

# Building and Supporting the ALERT Immunization Information System (ALERT IIS)

## The Oregon Experience

---

**Colorado Stakeholder Meeting**  
**October 10, 2013**

---

**Mary Beth Kurilo, MPH, MSW**  
**ALERT IIS Director**



OREGON IMMUNIZATION PROGRAM  
Oregon Public Health Division

# Overview of Session

- Welcome, Brief Background on Oregon's ALERT IIS
- The Evolving Landscape of IIS
- What's New for Oregon
- What's Still in the Queue
- Broader National Themes



# Oregon ALERT IIS: Data Overview

- ALERT began collecting data as a childhood registry in 1996
  - Modified legislation to become lifespan IIS in 2008
- Current data metrics:
  - 5 million+ patient records
  - 42 million+ immunization records
    - 237,755 imms added in July alone
  - 10,000+ public and private health care providers and school users
  - Percentage of population captured in ALERT:
    - ~98% ages 0-6
    - ~90% to age 20, ~65% age 21+

# Data In Data Out

## Who Submits ALERT Data?

- 88% of private and public clinics immunizing all ages
- DMAP and all contracted plans
  - Note: working on CCO data flow
- Major private health plans and IPAs
  - Regence, ODS, Sisters of Providence, etc.
- Pharmacies
- Vital records

## Who Uses ALERT Data?

- Private and public providers and pharmacists
  - Clinical decision support, reminder/recall, quality improvement (QI), inventory mgmt.
- Health plans
  - HEDIS, QI, reminder/recall
- Schools, child care facilities
- State and local public health
- National/CDC projects

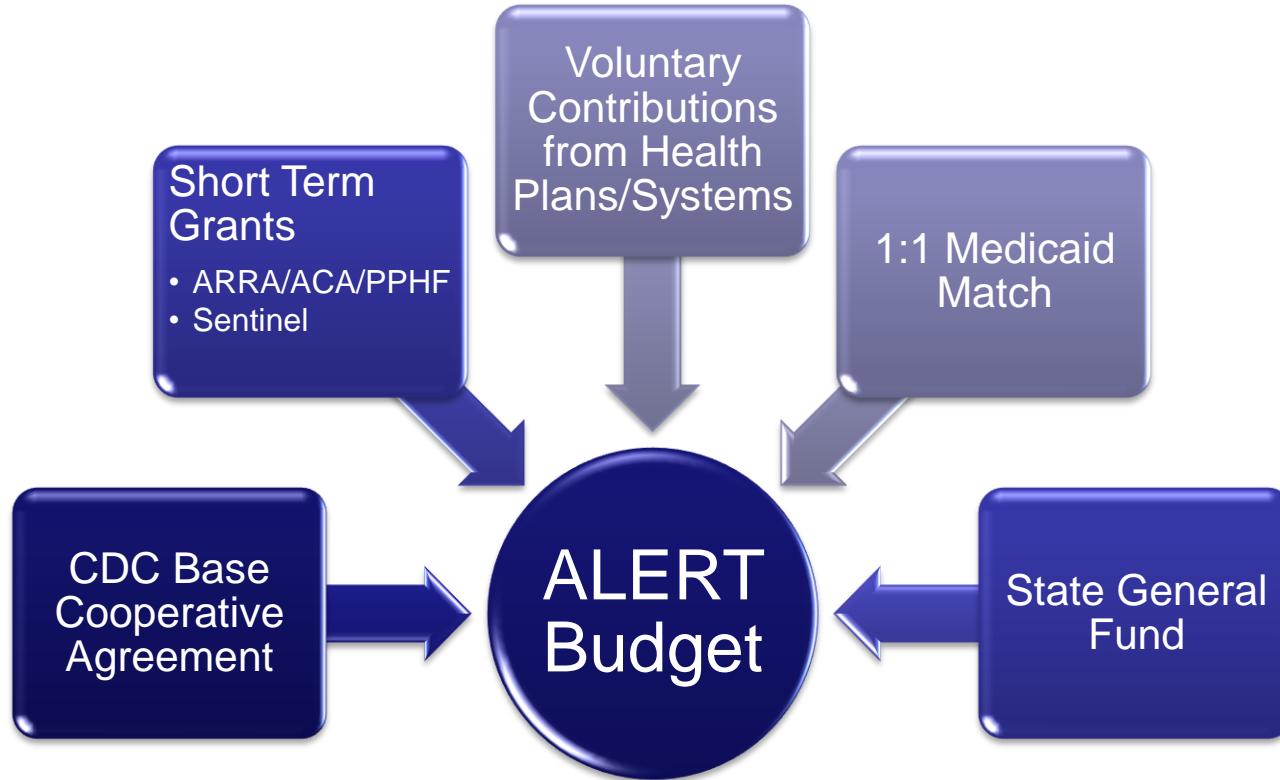
# Childhood (and beyond) Health Linkages

- Current Interfaces
  - WIC
  - OR-KIDS (Oregon's Foster Care Program)
  - Early Hearing Detection and Intervention (EHDI)
  - Communicable Disease
- Interfaces Under Active Consideration
  - School Law Module
  - Consumer Portal

