective equipment provision across hospitals, and allow tribes input regarding desired numbers of vaccine doses.
- Phoenix Area Indian Health Service collaborated with La Paz County to allocate first doses to Native Americans and redistribute unused doses to the county.
- Navajo Nation coordination of vaccine distribution with New Mexico and Arizona (the reservation is located in both states, and the Navajo point of dispensing is located in New Mexico).
- The Navajo Nation's Head Start program partnered with the Hopi reservation to hold a mass vaccination drill.

Florida

 The Florida Department of Health developed an arrangement with the Florida Department of Juvenile Justice system to minimize the number of times parental consent was needed for vaccine.

Minnesota

- A language translation grid was designed to help planners refine priority language groups for materials to be translated.
- An innovative H1N1 communication campaign was developed through a new partnership between Emergency and Community Health Outreach; Minnesota Commission of Deaf, DeafBlind, and Hard of Hearing Minnesotans; Minnesota Department of Health; and the Minnesota Department of Education.

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