Can We Outsmart MRSA?

Methicillin-resistant Staphylococcus Aureus (MRSA) first emerged in the United States in the 1960’s and has since seen a rise in numbers for both healthcare associated (HA) and community acquired (CA) infections. Now approximately 4.6% - 19% of HA infections are caused by MRSA. Recent case reports identified outbreaks of HA MRSA in a Japanese NICU and CA MRSA in a Los Angeles NICU. MRSA can be defined as a Staphylococcus Aureus that colonizes the skin, nares, and perineum of 30-50% of healthy adults/children and is resistant to common antibiotics. Colonization is the presence of bacteria without causing symptoms of infection. It leads to an increased risk of becoming infected.

Modes of transmission for MRSA include direct skin-to-skin contact, infected fomites (hands, linens, equipment, telephones, stethoscopes, and shared supplies), skin breaks or lesions, and crowded living conditions (poor hygiene, inappropriate cleaning, overcrowding).

Risk Factors

HA MRSA risk factors identified in the perinatal setting are prolonged hospitalization or invasive procedures (circumcision, Cesarean Section (CS)), ventilatory support (endotracheal intubation), dialysis, indwelling catheters (peripherally inserted central catheters, intravenous lines, umbilical artery or venous catheters) or other medical devices, prior antibiotic use within 60 days, maternal IV drug use, compromised or weakened immune system, and frequent contact with any person with one or more of the previous risk factors. In addition, several patient factors and NICU practices contribute to the increased risk for MRSA infections; patient’s immature immune systems, congenital or acquired immune deficiencies, congenital anomalies, co-bedding practices, kangaroo care, and family-centered care.

CA MRSA risk factors identified in the perinatal setting are presence of, or household contact with a person who has skin or soft tissue infections (“spider bites”), or who works, uses, or lives in a correctional facility, public housing, athletic setting, or childcare center. These skin or soft tissue infections are accompanied by fever, swelling, pain, warmth at the site, and drainage.

Presentation and Diagnosis

HA or CA MRSA infection can present with cases of infected episiotomy, pneumonia, meningitis, endocarditis, CS wound infections, newborn septic arthritis, mastitis, bacteremia, UTI, lung abscess, and death. Normally, staph infections can be treated with penicillin and other antibiotics. However, through the years bacteria have become mutated to be resistant to most antibiotics.

Differences between HA and CA MRSA can be identified by genetic typing and by patient history. HA MRSA has two common strains identified as USA 100 and USA 200 while CA MRSA has two different strains identified as USA 300 and USA 400. There is evidence that HA infections may actually be caused by CA MRSA.

Can We Outsmart MRSA?

Diagnosing MRSA is done by obtaining laboratory cultures from wound sites and catheter tips after removal. However, it may take 4—72 hours to get results which may delay treatment. Polymerase chain reaction (PCR) testing is a likely alternative and takes approximately one day to obtain results.

Susceptibility testing will identify drugs of choice used to treat MRSA infection. Drugs of choice for HA are vancomycin, gentamicin, or rifampin. Drugs of choice for CA are ciprofloxacin, clindamycin, gentamicin, tetracycline, vancomycin, and rifampin. Therapy should be administered for at least 10 days and may continue longer depending on severity of the infection. Avoid sulfu drugs and tetracycline use in the neonate and breastfeeding mother due to adverse affects.

MRSA infections can be expensive for a hospital with additional costs related to longer length of stay, higher incidence of septicemia, increased severity of infection, and increased cost for antibiotics. The costs to the patient far outweigh those incurred by the hospital related to loss in wages, lasting effects from the illness, and may result in loss of life.

Beginning October 1, 2008 the Centers for Medicare and Medicaid Services (CMS) will no longer reimburse hospitals for additional costs related to three infections

Continued on page 2
Some preventive strategies identified for the perinatal setting include the following (adapted from Gardner and Brown, 2008):

1. **Strict hand hygiene is a must for all healthcare providers**
   a. Use of soap and water or alcohol-based hand rubs after each patient contact
   b. Encourage family members to wash hands when visiting
   c. Monitor compliance, surveillance checks and hold employees

2. **Active Surveillance Cultures (ASC)** – done on all or a select number of patients and/or staff based on risk factors to identify colonized or infected patients. Culture sites to include, nasal passages, throat cultures, skin lesions, perineal/perirectal/vaginal sites, blood, spinal fluid, urine, joint fluid, abscess fluid, breast milk, and fetuses. The following are high-risk factors to consider for ASC:
   a. Antepartum patients undergoing invasive procedures such as amniocentesis
   b. Mothers who have been in the ICU
   c. Patients with skin or soft tissue lesions
   d. Neonates transported and/or admitted to the NICU
   e. Newborn invasive procedures such as circumcision
   f. Any patient with a previous MRSA infection
   g. Any invasive intravenous or umbilical catheter
   h. Surgery
   i. Patient with weakened immune system
   j. Patient with prior history of IV drug abuse
   k. Staff who are employed during an outbreak or those with skin tissue lesions.

