Organizational Influences on the Direct Provision of STD Prevention Services by Local Health Departments

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Annual national STD incidence rates have not reduced over time in spite of the identification of effective surveillance and prevention methods

Structural Changes in LHDs

- Many local health departments (LHDs) have been modifying their organizational structures and processes in order to more effectively address the social and environmental influences on chronic disease prevalence and morbidity.

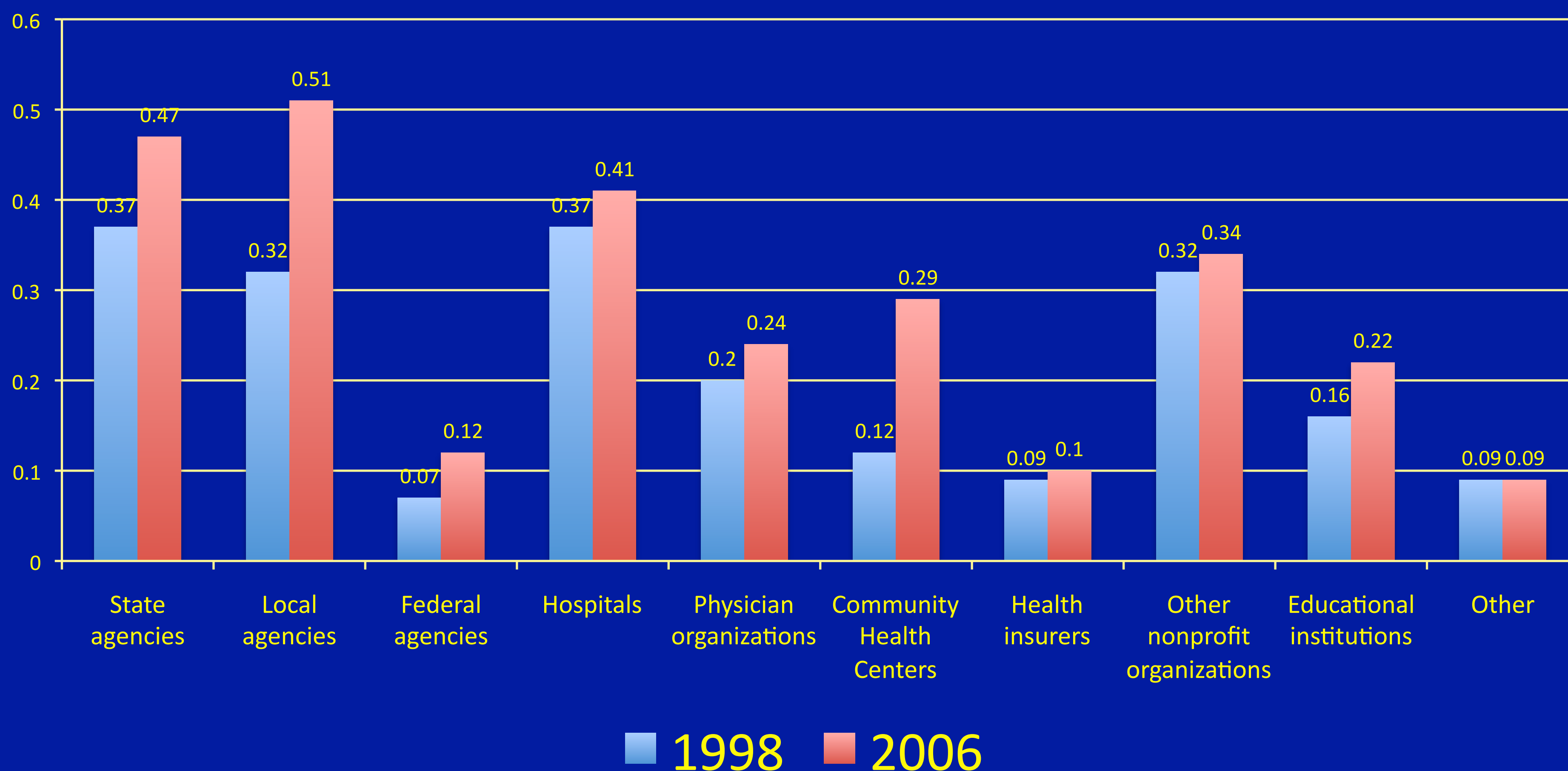
•More **diversified** – broader scope of services

