### Public Health PBRN Monthly Virtual Meeting November 21, 2013

Research-in-Progress Presentation by Washington PBRN

Public Health Activities & Services Tracking

**PHAST "Finance"...Works in Progress** 

**Betty Bekemeier, University of Washington** 

Conference Phone: 877-394-0659 Conference Code: 7754838037# Please remember to mute your computer speakers during the presentation



at the University of Kentucky College of Public Health







### PHAST "Finance".... Works <u>in Progress</u>

### NCC PBRN Presentation --November 21, 2013 Webinar

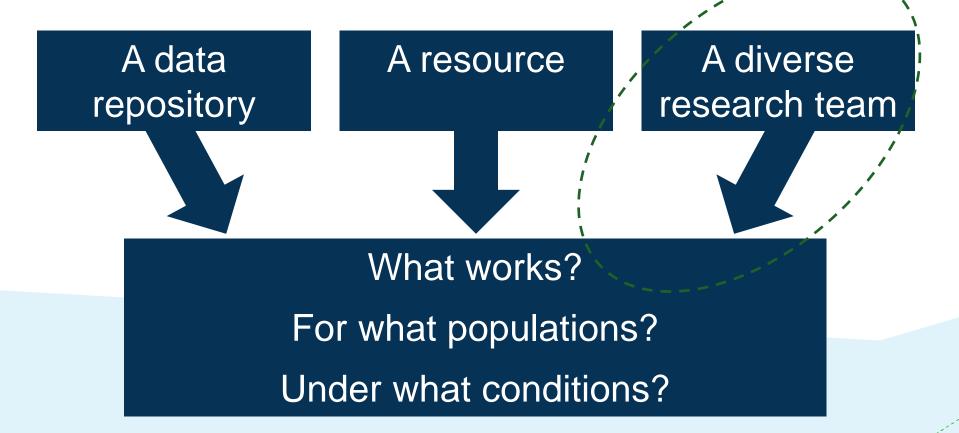
#### PBRN partners and PHAST Research Team Betty Bekemeier, Matt Dunbar, Greg Whitman, Athena Pantazis, David Grembowski, Jerry Herting, Michelle Yip



## Outline

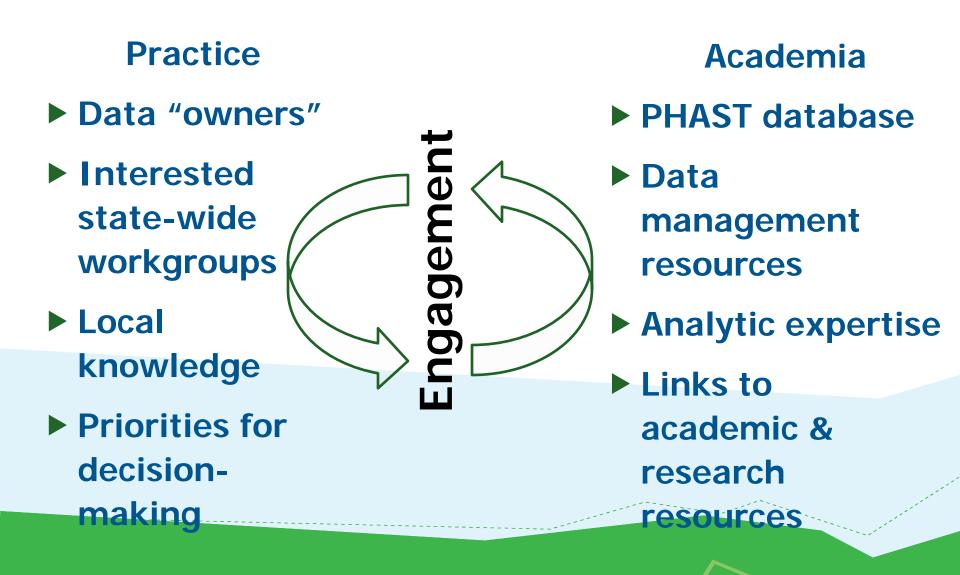
- PHAST Overview
- PHAST-Finance
  - MCH Findings
  - EH descriptives to date
  - CD Control descriptives to date
- PHAST Finance "Other"

### The PHAST Study: WHAT



PBRN PHAST Study | A project first funded by The RWJF – Nurse Faculty Scholars Program