3. **Cohorting of colonized/infected MRSA patients, equipment, and staff**
   a. Group together patients with the same strain, use same equipment, and make staffing assignments for employees to only care for these patients
   b. Hold employees accountable for incorrect practices

4. **Standard precautions – universal precautions**
   a. Applies to all staff having direct contact with any patient and in cludes: hand washing, gown, gloves, mask, and eye shields to
   b. Limit contact of type of contact (ie, wound cleaning and dressing, IV insertion, umbilical cord care)
   c. Applies to staff involved with cleaning the patient care area
   d. System in place to alert staff to MRSA infection in the chart and the computer

5. **Wound care**
   a. Skin lesions cultured, cleaned and covered with impermeable dressings
   b. Umbilical cord care recommendations includes: triple dye, iodine ointment, alcohol, or air dry, keep area clean, assess for infection
   c. Circumcision care – assess for infection with each diaper change

6. **Environmental considerations**
   a. Trained hospital staff in appropriate use of disinfectants
   b. Compliance with policies and procedures for cleaning the patient care areas

7. **Decolonization recommendations**
   a. Have not been shown to eliminate MRSA
   b. Not recommended universally due to risk for developing future antibiotic resistant strains
   c. Only recommended during outbreaks or with patients deemed at risk prior to invasive procedures. This can be done by nasal treat ment, oral antibiotics, or antiseptic baths

8. **Other considerations**
   a. Judicious use of antibiotic therapy – appropriate drug selection, dose, and length of treatment
   b. Education of administration, hospital staff, patients, and family on prevention and control measures, signs and symptoms, and cost effectiveness.
   c. Mandatory reporting/tracking to appropriate state authority

We can outsmart MRSA with diligent preventive strategies with hand washing being our number one weapon.

**Websites**

- [www.cdc.gov/ncidod/dhqp/jl_isolation.html](http://www.cdc.gov/ncidod/dhqp/jl_isolation.html)
- [www.ihi.org/IHI/topics/PatientSafety/SurgicalSiteInfections/](http://www.ihi.org/IHI/topics/PatientSafety/SurgicalSiteInfections/)

Written by: Kristi Gabel, RNC-OB, MSN, CNS, RPCC/CDAPP Region 2

**References**

It is an under-appreciated fact that hearing loss is the most common birth defect: in the United States (US) alone it affects 12,000 children each year and is often called “the invisible disability.” In recent years, infant hearing screening has become increasingly widespread as research has demonstrated its dramatic benefit when early identification of hearing loss occurs before six-months of age. Children with hearing loss identified at this age have higher levels of perceptive and expressive language, personal and social development and better vocabulary if treated rapidly.

At the forefront of the movement towards the auditory screening of newborns has been the Joint Committee on Infant Hearing, a national body comprised of representatives from the American Academy of Pediatrics, the American Academy of Otolaryngology and Head and Neck Surgery, the American Speech Language Hearing Association, the American Academy of Audiology, the Council on Education of the Deaf, and Directors of Speech and Hearing Programs in State Health and Welfare Agencies. Throughout its nearly 40-year history, the Committee has explored the complexities of hearing loss and its effect on a child’s development. They have worked to find newer and better methods to identify and serve the infants and their families. Central to their work has been a series of position statements summarizing the state of the science and art in infant hearing, and recommending the preferred practice in early identification and appropriate intervention of newborns and infants at risk for or with hearing loss.

The most comprehensive and widely peer-reviewed position statement was issued in 2000. The position statement recommends universal newborn hearing screen to identify infants with hearing loss before hospital discharge. The Principles and Guidelines for hospital and state level programs promotes a system for hospital screening and community follow-up care and rehabilitation for those infants who were identified with hearing loss.

Standard of Care

In October 2007, the Committee updated its 2000 position statement on early diagnosis and intervention for infants with hearing loss. The new guidelines recommend screening of hearing of all infants before discharge from the hospital if possible but no later than 1 month of age. For those who fail screening, a comprehensive audiologic evaluation should occur no later than 3 months of age, and those with confirmed hearing loss should receive appropriate intervention no later than 6 months of age. The ideal is to examine the child before he leaves the hospital and not wait until after the end of the first month.

Starting at 2 months of age, all infants with or without risk factors should receive ongoing monitoring of communications skills development, regardless of outcomes from previous hearing screening. This screening may take place during well-child visits with the primary provider, with early hearing detection and intervention (EHDI) systems in place to ensure seamless transitions for infants and their families during this process.

The Committee further recommends that treatment be guided and administered by healthcare and education professionals with expertise in hearing loss and deafness in infants and young children.

A few of the specific changes in these updated guidelines include:

- The definition of targeted hearing loss now includes neural hearing loss in infants admitted to the neonatal intensive care unit (NICU).
- Distinct hearing-screening and re-screening protocols are recommended in the NICU and in well-infant nurseries. To detect neural hearing loss in infants in the NICU admitted for more than 5 days, their screening should include auditory brainstem response (ABR).
- Infants failing automated ABR testing in the NICU should be referred to an audiologist for re-screening. This should include comprehensive evaluation and ABR when indicated and complete screening on both ears, even if only 1 ear failed the initial screening of both ears.
- Any infant readmitted in the first month of life with any condition associated with potential hearing loss, such as hyperbilirubinemia requiring exchange transfusion or culture-positive sepsis, should undergo repeat hearing screening before discharge.
- Children with cytomegalovirus infection, syndromes associated with progressive hearing loss, neurodegenerative disorders, trauma or culture-positive postnatal infections associated with sensorineural hearing loss may require earlier and more frequent evaluation.
- When families decide on amplification for their infant with permanent hearing loss, the amplification device should be fitted within 1 month of diagnosis.
- Medical evaluation for an infant with confirmed hearing loss should include offering a genetics consultation to the family.
- Mandates for communication are that the birth hospital must collaborate with the state EHDI coordinator to inform the parents and the medical home of hearing-screening results.
- Information infrastructure should include state implementation of data-management and data-tracking systems to monitor the quality of EHDI services and to offer recommendations for improving care systems.

Despite serious remaining system barriers, much has been done to develop early hearing loss detection and intervention systems as a major public health initiative. A child is never too young to be treated for hearing loss. The earlier the intervention is started the greater the child’s chances of developing to their maximum potential. It is well documented that children with hearing loss given the opportunity to learn language, have greater educational and employment achievement in adulthood and increased contributions to society. Early detection and intervention for infants with hearing loss will enable children to grow in linguistic ability and literacy, and not fall behind their hearing peers.

For more information the revised JCIH guidelines may be found at the website: http://www.jcih.org/positionstatements.htm or in the October 2007 issue of Pediatrics.

Written by: Shirley Smith, RN, RPCC/CDAPP Region 6.2
The need for community awareness about diabetes is critical given the increasing prevalence of the disease, the high percentage of undiagnosed persons with diabetes, and the large populations of persons at-risk for the condition. Over the past 15 years, the number of people in the U.S. with diagnosed diabetes has more than doubled reaching over 14 million. Another one-third of adults with diabetes are undiagnosed (over 6 million) and unaware that they have the condition. Diabetes is diagnosed as a fasting plasma glucose level $> 126$ mg/dL or a 2-hour post-glucose challenge plasma glucose $> 200$ mg/dL.

Estimates indicate there are more than double the number of persons with pre-diabetes than those with diabetes. A consensus statement of the American College of Endocrinology states that early identification and treatment of persons with pre-diabetes have the potential to reduce both the incidence of diabetes and related cardiovascular and microvascular disease. Pre-diabetes currently refers to persons who have impaired fasting glucose (IFG = fasting glucose $100-125$ mg/dL), impaired glucose tolerance (IGT = 2 hr post glucose load $140-199$ mg/dL) or both.

Persons at risk of developing diabetes or pre-diabetes have the following risk factors:

- A family history of diabetes
- African American, Hispanic/Latino, Pacific Islander, Asian, Alaska Native, and American Indian descent
- A history of gestational diabetes or had a baby over 9 pounds
- Polycystic ovary syndrome
- High blood pressure (140/90 mm/Hg or higher)
- HDL cholesterol $< 35$ mg/dL or triglyceride level $> 250$ mg/dL
- Acanthosis nigricans (dark, thickened skin around neck or armpits)
- History of disease of the blood vessels to the heart, brain, or legs
- IFG or IGT on previous testing.
- Sedentary lifestyle (exercise less than three times a week)
- Overweight or obese
- $> 45$ years of age

Persons under 45 years of age who are overweight and have another risk factor should ask about diabetes screening. Those at risk of developing diabetes can help prevent the onset of the condition by adopting a healthy lifestyle.

