

# **A Tale of Two Collaborators: The IIS Sentinel Site Project and the Centers for Disease Control and Prevention (CDC)**

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## **“Two Heads are Better than One”**



## Overview

- ❑ **What is the Sentinel Site Project?**
- ❑ **Sentinel Site Cooperative Agreements**
- ❑ **CDC/Sentinel Site Collaborations**
  - Vaccination Coverage Assessment
  - Vaccine Uptake and Shortage
  - Pandemic Preparedness
  - HPV Vaccination Coverage
  - Data Linkage
- ❑ **Impact of Collaboration**
- ❑ **Future of the Sentinel Site/CDC Relationship**

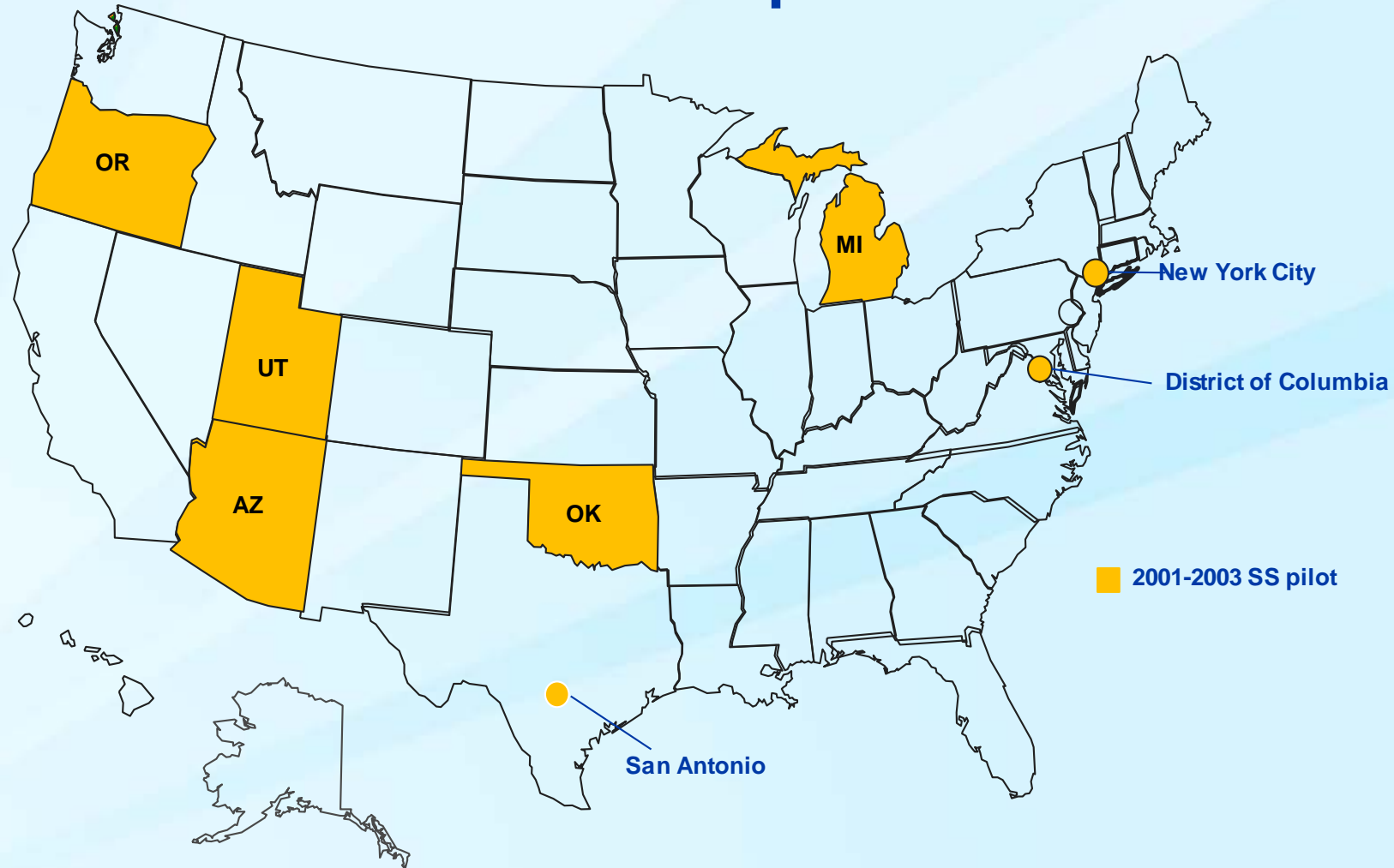
# What are IIS Sentinel Sites?

