
Why do the PPOR approach?

- Establishes a framework to sort the complex issues of why babies are dying
 - Gives a new way to examine existing data to prioritize actions
 - Identifies “Opportunity Gaps” in community strategies, efforts and resources
 - Helps target resources for prevention activities
 - Mobilizes the community to strategic action
-

1) PPOR is a six step approach used to address feto-infant mortality

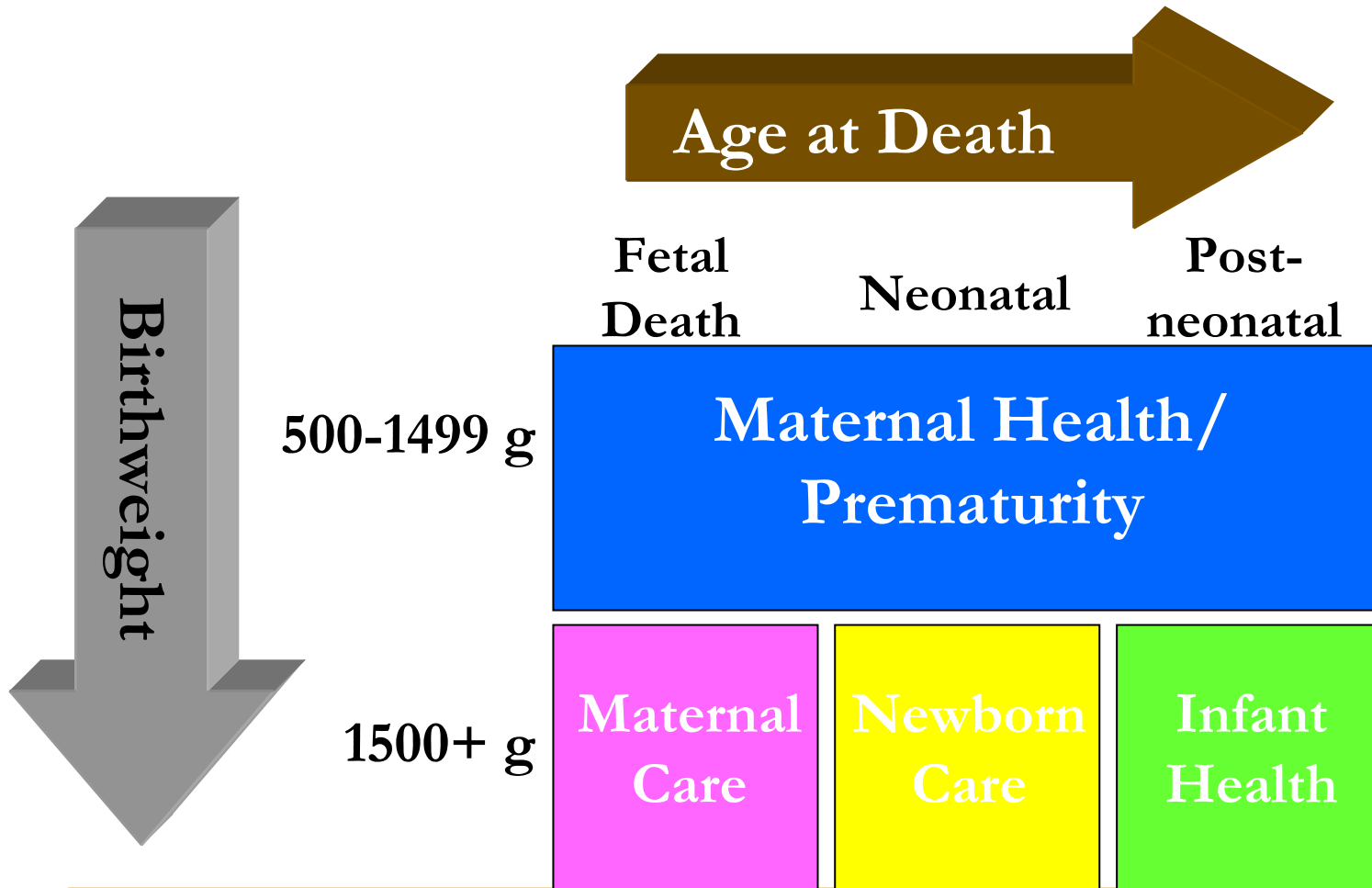


Data is the *starting point*
not the ending point

2) The PPOR Approach allows you to look at infant mortality in new ways

- Includes **Fetal** and **Infant Deaths** (> 24 weeks)
 - Focuses on **VLBW** (< 1,500 grams)
 - Examines **birthweight** and **gestational age** at the same time
 - Generates a **“Map”** for targeting strategic actions
-

