

Using The Perinatal Periods of Risk (PPOR) Approach to Implement New Policies and Programs



A Healthy Start Webcast - October 11, 2005

Johannie Escarne, MPH
Moderator

Today's Presenters

- Magda Peck, ScD, CityMatCH, Omaha NE
- Mary Balluff, MS, RD, Douglas County Health Department, Omaha NE
- Judith Hill, Charles Drew Health Center Inc. Omaha Healthy Start, Omaha NE
- Carol Brady, MS, Northeast Florida Healthy Start Coalition, Jacksonville FL

Objectives

During this session, participants will:

- 1) receive a basic overview of the PPOR approach
- 2) understand how two communities (Omaha NE and Jacksonville FL) used PPOR to go from data to action
- 3) learn strategies that strengthen partnerships to implement new programs and policies

CityMatCH Mission

Improving the health and well-being of urban women, children and families by strengthening public health organizations and leaders in their communities.



Why PPOR?

- Establishes a common framework to sort the complex issues of infant mortality
- Gives a new way to examine existing data to prioritize actions
- Offers value-add to existing community efforts
- Identifies gaps in community strategies, efforts and resources
- Helps target resources for prevention activities
- Mobilizes the community to strategic action

6 Basic Steps:

Perinatal Periods of Risk Approach

Step 1: Assure Community and Analytic Readiness
Step 2: Conduct Analytic Phases of PPOR

Step 3: Develop Actions for Targeted Prevention
 Step 4: Strengthen Existing, Launch New Prevention Initiatives
 Step 5: Monitor and Evaluate Actions, Approaches
 Step 6: Sustain Stakeholder Investment, Political Will



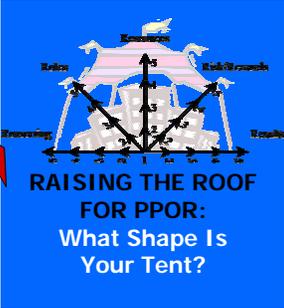
Community Readiness

Champions, Leadership and Adequately Trained Professionals who:

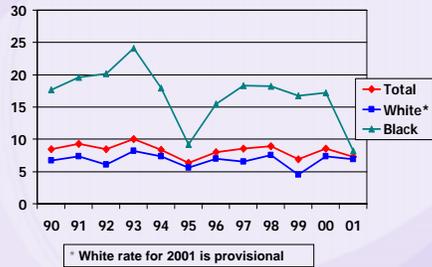
- Understand and can articulate the feto-infant mortality problem and the work plan
- Commit to assuring resources for the investigation
- Commit to assuring resources for community collaboration, strategic actions
- Champion the initiative and make it a priority

Community Readiness: *From Concepts to Tools*

- ✓ Leadership
- ✓ Partnership
- ✓ Commitment
- ✓ Change



Infant Mortality Rate, Urban County, 1990-2001

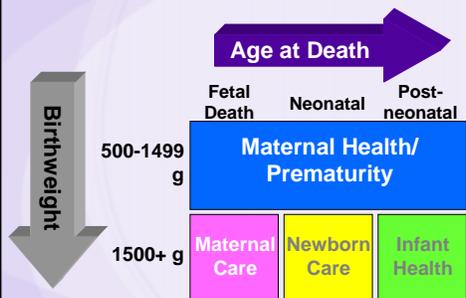


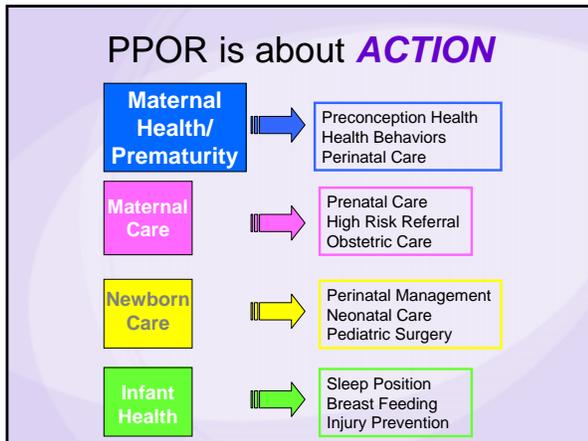
Source: DHHS

Analytic Readiness

- Fetal death certificate files (>24 wks)
- Infant death certificate files (>24 wks)
- *Linked* birth—infant death certificate files
- Critical number of events (overall, per cell)
- Key data items missing or poor quality