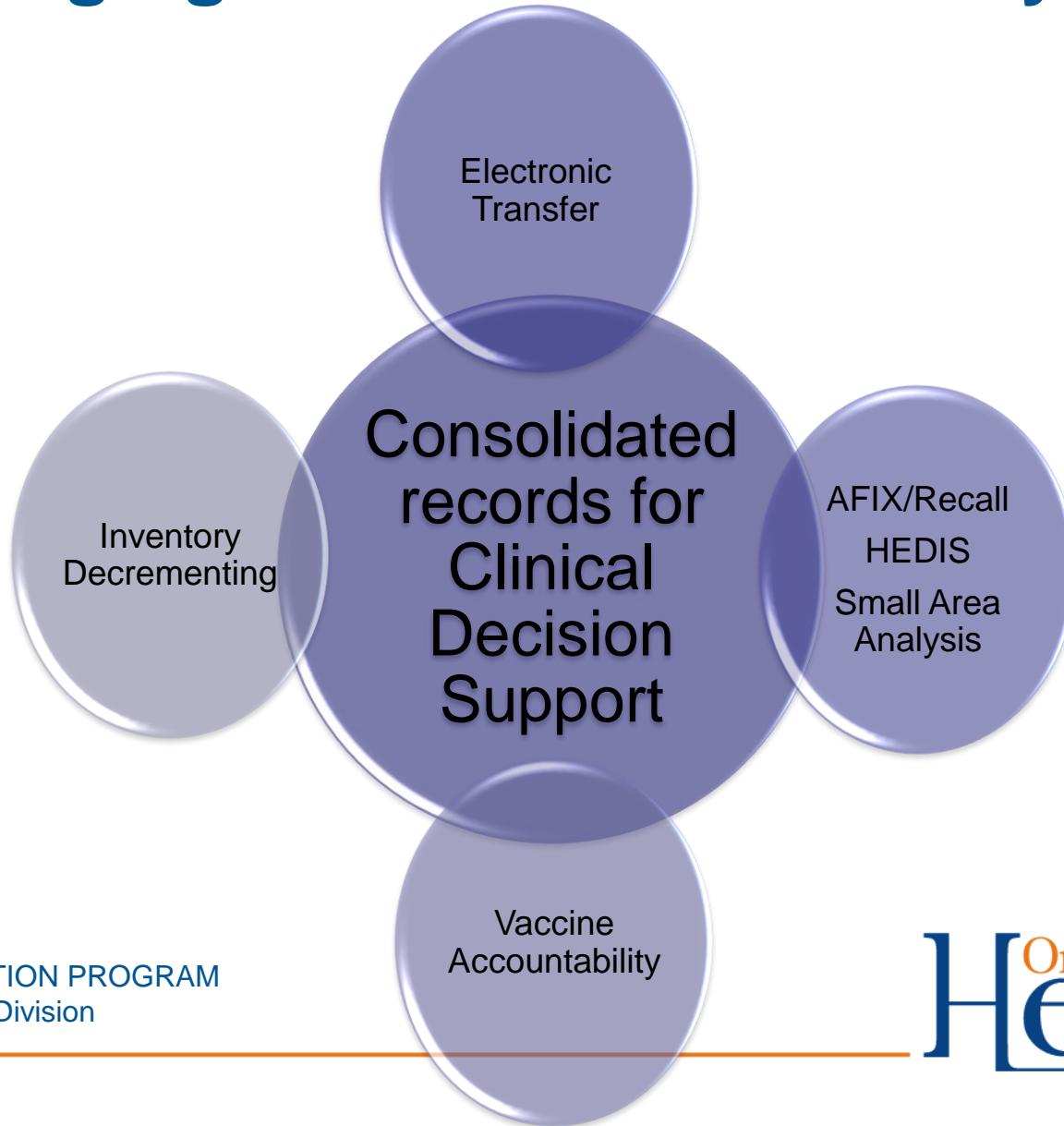
# Key ALERT IIS Partners/Advisors



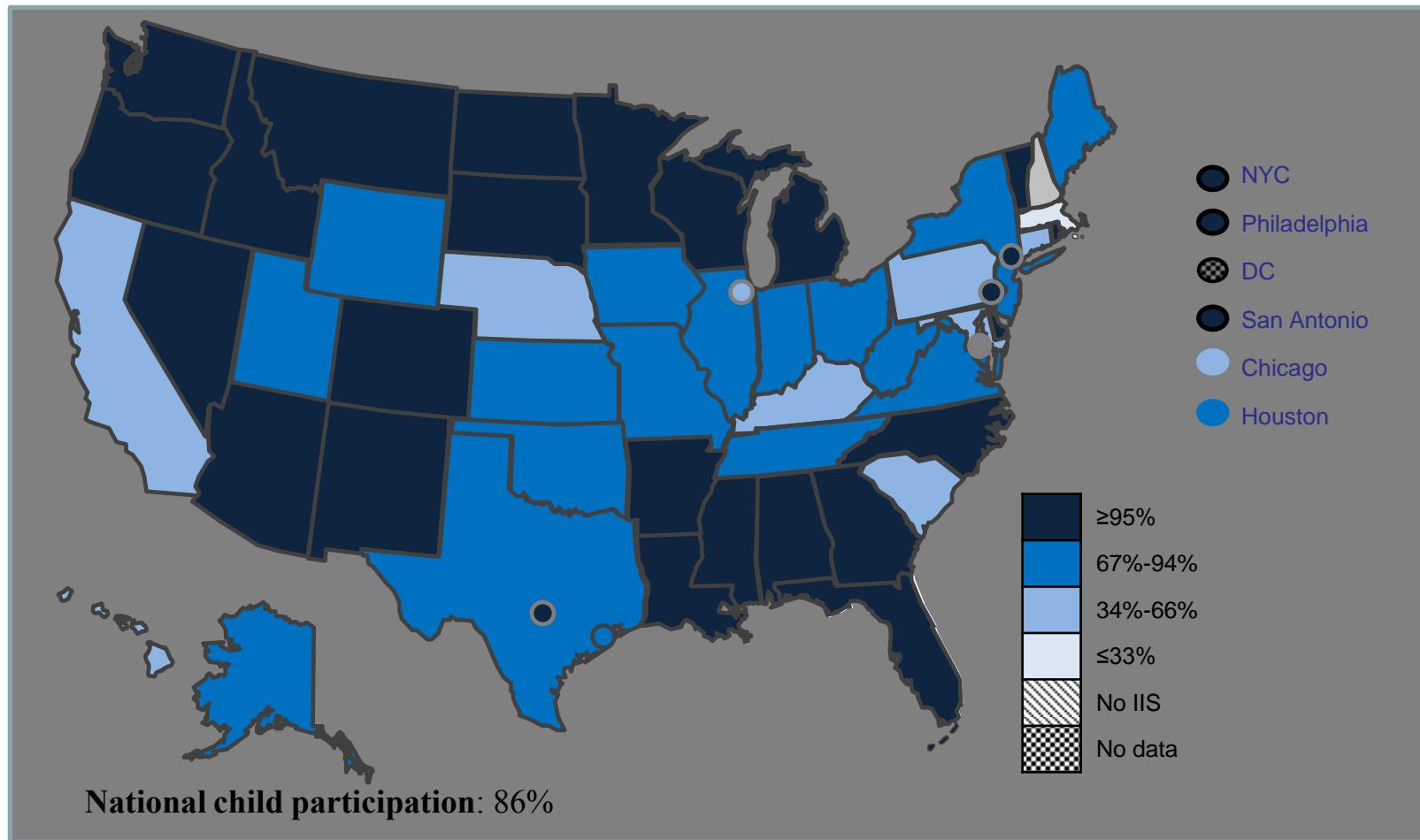
# Funding Sources



# The Changing Environment of IIS Systems



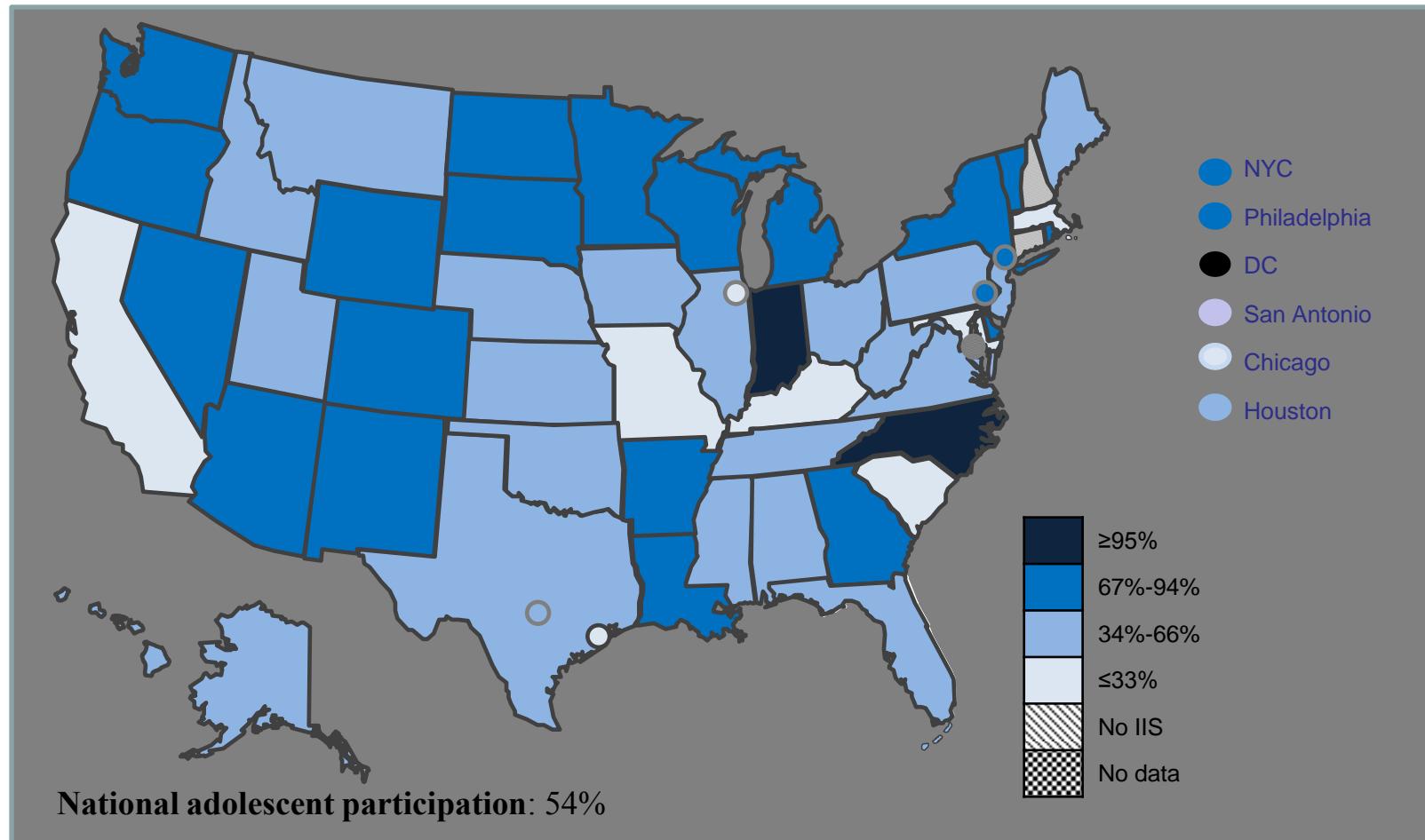
## **Percentage of children aged <6 years participating\* in an Immunization Information System (IIS) – United States, five cities<sup>†</sup>, and the District of Columbia, 2012**



\* Participation is defined as having two or more vaccinations recorded in the IIS

<sup>+</sup>Chicago, Illinois; Houston, Texas; New York, New York; Philadelphia, Pennsylvania; and San Antonio, Texas.