PPOR “Map” fetal & infant deaths

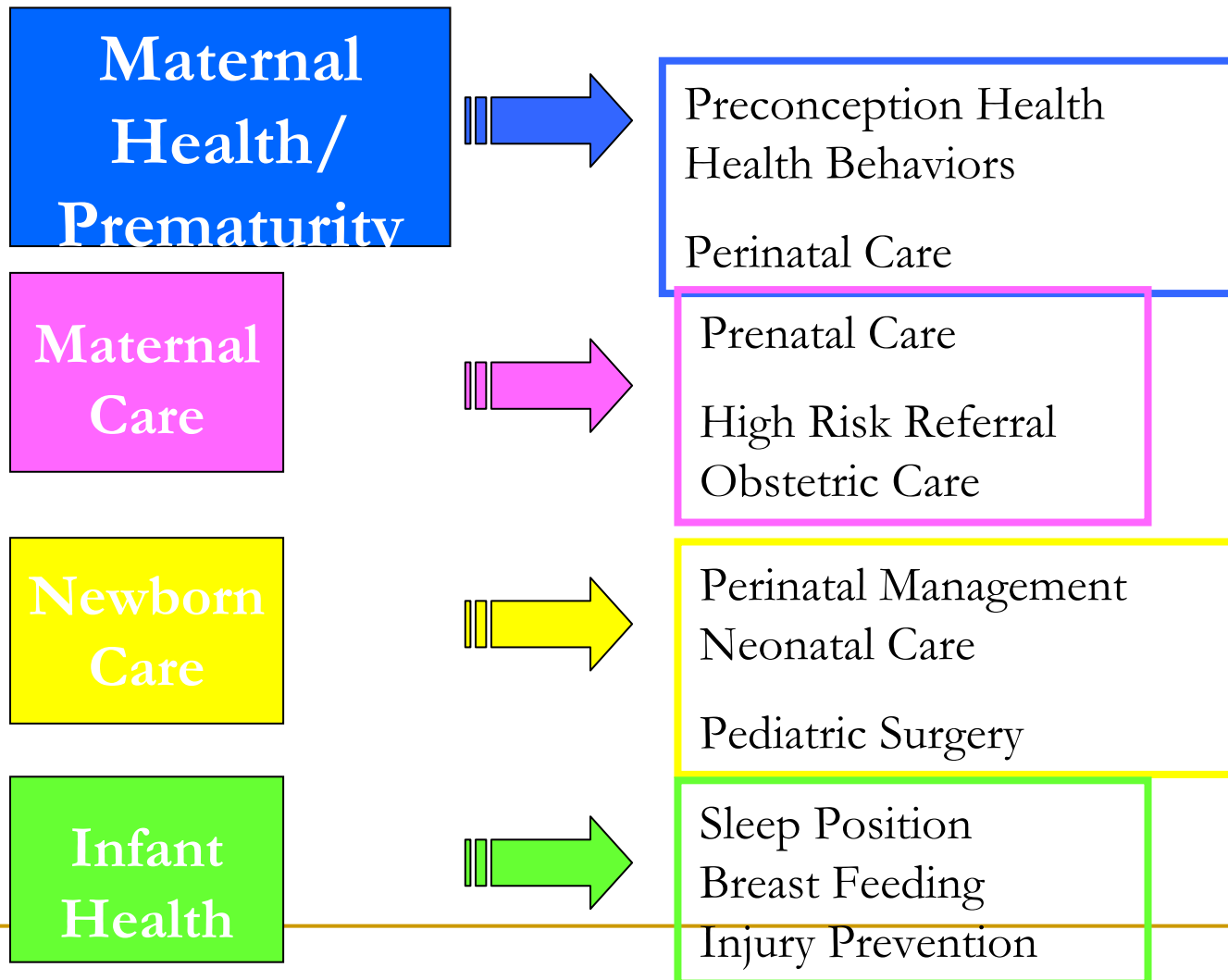


3) It brings community partners together to build consensus, support, and partnership



Provides a *framework* for discussing the problem

4) It allows a Community to move from data to ACTION!