•More **integrated** with other system contributors

•More **concentrated for policy development** activities

Source: Mays et. al, Milbank Q, 2010

More Integration with System Contributors Over Time



Source: Mays et. al, Milbank Q, 2010

Potential Unintended Effects

- Organizational changes can affect the reach and effectiveness of **traditional LHD functions**, including infectious disease control
- Direct provision of STD prevention can have advantages (link to surveillance efforts, coordination with community partners).

Research Questions

1. To what extent do LHDs discontinue providing STD prevention services (screening, social marketing, outreach) over time?

2. Which baseline LHD organizational factors are associated with changes in the direct provision of STD prevention?

3. Preliminary: Are changes in the direct provision of STD prevention (1992 to 2005) associated with STD incidence rates (2005-2008)?

Data Sources

- National Association of City and County Health Officials (NACCHO) Profile surveys from 1992 and 2005 waves (n=1523)
- County-level STD Incidence Data from the Centers for Disease Control's National Electronic Telecommunications Systems for Surveillance (NETTS) for 2005, 2006, 2007, and 2008.

Chlamydia, Gonnorhea, and Primary & Secondary Syphilis (merge limited to geocoded LHDs in 13 states)

LHD Organizational Factors

- Structural Characteristics
  - Jurisdiction type (city, county, multi-county, multi-district)
  - Jurisdiction size
  - Existence of local board of health

- Financial Characteristics
  - FTEs per jurisdiction population
  - Expenditures per population
  - Proportion of expenditures from local (city/county) sources.