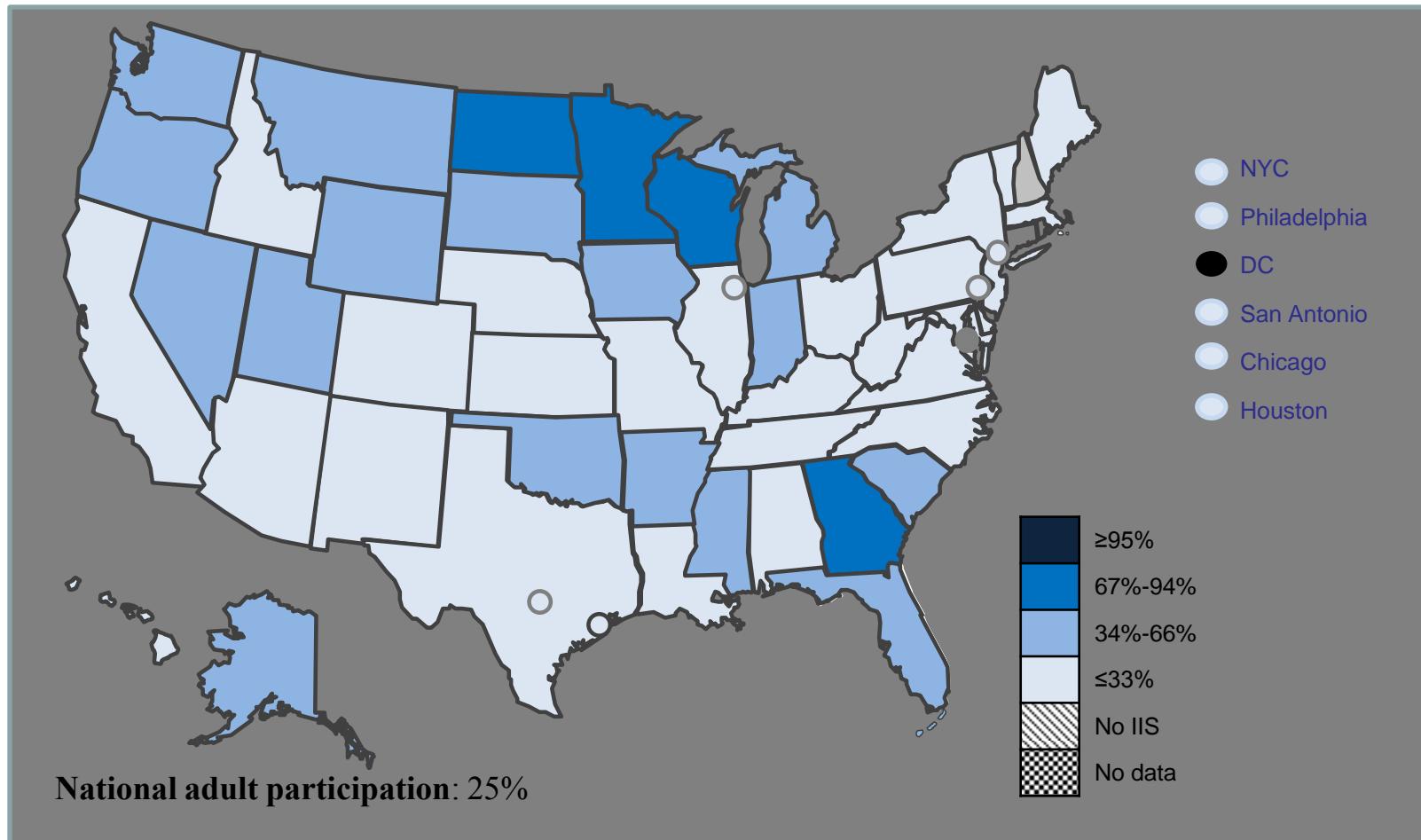
# Percentage of adolescents aged 11 through 17 years participating\* in an Immunization Information System (IIS) – United States, five cities<sup>+</sup>, and the District of Columbia, 2012



\* Participation is defined as having two or more vaccinations administered during adolescence recorded in the IIS

<sup>+</sup>Chicago, Illinois; Houston, Texas; New York, New York; Philadelphia, Pennsylvania; and San Antonio, Texas.

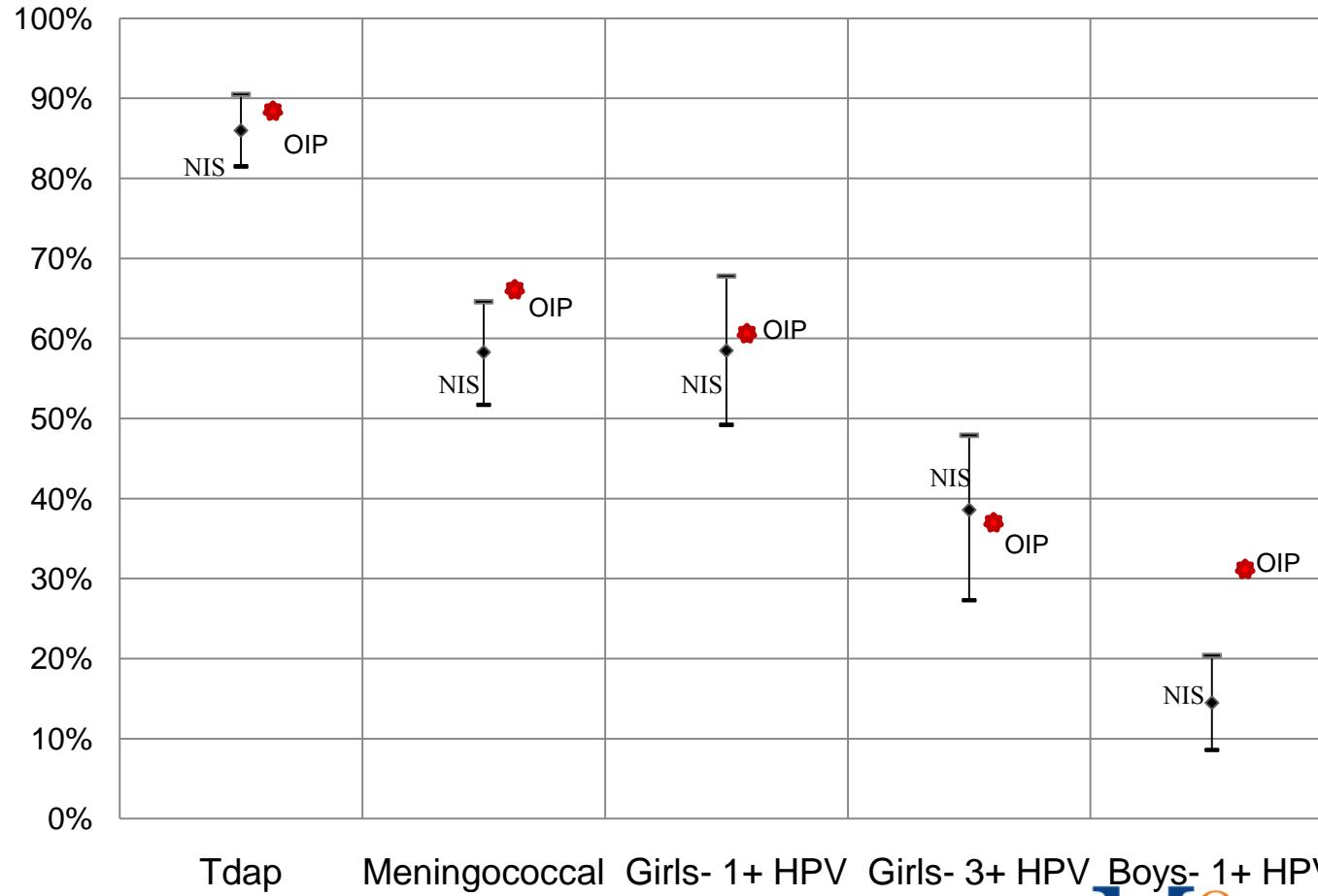
# Percentage of adults aged $\geq 19$ years participating\* in an Immunization Information System (IIS) – United States, five cities<sup>†</sup>, and the District of Columbia, 2012