5) PPOR Redefines Disparities, Estimates “Opportunity” Gap

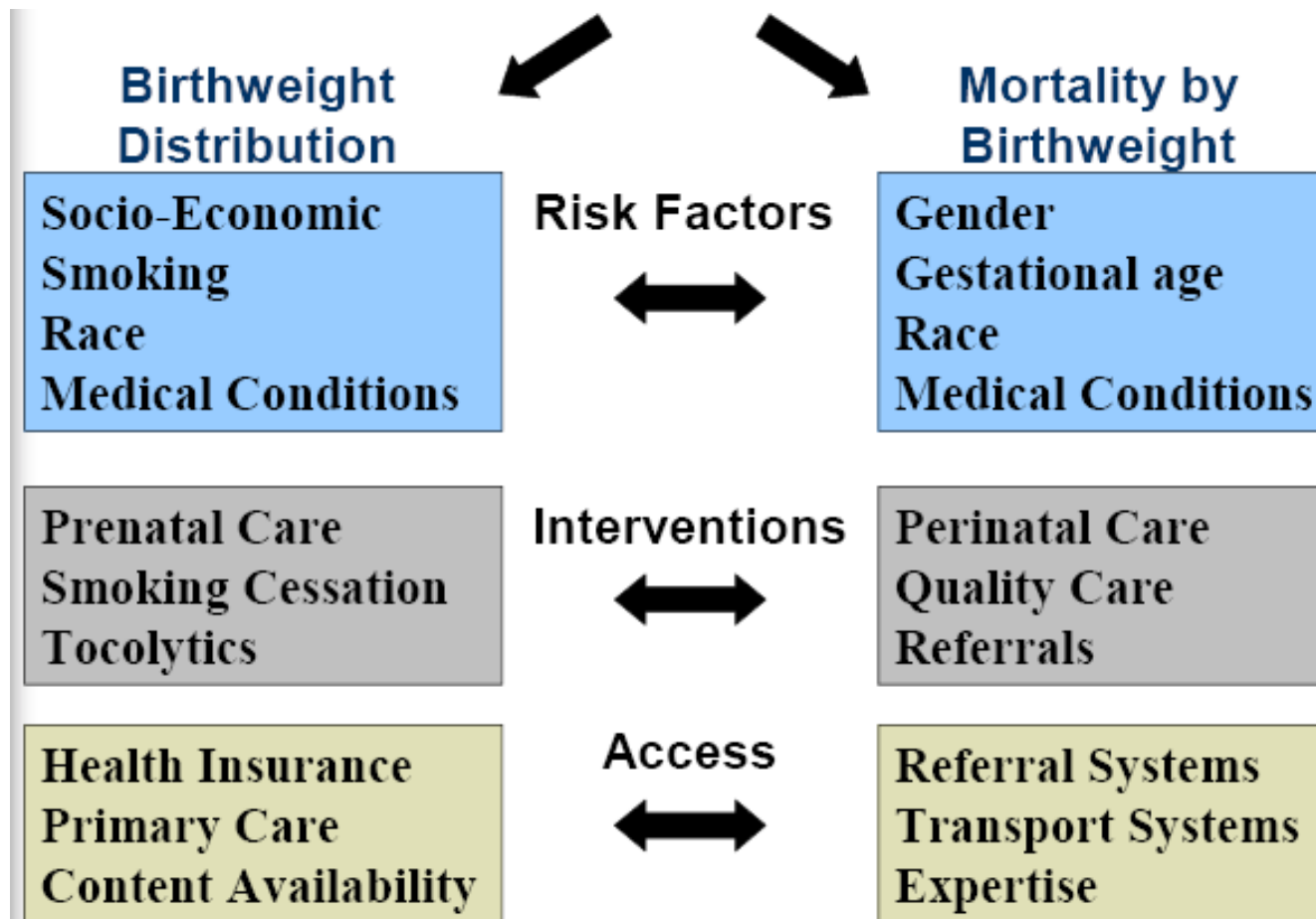
- ✓ **ASK:** Which women/infants have the **"best"** outcomes?
 - ✓ **ASSUME:** all infants can have similar “best” outcomes
 - ✓ **CHOOSE:** a **comparison group(s)** (“reference group”) who already has achieved “best” outcomes
 - ✓ **COMPARE:** fetal-infant mortality rates in your **target** group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

6) PPOR provides a framework for targeting further investigations and actions

- **Phase 1:** *Identifies the populations with overly high numbers and rates of mortality.*
 - **Phase 2:** *Explains why the excess deaths.*
-

Feto-Infant Mortality

Maternal Health/Prematurity Category



7) 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

“Paint the faces behind the numbers”

8) You need to be ready to run the numbers

Adequately Trained Staff

Critical number of Events (n=60)

Fetal death files (no gest. age restrictions)

Linked birth—infant death certificate files

Key data items missing or poor quality

9) You need the Community Onboard and Ready

Champions, Leadership and Adequately Trained Staff that:

- Understands the feto-infant mortality problem
 - Understands the work plan
 - Commits to providing resources for the investigation
 - Commits to providing resources for community collaboration
 - Gives priority and champions the initiative
-

10) PPOR is about impact and results:

- Builds data *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
-

Indianapolis PPOR Map

PPOR Excess Deaths *
 Compared to Internal and External Reference Groups**
 1999-2003 Birth Cohort Data***
 Marion County, IN

All Marion County	Maternal Health Prematurity	Maternal Care	Newborn Care	Infant Health	Overall Excess Deaths
Marion County	(273 deaths)	(148 deaths)	(100 deaths)	(163 deaths)	(684 deaths)
Excess compared to Internal Group	137	77	19	97	331
Excess compared to External Group	117	40	20	92	268

*Excluded are infants who weighed <500 grams at birth and fetal deaths that occurred before the 24th week or were <500 grams.

