### Budget Cuts, Maternal and Child Health Services, and Community Need

Budget cuts and maternal and child health service reductions occur in counties with highest rates of low birth weight

Sarah J. Newman, MPH Research & Evaluation Analyst National Association of County and City Health Officials (NACCHO) Wednesday, April 22, 2015 Session 4B: Maternal & Child Health Blackberry Lilly



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Educational Need/Practice Gap: Limited understanding of the relationship between local health department maternal and child health services and birth outcomes

Expected Outcome: Local health department leaders and other decision-makers will consider the potential impact of maternal and child health cuts on low birth weight (especially in areas with high incidence) and identify ways to eliminate or minimize those impacts





### Acknowledgements

### Centers for Disease Control and Prevention Robert Wood Johnson Foundation



## Maternal and child health (MCH) services have been consistently reduced

- Resource allocation decisions are not always based on perceived community need
- Investments in MCH services have a positive impact on health outcomes



### To what extent are local health department (LHD) budget cuts and changes in the provision of MCH services associated with community need?



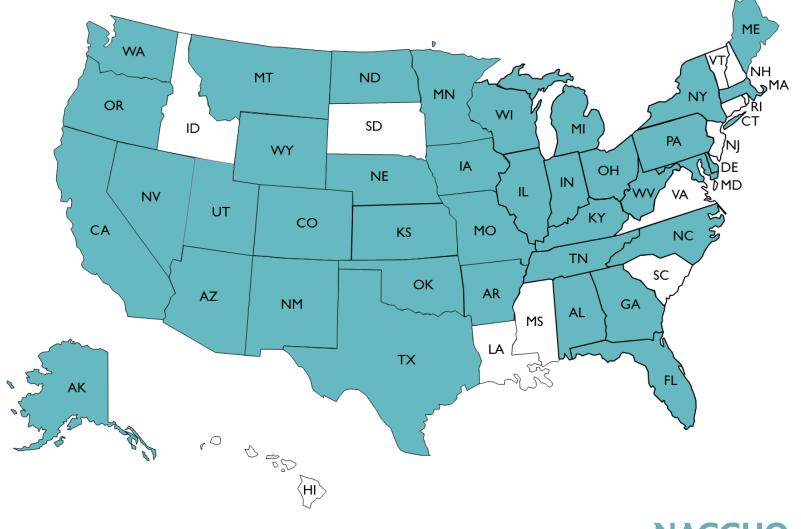
### Combined data sources

### NACCHO's 2014 Forces of Change survey: LHD budget cuts and provision of MCH services

2014 County Health Rankings: County-level rates of low birth weight



### Analyzed cross-sectional dataset of 422 county-level LHDs





### Tested associations between three variables

#### Budget cuts

• Less than, same as, greater than previous fiscal year

#### MCH service provision

Family planning, prenatal care, obstetrical care, WIC, MCH home visits, EPSDT, well child clinic

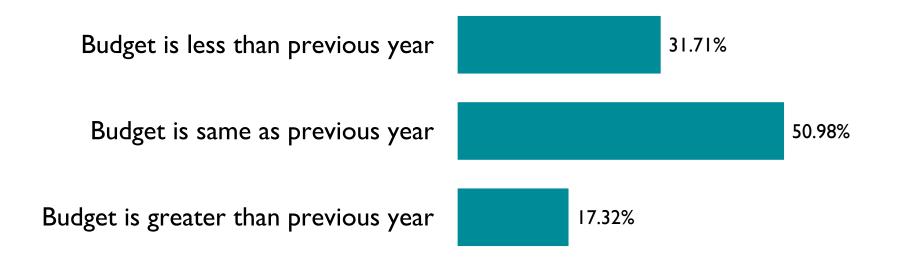
 Reduced, expanded, no change in service provision; does not provide MCH services