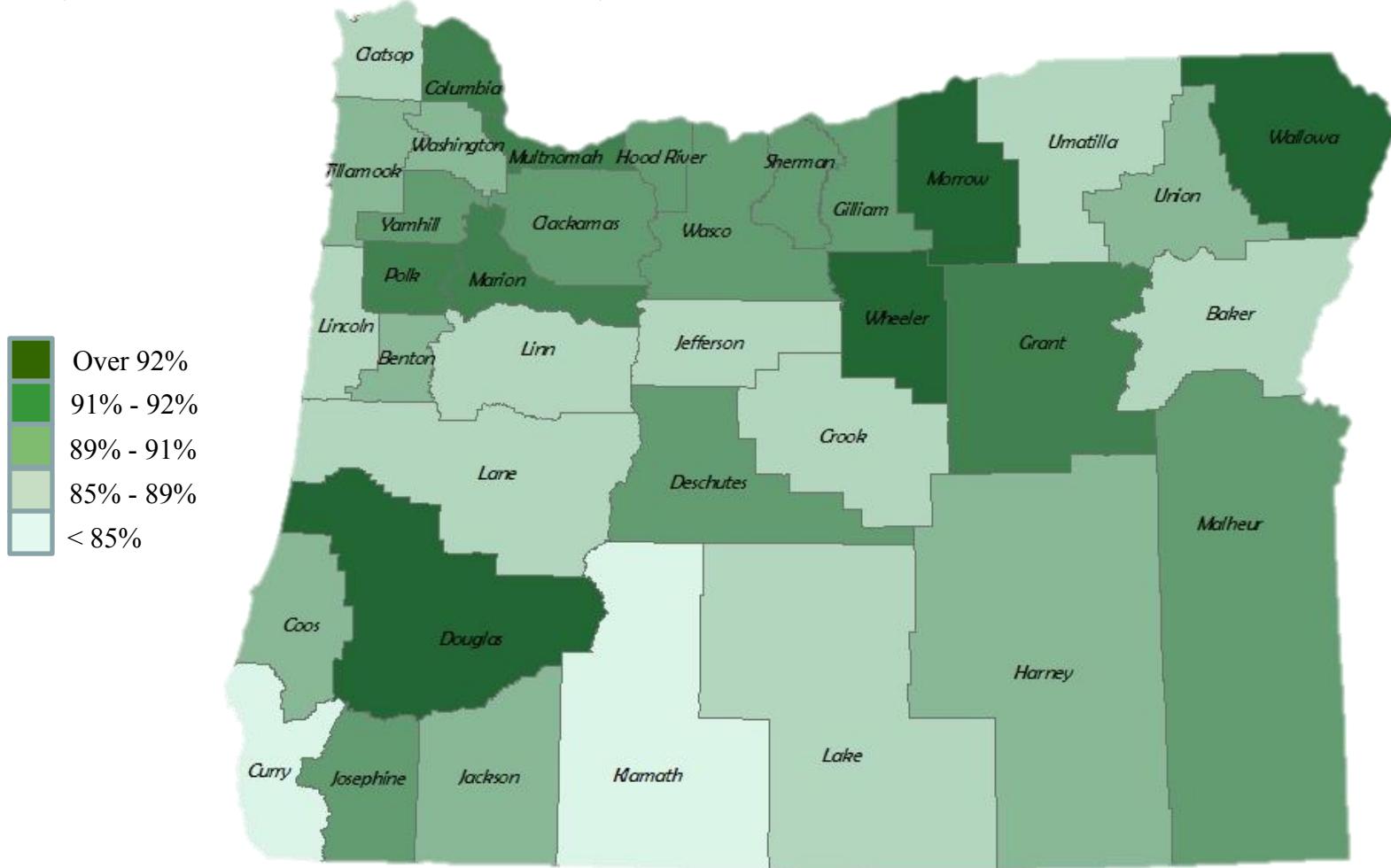
\* Participation is defined as having one or more vaccinations administered during adulthood recorded in the IIS

<sup>†</sup>Chicago, Illinois; Houston, Texas; New York, New York; Philadelphia, Pennsylvania; and San Antonio, Texas.

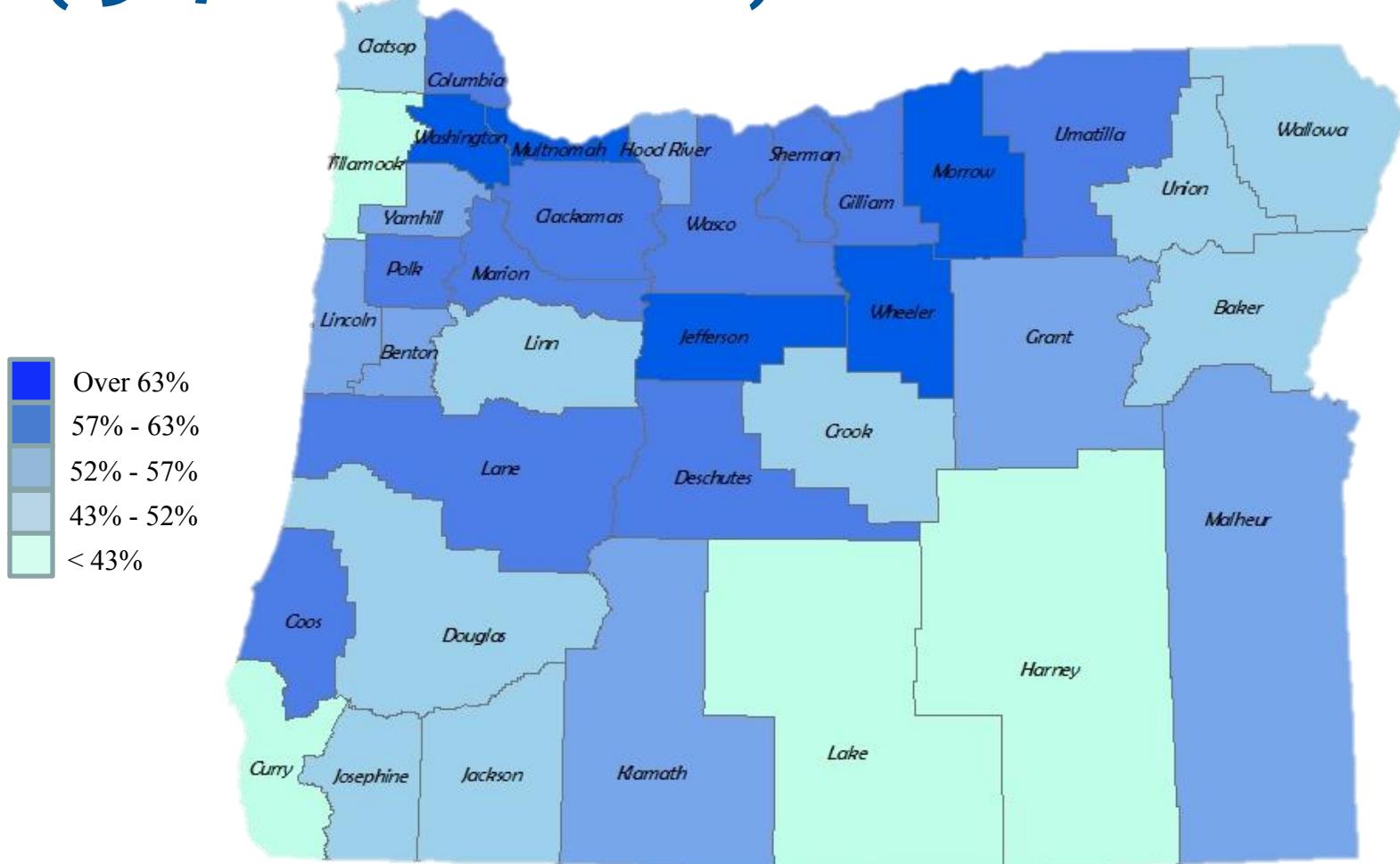
# Oregon 2013 NIS & OIP Comparison (Age 13 to 17)