**Internal Reference Group: White, non-Hispanic women, age ≥ 20 yrs., married, non-smoking, who have an education ≥ 13 years, received prenatal care in the 1st trimester and reside in Marion County, IN.

External Reference Group: White non-Hispanic women, age ≥ 20 yrs., who have an education ≥ 13 years.

***Data compiled from birth certificate data from the Marion County Health Department, Indianapolis, IN

Kitagawa, Risk Factor, and Cause of Death Analyses for Indianapolis

Highlights

- **Kitagawa Analysis**

Black women and women 20-34 years have 40% of their excess mortality rate occurring from excess birth weight specific mortality.

- **Risk Factors for VLBW and Survivability of VLBW infants**

Risk Factors: One of the most notable findings was that Black women and women 20-34 were more likely than the reference group to have had prenatal care in the Kotelchuck Index category of “Intermediate”.

- **Cause of Death Analysis for Infant Health Category**

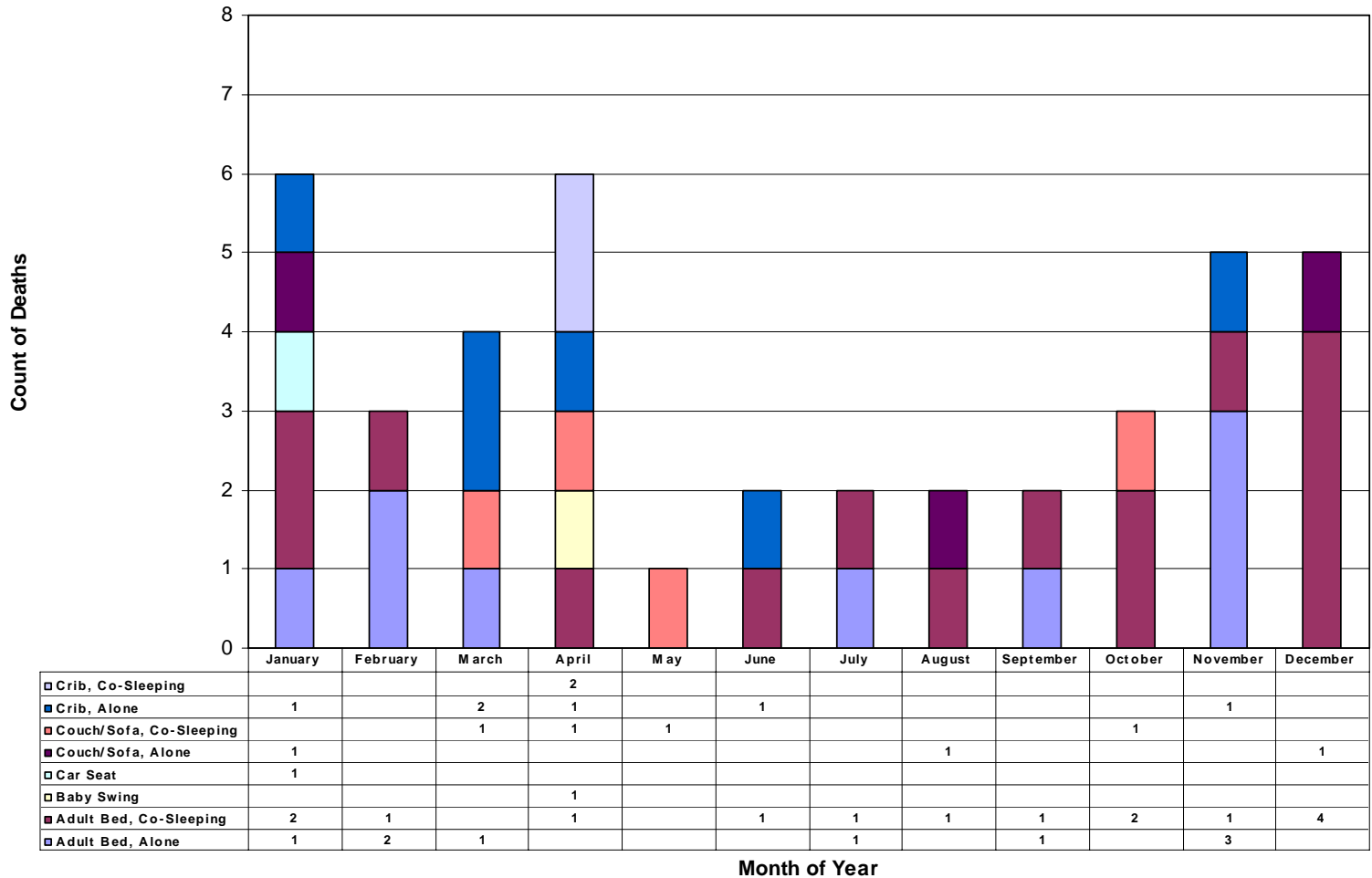
The injury category had highest percentage of deaths. A large percentage were due to suffocation and strangulation.