PPOR *Maps* Fetal & Infant Deaths





PPOR Redefines **Disparities**,
Estimates “Opportunity” **Gap**

- ✓ **ASK:** Which women/infants have the “best” outcomes?
- ✓ **ASSUME:** all infants can have similar “best” outcomes
- ✓ **CHOOSE:** a **comparison group(s)** (‘reference group’) who already has achieved “best” outcomes
- ✓ **COMPARE:** fetal-infant mortality rates in your **target** group with those of the comparison group(s)
- ✓ **CALCULATE:** **excess** deaths (= target – comparison groups). This is your community’s “**Opportunity Gap.**”

PPOR Fosters **Integration**
with other key efforts

- Fetal Infant Mortality Reviews
- Previous assessments
- Previous perinatal studies or surveillance
- PRAMS or other surveys
- Health system assessments
- Asset mapping
- Previous *policy and program evaluations*
- Healthy Start**, others

“Paint the faces behind the numbers”

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Headline News...

Data-based Action Plan Creates Stronger Partnerships to Address Health Disparities

Mary Balluff and Judith Hill
Omaha, NE

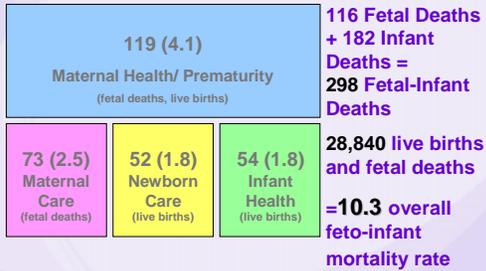


Initial Core/Steering Group

- Charles Drew Health Center*
- CityMatCH*
- Creighton University Medical Center
- Community Resources for Infants & Babies
- Douglas County Board of Health
- Douglas County Health Department*
- One World Community Health Centers (formally Indian Chicano Health Center)*
- Nebraska Chapter March of Dimes
- Metro Omaha Medical Society
- Nebraska Health and Human Services System
- Omaha Healthy Start *
- Our Healthy Community Partnership*
- University of Nebraska Medical Center * -Pediatrics, Obstetrics
- Visiting Nurses Association*

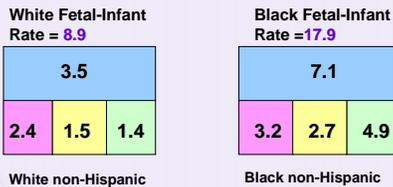
PPOR Map of Fetal-Infant Deaths

Douglas County, All Races
1997-2000





PPOR Map of Fetal-Infant Mortality Rates, by Race, Douglas County, NE, 1997-2000



Estimated Excess Fetal-Infant Mortality

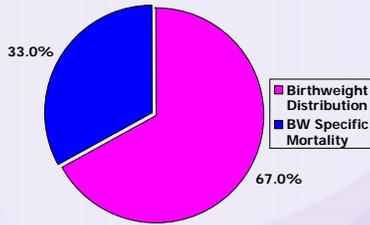
Using External Comparison Group*
Douglas County, NE, 1997-2000

Groups	Maternal Health/ Prematurity	Maternal Care	Newborn Care	Infant Health	Overall
Total	4.1	2.5	1.8	1.9	10.3
External* Comparison	2.2	1.5	1.0	1.2	5.8
Excess FIMR Rates	1.9	1.1	0.9	0.7	4.5
Excess Number of deaths	56	31	25	19	131

*External comparison group based on 12 U.S. cities with best reporting, 1996-1998

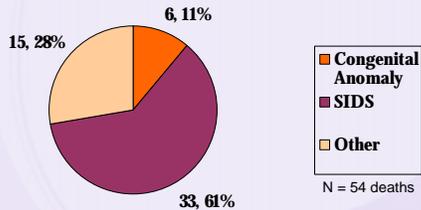
Excess *Maternal Health/Prematurity*
Douglas County, 1997-2000

- 2/3 (67%) of deaths due too many babies born <1500g
- 1/3 (33%) of deaths due to survival once born <1500g



From Kitagawa Analysis of estimated excess deaths <1500 g.

