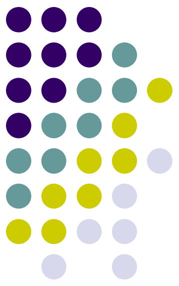
FETAL INFANT MORTALITY REVIEW COMMITTEE

"PUT A NEW FACE ON STATISTICS"

REVIEW OF CASES INCLUDE:

- CIRCUMSTANCES SURROUNDING DEATH
- AUTOPSY – SCENE INVESTIGATION
- BIRTH AND PRENATAL RECORDS
- PEDIATRIC RECORDS
- EMERGENCY ROOM VISITS
- EMS RECORDS
- PSYCHOSOCIAL AND ECONOMIC FACTORS

FIMR Case Review Process—Improve the well-being of women, children and child-bearing families in the community

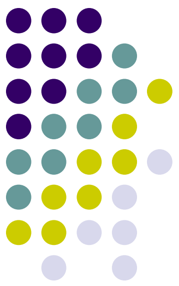


- **A case review where the infant, family, and service providers are de-identified and *<u>confidentiality is paramount</u>***

- **A <u>diverse</u> membership composed of individuals from many backgrounds reflecting the composition of their community with varied expertise (*physicians, nurses, midwives, social workers, Department of Health, managed care organizations, March of Dimes, DC Action for Children, Healthy Start, etc*.). FIMR can serve as a multi-disciplinary, multi-agency quality assurance process**

- **Recommendations are based on the cases reviewed and the knowledge of the committee members**

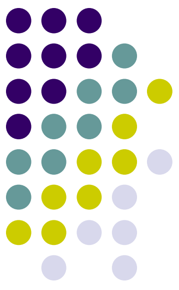
Multi-disciplinary Team



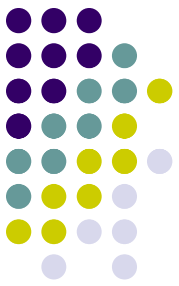
Abbreviated case

- “Debbie” is a 30 year old AA woman who has been pregnant six times. She has a 13 year old daughter. She had 2 induced and 2 spontaneous abortions.
- Her medical history included asthma, hypertension, diabetes on oral medication, and obesity.
- Her social history included significant abuse of alcohol, tobacco, and cocaine.

Abbreviated case



- She began prenatal care at 14 weeks gestation (total 5 visits)
- Pregnancy was complicated by hypertension, UTI and poorly controlled diabetes
- She presented to the hospital with leaking membranes, mild fever, in active labor.
- She delivered a severely premature 22 week infant vaginally shortly after admission to the Obstetrical service.

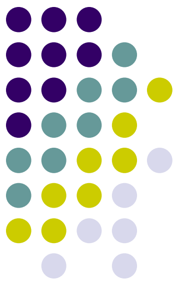


Abbreviated case

- The male infant weighed 482 gms (1 lb 1 oz)
- Apgars were 1 and 1 at 1 and 5 minutes
- Infant expired at 9 minutes of age.

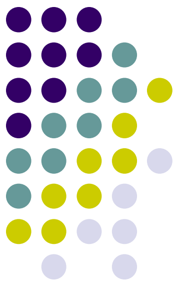
- Cause of Death: “Cardiorespiratory Failure, Extreme Immaturity at 22 weeks”

Based on Committee data, the primary cause of infant deaths--Prematurity

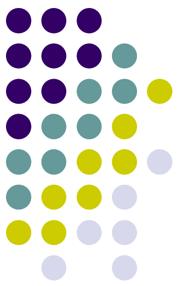


Gestational Age					
	2001 Total - 80	2002 Total - 80	2003 Total – 68	2004 Total – 68	2005 Total - 81
< 38 weeks	66/83%	59/74%	48/71%	45/61%	59/73%
< 23 weeks	32	31	24	17	20