### **Collaborative Process**





PHAST Finance: Variation in LHD investments relative to need & economic

change



### MCH

# LHD targeted expenditures: Health outcomes for women and children

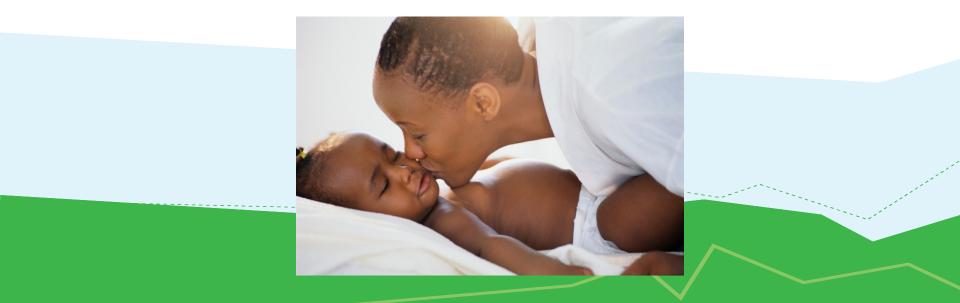


PUBLIC	
HEALTH	
ACTIVITIES &	
SERVICES	
TRACKING	



## **Research Question**

### Are LHD expenditures on MCH services impacting health outcomes for populations at risk?



### MCH

# **Findings/Discussion**

- LHD expenditures have an independent impact on birth outcomes...especially in areas of high poverty
- Despite limited variation & change in the outcome, an effect was detected
- *Targeted* expenditures "impact" more *proximal* outcomes

## Implications

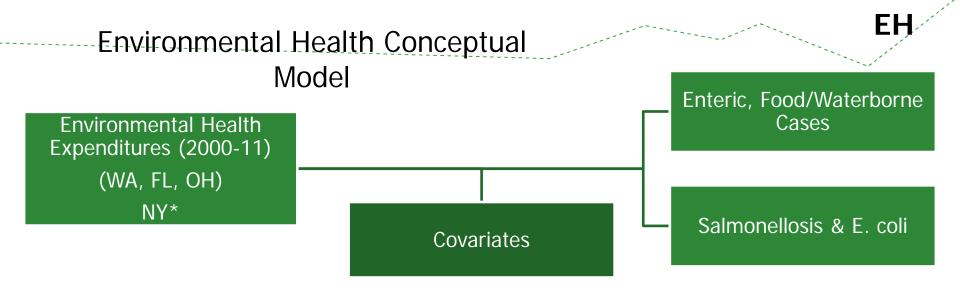
- LHD assurance function is critical....given service MCH reductions & transitions
  - Effective investments must not be lost
- PBRNs & detailed (often existing!) data are key to advancing PHSSR





## Environmental Health Update





Population characteristics	LHD services		Community		Others	
<ul> <li>Social Disadvantage Index (SDI)</li> <li>% poverty</li> <li>% of black</li> <li>% of Hispanics</li> </ul>	<ul> <li>food permits</li> <li>routine inspections</li> <li>food worker cards</li> <li>EH specialists</li> </ul>		• % food workers		<ul><li>CBSA</li><li>State</li></ul>	
<b>Note:</b> (*) variables still being pulled together. gray'd out variables = covariates not fully available.						

SDI = Social Disadvantage Index (including unemployment, income, households receiving public assistance).

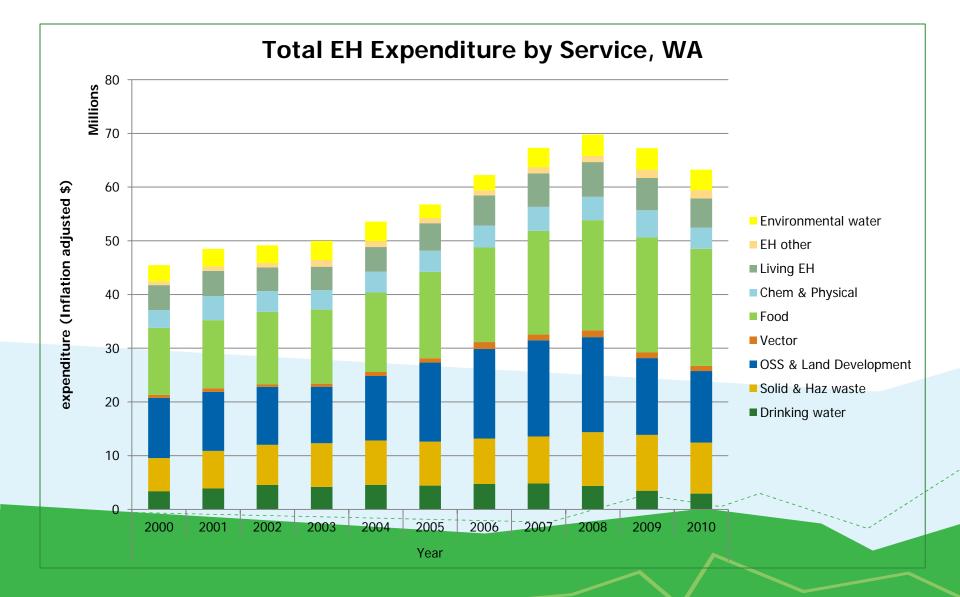
CBSA = Core Based Statistical Area (metropolitan, micropolitan, rural).

