

# New Directions in IIS Evaluation

Program Managers Meeting  
February 3, 2012

**Laura Pabst, MPH**  
Evaluation Team Lead, IISB, CDC

## IIS Data and System Use

- ❑ **Increased use of IIS data by vaccine providers and other vaccine stakeholders**
  - EMRs
  - VTrckS
  - HIEs
  - Immunization program activities (e.g. AFIX)
  - WIC, schools, HEDIS, disease surveillance, and other partners

## Meeting the Needs

- ❑ **To ensure we meet the needs of these multiple stakeholders and to increase buy-in for IIS use, we must**
  - Ensure high quality data (timely, accurate and complete)
  - Ensure system flexibility to analyze & report based on needed parameters
  - Develop greater capabilities for evaluating
    - IIS data quality
    - IIS system functionality
    - Vaccination coverage / vaccine use
  - Develop evaluation methods specific to IIS

## **Barriers to Conducting IIS Evaluations**

- ❑ Competing priorities / requirements**
- ❑ Limited staff**
- ❑ Time constraints**
- ❑ Expertise / experience**
- ❑ Rapidly changing environment**

## **CDC Evaluation Activities**

- ❑ IIS Annual Report (IISAR)**
- ❑ Program Evaluation SMEs at IIS Support Branch/CDC**
- ❑ Methods for assessing vaccination coverage**

# IISAR

- ❑ **Immunization programs have completed since 1999**
- ❑ **Questionnaire contains**
  - Coverage measures
  - Functional standards
  - Other priority issues (data quality, interoperability, legislation, funding, etc.)
- ❑ **Purpose is to assess individual and collective grantee performance**

# IISAR

## □ Future activities

- Revise questions to assess current state as well as progress toward a stated goal
- Consistent core questions
- Rotating questions to maintain a manageable size and address emerging / high priority topics
- Pilot tool with selected grantees prior to rollout
- Publications of IISAR results
  - Possible individualized feedback reports
- Periodic supplemental surveys for more detailed information

# Determining population-based IIS

## ❑ IIS definition

*An immunization information system (IIS) is a confidential, computerized, **population-based** system that collects and consolidates vaccination data from vaccine providers and provides tools for designing and sustaining effective immunization strategies at the provider and program levels.*

## ❑ What makes an IIS population-based?

- Source of demographic records?
  - Vital Records vs. other sources
- Percentage of population captured?
  - MOGE confounds this issue