Additional Data Analyses

- Generated profiles of women most likely to experience a VLBW birth
 - Black women, being single, <12 years education, <24 years of age and smoking during pregnancy
 - The impact of being single was relatively small among blacks and women with few prior births
 - Examined preterm status with regards to VLBW and SGA infants
 - Black women and women <20 years of age were most likely to have preterm births that were VLBW or SGA
-

Current Data

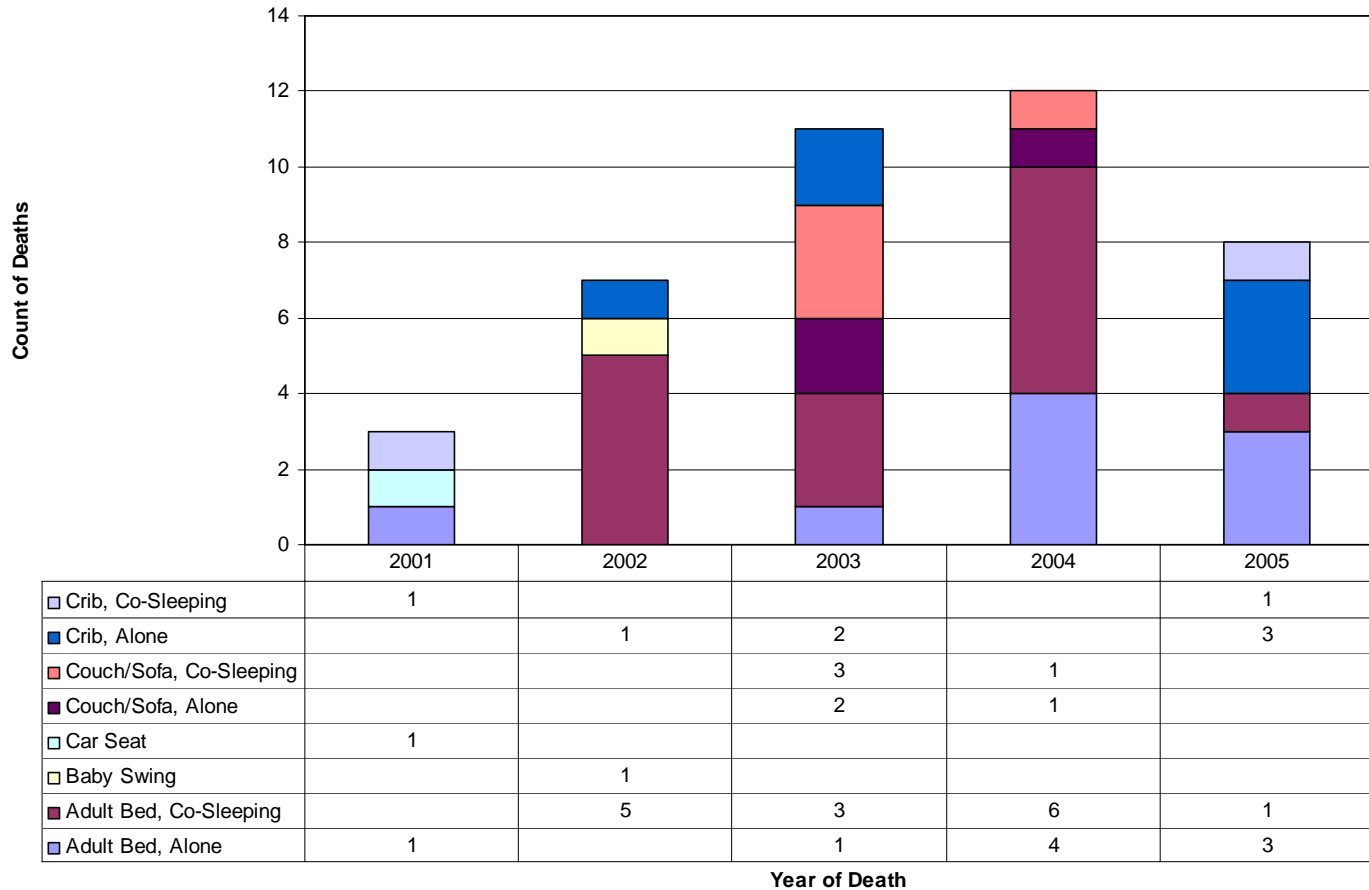
Cause of Death Categories Accidental Suffocation and Strangulation in Bed and Other Accidental Suffocation and Strangulation by Month of Year Marion County, IN 2001-2005



Source: MCHD birth certificate and death certificate data. Created 07SEP2006, Marion County Health Department, Epidemiology DR0421.

