# Changes Since H1N1: Perspectives from Immunization Managers in Our 2012 National Survey

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#### **Agenda**

- Emory PERRC overview
- IPM Survey
  - -Protocol

### **Agenda**

- -Selected Results
  - Changes since H1N1
    - -Policy and Infrastructure
    - -Relationships
    - -Immunization Registries (IIS)
- Discussion

#### What Is a PERRC?

• PERRC = Preparedness and Emergency Response Research Center

#### What Is a PERRC?

- · CDC funded nine PERRCs in the U.S.
  - -The intent of the program is to use the public health systems research approach to examine the organization, function, capacity, and performance of components in the public health system in preparing for and responding to all potential threats and hazards

#### What Is a PERRC?

- Emory's PERRC has four projects including this project which is called:
  - Immunization Systems and Public Health Preparedness

#### **Project Overview and Goals**

- Overview
  - Explore ways to enhance the U.S. immunization system to more effectively handle a disaster in which leveraging the immunization system may be useful

#### **Project Overview and Goals**

- Goals
  - Learn how immunization systems have responded to vaccine shortages
  - -Identify strategies for improving responses to vaccine shortages

### **Project Overview and Goals**

-Determine how insights from responses to these shortages could improve responses to shortages of vaccines or other pharmaceutical countermeasures during other public health crises, such as an influenza pandemic, a natural disaster, or a bioterrorist attack

### PERRC Immunization System Projects

- · Vaccine Provider Surveys
  - -Oregon and Louisiana 2009
  - -OB/GYN 2009
  - -Correctional Facilities 2010
  - -Washington 2010
  - -California 2011

### PERRC Immunization System Projects

- Immunization Program Manager Surveys
  - -2009, 2010, 2012
- MOMVAX
  - -2012 OB/GYN Randomized Controlled Trial in Georgia
    - Maternal Immunization

# 2012 Immunization Program Manager Survey

- IPM = Immunization Program Managers
- AIM = Association of Immunization
   Managers
- Survey developed through input from IPM focus group at CDC and the AIM research subcommittee

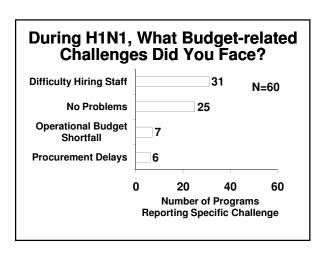
# 2012 Immunization Program Manager Survey

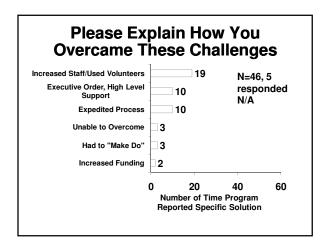
 Survey was mailed to 64 IPMs in US states / districts and territories (50 states, 6 cities, 8 territories) in June 2012

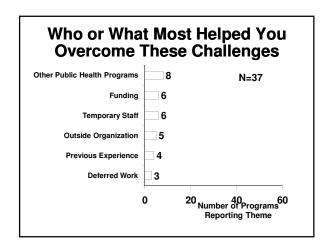
### 2012 Immunization Program Manager Survey

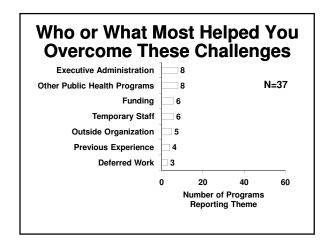
- 95% response rate
  - Covers roughly 99% of the United States population
  - -61 of 64 jurisdictions responded including all states and cities
  - Non-responders were 3 of the 8 outlying territories

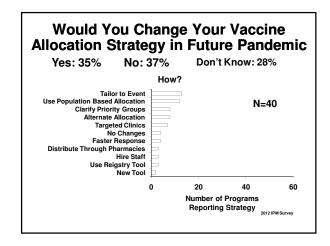
During or After the H1N1
Vaccination Campaign:
Post H1N1 Changes
to Policy and Infrastructure