# Determining population-based IIS

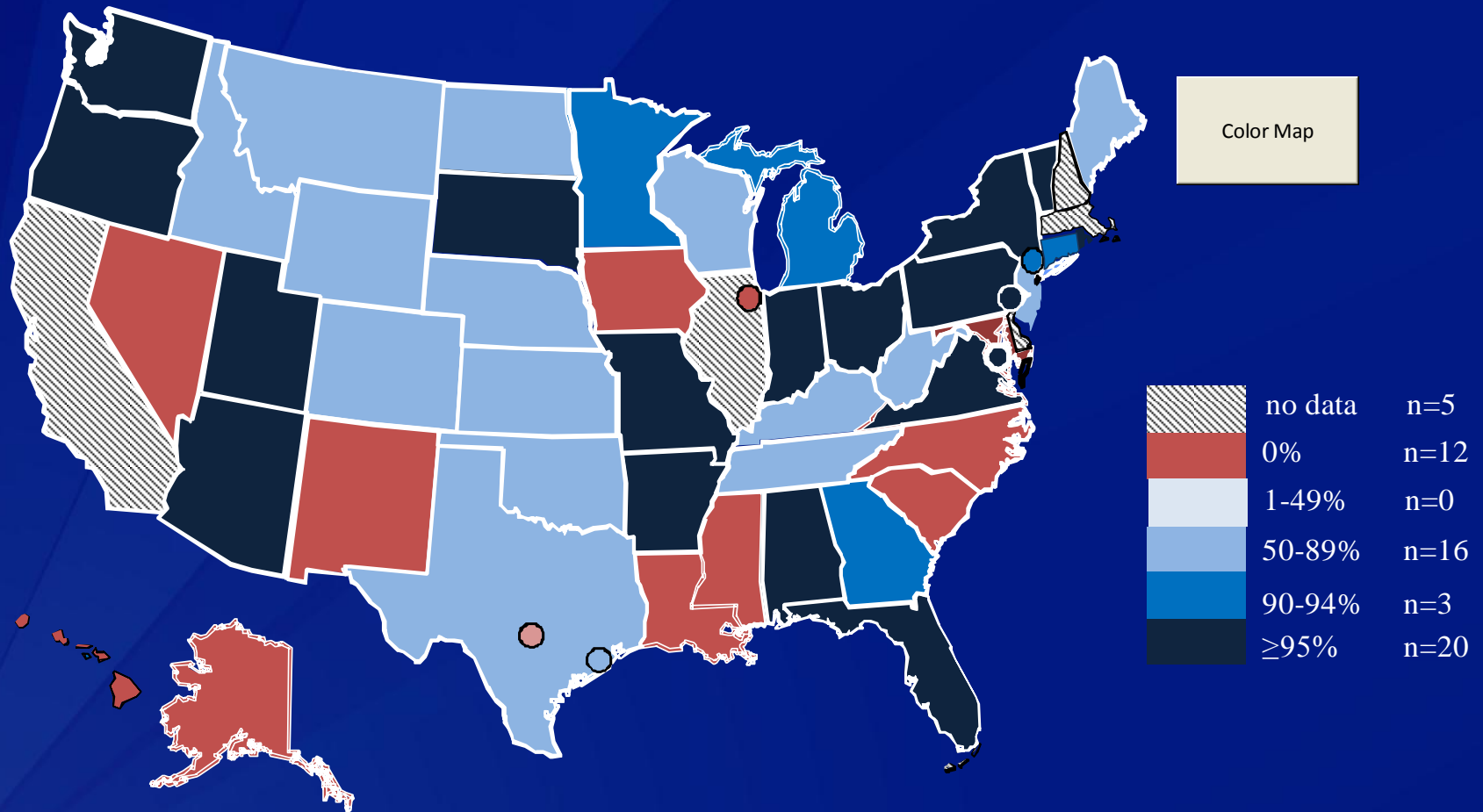
## ❑ 2009 IISAR

- “Is your IIS populated by birth data” – Yes / No
  - Vital records, birth hospitals & other sources
- 82% reported “Yes”

