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!
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