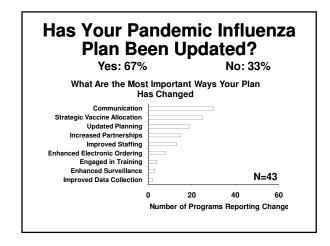


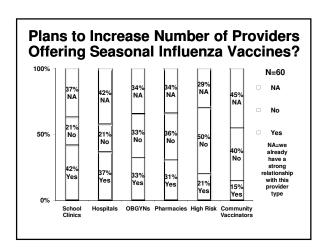


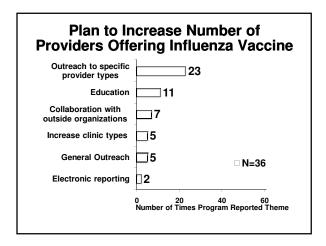


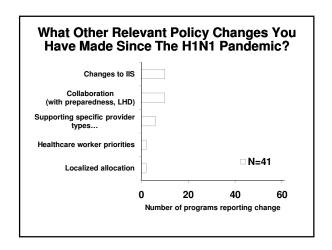




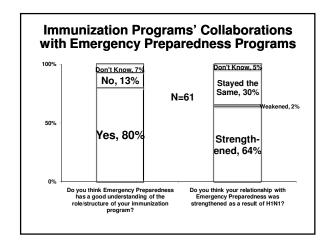


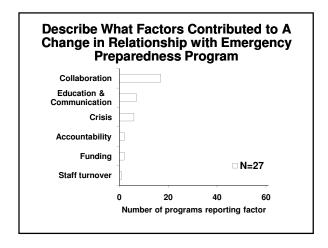


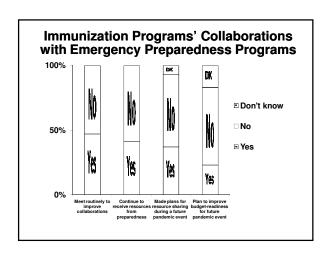


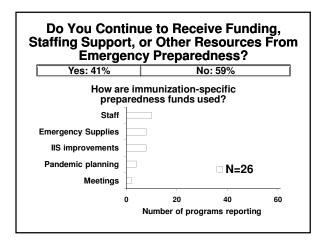


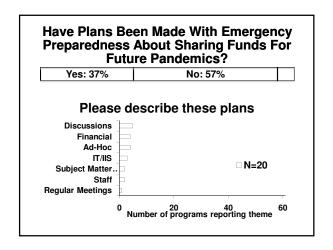
Post H1N1 Relationships: Immunization Programs and Emergency Preparedness Programs

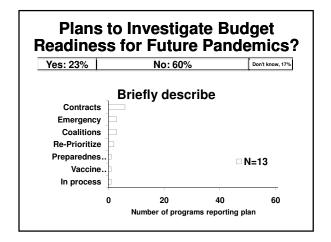


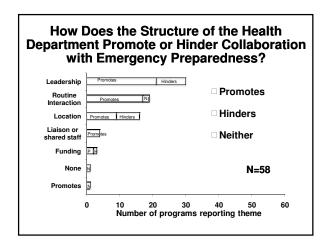


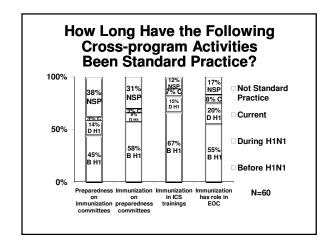


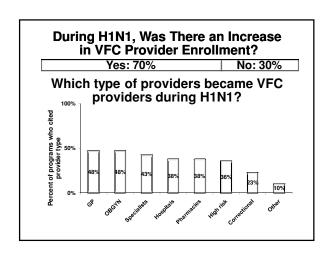


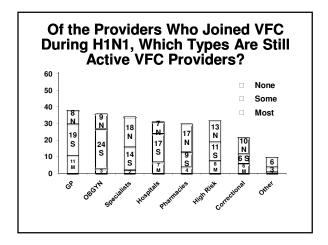


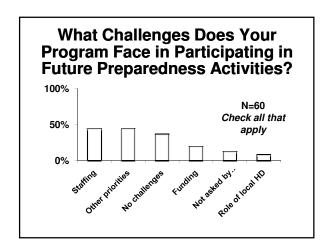


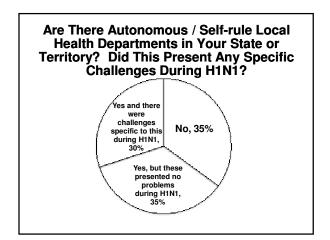


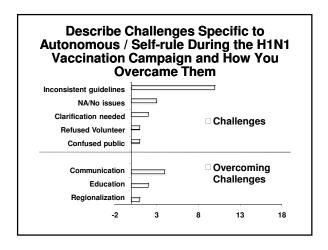


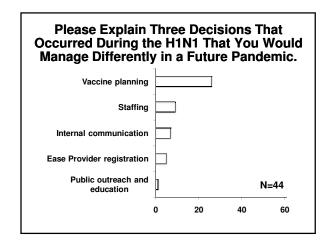












### **Examples of Lessons Learned**

- We allowed local health departments to manage the entire inventory allocated to their jurisdictions for the first 8-10 weeks
  - We would probably begin allocating vaccines to other providers sooner in a future pandemic

# Case Study: One State's Perspective

- Federally Qualified Health Center Pharmacies
- First Responders and Prophylaxis
- Standardization of Standing Delegation Orders