Cause of Death for *Infant Health*
Period of Risk (N, %)
Douglas County, 1997-2000





Baby Blossoms Collaborative

- Alegent Health Care
- Charles Drew Health Center*
- Children's Hospital
- CityMatCH*
- Creighton University Medical Center
- Community Resources for Infants & Babies
- Douglas County Board of Health
- Douglas County Health Department*
- Greater Omaha Chamber of Commerce
- One World Community Health Centers (formally Indian Chicano Health Center)*
- Nebraska Chapter March of Dimes
- Metro Omaha Medical Society
- Nebraska Health and Human Services System

- NHHS Office of Minority Health—District 2
- Office of the Governor
- Office of the Mayor (Omaha)
- Omaha Community Foundation
- Omaha Healthy Start *
- Our Healthy Community Partnership*
- Omaha Housing Authority
- Salvation Army
- United Healthcare of the Midlands
- United Way of the Midlands
- University of Nebraska Medical Center *
- Community Partnerships, Pediatrics, Obstetrics
- Visiting Nurses Association*
- Voices for Children in Nebraska

*Core/Steering Group

So what did we learn from PPOR?

Maternal Health/Prematurity (Very Low Birth Weight, <1500 g. or under 3.3 pounds) period of risk has the biggest part of fetio-infant mortality for *all Douglas County women and infants*

Compared to other cities, Omaha has a higher proportion of excess VLBW fetio-infant deaths due to "birthweight-specific mortality" (survival once tiniest babies are born).

Larger stillborns (fetal deaths >1500 g in the **Maternal Care** period of risk) is a larger component of White fetio-infant mortality and deserves further study.

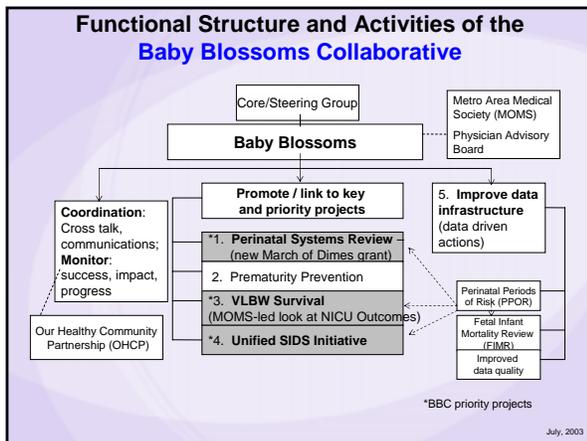
▪The rate of infants born weighing >1500 g who die after the first month of life (**Infant Health** period of risk) is **4 times higher for Blacks** than for Whites. **SIDS** and other causes play major roles.

2002 Blueprint for Action:

Douglas County (Omaha), Nebraska

1. **Review the Perinatal System** – how does it REALLY work for **all women and infants** in Douglas County?
2. **Implement FIMR**: Study specific cases to understand if and how deaths could have been prevented
3. **Focus on Very Low Birth Weight survival**
4. **Unify all SIDS Prevention** in Douglas County

Functional Structure and Activities of the Baby Blossoms Collaborative



Action #1: Review Perinatal System through Appreciative Inquiry

- Received small March of Dimes (MOD) Grant to conduct focus groups with high risk moms
- The Mother's Journal project gathered positive perinatal experiences using appreciative inquiry (what worked)
- A Preconception Health flipbook was developed as a community-training tool
- "Are You Ready to Have a Baby?" culturally appropriate curriculum for Sudanese, American Indian and Hispanic populations living in Omaha.

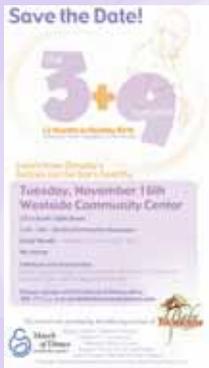
OHS Community Action Plan

- Identify Baby Blossom as 2005-09 Local Health Systems Action Plan
- Continue to participate as core member of Baby Blossom
- Adopt preconception health flipchart for use in one-on-one health education interventions
- Continue funding and participation w/FIMR

Action #2: Implement FIMR

- Local Healthy Start money supported a FIMR feasibility study
- Based on PPOR data, the FIMR process will further investigate deaths in the **maternal health /prematurity** and **maternal care** periods of risk
- Community training at Project Harmony
- Contract with the state Child Death Review is being finalized.

