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Assessing Perinatal Screening Rates: Preliminary Results from South Carolina

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The Project

- **An Assessment of HIV Perinatal Screening in Hospitals**
- **Contract with Centers for Disease Control and Prevention/National Center for HIV, STD, and TB Prevention**
- **Contractor: Research Triangle Institute (RTI), a nonprofit research institute**

The Project Team

- **Allan Taylor (Current Task Monitor)**
- **Stephanie Sansom (Former Task Monitor)**
- **Elizabeth Zell**
- **Jill Clark**
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Contributors

- **Staff of the participating hospitals**

Overview

- **Purpose of the Assessment**
- **Methodology**
- **Results**
- **Future Analysis**
- **Discussion**

Purpose of the Assessment

- Develop a consistent design for estimating hospital perinatal screening rates for infectious diseases using medical charts
- Assess screening rates by hospital and by Perinatal Prevention Area in comparison with CDC guidelines
- Analyze effects of hospital and patient characteristics on screening rates

Methodology

- Target Population—Live births that occurred 01/01/03 to 12/31/03 in delivery hospitals in selected areas; includes mothers who are nonresidents as well as residents
- Data Collection Unit—Mother's and Infant's Records
- Sample Frame—Vital Records
- Sample Design—Hospitals selected proportional to the number of births; 220 births selected randomly with each selected hospital

Methodology

- Sample size can support estimates at either the hospital level or Prevention Area
- Sample Size in South Carolina
 - 11 Hospitals
 - 2,420 Births
- Sample Size in Full Assessment (120 hospitals in 12 states; 26,400 birth records)

Methodology

- Data Collection Instruments—Content and Format
 - Mother's demographic and prenatal history
 - Documented screening for GBS, HBsAg, Rubella, Syphilis, Chlamydia, HIV, either prenatally, or during labor and delivery or (for HIV) in the infant's record
 - 1-page form (2-sided)
- Data Collection Procedures
- Institutional Review

Results

Completion Rates

Hospital

$$\frac{\text{Participating Hospitals}}{\text{Sampled Hospitals}} = \frac{11 \text{ Hospitals}}{11 \text{ Hospitals}} = 100.0\%$$

Births

$$\frac{\text{Complete Abstract Records}}{\text{Sampled Birth Records}} = \frac{2,407 \text{ Records}}{2,430 \text{ Records}} = 99.5\%$$

Results—Mother's Characteristics

Preliminary Estimates

	Percent (<i>n</i> = 2,407)	(95% CI)
Race		
White Only	59.5%	(57.6—61.4)
Black Only	32.4%	(30.7—34.7)
Other Only	0.6%	(0.4—1.0)
Missing/ Not Documented	7.4%	(6.4—8.5)

Results—Mother's Characteristics

Preliminary Estimates

	Percent (<i>n</i> = 2,407)	(95% CI)
Ethnicity		
Non Hispanic	57.4%	(56.0—58.8)
Hispanic	6.6%	(5.7—7.7)
Missing/ Not Documented	36.0%	(34.7—37.2)

Results—Mother's Characteristics

Preliminary Estimates

	Percent (<i>n</i> = 2,407)	(95% CI)
Prenatal Care		
Yes	98.7%	(98.2—99.1)
No	0.8%	(0.5—1.3)

Overall Screening Rates*

Preliminary Estimates

Screening for:	Percent with Documented Screening (n = 2,407)	(95% CI)
Group B Strep	78.5%	(76.8—80.1)
HBsAg	95.8%	(94.9—96.5)
Rubella	82.0%	(80.4—83.4)
Syphilis	89.8%	(88.6—90.8)
Chlamydia	78.9%	(77.3—80.4)
HIV	85.5%	(84.2—86.8)

***Screening Rate = Documented offer or date of offer or result / Births**

Future Analysis

- Compare Screening Rates by Hospital Characteristics
- Compare Screening Rates by Mother's Characteristics (Payment source for labor and delivery, Kessner Index, Country of birth (US/Other))
- Extend analysis to other states as data collection is completed

Discussion/Questions

Thank You

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