## Case Study: One State's Perspective

- Federally Qualified Health Center: Pharmacies
  - Clarify the role of FQHCs in the disaster response system, and specifically in the private pharmacy network with explicit notation that FQHCs:

### Case Study: One State's Perspective

- Serve a defined patient population who have an established doctor-patient relationship
- Provide pharmacy services to established patients only, not to the public at large

### Case Study: One State's Perspective

- Charge a sliding scale fee for physician visits
- · Are not a free clinic

## Case Study: One State's Perspective

- · First Responders and Prophylaxis
  - Educate first responders on when and under what circumstances prophylaxis will likely be offered and the limitations of antiviral medications as prophylaxis

### Case Study: One State's Perspective

 For example, antiviral prophylaxis availability during a future pandemic influenza event will depend on illness severity, likelihood of transmission, extent of patient contact, availability of stock, and other epidemiological factors

### Case Study: One State's Perspective

 Revise plans and operational guidelines to include language sensitive to the decision-making process involved in determining when and under what circumstances prophylaxis will be made available to first responders

## Case Study: One State's Perspective

 Identify opportunities to review plans and procedures as related to prophylaxis for other infectious disease or bioterrorism incidents

### Case Study: One State's Perspective

- Standardization of Standing Delegation Orders
  - -Standing delegation orders were needed to allow non-physician personnel within [our health department] greater scope of practice to support health and medical response activities

### Case Study: One State's Perspective

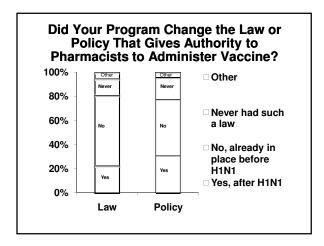
 We did not have all of the needed standardized standing delegation orders (SDO) available for personnel at the statewide level

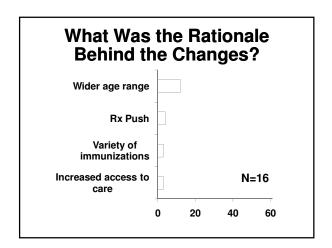
## Case Study: One State's Perspective

- However, during this event, some health service regions created the additional SDOs needed to allow nursing personnel to provide additional duties under the scope of practice of the regional medical director
  - This practice was effective

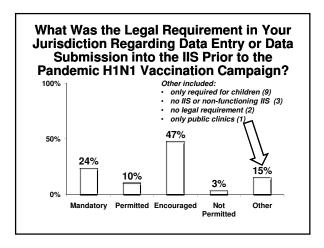
### Case Study: One State's Perspective

 Develop SDO templates at the DSHS statewide level for all medications in the SNS





Immunization Registries: Immunization Information Systems



During or After H1N1, Did Your Jurisdiction
Change the Law or Policy That Requires
Providers to Enter Data or Submit Data for
Direct Entry into the IIS?

| No, we have never had such a law or practice | No, ln place before H1N1 | No, ln place B1N1 | No, ln pla

### Please Describe Any Policy Changes Since H1N1

- Qualitative themes for this response
  - Require entry into registry:
    - · Within a given timeframe
    - When not required previously
    - Wider range of ages or more vaccines
    - Other than state or city IIS

### Please Describe Any Policy Changes Since H1N1

Already required, but accelerated efforts or new enforcements

-N=31

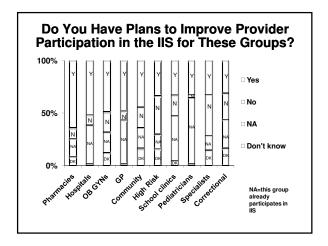
### What Challenges Did Providers Face As a Result of Changes?

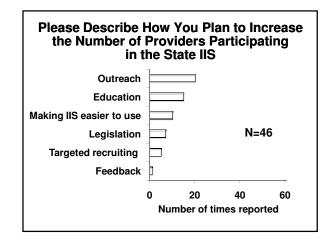
- · Qualitative themes for this response
  - Technical problems such as with entering data into IIS and issues with internet
  - Increased workload due to the need to increased need for reporting immunizations, education and training

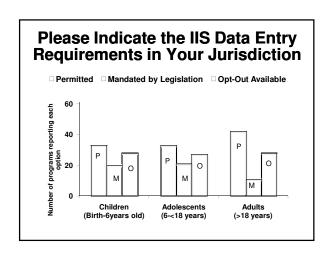
### What Challenges Did Providers Face As a Result of Changes?