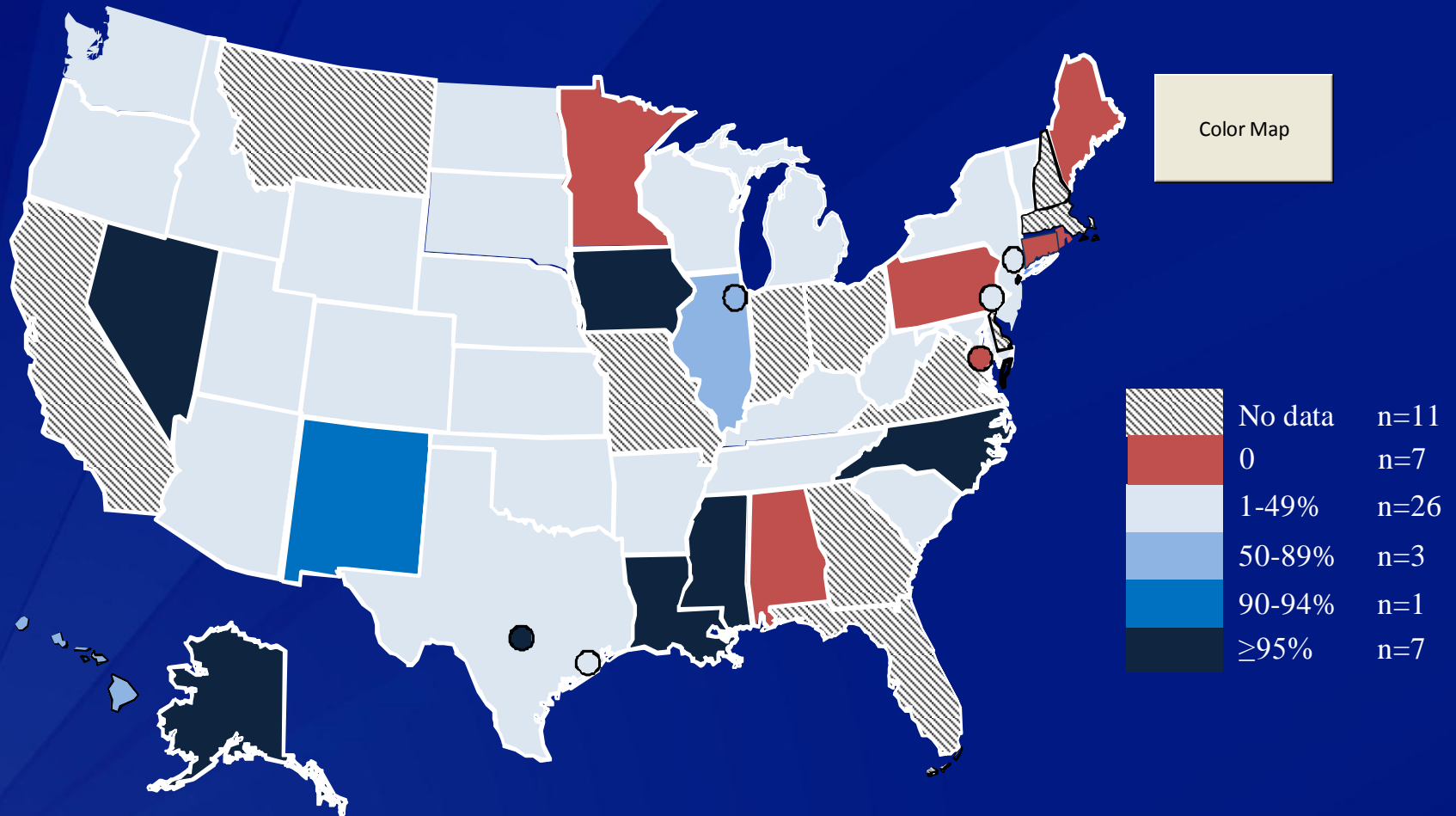
## ❑ 2010 IISAR

- Report # of records created for children born in 2010 by source
  - Vital records
  - Birth hospitals & other sources