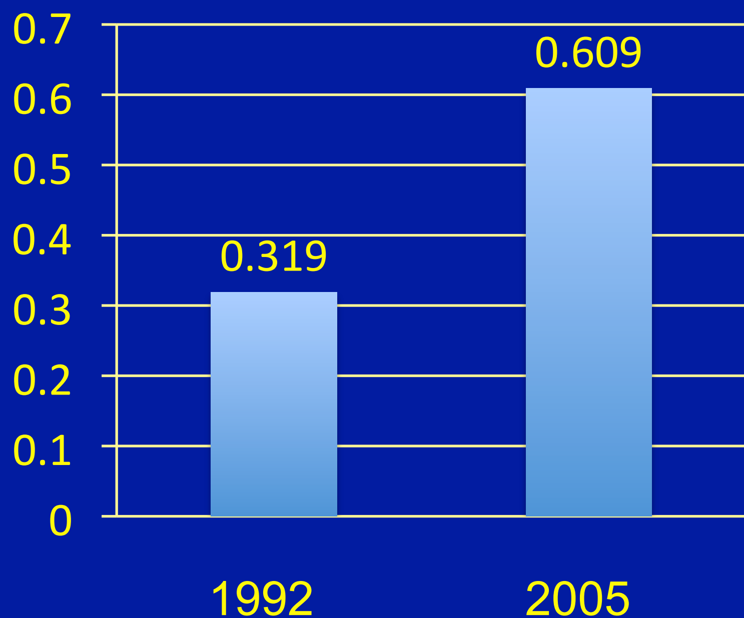
Analysis

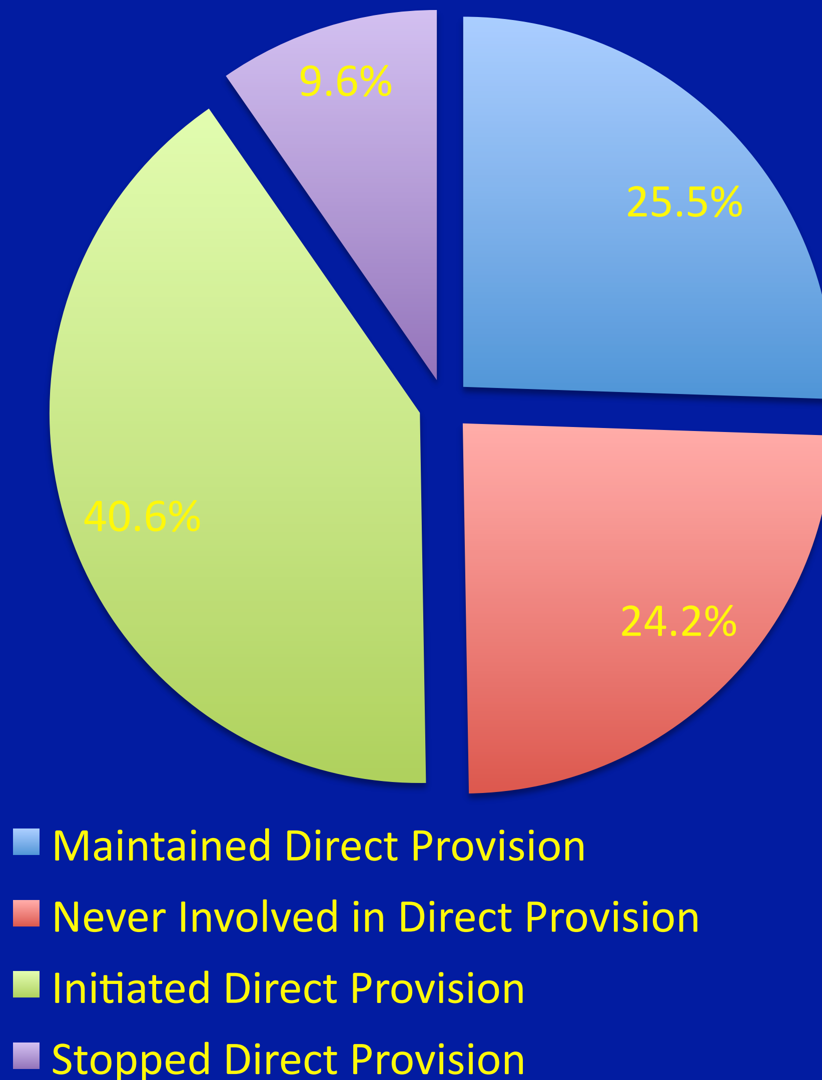
- Create four categories representing changes in the direct provision of STD prevention based responses to 1992 to 2005 NACCHO Profile Surveys