- ❑ **Regions within a grantee's jurisdiction (entire jurisdiction or a subset of the jurisdiction) that demonstrate high data quality measures in the IIS:**
  - $\geq 85\%$  vaccine provider site participation;
  - $\geq 85\%$  of the child/adolescent (aged  $<19$  years) participation;
  - $\geq 70\%$  of the doses administered are submitted to and processed by the IIS within 30 days of vaccine administration.
- ❑ **Receive competitive supplemental section 317 funds to:**
  - Assesses vaccine use among persons aged  $<19$  years
  - Conduct programmatic evaluations
  - Implement enhanced data quality activities
  - Publish and present findings

# Purpose of the Sentinel Site Project

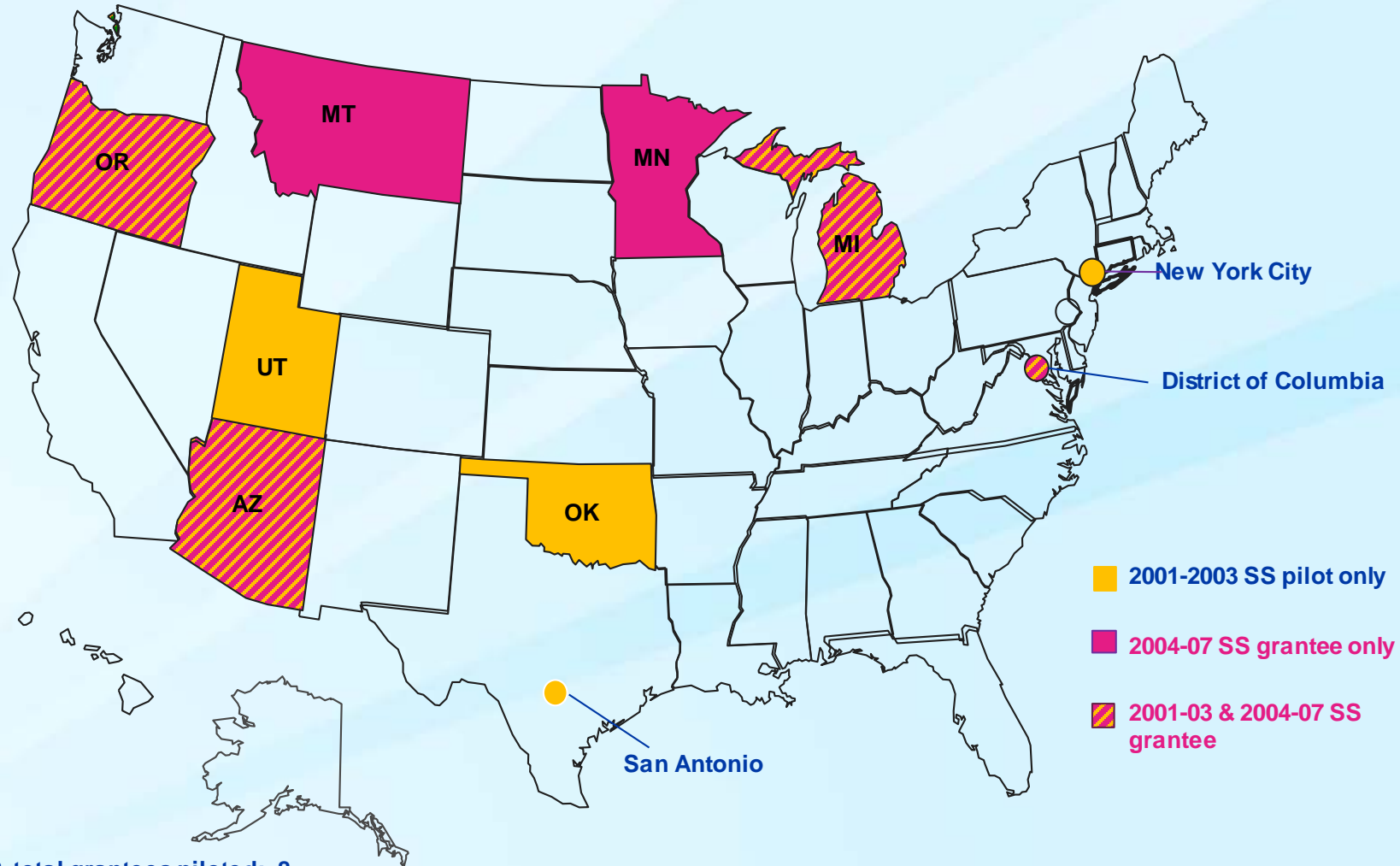
- ❑ Further enhance the ***use of IIS data*** to support the immunization program and other stakeholders, and to enhance IIS data quality and system functionality.
- ❑ Further enhance the ***evaluation and analytic capacity*** of IIS to conduct evaluations and epidemiologic studies.
- ❑ **Serve as “learning laboratories” for the entire IIS community**
  - Sentinel Sites contributed about 50% of US literature considered by the Task Force on Community Preventive Services in support of IIS