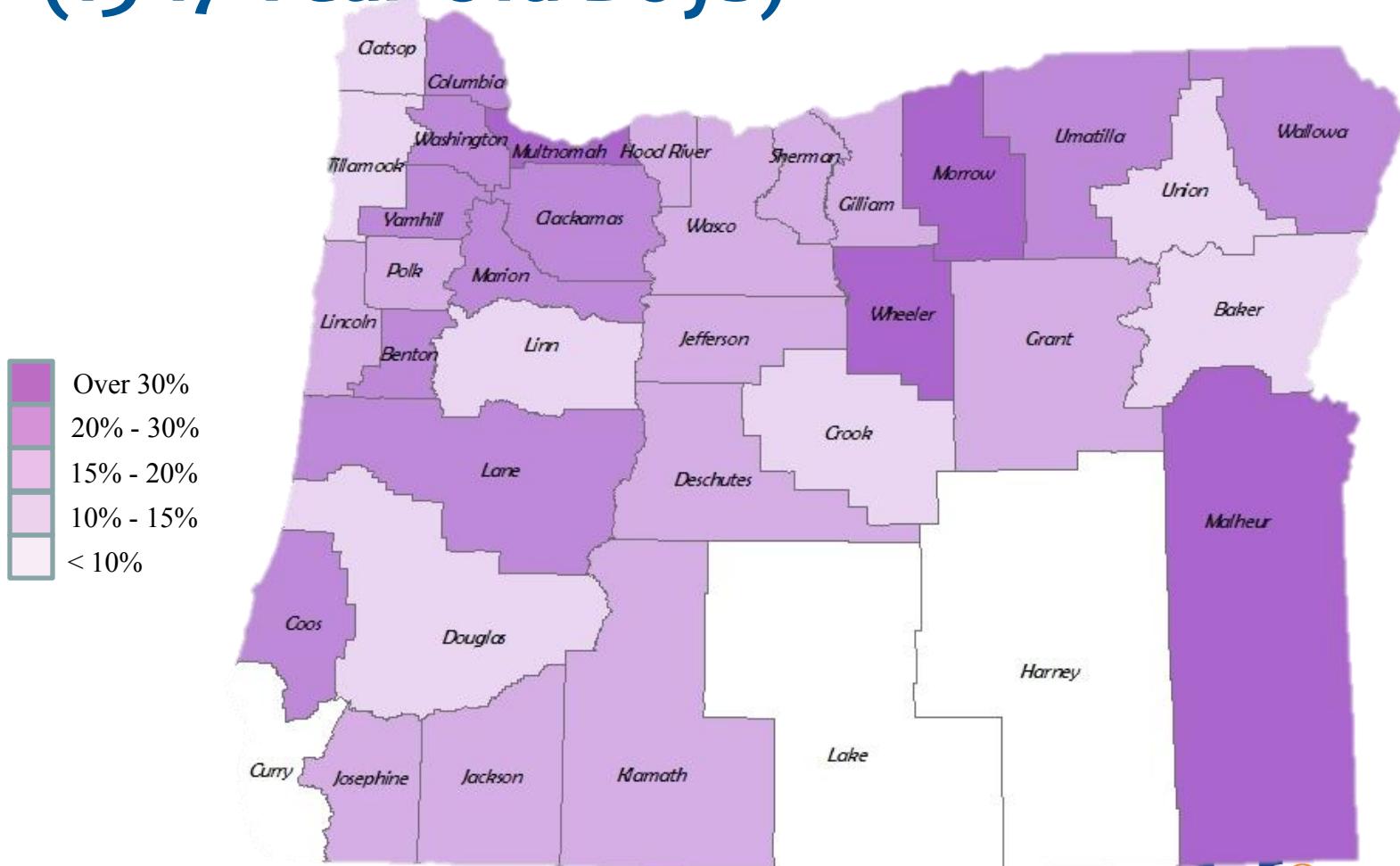
# Oregon 2013 Teen Tdap Rates (13-17 Year Olds)



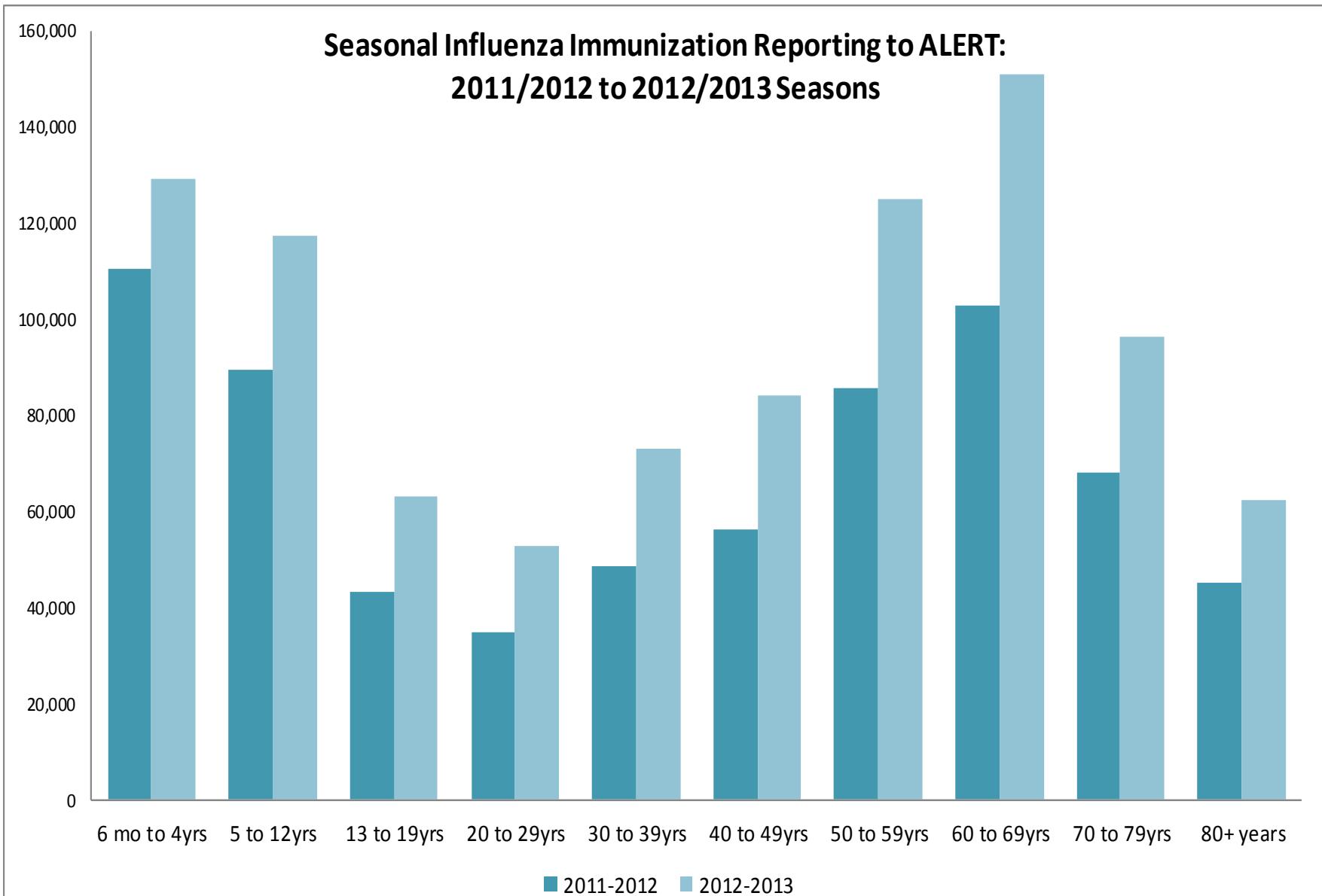
# Oregon 2013 Teen 1+ HPV (13-17 Year Old Girls)



