H1N1 Vaccine Campaign
What worked?

Hurdles and Barriers

- Frayed pre-pandemic infrastructure for immunization
- Brief period to construct complex vaccine delivery systems based on readjusted assumptions
- Vaccine supply lagging pandemic curve
- Overestimated supply projections Oct-Dec 2009
- Delays in policies, funding, vaccine…
- Fragile vaccine ordering system (VACMAN)
- Limited data to make complex allocation decisions
- Recalls, field adjustments, mismatch in child dosing between seasonal and H1N1…

Accomplishments

- Rapid creation of systems that permitted
  - Registration of >14,000 providers in state
  - 16 million vaccine doses shipped
    - 80% private - 20% public
  - ~11 million doses given to date…
  - Immediate forwarding of orders once additional vaccine allocated to California
  - Supplemental distribution apparatus beyond limits of federal contract
  - Supplemental vaccine safety monitoring
  - Rapid communication with providers and partners

Successful strategies

- Strengthening old partnerships, forging new ones
  - Existing
    - Local health departments, CDC
    - Professional organizations
  - Newer
    - Chain Pharmacies
    - Obstetricians
- Communication, communication, communication

Successful strategies

- Multifunctional Website:
  - Registration of >14,000 vaccinators
  - Electronic signature of federal provider agreement
  - Information on storage, handling, administration, disease control
  - Placing one or multiple orders
  - Reporting doses administered
  - Listserv of vaccinators for updates, reminders, updates, etc.

Successful strategies

- Diverse network - private sector >80% of doses
- Accommodating smaller vaccinators
  - ~20% of providers requested <100 doses/formulation
- Smaller, briefer allocation phases
  - Permitted course corrections

Diverse delivery locales and models

- Building on established successes for seasonal vaccine
  - Schools
  - Community centers
  - Hospitals
  - Clinics
  - Drive-through
  - Retail
- Novel delivery sites included
  - Swap meets
  - Trailer parks
  - Mass transit stations
  - Farmworker and day laborer sites

Lessons Learned

- Pandemic immunization required
  - Majority of private sector delivery(>80%) AND Key increases in public sector delivery
  - Strong existing infrastructure AND Surge capacity
  - Shorter allocation windows to hedge risk and allow for adjustments

Lessons Learned

- Prior planning assumptions too narrow
  - Expect the unexpected
- Nimbleness, flexibility are key and require timely
  - Funding
  - IT capability
  - Expansion of staff
  - Contracting
  - Procurement
  - Communications

Recommendations

- Strengthen the existing infrastructure for delivering annual seasonal influenza vaccine
  - Private sector
    - Reimbursement
  - Public sector
    - Immunizers
    - Training
    - Mass clinic capacity, especially school-located delivery
    - Large and small providers
  - Support for IT systems, including immunization information systems benefits both sectors

Thank you for a job well done!

Extras

Recommendations

- Broaden planning assumptions for next pandemic
- Nimble pandemic response requires
  - Timely procedures for
    - policy decisions
    - vaccine delivery
    - funding, hiring, contracting, procurement
    - IT capability
  - Accurate estimates (confidence interval) of timing of supplies
- Expect the unexpected

Recommendations

- Update VACMAN vaccine ordering system
- DHHS should request or compel manufacturers to provide influenza vaccine customer data to assist with future allocations of seasonal and pandemic influenza vaccine during scarcity.
- To promote simpler vaccination policies, clinical trials of pandemic vaccines should
  - include all ages, pregnant women, chronically ill, even if beyond FDA-licensed age indication
  - be harmonized with seasonal influenza age groups
  - Include briefer intervals between multiple doses or seasonal influenza vaccine
  - Include co-administration of seasonal influenza vaccine
- Augment R&D funding of universal influenza vaccine and accelerated production technology