# Who are the Sentinel Sites? 2001-2003 pilot



Total grantees piloted: 8

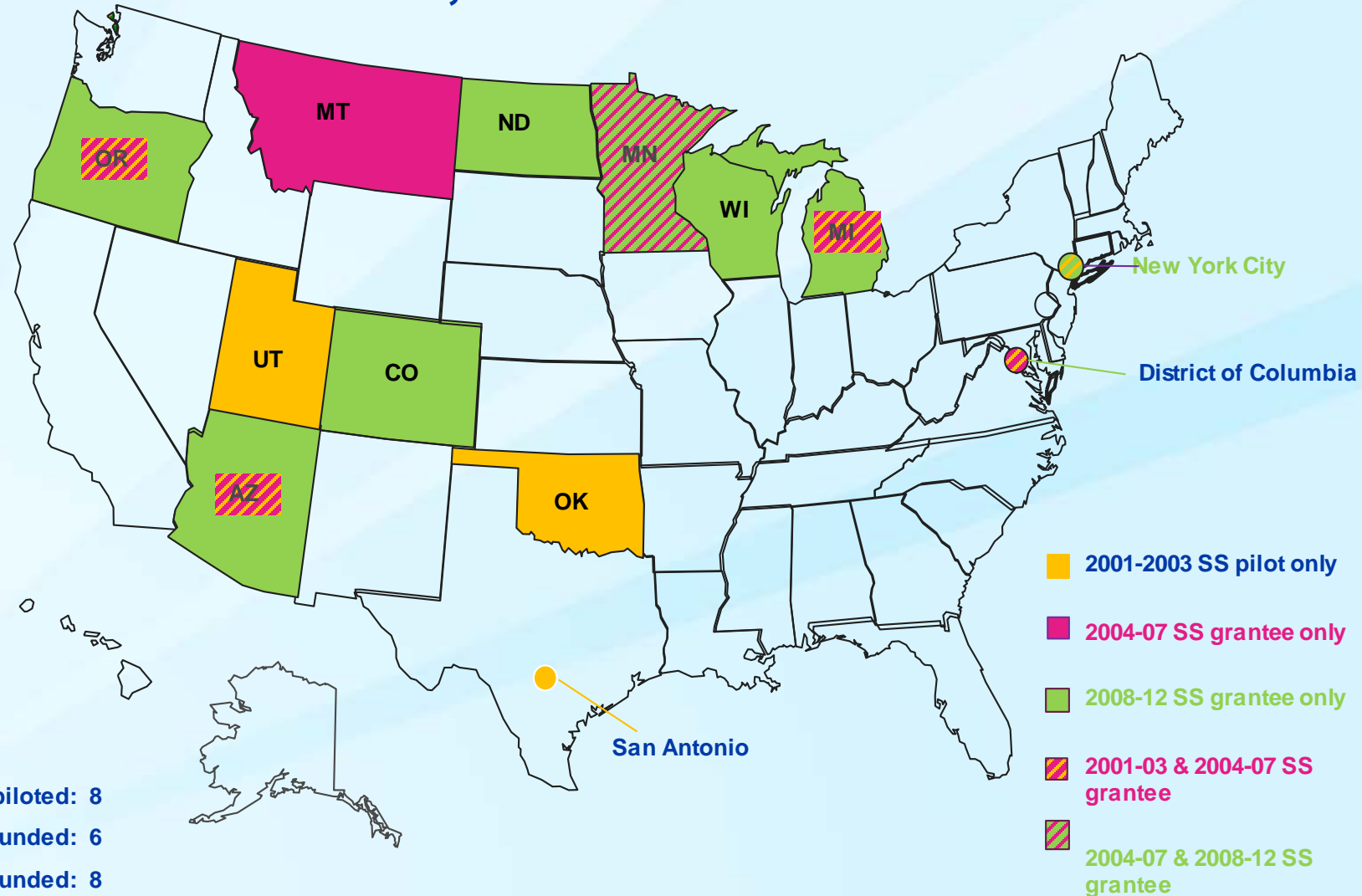
# Who are the Sentinel Sites? 2001-2003 & 2004-2007