# Percentage of newborn records created in IIS from Vital Statistics – 2010

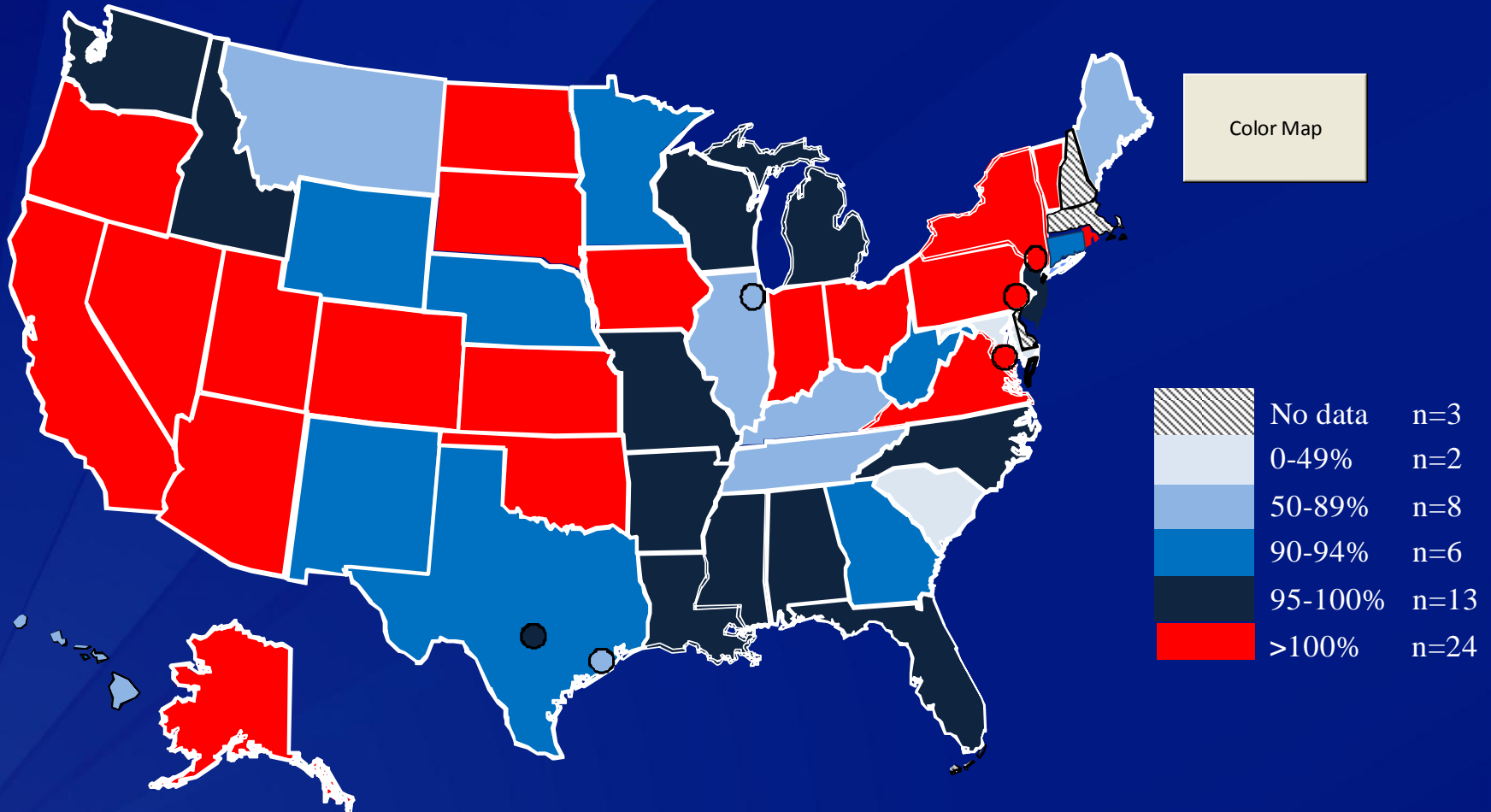


# Percentage of newborn records created in IIS from other birth sources – 2010





# Percentage of newborn records created in IIS from Vital Records & other birth sources – 2010



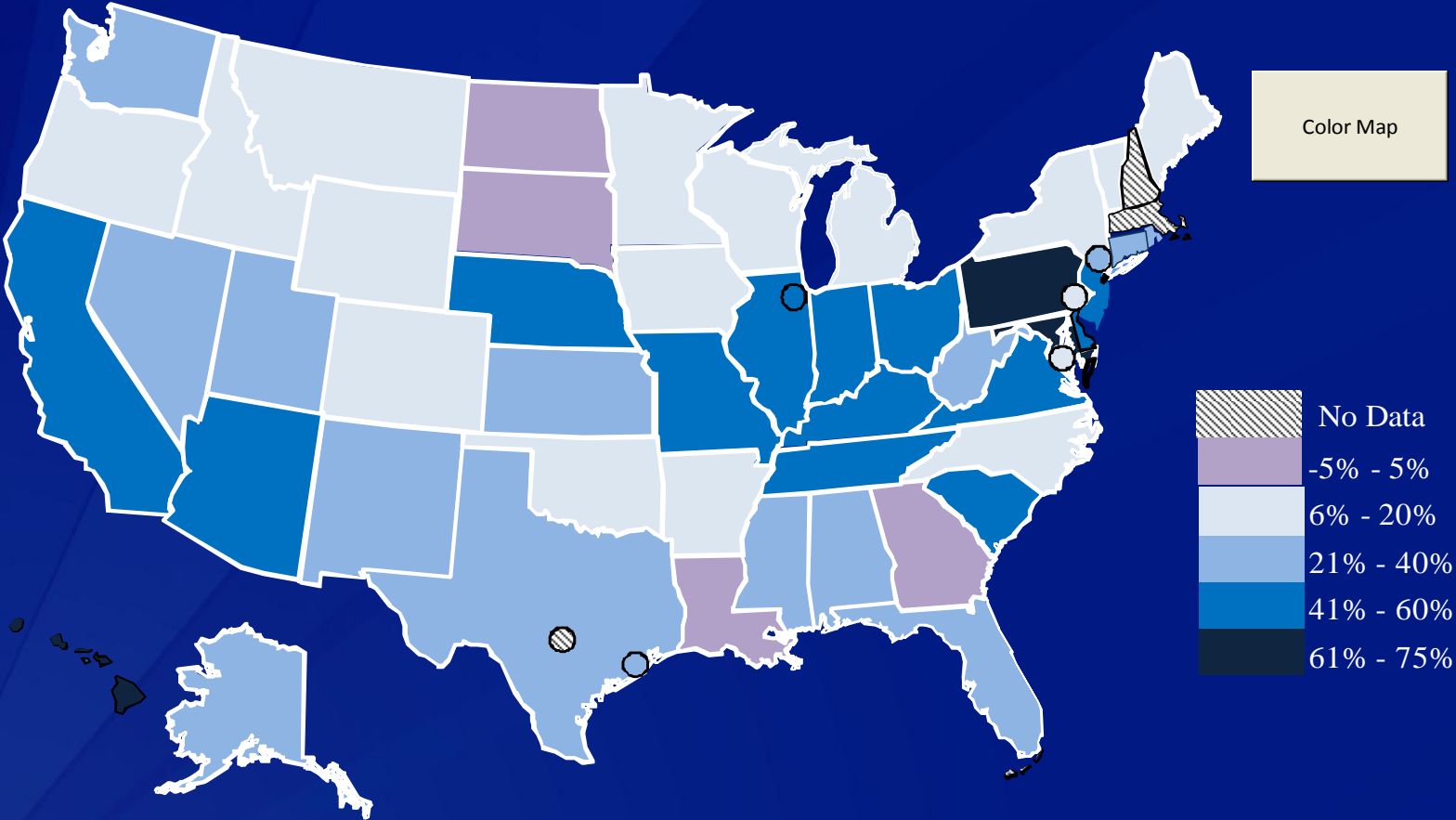
## IIS SMEs for Evaluations

- ❑ **CDC developing more SME support for:**
  - Evaluations of IIS-specific issues (e.g. MOGE)
  - Evaluations of other immunization program components / other partners using the IIS (e.g. AFIX, WIC, etc.)
  - Vaccination coverage / vaccine use studies
  - Individual consultation regarding methods, analysis, etc.
  - Development and distribution of IIS-based best practices
  - Includes Immunization Program Evaluations (317 requirement) and other evaluations

# Assessing Vaccination Coverage Using IIS

- ❑ **National Immunization Survey (NIS) / IIS activities for state-level coverage**
  - IIS as a sampling frame to identify child participants in NIS and adolescent participants in the NIS-Teen
  - IIS to contribute to vaccination data for NIS participants
  - Compare IISAR coverage estimates with NIS estimates
    - Can IIS be used for state-level coverage and if so, when?

# Difference between 431331 coverage among 19-35 month olds – 2010 NIS vs. 2010 IISAR



National Average: 30% (excluding Territories)

# Assessing Vaccination Coverage Using IIS

## □ IIS for local assessments / small area analysis

- Develop methodologies to calculate and interpret vaccination coverage for sub-populations (e.g. counties, Census-tracts, zip codes, etc.).
- Need to identify:
  - True pockets of need
  - Areas with high rates of out-migration
  - Areas with low provider participation
  - Other factors that may create artificially low coverage estimates
- Dedicate resources most efficiently

# Summary

## □ CDC is working to

- Support evaluation capacity-building for IIS staff
- Develop IIS evaluation best practices
- Provide individual consultation on IIS evaluations
- Increase the number and quality of IIS-based evaluations

**For more information, please contact:**

Laura Pabst, MPH

[LPabst@cdc.gov](mailto:LPabst@cdc.gov)

404-639-6082