Current Data cont'd

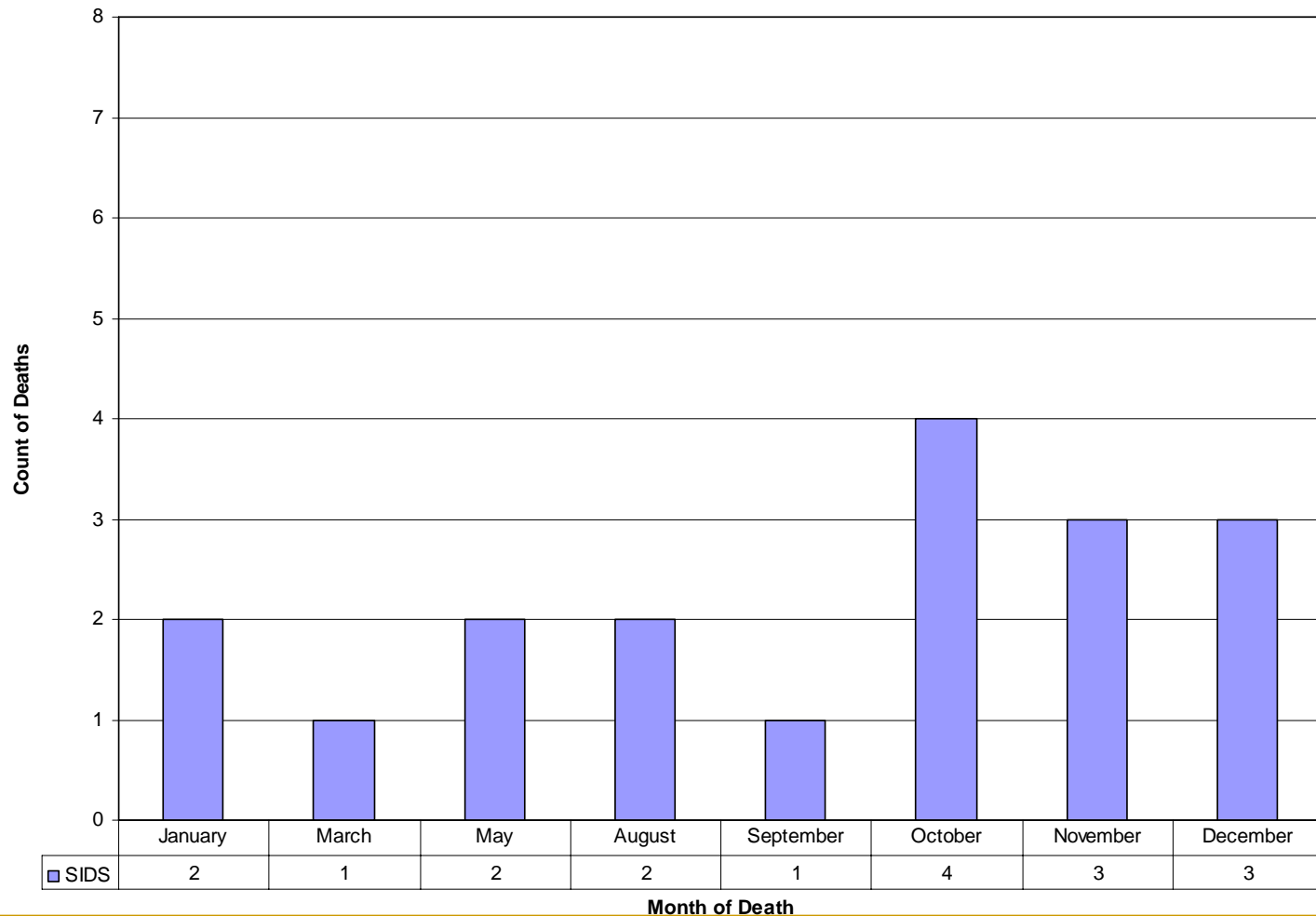
Cause of Death Categories
 Accidental Suffocation and Strangulation in Bed and
 Other Accidental Suffocation and Strangulation
 by Year of Death
 Marion County, IN 2001-2005



Source: MCHD birth certificate and death certificate data. Created 07SEP2006, Marion County Health Department, Epidemiology DR0421.