Action #3: Focus on VLBW Deaths



- 2004 March of Dimes Summit: 60 Health Professionals attended to listen to National Speaker focused on Preconception Health /Practices
- 2005 November 18 Prematurity Summit will focus on Preconception Care
- 2005 Meeting with Dr. Atrash (CDC) to discuss national recommendations for preconception care

Action #4: Unify SIDS Prevention

- Understand and improve classification of SIDS
- Developed a media and community education campaign (initial child care provider trainings – 2003, 2004)
- Developed the Douglas County **Safe Sleep Initiative** with 3 subcommittees for public relations, health care professional and child care policy and training
- **Safe Sleep Campaign** OHS Community Forum September 26th, 2005



2201 North 30th Street
Nebraska 68111

Omaha,
(402) 455-
BABY (2229)

OHS Community Action Plan

- Provide training for OHS General Council and OHS (consortium) during BY2005-06 on PPOR, Preconception Health, Safe Sleep, SIDS
- Identify HealthNET and FFL participants to participate as members of on Baby Blossoms committees
- Continue community-based SIDS education, training

OHS Core Strategic Partners

- OHS General Council (consortium)
- Douglas County Health Department
- Baby Blossoms
- Charles Drew Health Center
- University of NE Medical Center
- Creighton University
- Visiting Nurse Association

Headline News...

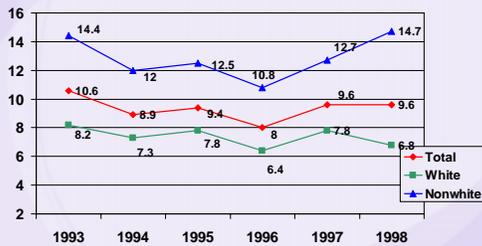
Successful integration of PPOR, FIMR, Healthy Start and March of Dimes yields new strategies to prevent feto-infant deaths

Carol Brady
Jacksonville, Florida

A little history . . .

- Duval was one of three counties in 1995-97 that had an infant mortality rate significantly higher than the state
- Two factors contribute to higher infant mortality rates in Duval County:
 - Proportion of nonwhites in the population
 - Poor outcomes among nonwhites

Infant Mortality Rates, Duval County, 1993-1998

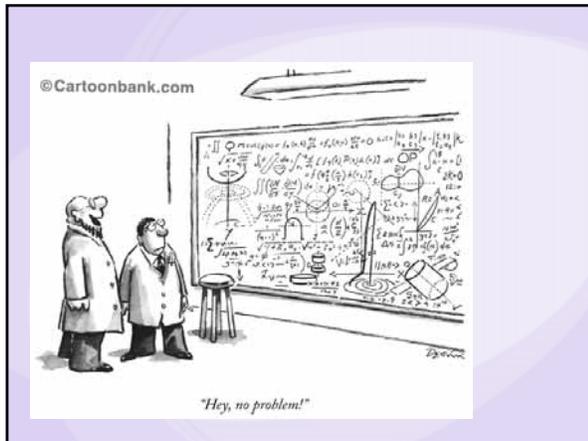


Why focus on well-women?

- **PPOR!**
 - Greatest racial disparities occurred in **Maternal Health/Prematurity** and **Maternal Care periods of risk**
 - Disparities **disappeared** in the other categories
 - Kitagawa: too many **black babies born too soon** and too small
- **FIMR!**

Black & White Fetal-Infant Death Rates By Period of Risk, Duval County 1995-97

	Fetal (24+ Wks Gestation)	Neonatal	Postneonatal
500- 1499g	Maternal Health/Prematurity Black 6.9 White 2.3 R= 3.01 (2.14, 4.25 95% C.I.)		
1500+g	Maternal Care Black 3.4 White 2.0 R=1.70 (1.12, 2.58 95% C.I.)	Newborn Care Black 1.5 White 1.2 R= 1.22 (0.67, 2.20 95% C.I.)	Infant Care Black 2.8 White 1.9 R= 1.44 (.092, 2.24 95% C.I.)
Total Feto-Infant Deaths/1000 (Live Births + Fetal Deaths) = Black 14.6 White 7.4 R=1.96 (1.59, 2.41 95% C.I.)			



What do all the numbers mean?

- Almost **two-thirds** of the mortality difference between black women and the internal reference group is due to **birth weight distribution**
- The focus of efforts should be on **Maternal Health and Prematurity** as they account for **95%** of the excess deaths.