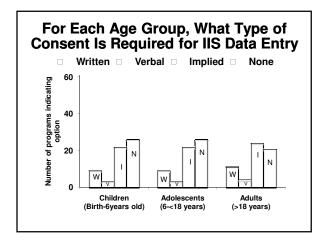
-General resistance

-N=27









#### What Functionality Changes Occurred to the IIS During or After H1N1

- Prior to H1N1, more than 80% of IISs were able to document eligibility
- More than 50% could track vaccine adverse events

#### What Functionality Changes Occurred to the IIS During or After H1N1

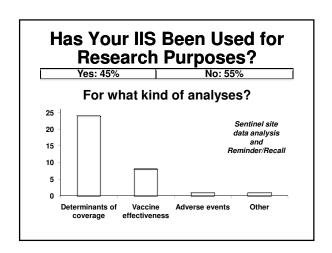
- Two main functions reported being added after H1N1
  - -Billing
  - -Vaccine Ordering

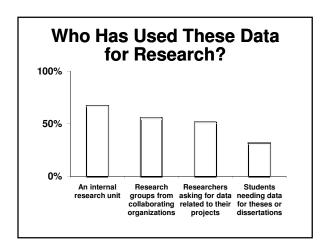
### **Using IIS for Research**

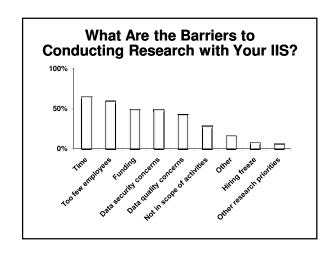
- For the purposes of the next few survey items, we defined the term "research" to mean:
  - An activity that involves a research plan and data analysis to answer a research question intended to contribute to generalizable knowledge

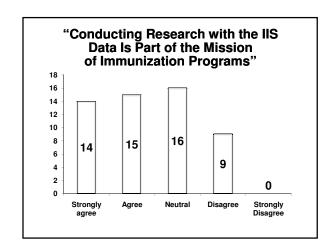
### **Using IIS for Research**

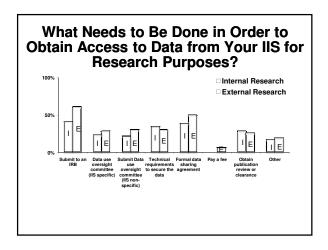
i.e., not only for internal program or evaluation purposes

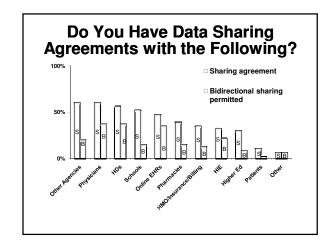


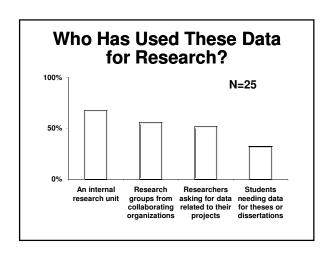












### **Criteria for Sharing?**

- · Registration in registry
- · Formal agreement, such as a MOU
- · Part of one departmental agency
- Authorized users

### **Criteria for Sharing?**

- · HL7 compatibility requirements
- Must be an immunization provider
- · Only have view access
- · Signed consent or authorization

- N=12

### **Barriers to Sharing?**

- State law
- Data sharing agreements / MOU requirements
- IT issues such as bi-directional interface and compatibility
- Patient consent / HIPAA rules
- · Data quality concerns

### **Barriers to Sharing?**

- · Not enough time
- · Not enough staff
- Competing priorities or lack of interest
- · Lengthy review process

-N=12

### **Discussion: Summary**

### **Policy Changes Since H1N1**

- Revised pandemic influenza plans focusing on
  - Establishing clear communicationIncreasing partnerships
  - -Improving data collection

#### **Policy Changes Since H1N1**

- Vaccine allocation strategies will likely
  - -Tailor strategy to event
    - Taking into account disease virulence, vaccine production rates and public demand
  - -Having targeted clinics
    - Through pharmacies or schools

#### Relationship Changes Since H1N1

- Budget and staff problems can be mitigated by:
  - Ensuring well defined roles during response
  - Experience collaborating during non-emergency times
- Improved collaboration with emergency preparedness

## Challenges: Areas for Improvement

- Leadership needed to increase capacity of existing immunization infrastructure
- A sustainable, flexible approach to funding public health also needed

#### **Barriers to Using IIS**

- Staff size and time were the two most cited barriers to conducting research with IIS data
  - -Funding and data security were also top barriers
- Though only 16% disagreed that conducting research was part of their mission, only 45% reported having done so

### **IIS Changes Since H1N1**

- Addition of billing and vaccine ordering / inventory management modules
- For some grantees, addition of laws or policies mandating reporting to IIS

#### **Future Plans for IIS**

- Grantees plan to increase participation levels in IIS among pharmacists, specialty providers (e.g. OBs), and hospitals through:
  - -Outreach
  - -Education
  - -Improvements to IIS

#### **Thank You!**

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#### **Thank You!**

The contents of this presentation are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention