Perinatal outcomes -
*a roadmap to good health*

Can we get there from here?

American College of Epidemiology
2014 Annual Meeting
Silver Spring, MD
September 8, 2014
• Maternal chronic conditions – short and long-term consequences
  ▫ Pauline Mendola, Investigator, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development

• Fetal programming – how much is “over” before it begins?
  ▫ Edwina Yeung, Investigator, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development

• Using research to drive improvements in perinatal health at the state and national level
  ▫ Reem Ghandour, Director of the Division of Epidemiology, Maternal and Child Health Bureau, Health Resources and Services Administration
Maternal chronic conditions - short and long-term consequences

Perinatal outcomes – a roadmap to good health
Can we get there from here?
American College of Epidemiology 2014 Annual Meeting
September 8, 2014

Pauline Mendola, PhD
Investigator, Division of Intramural Population Health Research
Overview

• American women of reproductive age
  ▫ Increasing rates of chronic disease
  ▫ Changes in the obstetric population

• Chronic diseases increase risk for adverse neonatal and obstetric outcomes
  ▫ Preterm delivery
  ▫ Hypertension

• Long-term consequences for mothers and children
US women who rate their health as excellent or very good
Diagnosed hypertension among US women aged 20-45


www.cdc.gov/nchs/hdi.htm
Diagnosed diabetes among US women


www.cdc.gov/nchs/hdi.htm
Increases in asthma, US women 18-44


www.cdc.gov/nchs/hdi.htm
Changes in the obstetric population associated with increased risks

- Age
- Obesity
Birth rates continue to rise for older mothers.
Weight among US women 20-44

Increased prevalence of chronic disease, older and overweight mothers can lead to complications hypertensive disorders in pregnancy and preterm birth
Long-term effects for mom

Mothers who have preterm deliveries have higher blood pressure and BMI in later life

Shorter gestation also has long-term effects on children.

Perinatal health - a *family* health issue with population level consequences

- Social and medical factors interrelate
- Maternal chronic disease in pregnancy is on the rise
  - 25% of twin pregnancies
  - More than 15% of singleton pregnancies
- Better primary care and good health behavior may be the best foundation for healthy pregnancy with long term consequences for population health