Fetal & Infant Mortality Review (FIMR)

- Information abstracted from birth, death, medical, hospital and autopsy records
- Family interviews
- ACOG process
- Case review team determines medical, social, financial and other issues that may have impacted on poor outcome

FIMR Process

- 142 fetal and infant cases reviewed by CRT since 1995
 - 83 white
 - 53 black
 - 6 other
- Systematic, not random, sample based on specific criteria

Linking FIMR to PPOR

- **Most Frequent FIMR Factors:**
 - Infections and STDs
 - No Healthy Start screening
 - Late/inadequate prenatal care
 - Previous poor outcome
 - Family planning problems
 - General state of mother's health
 - Poor nutrition

From data to action

- Used PPOR & FIMR findings to respond to federal Healthy Start RFP in 1999 to address racial disparities in birth outcomes
- Funded for proposed a Pre- and Interconceptional Model
- Initiated the **Magnolia Project**

The Magnolia Project



- Area accounts for **more than half** of the Black infant mortality in the city
- About **25,000 women** age 15-44 years old live in the project area

- **85%** African-American

The Magnolia Project



- Storefront site
- Collaborative effort:
 - Local Health Department
 - Shands Jax Hospital
 - HS Coalition
 - Community agencies

The Magnolia Project

- Interventions (1999):
 - *Enhanced clinical care*
 - *Case management & risk reduction*
 - *Outreach*
 - *Community development*
- Additions (2001):
 - *Depression screening*
 - *Health education*
- Continued funding in 2005.

The Magnolia Project



Who Did We Serve?

2001-05: 3,252 participants

- 51% age 18-25
- 83% single
- 88% black
- 40% less than HS education
- 90% uninsured (but would be insured if pregnant!)

The Magnolia Project

- Clinic services
 - Age 15-44
 - Resident of target area
 - Pregnant or able to get pregnant
 - Health exam > 1 year
- Case management
 - 15-44 and living in target area
 - Not pregnant, but sexually active
 - 3 or more risk factors: previous loss, repeated STDs, no family planning, substance abuse, pregnancy <15 yrs, mental health probs, protective services, no source of care

The Magnolia Project

- Project experience (2001-05)
 - 3,500 Women served
 - 3,252 clinic
 - 388 case management (3+ months)
 - 12% pregnant
 - 12,347 clinic visits
 - 3,223 pregnancy tests (77% negative)

Clinic Services

- Tailoring Care to the Community
 - Evening clinic
 - Magnolia for Men
 - Walk-in Wednesdays
 - Ryan White III partnership
 - Group prenatal care

Clinic Services



- Birth Outcomes for Pregnant Clients (n=388)
 - 66% began care in first trimester
 - 10% LBW
 - 3.8% VLBW
 - 12.3% pre-term
 - 2 infant deaths (6.0 deaths/1000 live births)

The Magnolia Project



Case Management

- Risk Factors by Type
 - 28% Medical
 - 72% Social
- Duration of Service (2001-05 participants)
 - 30% >12 months
 - 11% 9-12 months
 - 13% 6-9 months

Case Management

- 388 participants (2001-05)
- 60% referred by clinic
- Average of 7.9 risk factors/patient
 - 43% family planning issues
 - 27% education/training
 - 33% job placement
 - 30% BV
 - 20% poor nutrition
 - 17% repeat STDs

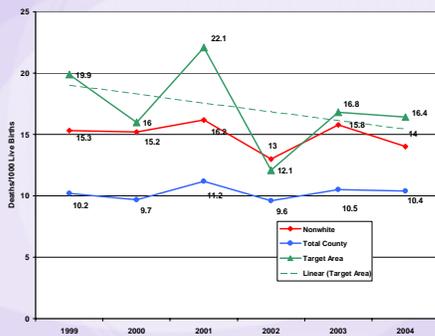
Case Management

- 247 clients closed to service (2001-05)
 - 44% were in case management for 1 year+
 - 60% completed referrals
 - 85% of risks were resolved or managed
- CDC-funded study of impact on next pregnancy

Case Management

- Priority risks at closure (2001-03)
 - 86% of participants with family planning issues were consistently using a method at closure
 - 74% of participants with repeated STDs had no recurrent STDs at closure

Infant Mortality Rates, Duval County, 1999-2004 (prelim)