2001-03 total grantees piloted: 8

2004-07 total grantees funded: 6

# Who are the Sentinel Sites? 2001-2003; 2004-2007 & 2008-2012



2001-03 total grantees piloted: 8

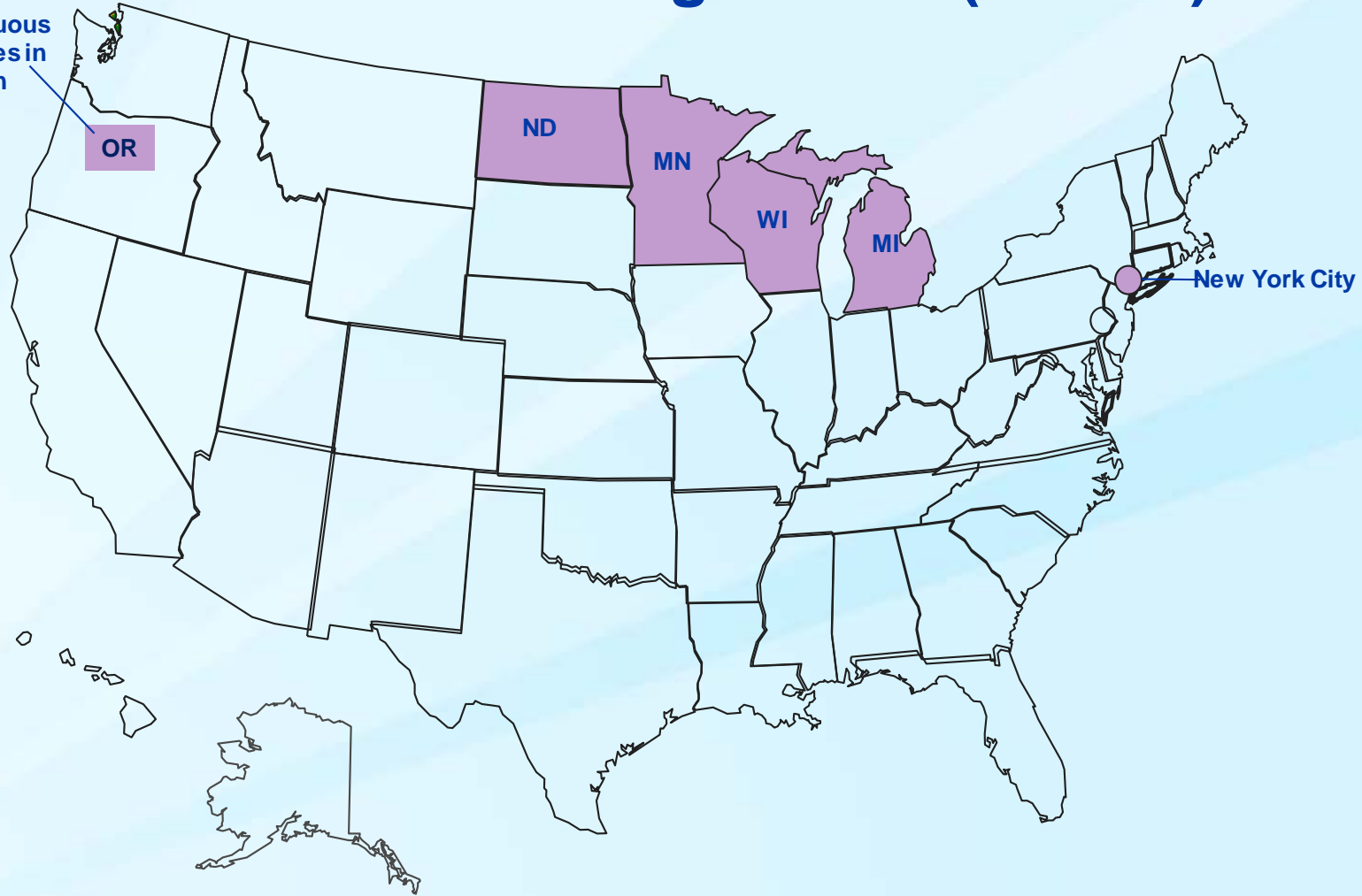
2004-07 total grantees funded: 6

2008-12 total grantees funded: 8



# Who are the Sentinel Sites: 2013–2017 Co-Ag Period (6 Sites)

Six  
contiguous  
counties in  
Oregon



## Sentinel Site Cooperative Agreements

- ❑ **IIS Sentinel Site Project Cooperative Agreement (Base Sentinel Site Co-Ag)**
  - Base Sentinel Site Participation Criteria
  - Quarterly Data Submission to IIS TIPS
  - IIS System Evaluations
- ❑ **Increasing IIS Capacity for Enhanced Program Support**
  - Pandemic Influenza Preparedness and Response
    - Adult Provider Recruitment and Onboarding
    - Technical Enhancements for Antigen/Adjuvant Tracking
    - Additional IIS-TIPS Data Submissions including Adults
  - HPV Vaccination Coverage and Data Linkage
    - HPV Provider Recruitment and Onboarding
    - Data Linkage feasibility between IIS and HPV outcome databases

# Base IIS Sentinel Site Project

## The Collaboration

- CDC provides 1.5M per year to IIS Sentinel Sites to increase IIS capacity, while advancing the use, strengths, and benefits of IIS Data.
- Sentinel Sites provide CDC with Program and Systems Evaluations examining IIS priority topics, as well as quarterly demographic and vaccination data from their Sentinel Site Jurisdictions

## The Impact

- Increased IIS use for Immunization Program Activities
- Increased IIS-focused contributions to the literature
- Increased IIS ability to provide timely, complete data for coverage assessment
- Increased examples of the capabilities and versatility of IIS