# Oregon 2013 Teen 1+ HPV (13-17 Year Old Boys)

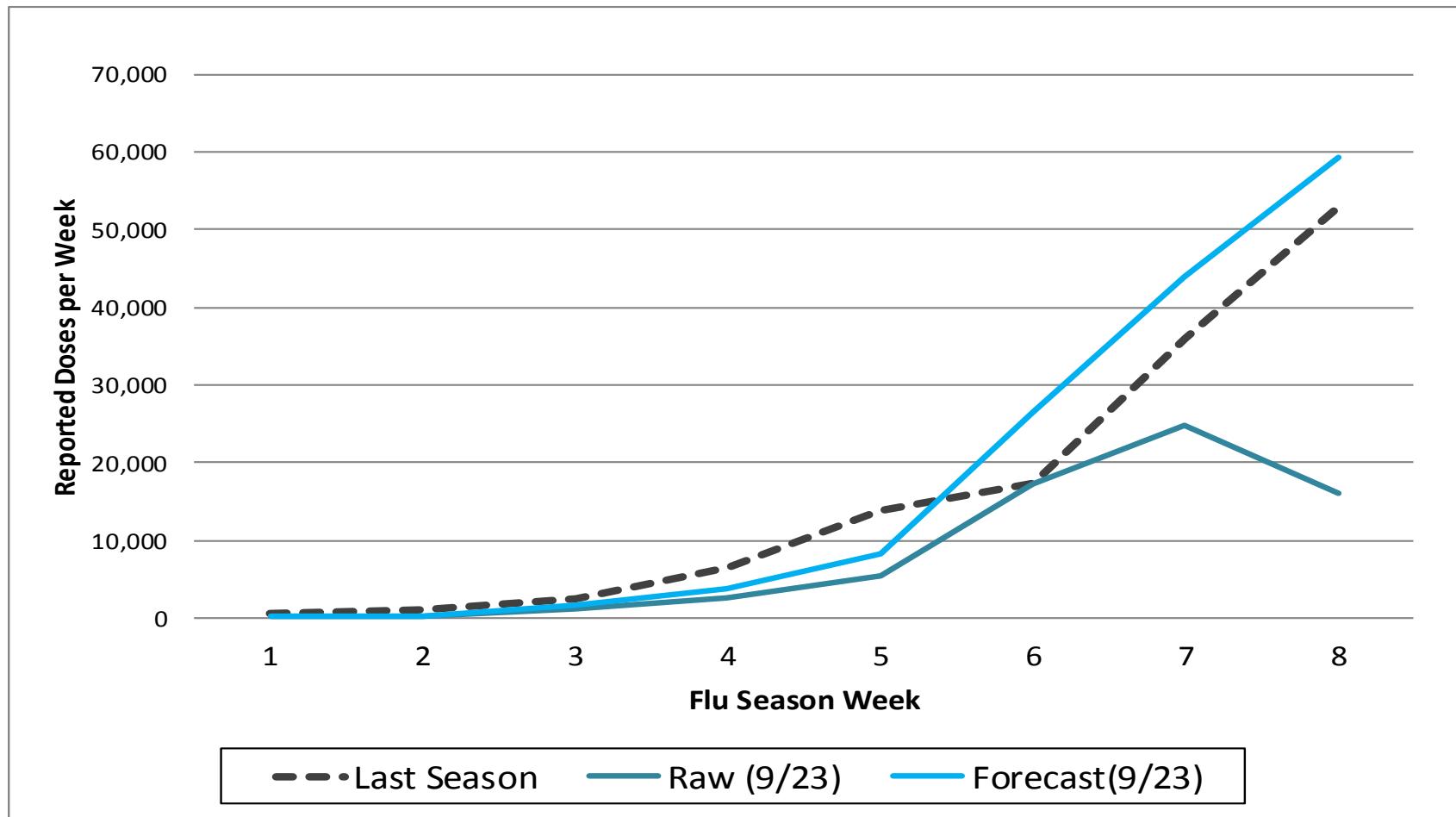


## Seasonal Influenza Immunization Reporting to ALERT: 2011/2012 to 2012/2013 Seasons



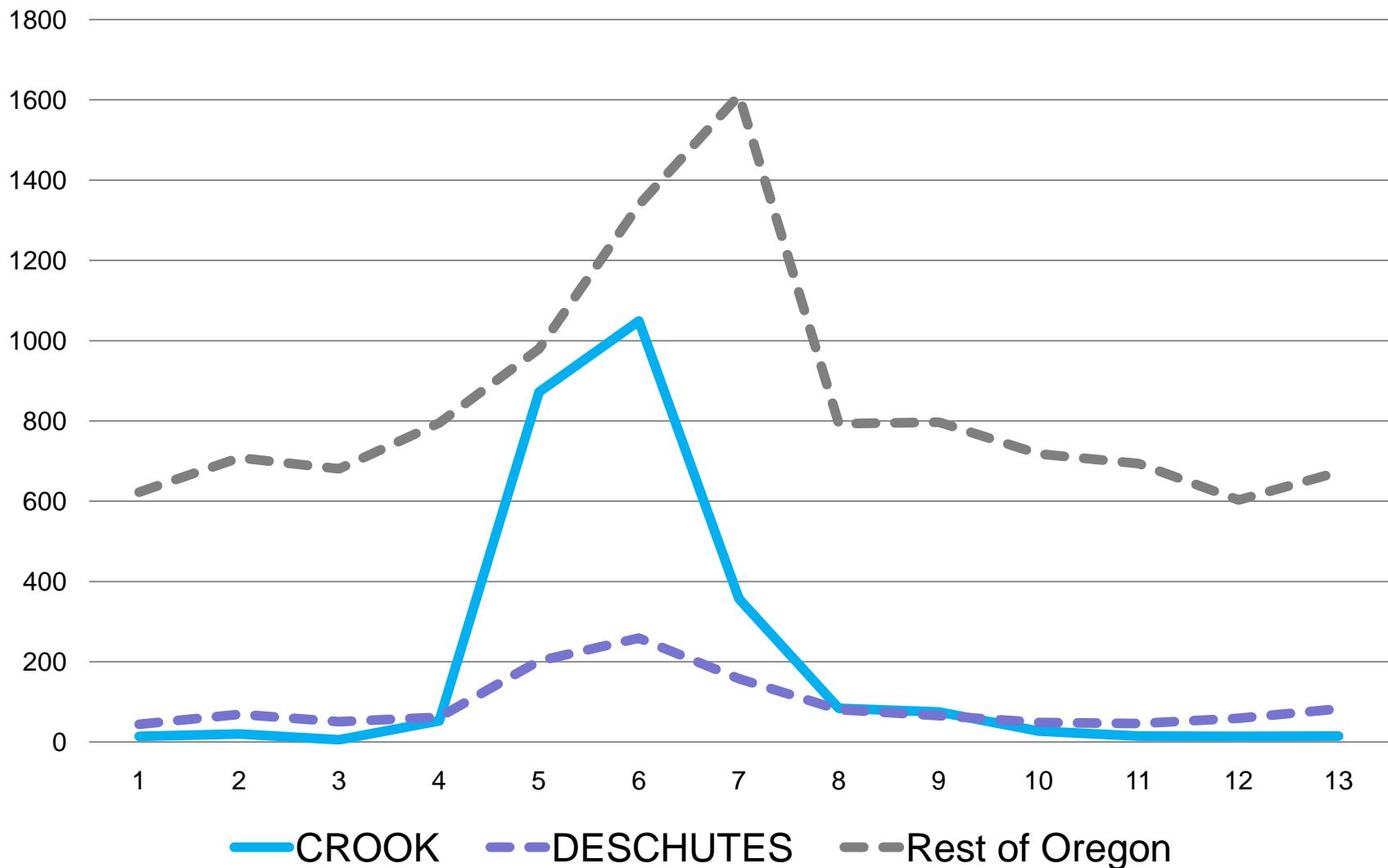
Source: Oregon ALERT IIS

# Reported Flu Vaccine Doses as of 9/23/2013 by Week



Source: Oregon ALERT IIS

# 2012 Meningococcal Vaccination by EpiWeek & County of Residence



# Changes Introduced in the Last Year

## HL7 2.5.1 Capacity

- Most current messaging standard
- Improved data exchange process and messaging

## VTrckS Integration

- Interface with CDC ordering and tracking system
- Allows providers to manage inventory within ALERT IIS

## Hardware Refresh

- New servers increased capacity and performance
- Accommodates new Web Service partners