#### Rates of low birth weight

• Percent of births that are below 2,500g



# Almost one-third of LHDs reported budget cuts in 2014

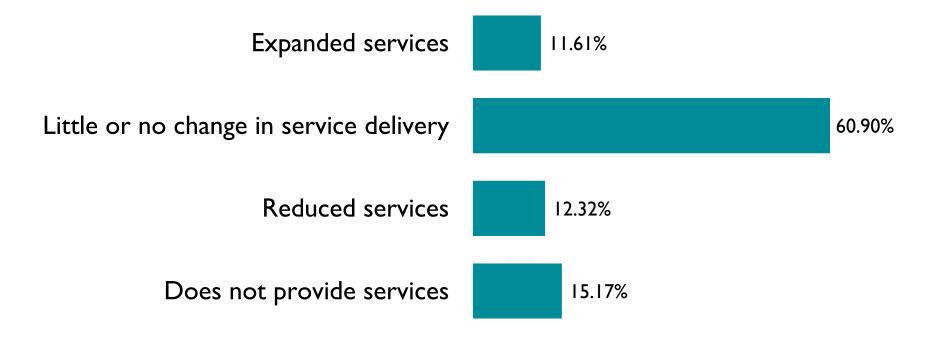


n = 410



Note: Only county-level LHDs are included in this analysis

## One in eight LHDs reported reducing MCH services

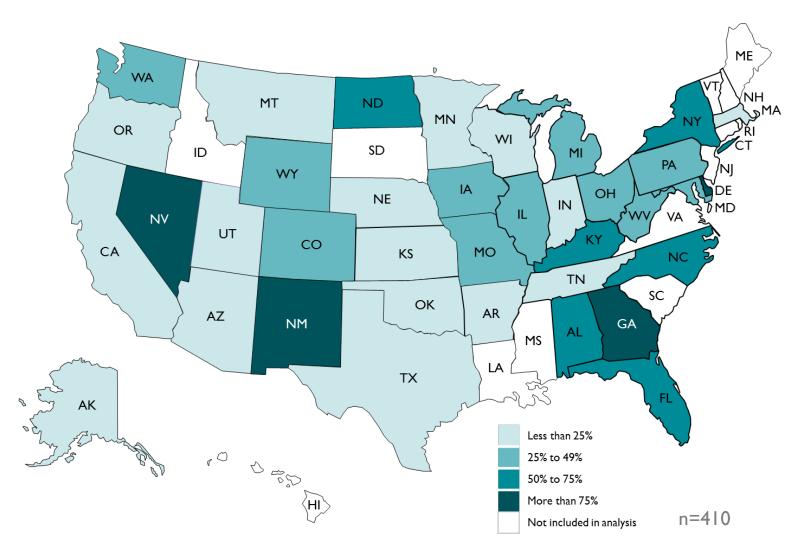






Note: Only county-level LHDs are included in this analysis

#### Proportion of LHDs with budget cuts

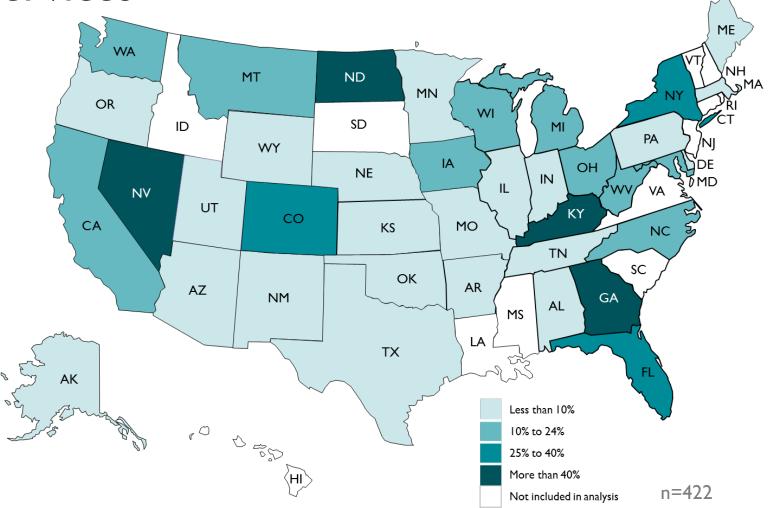


Note: Only counties with LHDs included in the sample are shown





### Proportion of LHDs reducing MCH services

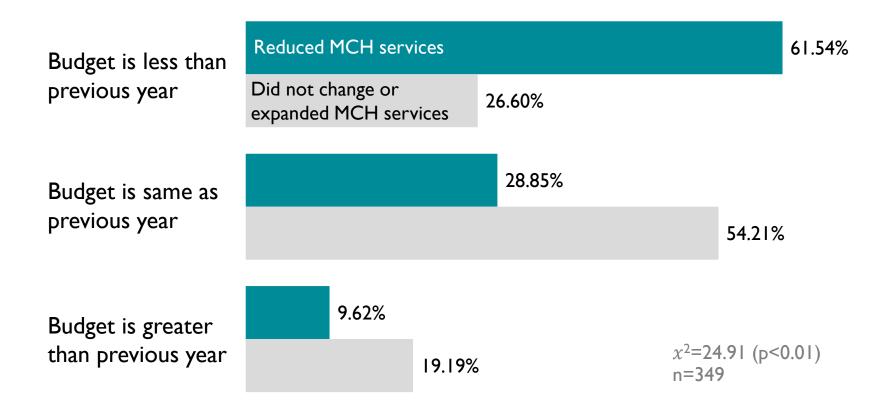


Note: Only counties with LHDs included in the sample are shown





### LHDs with budget cuts also reduced their MCH services





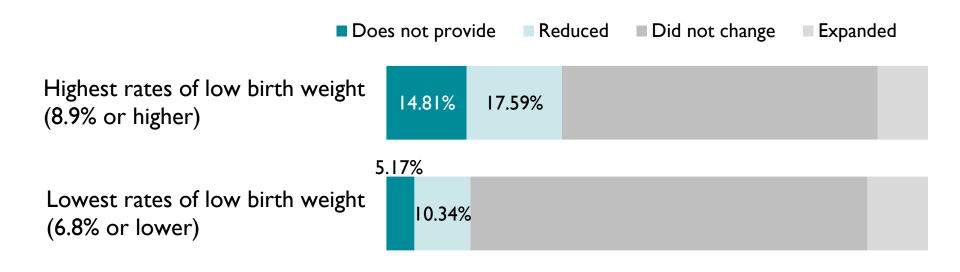
# Rate of low birth weight higher in counties where LHDs experienced budget cuts

	Mean	Standard deviation	n
All counties with LHDs in sample	7.98%	١.76	422
Budget is less than previous year	8.49%	1.97	130
Budget is same as previous year	7.76%	1.62	209
Budget is greater than previous year	7.72%	1.62	71

p=0.001



### LHDs in counties with high rates of low birth weight are less likely to provide MCH services



x<sup>2</sup>=9.51 (p=0.023) n=224



#### Limitations

- Only county-level LHDs are included
- Directionality and causation cannot be determined
- MCH services broad category