Based on Committee Data, Number of Deaths Attributed to Low Birth Weight

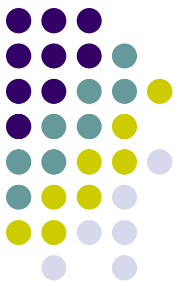


Low Birth Weight					
Total Infant Deaths	**2001** **Total 80**	**2002** **Total 80**	**2003** **Total 68**	**2004** **Total 68**	**2005** **Total 81**
< 1500 Grams	**59** **(74%)**	**51** **(64%)**	**32** **(47%)**	**33** **(49%)**	**46** **(57%)**
< 500 Grams	**23** **(28.7%)**	**24** **(30%)**	**15** **(22%)**	**16** **(23.5)**	**17** **(21%)**



Recommendations

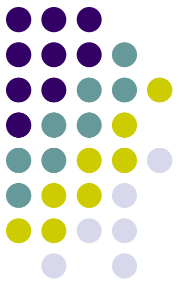
- **CFRC/FIMR should establish better collaboration with DOH State Center for Vital Statistics to compare and validate data**
- **CFRC/FIMR should develop a strategy to obtain maternal interviews that does not involve contracting services, i.e. volunteers**
- **OCME should provide periodic education on the appropriate completion of the death certificate causes of death.**



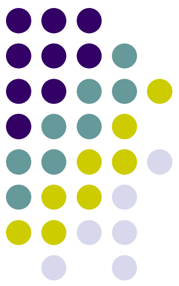
Recommendations

- DOH should work with health care providers to integrate preconception care with existing programs (maximize control of existing health conditions prior to pregnancy)
- DOH, local AAP and ACOG, and the schools should develop strategies to "market" the benefits of a health life style.
- AAP and ACOG classify preconception care:
  - Physical assessment
  - Risk screening
  - Vaccinations
  - Counseling

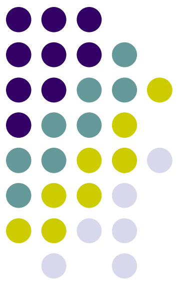
Abbreviated case



"Daisy" is 20 year old single woman who had delivered her first child "Dolly", premature female, by emergency C-section because of fetal distress. The Apgar scores were 8/8. The baby was approximately 33 weeks gestation and weighed two pounds. The mother's pregnancy was complicated by severe hypertension related to her pregnancy and this condition probably contributed to the infant's small size.

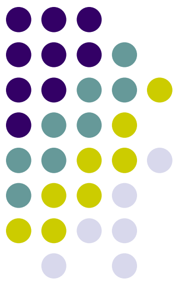


"Dolly's" nursery course was very complicated. She required treatment to assist her breathing (CPAP) for approximately three weeks. Low platelet counts (thrombocytopenia) and anemia were treated with transfusions of platelets and blood. Severe infection was treated with multiple antibiotics, a medication to stimulate white blood cell production, and a period of isolation. The infant's head ultrasound revealed that there was a small area of bleeding on the left side of the brain (temporal lobe). There was also slight damage to the eyes which would probably resolve without treatment.

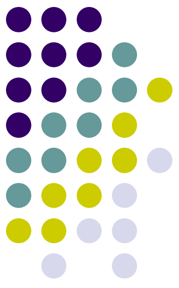


About two weeks after discharge from the hospital, the mother fell asleep with the infant on her chest. Sometime during the night the mother placed “Dolly” face down on a pillow beside her. A couple of hours later the infant awoke and the mother fed her and again placed “Dolly” face down on the pillow.” When the mother awoke in the morning, “Daisy” found the baby’s face under her stomach.”

The infant was pale and unresponsive.

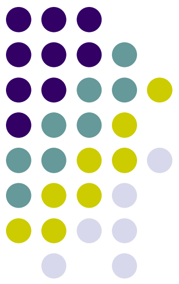


"Dolly" called out to her grandmother who initiated CPR and called 911. EMS transported "Daisy" to the nearest hospital where resuscitation was unsuccessful. "Daisy was pronounced dead 20 minutes after arrival to the ER.



Recommendations

- DOH in conjunction with Hospital Association and local AAP should mandate that discharge instructions from all hospital nurseries routinely include information on safe sleep practices. This information should be re-enforced on each pediatric visit.
- DOH should develop or utilize appropriate existing PSA's to inform the public on the importance of a safe sleep environment for infants



Abbreviated Case

"Demi" was a 30 year old single African American primagravida who

experienced a pregnancy complicated by <u>obesity</u>, <u>severe hypertension</u> and <u>gestational diabetes.</u>

She was employed as an office worker and had private health insurance .The father of the infant was not involved.

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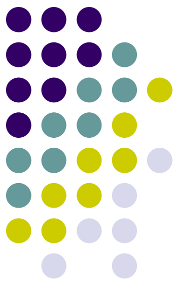
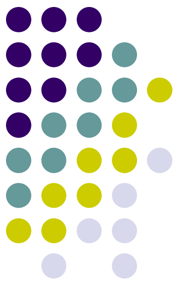


Abbreviated case

The mother delivered a premature SGA infant with multiple congenital anomalies via C-Section. C/S was performed because of the mother's severe hypertension

Despite aggressive treatment, the infant expired approximately two days after birth.



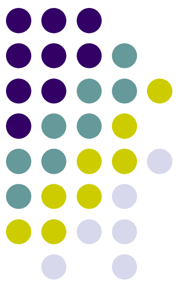
Abbreviated Case

Because of persistent hypertension, the mother was referred to internal medicine.

During these visits the mother was found to be very depressed ("elements of postpartum psychosis ") and placed on various medications that she took sporadically

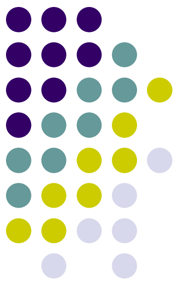
Six months after the death of her infant, she committed suicide by hanging.

Recommendations



Department of Mental Health should collaborate with health care providers to initiate or enhance routine prenatal and postpartum depression screening.

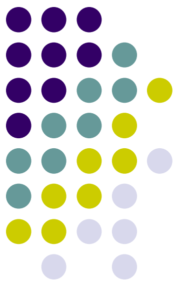
- Department of Mental Health should collaborate with private health care providers and HMO's to increase the availability of appropriate affordable resources for the treatment of postpartum depression and other psychiatric orders identified in the prenatal and postpartum period.



Recommendations

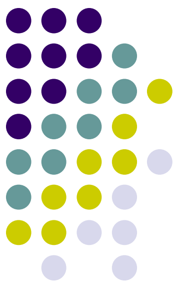
- **Department of Mental Health, the religious community, and private organizations such as William Wendt should educate health care providers on the availability of appropriate culturally sensitive grief counseling services for the parents and siblings of the deceased infant.**

ABBREVIATED CASE



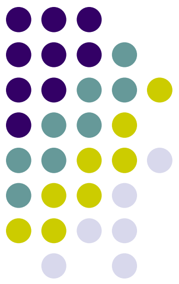
On a cool fall morning, a teenage mother discovered her 7week old child cold and unresponsive in his crib. She took him to a family member's house where she called 911.

Medics transported the infant to the nearest ER with CPR in progress. Resuscitation was unsuccessful.



ABBREVIATED CASE

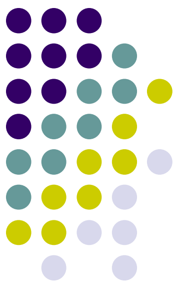
The mother stated that in a 2 hours period she fed and changed the infant 3 times. After his 9:00 AM feeding, she checked o him, kissed his arm, noticed movement, and covered him while he slept in his crib. She checked on him several additional times and found him in the same position. When she attempted to wake him for his feeding she noticed that he was cold and unresponsive. She removed his sock and plucked his foot to arouse him with no change. She changed his diaper and his clothes and went to get assistance.