## Support and Maintenance

- Modifications to immunization forecaster, reminder recall functionality

# Grants Awarded in the Last Year

PPHF - Interoperability

PPHF - 2D Barcode Use

PPHF - Adolescent IIS Data Use

PPHF – Hepatitis B

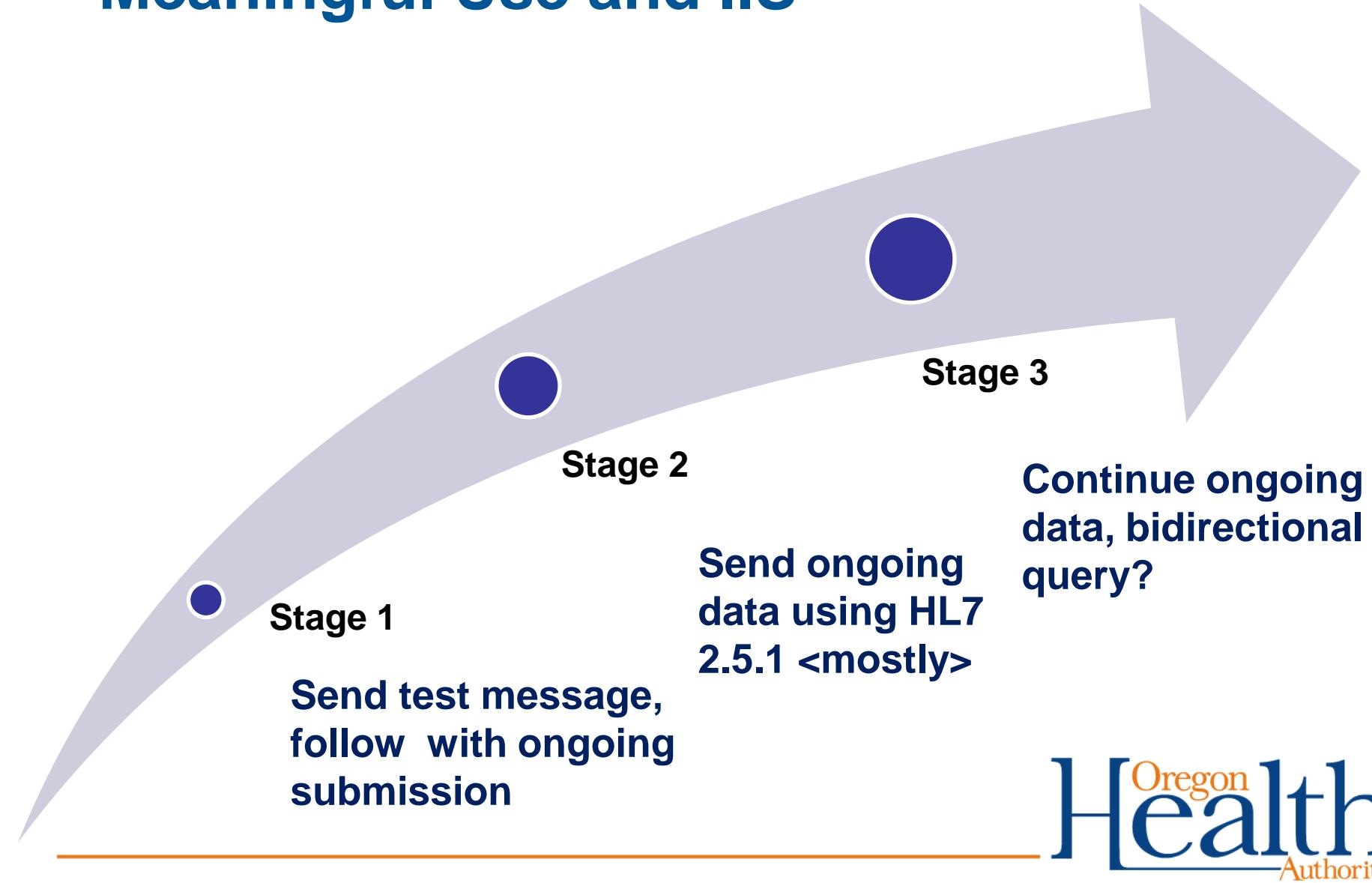
Sentinel Supplemental Funds

# Interoperability: Meaningful Use

- Providers must demonstrate “Meaningful Use” of their EHR to qualify for Medicaid/Medicare Incentive Payments
- In Stage 1, vendors could work more or less independently from their providers to meet this measure
- Stage 2 requires much closer coordination

*Stages of Meaningful Use and interoperability  
will continue to build on earlier work*

# Meaningful Use and IIS



# Onboarding System Enhancements

- System will allow providers and vendors to test and fine-tune HL7 messaging format prior to connecting to ALERT (Self-service approach!)
- Will also allow new site agreement submissions and renewals
- Rolling out this month



# Focus on Adult Capture

- New team supported by Sentinel Supplemental Funds will focus on adult capture
- Partnering with Oregon's Quality Improvement Organization (Acumentra Health) and other key partners to recruit and support adult immunizers to report to IIS
- Targets:
  - Long Term Care
  - Ob/Gyns
  - Employee Health Departments
  - Select Hospital Departments not yet reporting (ERs, etc.)

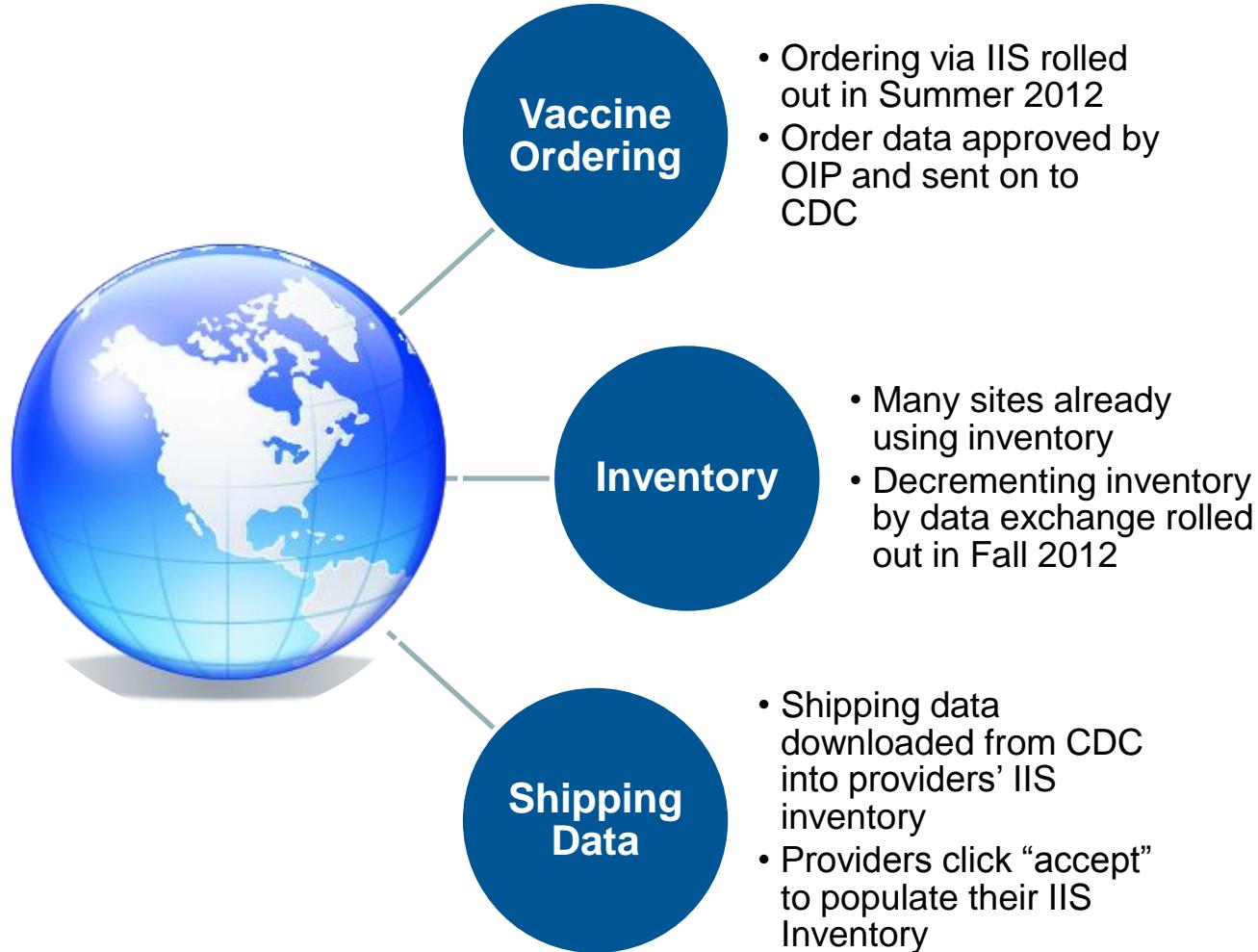
# Continued Work with Pharmacies

- All immunizing pharmacists are required to submit to ALERT IIS
- Effective January 1, 2014, Pharmacists are required by protocol to search ALERT IIS prior to immunizing:
  - *For each vaccine encounter, prior to administering vaccine, pharmacy personnel will look up each patient in the ALERT Immunization Information System (IIS) to determine the patient's vaccine history and to forecast vaccines as needed.*
  - *Exceptions:*
    - *This is not required when administering only influenza vaccines, but will continue to be recommended to help increase pneumococcal vaccine rates.*
    - *This is not required when the pharmacy/pharmacist conducts a remote vaccine clinic, but will continue to be recommended when remote connectivity is available.*

# Exploration of Component Tracking

- H7N9 Influenza Clinical Trials Preliminary Findings
  - Suggested two dose series, with antigen and adjuvant mixed at bedside
  - Requires tracking of both components to ensure same combination at first and second dose
- 2D Barcode Project
  - Most component vaccines (e.g., Pentacel) have separate lot numbers and NDCs (National Drug Codes) on box and on individual components
  - Scanning at point of administration may require tracking multiple components
  - Barcode scanning may have mass vaccination utility as well