Current Data cont'd

Cause of Death due to SIDS
by Month of Year
Marion County, IN 2001-2005

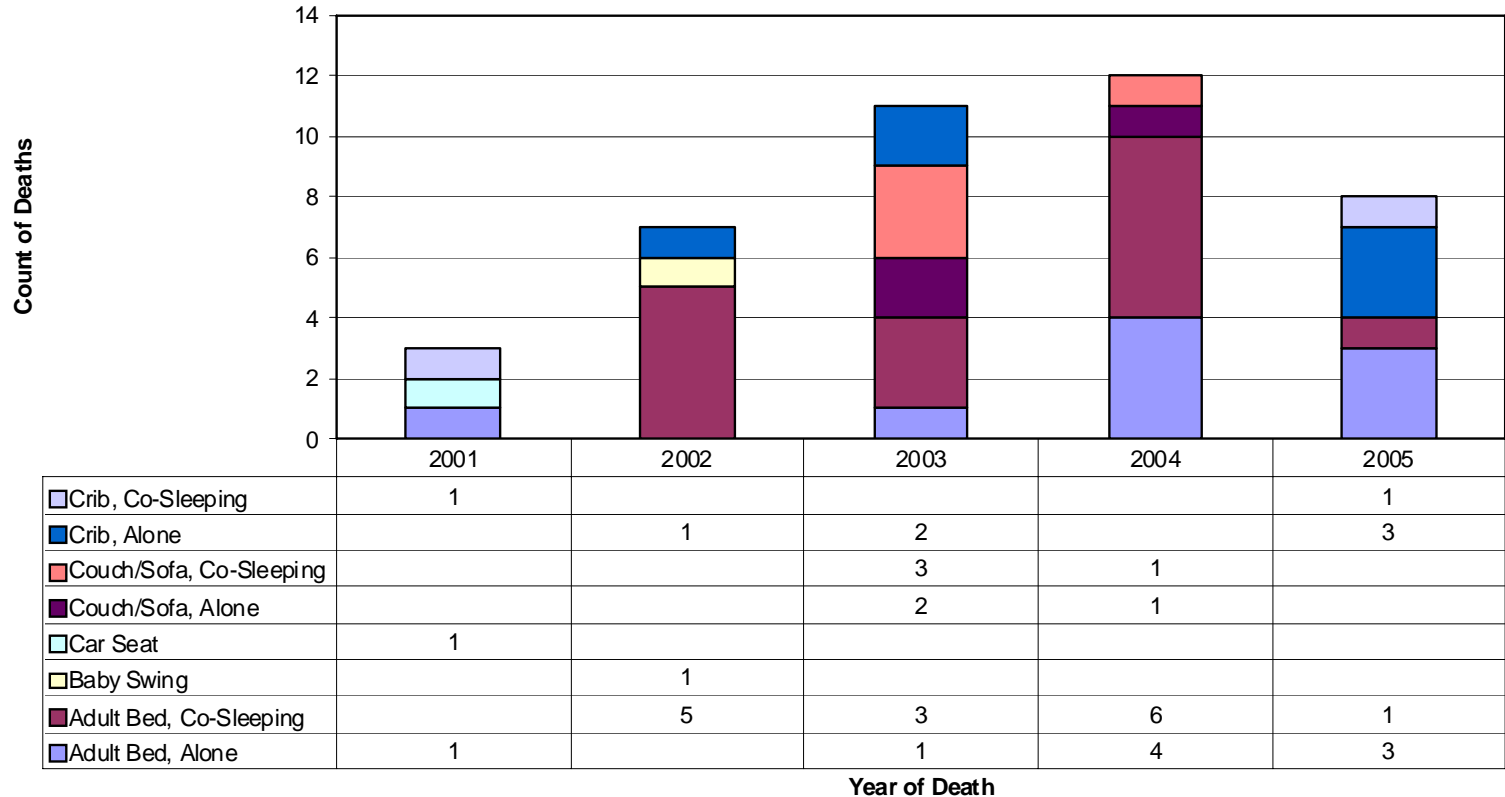


Source: MCHD birth certificate and death certificate data. Created 07SEP2006, Marion County Health Department, Epidemiology DR0421.