- No data on size or scope of cuts
- Data were self-reported



# Cuts are occurring in counties with greatest need

- Rates of low birth weight higher in counties where LHDs experienced budget cuts
- Counties with high rates of low birth weight
  - Less likely to provide MCH services
  - More likely to reduce MCH services



### Implications

- Budget cuts and MCH program reductions perpetuate poor birth outcomes
- Consistent funding in areas of high need will help reduce the burden of poor birth outcomes



### Additional resources

- Bekemeier B, Chen A, Kawakyu N, & Yang YR. Local public health resource allocation: limited choices and strategic decisions. Am J Prev Med 2013;45(6);769-75
- Bekemeier B, Yang Y, Dunbar MD, Pantazis A, & Grembowski DE. Targeted health department expenditures benefit birth outcomes at the county level. Am J Prev Med 2014;46(6);569-77
- National Association of County and City Health Officials (NACCHO). Staying resilient in hard times: local collaboration for women, children, youth, and families. Washington, DC. October 2013.
- National Association of County and City Health Officials (NACCHO). Staying resilient in hard times: local programs and services for women, children, youth, and families. Washington, DC. June 2014.



### Thank You

Carolyn Leep, Jiali Ye, Nathalie Robin

NACCHO's 2014 Forces of Change dataset publicly available:

www.nacchoprofilestudy.org/data-requests



