# Measuring child participation in immunization registries: two national surveys, 2001

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### **Objectives**

- Describe the progress of immunization registries in reaching a national objective using two data sources
- Describe the percentage of children 19-35 months of age participating in an immunization registry
- Describe the characteristics of health providers who report vaccines to registries





### National Objective for Immunization Registries

 Increase to 95% the proportion of children <6 years of age who participate in fully operational, population-based immunization registries

(Healthy People 2010, objective 14.26)





### **CY2001 IRAR Methods**

- Self-administered questionnaire to immunization program managers; yearly reporting requirement of Public Health Service Act 317b grantees
- Questions pertain to child and health provider participation in registries, vaccination coverage levels, and registry functionality
- Analysis focused on states and DC





### NIS Methods (1)

- Random-digit-dialing survey of parents; collects vaccination coverage on children 19-35 months of age
- Validates parental responses with provider records via a mailed survey
- Beginning in April 1999, the mailed NIS provider survey asked: "Did you or your facility report any of this child's immunizations to your community or state immunization registry?"





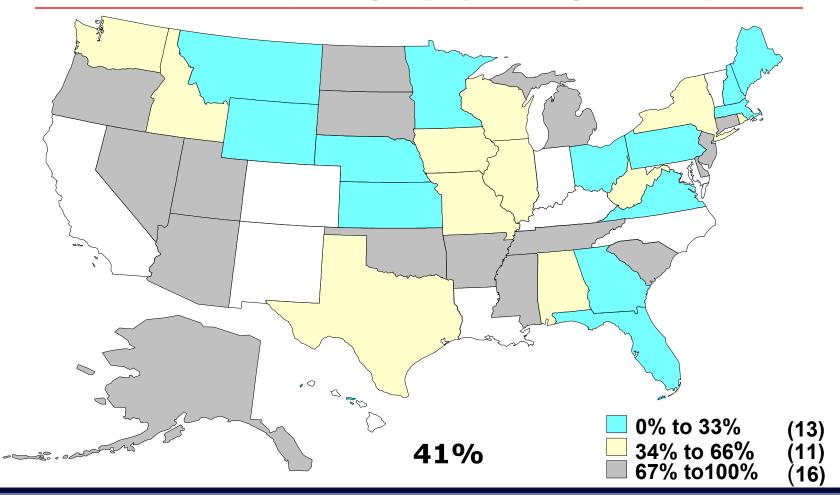
### NIS Methods (2)

- Answers are linked to child data; "yes" by at least one provider indicates a child in a registry
- Data from 23,531 children 19-35 months of age, weighted to represent U.S. population
- State of child's residence used as proxy for state of provider's practice
- SUDAAN 7.5 produced all NIS estimates and standard errors





