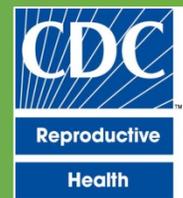


***MCH Epidemiology Program
U.S.-Mexico Border Initiative:
Past, Present and Future***

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U.S.-Mexico Border Region



***U.S.-Mexico Border: 1,000,000
legal crossings per day***



Socio-demographic Characteristics of the Border Population

- 14 million, divided equally between the U.S. and Mexico
- Projected to reach 20 million by 2020
- Resides in 14 pairs of interdependent sister cities
- Young with high fertility
- High Hispanic concentration
- Low education and income
- Limited access to health services



MCH Concerns in Border Region

Healthy Border 2010 addresses MCH issues:

- Adolescent pregnancy
- Infant mortality and birth defects
- Motor vehicle crash mortality in children
- Prenatal care
- Access to care
- HIV and STDs
- Cervix cancer
- Diabetes

Other important MCH issues

- Fetal mortality
- Maternal mortality
- Maternal obesity
- Cesarean birth



Factors that Limit MCH Epidemiology Capacity in the Region

- Few health resources
- Few health department staff with data skills
- National and state data not representative of the border
- Border-specific data limited by lack of standard definitions and procedures
- Poor coordination across international and state jurisdictions
- Two languages
- Incomplete telephone coverage
- Lack of formal street addresses



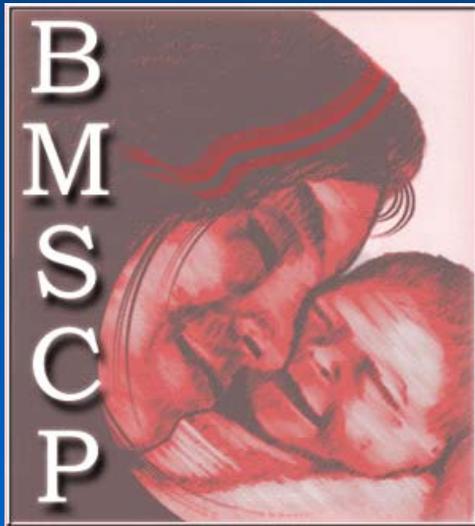
Maternal and Child Health Epidemiology (MCH Epi) Program



Supports public health partners to effectively address challenges to the health of women, children and families by building MCH epidemiology and data capacity at the state, regional, local and tribal levels to use information for public health action



Brownsville-Matamoros Sister City Project for Women's Health (BMSCP) 2003-2006



- 4-year demonstration project
- Created as a model for reproductive health surveillance in the border region

BMSCP Study Design

- Population
 - Women giving birth in Cameron County (Brownsville) and its sister city, Matamoros
- Sample
 - Systematic and random
 - 500 women per community
 - Identified from birth hospital delivery logs
- Data collection
 - In-hospital interview
 - Pre-pregnancy/prenatal factors, behavior & lifestyle, health history, contraception, birth outcomes, health coverage



BMSCP Hospital Interview



BMSCP Results

- Effective surveillance method
 - Population coverage 98%
 - Response rate 95%
- Useful pilot data
 - Local health institutions have submitted manuscripts for peer review
 - Publication expected in *Preventing Chronic Disease* theme issue, October 2008
 - Data will be available for public use in October 2008

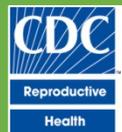


Health Care Coverage Before Pregnancy, BMSCP 2005^a

Cameron County	Matamoros	OR ^b (95% CI)
25.9%	68.0%	0.11 (0.1- 0.2)

^a Ruiz et al, unpublished

^B Odds ratio, adjusted



Attempted Breastfeeding in Hospital, BMSCP 2005^a

Matamoros	Cameron County	OR ^b (95% CI)
81.9%	63.6%	1.9 (1.3- 2.8)

^a Castrucci et al, unpublished

^b Odds ratio, adjusted



Ever Had a Papanicolaou Test, BMSCP 2005^a

Cameron County	Matamoros	OR ^b (95% CI)
95.7%	62.1%	6.8 (3.8-12.5)

^a Castrucci et al, unpublished

^b Odds ratio, adjusted



Tested for HIV During Pregnancy, BMSCP 2005^a

Cameron County	Matamoros	OR ^b (95% CI)
94.8%	57.6%	11.7 (6.7- 20.4)

a Gossman et al, unpublished

b Odds ratio, adjusted



Adolescent Births **(Births/1000 women ages 15 -19 yrs),** **BMSCP 2005^a**

Matamoros	Cameron County
110.6 (88.9 – 138.3)	97.5 (74.4 – 120.2)

^a Galván et al, unpublished



Health Behavior by Community, Ages 14-24, BMSCP 2005^a

Maternal Behavior	Matamoros	Cameron County	OR ^b (95% CI)
Current Smoker	0.4%	1.1%	0.4 (0.03-4.6)
Current Drinker	15.3%	38.4%	0.5 (0.2-0.9)