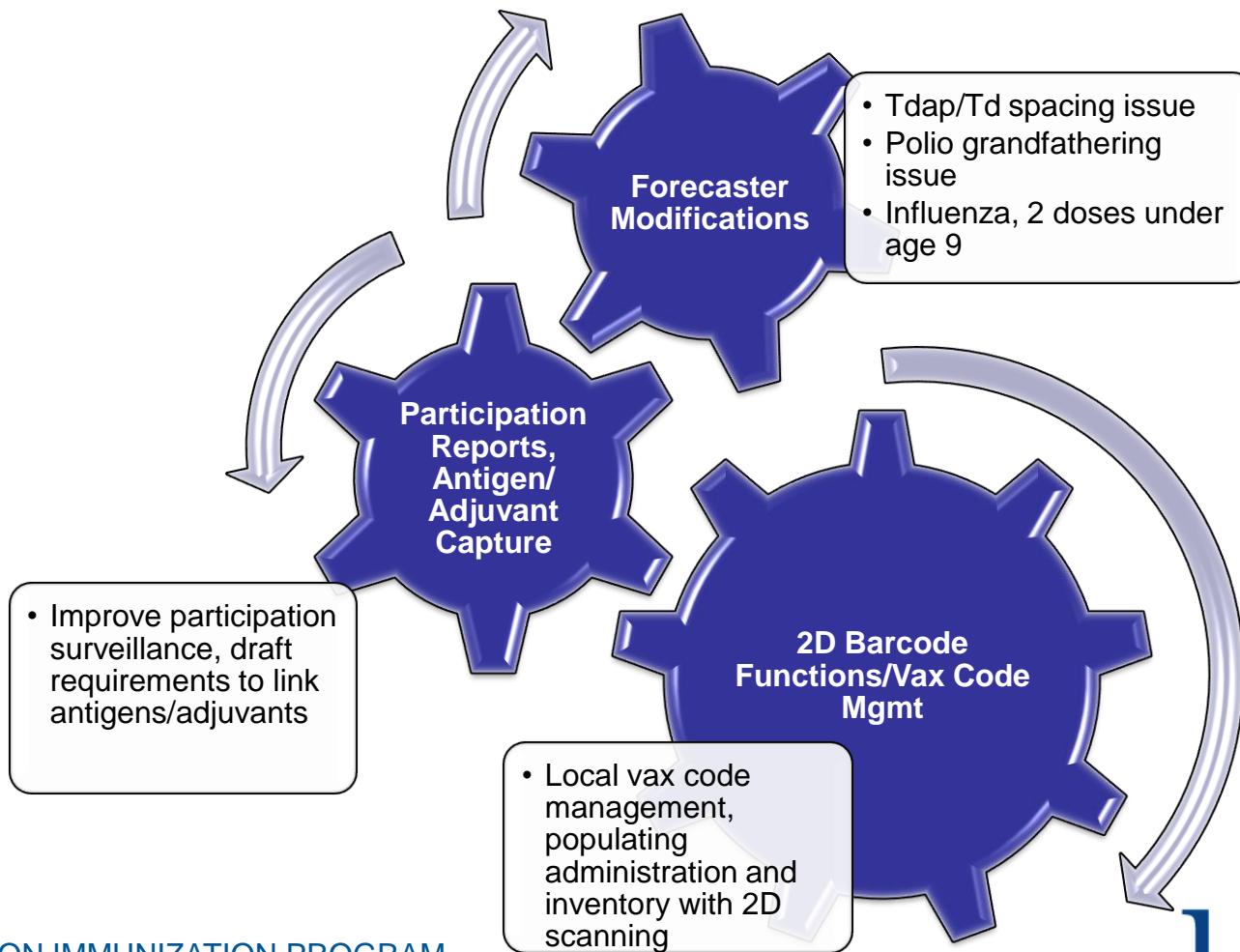
# The World of Vaccine Management



# What's Coming Up?

- Launching Statewide Reminder/Recall – November 2013
  - Recalling all due and past due 22 month olds across Oregon
  - Involves QI review of patient records
- Release of Vaccine Accountability Report – November 2013
  - A tool to assist with vaccine management
- Enhancements to accommodate 2D Barcode Scanning at point of inventory and administration
  - Vaccine codeset crosswalk

# Future Releases – Challenging Priorities



# On The Horizon?

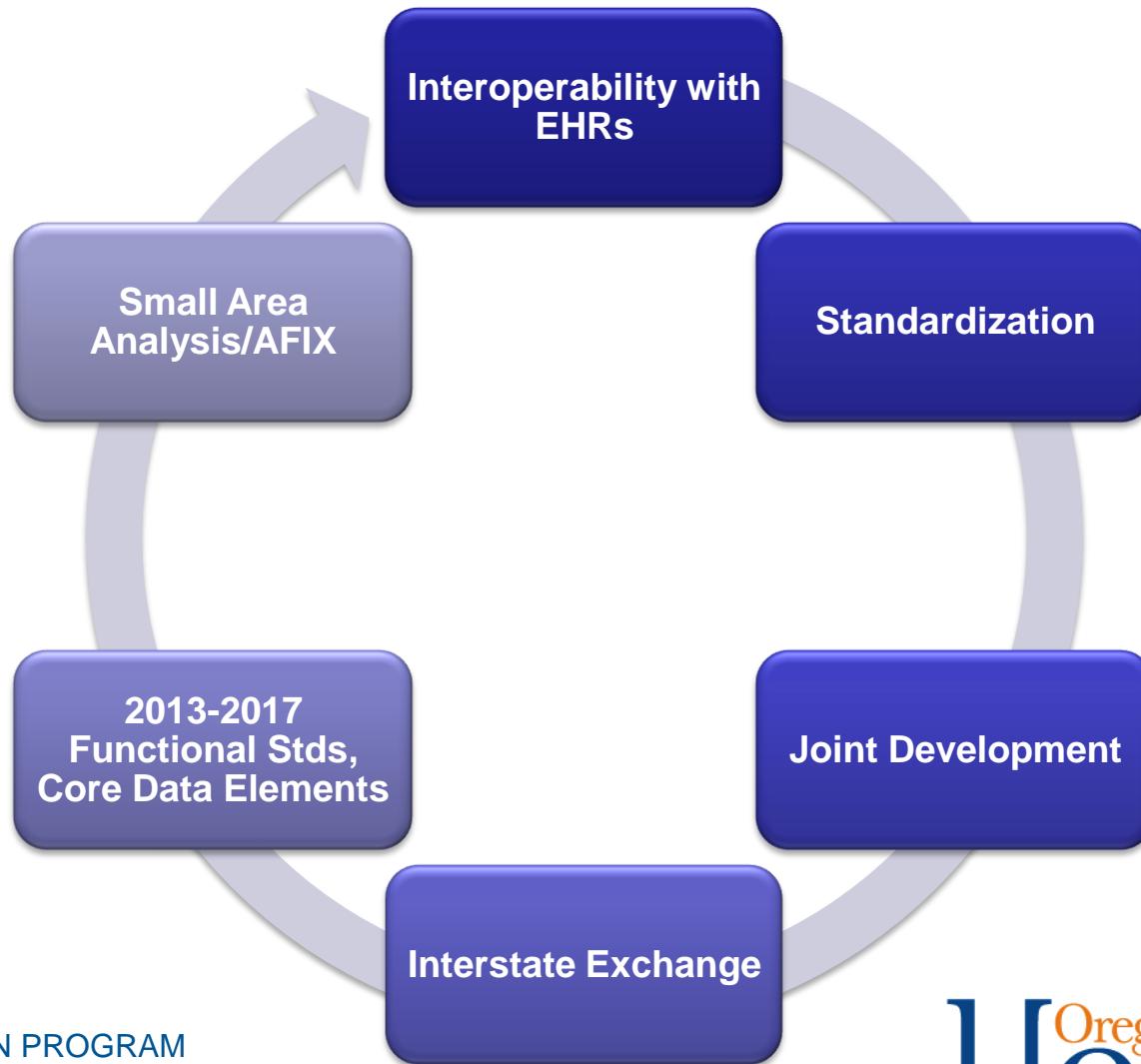
HL7  
Conformance  
Changes?

School  
Law  
Module?

Consumer  
Access?

OR/WA  
Query  
Response?

# National Themes



# Take Home Points

- As IIS continue to grow in complexity, we will have even harder choices to make about which enhancements to prioritize.
- Data quality will continue to increase as a high priority area, but also a potential area of risk, for IIS as well as for our partners.
- We are beginning to see the rewards for greater integration (Bidirectional query, VTrckS, decrementing inventory, etc.).

# Questions and Discussion

## Contact Information

- **Mary Beth Kurilo**  
ALERT IIS Director  
971-673-0294  
[mary.beth.kurilo@state.or.us](mailto:mary.beth.kurilo@state.or.us)