The Next Step: Florida PPOR Practice Collaborative



- Orlando, St. Pete and Jacksonville participated in CityMatCH national PPOR Practice Collaborative
- Recognized need for policy changes to support community action in response to PPOR findings
- Successful grant application Florida March of Dimes Chapter

Florida PPOR Practice Collaborative



Strategy:

- Bring seven largest cities together to implement PPOR
- Promote state level policy change in response to findings

Florida PPOR Practice Collaborative

Objectives:

- Support implementation of PPOR in largest cities in the state
- Use PPOR findings to influence decision-making, resource allocation, program & policy development
- Move from analysis to implementation of data-driven, evidence-based prevention strategies
- Link PPOR with existing MCH planning efforts (Healthy Start, FIMR, other local initiatives)

Florida PPOR Practice Collaborative

- **Accomplishments:**

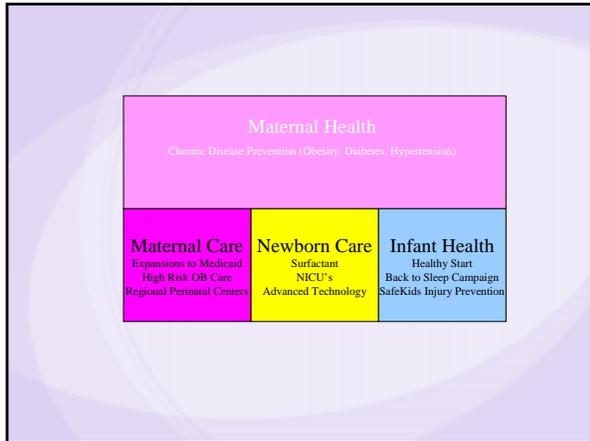
- Improved working relationship with state Title V agency (Data! Data! Data!)
- Five of seven cities completed Phase I; progress in other areas
- Integrated into community planning (Florida's local Healthy Start Coalitions)
- Identified "opportunities" for action within current programs
- Launched discussion on policy changes needed to move from analysis to action

Impacting Women's Health *Before* Pregnancy

- **Nearly half** of all pregnancies are unplanned (mistimed or unwanted)
- **All women age 15 - 44** should be considered pre-/interconceptional!
- **ID opportunities** for addressing pre-/interconceptional issues (FP, pediatrics, case management).

Refocus Program Services to Meet Needs

- Consistent finding among collaborative -- Maternal Health
- March of Dimes focus on Prematurity Campaign -- rising rates of prematurity over time
- Need to think "out of the box" on solutions
- What we have been doing -- has not been working



Results

- Developed consensus within Florida's Department of Health and the Florida Association of Healthy Start Coalitions to expand Healthy Start's focus to one of interconceptional care
- Formalized protocol and interventions for interconceptional care model within Healthy Start

Results (cont.)

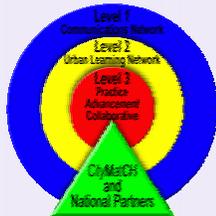
- Educating MCH partners around the state on disparities in area of maternal/preconception health
- A new approach, to think beyond "just" prenatal care access and quality
- March of Dimes MCH Prematurity Leadership Summit findings: need stronger focus on preconception/interconception health.

PPOR is about *impact* and *results*:

- Builds data and epi **capacity**
- Promotes effective data **use**
- Strengthens essential **partnerships**
- Fosters **integration** with other key efforts
- Encourages **evidence-based** interventions
- Helps **leverage resources**
- Enables **systems change** for perinatal health

Perinatal Periods of Risk:

For More Information:
www.citymatch.org



**PPOR Training Sessions
December 9 and 10**

In conjunction with MCH EPI meeting in Miami, FL, CityMatCH will provide the following PPOR training sessions:

- A. ORIENTATION TO PPOR**
Friday, Dec. 9, 2:00 pm – 5:30 pm
-- Or --
- B. ADVANCED PPOR PRACTICE WORKSHOP (Invitation Only)**
Friday, Dec. 9, 1:00 pm – 5:00 pm
- C. PHASE II ANALYTIC SKILLS BUILDING:**
Saturday, Dec 10, 8:30 am – 12:00 pm

- Please register at:
<http://app1.unmc.edu/citymatch/PPOR/MCHEpi/index.cfm>
- For more information contact: Jennifer Skala at jskala@unmc.edu