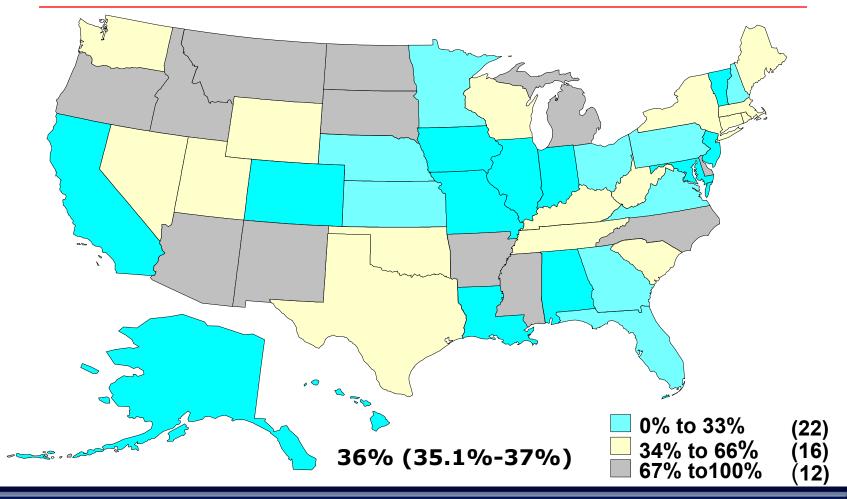
### IRAR- 19 to 35 months







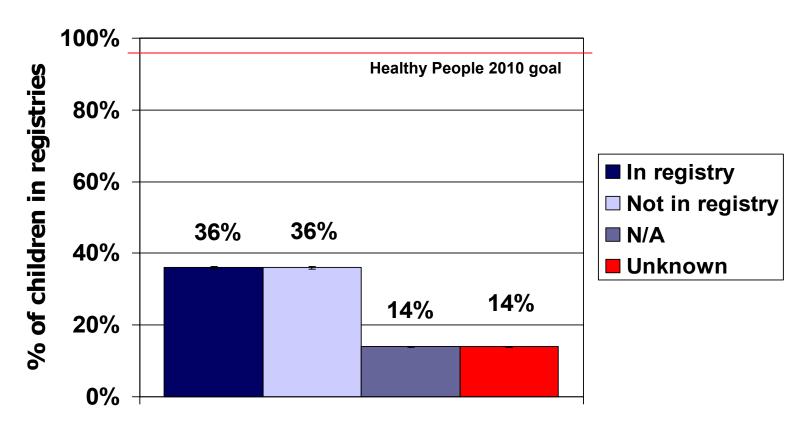
### NIS- 19 to 35 months







### Children 19-35 months of age who had at least one of their providers report their vaccination records to a registry

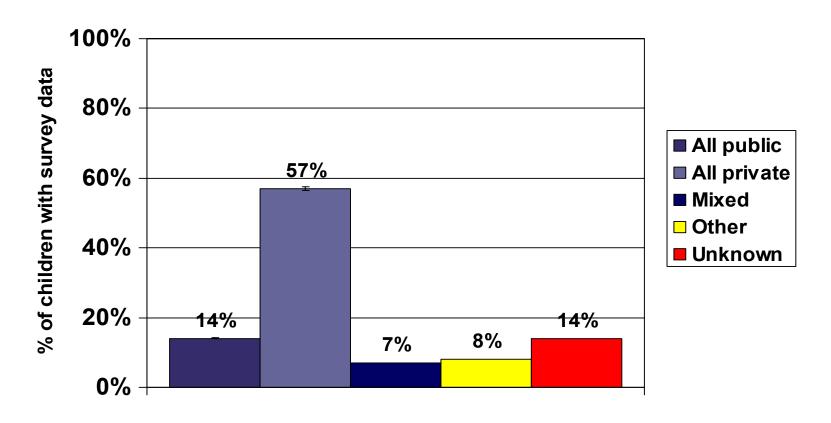


**Registry participation** 





### Percentage of children 19-35 months of age by immunization facility type

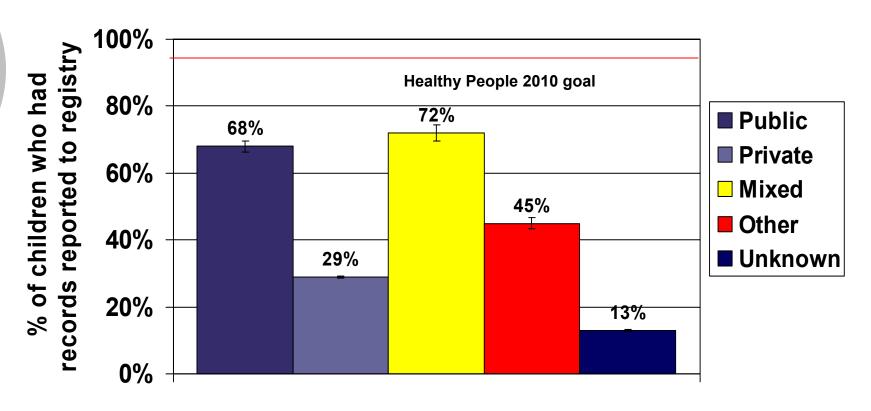


Immunization facility type





# Children 19-35 months of age who had a provider report their vaccination records to a registry by provider type



**Provider type** 

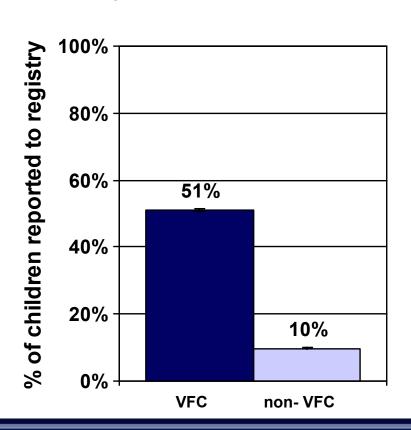


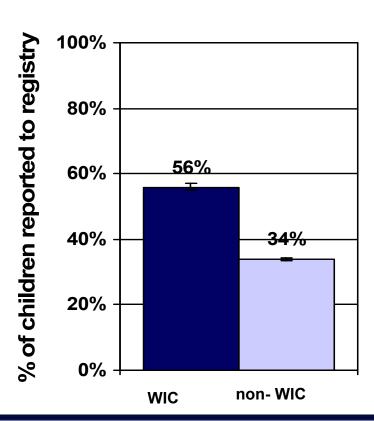


# Percentage of children aged 19-35 months who had their vaccinations reported by at least one VFC or WIC provider

By VFC provider











### **Conclusions (1)**

- States still trying to reach the Healthy People 2010 goal
- Poor agreement between NIS and IRAR estimates
  - Measure estimates differently
  - NIS definition of registry





### **Conclusions (2)**

- Children with only public providers or a mixture of public and private providers were almost three times more likely to have their vaccination records reported to a registry (2001 NIS)
- Children seen in WIC clinics or by VFC providers are more likely to have their immunization data reported to an immunization registry (2001 NIS)





### Limitations

- Data are self-reported
- IRAR provider numbers unreliable
- All NIS results are child-specific, not provider-specific
- The state where a child resides was used as a proxy measure for the provider and registry location in the NIS analysis





#### Recommendations

- Registries should use results to target immunization marketing efforts to parents and health providers to increase child and provider registry participation
- CDC and local projects should continue to use the NIS to complement and/or validate registry participation data from the IRAR





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