The ability of the United States to respond to a public health emergency was recently put to the test with the H1N1 influenza pandemic. Within five months of federal vaccine investment, public health immunization and emergency preparedness programs worked together to successfully vaccinate 80 million people; more than 27% of the population. This massive expansion of vaccination capacity in such a short period of time demonstrates the strength of our nation’s immunization system, our ability to respond to a public health emergency and the role of collaboration in responding to a public health threat.

Lessons learned from the H1N1 response can guide future emergency response preparation. Many state, city and territorial immunization programs and emergency preparedness programs established working relationships and conducted joint drills and planning exercises prior to H1N1, improving efficiency, management and resource sharing during the H1N1 vaccination campaign. Others faced challenges with collaboration and communication, perhaps because their funding and staffing structure were stretched thin and did not allow for joint activities. The key to prepare for the next pandemic event is maintaining and improving collaborations cultivated during the H1N1 vaccination campaign.

“In Washington State, longstanding relationships rooted in planning drills and emergency response exercises paid off during our H1N1 response,” said Janna Bardi, MPH, program manager of the Washington State Immunization and CHILD Profile Office, who also serves as Chair of the Association of Immunization Managers. “Team members implemented our response plan and emergency preparedness funding was shared with the immunization program to hire additional staff to support the vaccine campaign. An incident command structure helped organize the response and assure coordination, communication and clear roles and responsibilities in decision making. Regular conference calls with our 35 autonomous local health jurisdictions and 29 tribes were critical to understanding the challenges across the state, supporting adjustments in our response and joint problem solving. Together, we made more than 2.8 million doses of H1N1 vaccine available in Washington and vaccinated 30% of the population”.

Preparing for the Next Pandemic
Immunization Program & Emergency Preparedness Program
Pandemic Preparedness Collaboration Principles
In order to enhance the success of future collaborations, the Association of Immunization Managers (AIM), representing the 64 federally funded state, territorial and large urban area immunization programs, recommends the following principles to guide communication and collaboration between immunization and emergency preparedness programs:

**Pre-Event Relationships**

Develop an understanding of each other’s program prior to an emergency event.

⇒ Educate each other on the structure of the program, funding sources, program requirements, decision making responsibility, reporting, goals, objectives and evaluation mechanisms, etc.
⇒ Prepare a budget for activities and systems important for managing an emergency event, such as immunization information systems
⇒ Maintain communication and relationships with key staff in each program
⇒ Conduct event simulation exercises and practice mass vaccination exercises with seasonal influenza vaccine

**Shared Roles**

Use common leaders to convene pre-event collaborative activities.

⇒ Encourage leadership that is above both programs to get involved to set agendas, keep both programs working together, show commitment of agency, etc.
⇒ Encourage public health preparedness directors to include immunization program staff in incident command center training and drills
⇒ Encourage immunization programs to engage public health preparedness leaders in routine activities so they have a better understanding of immunization programs

**Collaboration**

Look for ongoing collaborative opportunities.

⇒ Develop plans for joint activities and seek funding
⇒ Designate seats in the health operations center for immunization program staff
⇒ Jointly plan for and assure preparedness for influenza pandemics and other events requiring a vaccination response, including:
  ♦ developing or updating, exercising, and ensuring maintenance of plans for large-scale mass vaccination;
  ♦ identification and vaccination of critical infrastructure personnel, event and other priority groups; and
  ♦ working with new and existing partners, including those in the commercial sector, to increase demand for seasonal influenza vaccine to improve preparedness for an influenza pandemic including school-located vaccination where feasible

**Communication**

Maintain regular communication.

⇒ Convene frequent regular meetings
⇒ Share routine reports that are relevant to both programs
⇒ Establish and maintain contact lists and directories of key staff

**Technology**

Build and plan for information technology enhancements.

⇒ Enhance existing systems for full optimization instead of developing separate systems
⇒ Look for opportunities to enhance existing routine systems, such as immunization information systems, so they have the ability to adapt quickly in preparedness situations
⇒ Maintain and enhance existing immunization information systems to support communication between the health department and the provider community
⇒ Enhance immunization information systems to meet HL7 standards to ensure the integration and compatibility of all data systems
⇒ Improve relationships with insurance companies, hospitals and other provider data systems
⇒ Identify specific data needs for an emergency response, such as identifying high risk recipients, reporting adverse events, measuring vaccination coverage, etc. and develop a plan for meeting these data needs
⇒ Develop the capacity to bill insurance companies for routine vaccinations and consider including large scale roster billing for pandemic vaccines, antivirals and administration fees
⇒ Increase provider participation in existing immunization information systems to include non-traditional providers (e.g. pharmacies, OB-GYNs, hospitals) who would serve in both routine and pandemic vaccination scenarios
⇒ Explore funding opportunities to interface the immunization information systems with electronic medical records for real-time data exchange and bridge the immunization information systems with existing surveillance and billing systems

**Budget**

Establish a “budget-ready” response — plan for accepting/using funds from any source.

⇒ Prior to an emergency event, begin discussions about whether immunization program and emergency preparedness program funds and resources can be shared
⇒ Investigate how preparedness money can be spent prior to the event, specifically as it relates to the difference between funding streams
⇒ Include budgetary support in the planning process to build and maintain systems for managing an emergency event, such as immunization information systems
⇒ Create pandemic influenza plans that cover major areas and concepts, but leave flexibility to adapt to different disease scenarios, different vaccine supply and distribution plans and various vaccination priority strategies
⇒ Identify potential challenges to the program’s ability to rapidly increase staff and activities, such as hiring freezes, contract approvals, etc.
⇒ Establish a plan to rapidly increase capacity and accept/distribute federal funds (i.e. contract workers, use of coalitions, etc.)

“Ongoing investment in staff, drills, exercises and technology improvements is critical to future success,” said AIM Executive Director Claire Hannan. “Budget cuts have resulted in furloughs, hiring freezes and a shrinking public health workforce. But disease doesn’t respect fiscal or geographic boundaries. The next pandemic or disease outbreak is only a plane ride away. We must continue to cultivate relationships across agencies and invest in both immunization and emergency preparedness programs.”