# Increasing IIS Capacity for Enhanced Program Support

## The Collaboration

- CDC provides 1.8M per year to IIS Sentinel Sites for Pandemic Preparedness and HPV Vaccination Coverage and IIS Data Linkage Activities
- IIS Sentinel Sites provide key information on the capacity, funds, and staff needed for pandemic preparedness efforts and IIS Data Linkage

## The Impact

- Increase in adult onboarding and report to the IIS
- Assessment of IT needs to track vaccine administered with an antigen and adjuvant component
- Identification of strategies to increase HPV vaccination coverage among adolescent and adult providers
- Assessment of the feasibility of linking the IIS with other outcome databases (e.g. Cancer Registry, STD Registry) to assess vaccine effectiveness

## **“Things Work Better, Together”**



## A Rich History of Collaboration...

- ❑ **The Sentinel Site have a long history of serving as “learning laboratories” for the CDC and the IIS community as a whole**
- ❑ **Collaborations between CDC and the IIS Sentinel Sites have included:**
  - Vaccination Coverage Assessments
  - Monitoring of Vaccination Uptake and Shortage
  - Pandemic Preparedness
  - HPV Vaccination Coverage
  - Data Linkage

## **Vaccination Coverage Assessment**

- ❑ **Sentinel Sites provide record level, demographic and vaccination data to CDC quarterly, via the CDC-developed IIS TIPS System**
- ❑ **In addition to TIPS Submissions, Sentinel Site have consistently provided CDC with coverage estimates (ex. Influenza, HPV, Rotavirus) to quickly assess changes in ACIP recommendations**
  - CDC provides data quality check of data submitted to IIS TIPS
- ❑ **Sentinel Site data are of great value to CDC**
  - High Quality
  - Timely
  - Complete
  - Allow a quick, on the ground assessment of coverage in a jurisdiction
  - NIS comparisons