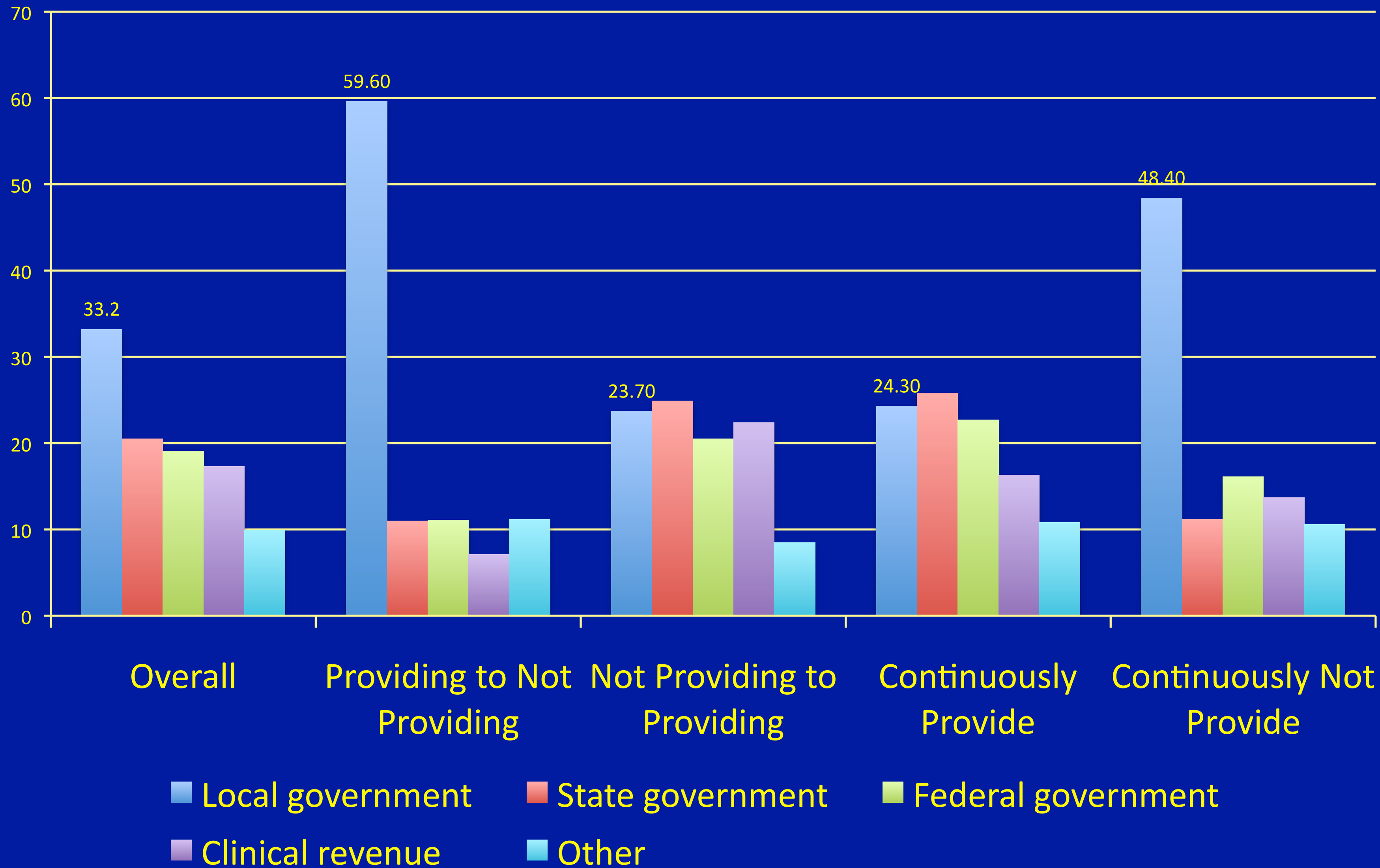
- Examine baseline LHD organizational correlates of changes to the direct provision of STD prevention (bivariate and multivariate)

- Explore relationship of changes in the direct provision of STD prevention (2005) and STD incidence rates (2005-2008).

Changes in the Direct Provision of STD Prevention by LHDs (1992 to 2005)