### What is in the EH bucket? (WA, FL, & QH)

EF	
1.	

WA (WA BARS)	FL (Service code)	OH	
Drinking Water Quality (wa_exp_562.52)	<ul> <li>Limited use public water systems (#57)</li> <li>Public water system (#58)</li> <li>Private water system (#59)</li> </ul>	<ul> <li>Local Environmental Health</li> <li>State Environmental Health</li> <li>Federal Environmental Health</li> </ul>	
Solid & Hz Waste (wa_exp_562.53)	Solid waste disposal service (#63)		
OSS & Land Development (wa_exp_562.54)	<ul><li>Individual sewage (#61)</li><li>Public sewage (#62)</li></ul>		
Vector (wa_exp_562.55)	<ul> <li>Rabies surveillance (#66)</li> <li>Arbovirus surveillance (#67)</li> <li>Rodent/Arthropod Control(#68)</li> </ul>		
Food (wa_exp_562.56)	Food Hygiene (#48)		
Chemical & Physical (wa_exp_562.57)	<ul> <li>Storage tank compliance service(#55)</li> <li>Biomedical waste services (#64)</li> <li>Toxic substances (#73)</li> </ul>		
Living Environments (wa_exp_562.58)	<ul> <li>Migrant labor camp (#52)</li> <li>Housing &amp; Public building (#53)</li> <li>Mobile home &amp; park (#54)</li> <li>Pools/bathing places (#60)</li> <li>Tanning facility services (#69)</li> </ul>		
EH – Other (wa_exp_562.59)	<ul> <li>Sanitary nuisance (#65)</li> <li>Air pollution (#71)</li> <li>Radiological health (#72)</li> <li>** Body art (#49)</li> </ul>		
Environment Water Quality (wa_exp_562.60)	<ul> <li>Water pollution (#70)</li> <li>SUPER Act Services (#56)</li> </ul>		
	<ul> <li>coastal beach monitoring (#47); Lead monitoring services (#50); Consumer product satisfaction, community EH project, EH initiatives (#45); Group care facility (#51); General EH (#75); General environmental engineer (#76); Environmental health surcharge (#115)</li> </ul>	<ul> <li>Local Laboratory_Environment</li> <li>State Laboratory_Environment</li> <li>Federal Laboratory_Environment</li> </ul>	

WA



#### 100 Millions 90 80 Expenditure (Inflation adjusted \$) 70 Environmental Water EH Other 60 ■Living EH Chem & Physical 50 Food 40 Vector Sewage 30 Solid Waste Disposal water system 20 10 0 2002 2010 2000 2001 2003 2004 2006 2007 2008 2009 2005

### **Total EH Expenditure, FL**

FL

E

year

### LHD EH Expenditures & Mean of 7 combined Enteric. Foodborne & Waterborne (EFW) Disease Rates



**Note:** The 7 combined diseases(95+% of EFW disease): Campylobacteriosis, Cryptosporidiosis, E. Coli, Giardiasis, Hepatitis A, Salmonellosis, and Shigellosis.