^a Galván et al, unpublished

^b Odds ratio, adjusted

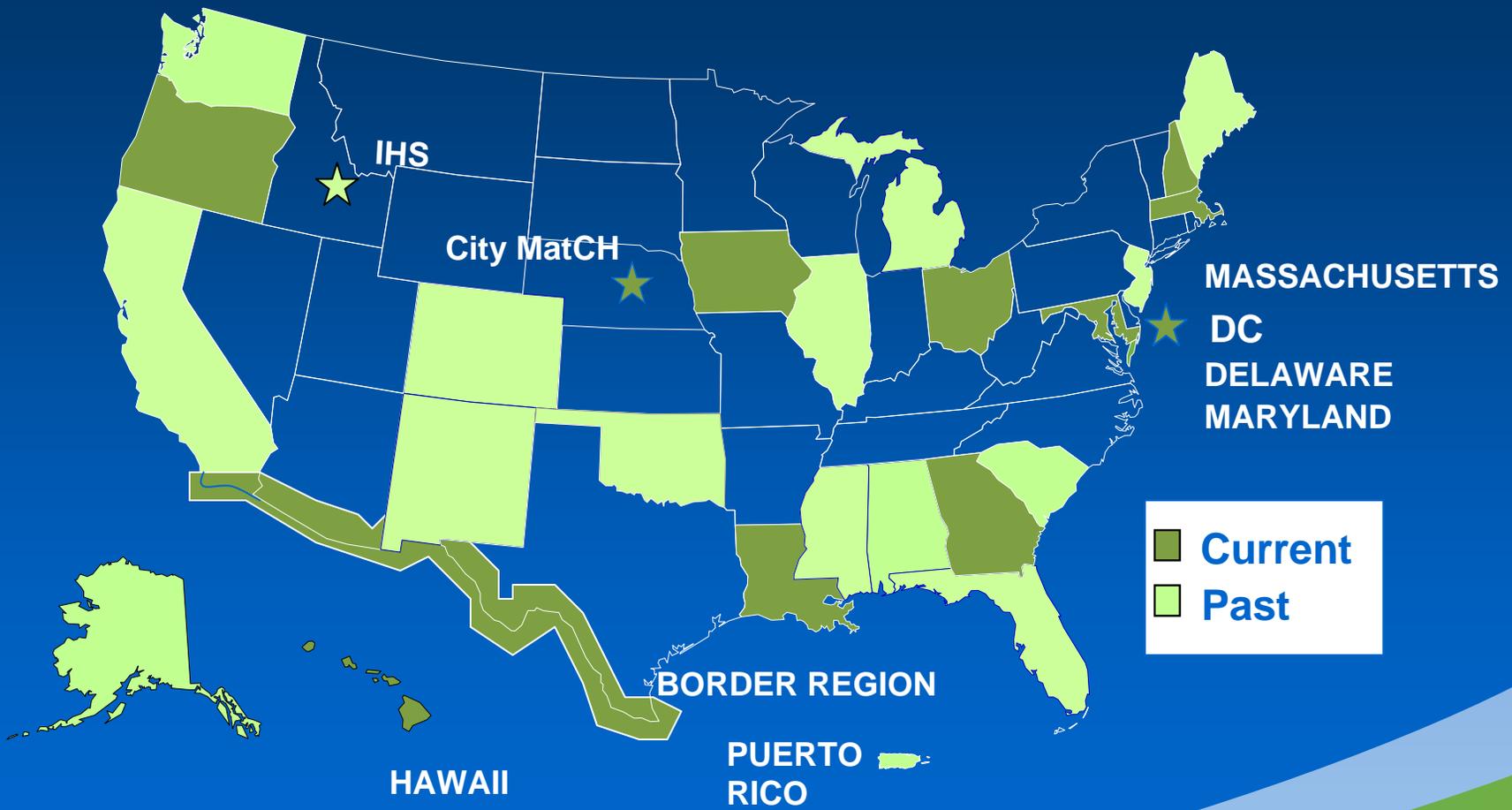


BMSCP Pilot Data Can Provide

- Better understanding of local problems by comparing the two communities
- Binational solutions to shared problems
- Evidence to prompt program and policy changes
- Documentation to support reallocation of resources



MCH Epi Program Assignees, 2008



BorderMACH Initiative

Develop local capacity to use epi data to answer questions of programmatic importance

- Establish a binational advisory committee
- Develop capacity-building curriculum for binational sister city teams of program staff
- Use existing sources of data; pool and standardize when possible
- Implement training over next two years



The Future: MCH Epidemiology Program Vision for the Border

- More useful epidemiologic data exist at the community level
- Institutions collaborate to standardize and share data
- Local public health staff use data to monitor similarities, differences and trends across and along the border
- A regional MCH identity exists: border communities work with one another
- Data help develop and support successful MCH programs and policies



Thank You

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The findings and conclusions in this presentation do not necessarily represent the official position of the Centers for Disease Control and Prevention