Current Data cont'd

Cause of Death Categories

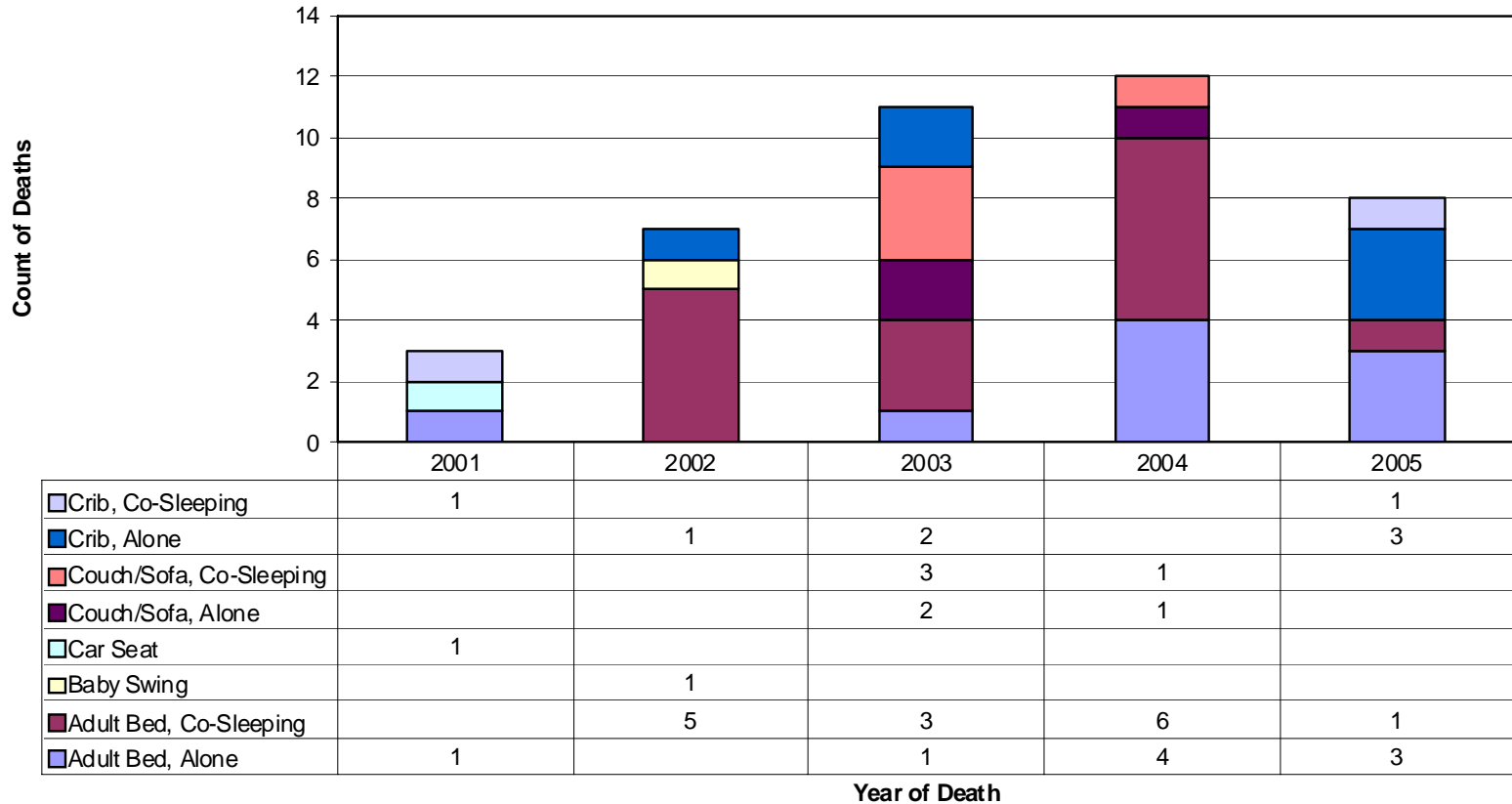
Accidental Suffocation and Strangulation in Bed and
Other Accidental Suffocation and Strangulation
by Year of Death
Marion County, IN 2001-2005



Source: MCHD birth certificate and death certificate data. Created 07SEP2006, Marion County Health Department, Epidemiology DR0421.

Current Data cont'd

Cause of Death Categories
 Accidental Suffocation and Strangulation in Bed and
 Other Accidental Suffocation and Strangulation
 by Year of Death
 Marion County, IN 2001-2005



Source: MCHD birth certificate and death certificate data. Created 07SEP2006, Marion County Health Department, Epidemiology DR0421.

Interesting Observations From Charts

■ Month Tables:

- 1. Note increase in deaths during the colder months for SIDS and suffocation deaths.

■ Year Tables (race charts not shown):

- 1. Note that co-sleeping deaths dominate the numbers from 2002 to 2004 then drop to only one in 2005.
 - 2. In charts divided by race, only Black and White races appear in the suffocation tables.
 - 3. For the 5 year period, Whites had 11 co-sleeping in adult bed deaths vs only 4 for Blacks.
 - 4. For SIDS, Whites had 11 of the 18 SIDS deaths for the 5 year period.
-

More Resources

- City Match Website: www.citymatch.org
 - National Data
 - Local Practices-Nationwide
 - Methods, Worksheets, Data Templates (Kitagawa)
 - And much more!
-