## Vaccine Uptake and Shortage

- ❑ **IIS Sentinel Sites collaborated with CDC to assess the impact several vaccine recommendation shifts and shortage incidents, including:**
  - Transition from PCV7 to PCV13
  - Uptake of Varicella Vaccine
  - Uptake of HPV Vaccine among males and females
  - The impact of Hib vaccine shortage in 2009
- ❑ **From these collaborations:**
  - CDC provided rapid information to NCIRD, ACIP, and others regarding the impact of these events on vaccination coverage
  - IIS Sentinel Sites gained strategies to examine vaccine uptake and the impact of vaccine shortage within their Sentinel Site jurisdictions, with the ability to inform program staff



## **IIS Pandemic Preparedness**

- ❑ **Sentinel Sites collaborated with the IIS Support Branch (CDC), Adult Immunization Team, and Vaccine Task Force to assess IIS readiness for pandemic response**
  - Adult recruitment and onboarding
  - Technical feasibility of antigen/adjuvant tracking
  - Increased, rapid IIS data submissions
- ❑ **From this collaboration**
  - CDC: Gained critical information regarding resources and technical considerations for adult onboarding and antigen/adjuvant tracking
  - Sentinel Sites: Increased internal capacity for pandemic preparedness, increasing adult and pharmacy provider enrollment, and implemented infrastructure for antigen/adjuvant tracking

## HPV Vaccination Uptake

- ❑ **Increasing HPV vaccination coverage continues to be a national priority**
  - Increasing HPV-provider enrollment in the IIS (adolescent and adult)
  - Increasing HPV-provider report of HPV to the IIS
- ❑ **As coverage increases, the exploration of the use of the IIS for HPV vaccine effectiveness becomes more feasible**
- ❑ **CDC and IIS Sentinel Sites are currently collaborating to determine strategies to increase HPV provider report to the IIS, as well as exploring VE studies**
  - Increased HPV (adult and adolescent) provider outreach
  - Exploring feasibility of IIS data linkage with other HPV outcome databases

## **IIS Data Linkages**

- ❑ **IIS Sentinel Sites were funded to determine the feasibility of data linkage between the IIS and HPV related outcome databases**
- ❑ **Collaborators included:**
  - IIS Sentinel Site Project
  - State Cancer Registries
  - CDC, IIS Support Branch
  - CDC, Cancer Surveillance Branch
- ❑ **Sites are currently developing protocols for data linkage and addressing existing barriers to linkage, with the long-term goal of evaluating HPV vaccine effectiveness**

## “Both Sides Win!”

CDC Benefits	IIS Sentinel Site Benefits
Increased knowledge of state-specific IIS systems and practices	Increased Data Quality
Increased ability to showcase the many attributes of IIS to CDC leadership and decision makers	Increased internal IIS Capacity
Increased ability to provide up-to-date information on critical, IIS related issues	Increased funding to strengthen IIS Infrastructure
Increased knowledge of the practical implications of IIS community and CDC related guidance	Opportunity to be on the “front line” to address complex and critical IIS related issues
Increased opportunity to sell the successes and capabilities of the IIS	Opportunity to inform and contribute to the IIS literature

## The Impact of Collaboration

- ❑ **Beneficial growth and synergy for both CDC and the IIS Sentinel Sites**
  - Increased IIS data quality and use
  - Increased understanding of the technical and site specific challenge to maintaining a high quality IIS
  - Increased interest in IIS Sentinel Site data to inform programmatic decisions
    - Pandemic Preparedness
    - Data linkage
    - VE
    - NIS/IIS Estimates
  - Increased understanding of the practical implications of best practices and guidance
  - Increased capacity and program infrastructure
  - Increased collaborative capacity between CDC and Awardees

## **The Future of IIS Sentinel Site/CDC Collaboration**

- ❑ Continued focus on high quality, timely data to assist the needs of the Immunization Program as a whole**
- ❑ Learning Laboratories Expanded/Continued Evaluation**
- ❑ Continued emphasis on Pandemic Preparedness Activities**
- ❑ More Interstate Collaboration?**
- ❑ Expansion????**

**To infinity and beyond....**



**For more information please contact Centers for Disease Control and Prevention**

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.