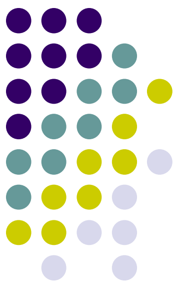
Abbreviated case

- **Hospital records indicated that the infant was severely emaciated.**

Recommendations



- DOH should collaborate with public and private health care providers to :
  - Increase the availability of home visitation services to high risk mothers and/or infants
  - Develop strategies to increase the numbers of nurses available to provide in-home follow-up care and surveillance
  - Establish an alert system to identify infants who have health insurance but have not had any documented medical care
  - Increase awareness of issues related to medical neglect

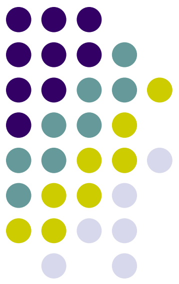


Abbreviated Case

A 25 year old mother delivered a late premature female infant "Maria" who weighs 5 pounds. The mother had a UTI late in pregnancy and was treated with antibiotics.

"Maria" experienced mild respiratory distress and was treated With antibiotics and less than 24 hours of supplemental oxygen.

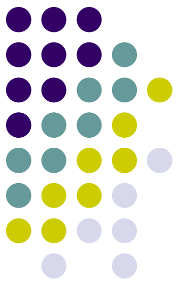
The infant was discharged home at one week of age in stable condition. "Maria" was up to date on her immunizations and well baby visits. Her physical examinations were WNL except for a heart murmur documented on her last well baby visit.



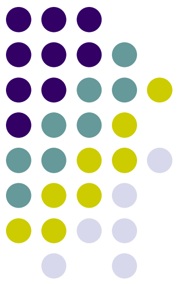
Abbreviated cases

- The mother fed and put 3month old “Maria” to sleep in her bed on her side.
- When “Maria’s” older brother “Carlos” returned from school he ran in the bedroom to check on his baby sister.
- “Maria” was lying on the bed, pale, limp, and not breathing. 911 was called and instructed mother how to perform CPR

Abbreviated Case



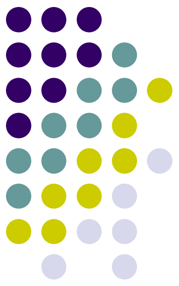
Autopsy revealed a tumor in the infant's heart



Recommendation

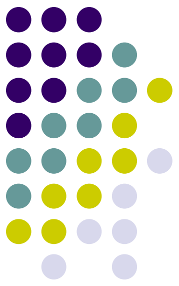
- **DOH in collaboration with managed care organizations, and DC Medical Society should work to decrease barriers to timely referral to specialists (cardiologists, fetal/maternal medicine specialists, gastroenterologists, etc.)**

FETAL INFANT MORTALITY REVIEW



- **1993 –Committee established as required by the Federal Healthy Start Project (limited to Wards 7 & 8)**
- **1998 --Committee officially incorporated as a subcommittee of Child Fatality Committee (CFRC)**
- **2003 –CFRC Legislation**
    - Expanded criteria to include all infant deaths

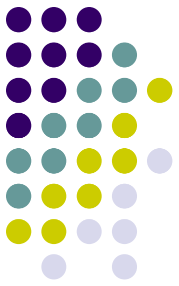
FETAL INFANT MORTALITY REVIEW



- **2010—Review meetings will begin evaluation of cases of perinatally acquired HIV cases (Dr. Denson)**

- **Although the majority of infants that die in the District are Black. Infant mortality is not a “Black” problem or a “Hispanic” problem. It is a problem that has to be tackled by the whole community. It is a problem that can affect your family member, your neighbor. The care and loss of these infants affects families emotionally *and* financially.**

FETAL INFANT MORTALITY REVIEW



- **Are you your brother’s keeper ?**