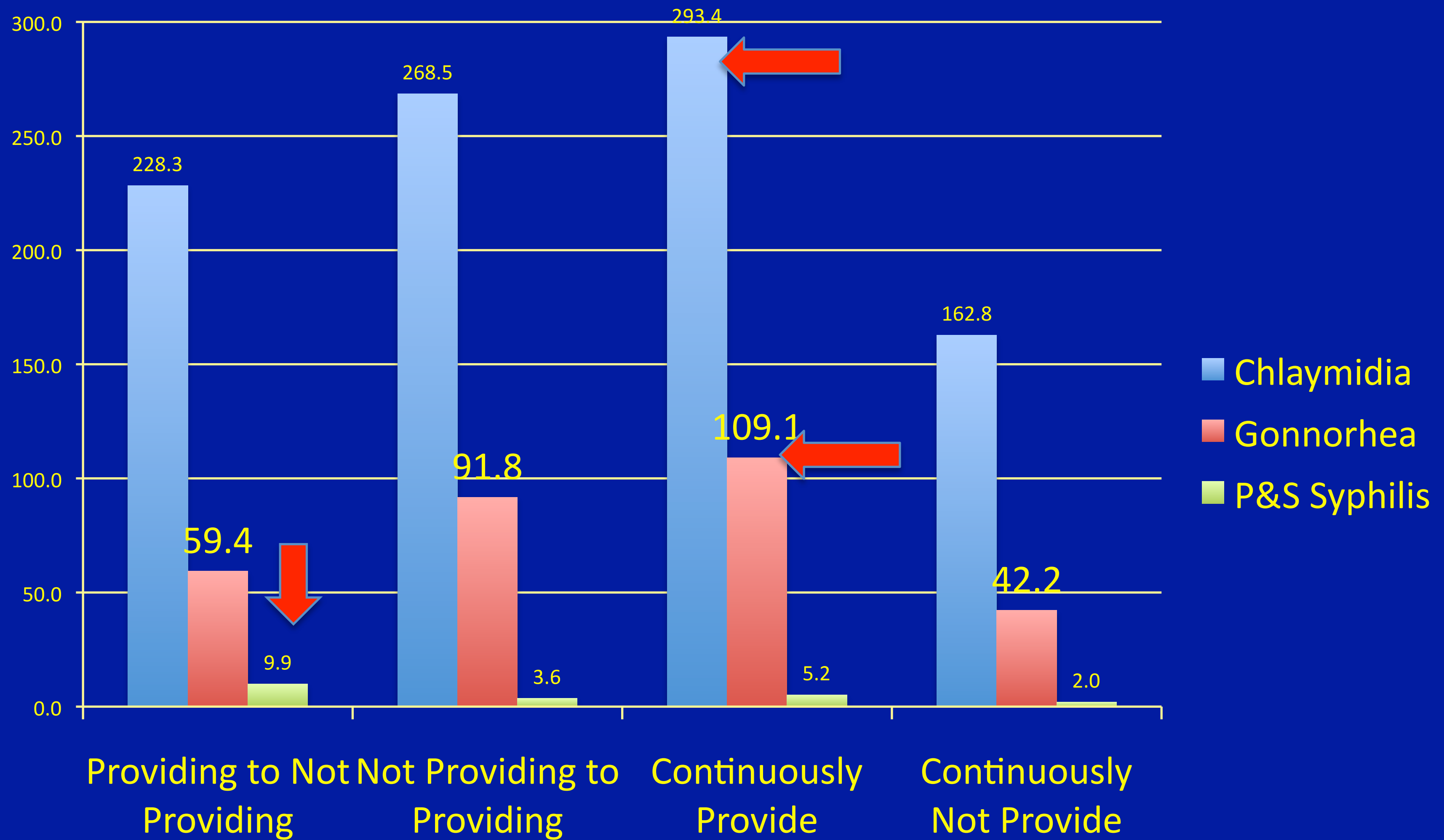





Higher Proportions of LHD Revenue From Local Sources Associated with Not Directly Providing STD Prevention in 2005
70
60
50
40
30
20
10
0
33.2
59.60
23.70
24.30
48.40
Overall
Providing to Not Providing
Not Providing to Providing
Continuously Provide
Continuously Not Provide
Local government
State government
Federal government
Clinical revenue
Other

	Providing to Not Providing			Continuously Not Provide	
Variable	OR	p-value		OR	p-value
LHD FTEs per population*	0.34	<0.001		0.61	<0.001
County LHD (vs. not)	0.55	0.001		0.85	0.19
City/County Sources of Funding (%)*	1.72	<0.001		1.78	<0.001
Board of Health (vs. none)	NS	NS		1.26	0.20
Black Population in Jurisdiction (%)*	0.28	<0.001		0.24	<0.001
Juridiction Size*	0.59	0.03		0.37	<0.001

Direct Provision (2005) and Average County STD Incidence Rates (2005-2008)



Summary

- The reorientation of LHDs to chronic disease prevention did not coincide with a mass discontinuation of the direct provision of STD prevention services.

LHDs serving

- non-county jurisdictions,
- having fewer LHD FTEs per population,
- higher proportions of non-Blacks,
- and higher proportions of revenue from local sources

were more likely to not directly provide STD prevention services in 2005.

Limitations

- No data on the nature of interorganizational arrangements for STD prevention in local communities (magnitude and quality of integration)
- Spatial autocorrelation affects county-level incidence rates and need to consider in estimating associations of LHD factors and STD incidence.
- Assessment of STD incidence rates is limited to the geocoded LHDs in the NACCHO Profile Surveys.

Conclusions and Next Steps

- Understand *how local STD screening arrangements affect STD incidence,* particularly the magnitude and nature of interorganizational collaboration
- Measuring the reach of STD prevention activities in a community
- Understand the influence of safety net providers (community clinics and health centers) and coordination with LHDs.