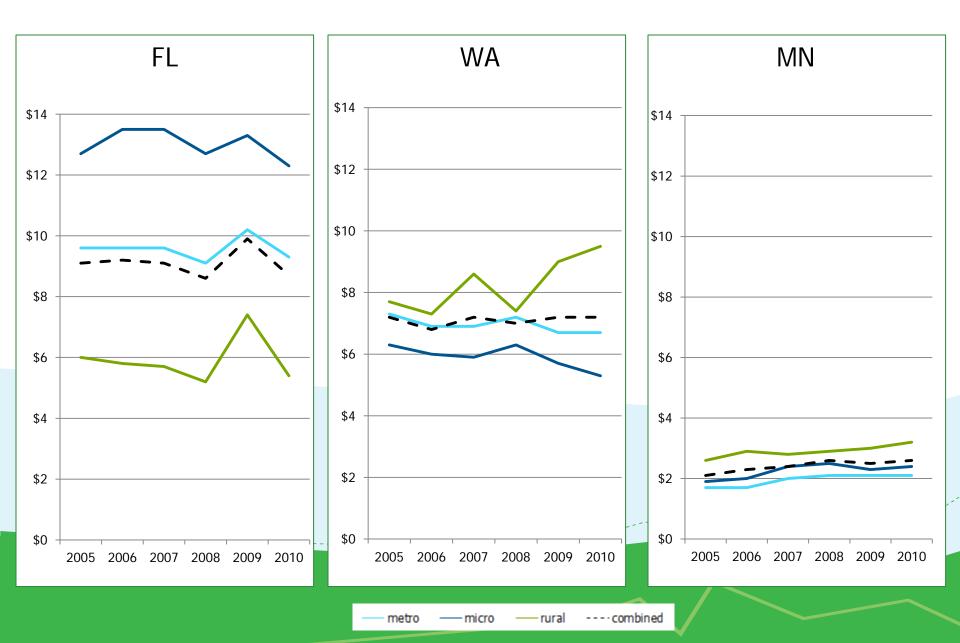
## Communicable Disease Update

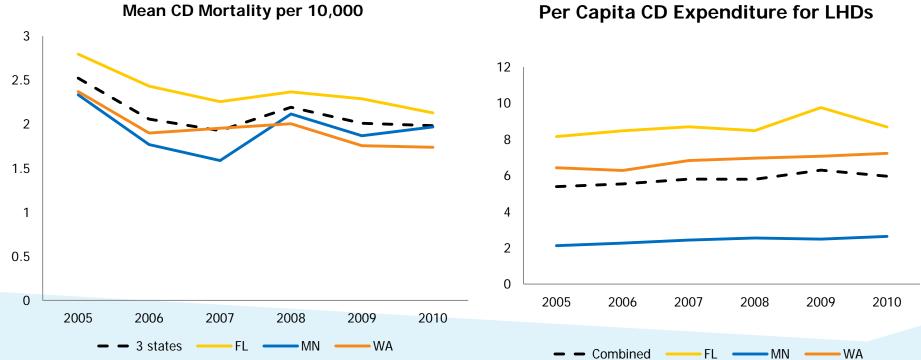


CD

### Per Capita CD Expenditures by CBSA

1





Per Capita CD Expenditure for LHDs

## CD Outcomes

- Immunization Rates
- Morbidity

# Analytic Next Steps

- Fewer Years (to include Imms data)
- More States (NY being added)

## Other...PHAST-Finance

- Incorporation of 3 "latent" LHD classes (paper under review)
- Inclusion of MPROVE data
- Comparisons of MCH, EH, CD funding overall—by 4 states, by before/after 2008
- Visits/webinars/meetings in/with YOUR PBRN &/or state partners
- Study end-date: May 31, 2013

### **PHAST Papers**

- Bekemeier, B. (2012). Tracking local public health services to inform decision making. *Northwest Public Health*, Spring/Summer 29(1),14-16. http://www.nwpublichealth.org/archives/s2012/tracking-local-public-health-services-to-inform-decision-making.
- Bekemeier, B., Bryan, M., Dunbar, M., & Fowler, C. (2012). Local health department provision of WIC Services relative to local "need"— examining 3 states and 5 years. *Frontiers in Public Health Services and Systems Research*, 1(1), Article 2. http://uknowledge.uky.edu/frontiersinphssr/vol1/iss1/2
- Bekemeier, B., Dunbar, M., Bryan, M., & Morris, M. (2012). Local health departments and specific Maternal and Child Health expenditures: Relationships between spending and need. *Journal of Public Health Management and Practice*, 18(6), 615-622.

#### Under Review:

- Bekemeier, B., Pantazis, A., Dunbar, M., & Herting, J. R. (2013, under review). Using available data to classify local health department approaches to service.
- Bekemeier, B., Yang, Y., Dunbar, M., Pantazis, A., & Grembowski, D. (2013, under review). Benefits of Targeted Local Health Department Expenditures to County-level Birth Outcomes.

# THANK YOU!

### The Robert Wood Johnson Foundation

...and PBRN Colleagues!!

- Florida
- Minnesota
  - Ohio
    - Washington
    - New York

Great teams have the "right people on the bus."

(Jim Collins, *Good to Great*, 2001)

**Public Health Activities and Services Tracking** 

MIN

### **Other Meeting Agenda Items**

**PBRN Research Updates** 

- Welcome to new PBRNs, Alabama and Virginia
- APHA Debrief
- CDC Injury Center proposal participating networks
  - North Carolina
  - Tennessee
  - Ohio
  - Virginia
  - Pennsylvania
  - Alabama
- AJPM December Theme Issue on PBRNs
- DACS update
- RWJF Open Forum- PBRN presentations

#### **Dissemination Opportunities**

- Frontiers
- Keeneland Conference and PBRN Grantee Meeting

#### **Funding Opportunities**

- Quick Strikes
- AcademyHealth Scholarships to the ARM and PHSR IG meeting- Kate Papa



# For more information contact: Glen Mays Glen.mays@uky.edu

111 Washington Avenue, Suite 201 Lexington, KY 40536 859-218-0113

www.publichealthsystems.org