Awareness about these risks and prevention strategies are necessary to slow the growing rates of diabetes in our communities. Health care practitioners need to specifically target prevention efforts among overweight and obese girls and women of childbearing age. The increasing number of pregnancies complicated by obesity and diabetes is predisposing infants to risk of developing type 2 diabetes by the time they reach adolescence. When diabetes complicates a pregnancy, perinatal mortality and morbidity are significantly increased, as well as the risk for future metabolic disturbances in both the mother and her child.

Each year up to 8% of all pregnant women develop gestational diabetes during pregnancy. Gestational diabetes mellitus (GDM) is defined as the condition of glucose or carbohydrate intolerance in a woman initially diagnosed during pregnancy and accounts for about 90% of the cases reported for glucose intolerance during pregnancy. To reduce the risk of poor outcomes for both the mother and her baby it is important to effectively manage blood glucose control before, during and after pregnancy.

A 2007 report from the Centers for Disease Control (CDC) compares the guidelines of several U.S. professional organizations for diagnosis and treatment of women with diabetes in pregnancy. The paper highlights the similarities and differences among the various guidelines and discusses how these differences might affect our efforts to address the challenges of controlling and preventing diabetes.

In an effort to develop a world-wide consensus on the diagnosis of GDM or glucose intolerance in pregnancy, the International Association of Diabetes and Pregnancy Study Groups (IADPSG) convened in June, 2008 to review the results of the Hyperglycemia and Adverse Pregnancy Outcomes (HAPO) study that were published in May, 2008 in the New England Journal of Medicine. The HAPO study results indicate maternal glucose levels below those diagnostic of diabetes have a strong association with increased birth weight and increased cord-blood serum C-peptide levels. Cord C-peptide levels serve as a proxy for fetal insulinemia. High C-peptide production was associated with neonatal hypoglycemia following birth. The highest correlation between cord C-peptide levels and maternal 75 gm Oral Glucose tolerance Test (OGTT) results were with the fasting and the 1 hour values. Fasting plasma glucose (FPG) $< 80$ mg/dL had the least correlation with adverse outcomes and FPG $> 90$ had the highest correlation with adverse outcomes. The 1 hour value was associated with significant increased risk if $> 179$ mg/dL and the 2 hour value was associated with a significant increased risk when $> 140$ mg/dL.

There was a majority opinion among the members of the IADPSG and related organizations who attended the June meeting that the diagnosis of type 2 diabetes should be able to be made with first recognition in pregnancy when a fasting plasma glucose is $> 126$ mg/dL. There also seemed to be consensus on using the 75 gm 2-hr OGTT for diagnosis of GDM versus the two step method of the 50 gm 1-hr glucose screen followed by a 100 gm 3-hr OGTT for diagnosis. An IADPSG-selected writing group will prepare a draft of clinical recommendations based on the input from the caucuses at this meeting. The process of revision and feedback will continue until a consensus is reached, hopefully by summer 2009.

Timely data and public health research are essential for developing a better understanding of how diabetes affects different population groups and how quality of care can be improved. The California Diabetes and Pregnancy Program has the largest database in the world for outcomes of diabetes management in pregnant women thanks to the contributing efforts of Sweet Success Affiliate programs throughout the state. Research is needed to examine the knowledge level, motivation and adherence of these women to treatment during pregnancy as well as their life-style changes after pregnancy for prevention or delay of pre-diabetes and/or type 2 diabetes.

Written by: Cathy Fagen, MA, RD, CDAPP/RPPC Coordinator, Region 6.1

References on page 5
Diabetes Awareness (continued from page 4)

References


Birth Certificates Matter

The Office of Vital Records has almost completed the 2008 Birth Data Quality Workshops for birth clerks and local registrars throughout the state. The remaining two will be held on September 18 in San Bernardino County and October 8 in Ventura County. Participants have found the workshops a forum for sharing ideas and information as well as an opportunity for everyone to learn best practices for improving data quality. Preliminary data reporting that has been released has shown some areas of improvement in missing data since the workshops began in March, 2008.

Recently, Alan Oppenheim, at California Department of Public Health, Center for Health Statistics, has stated that while there has been significant improvement in 2005 and 2006 in the number of unknowns listed on California’s birth certificates, there has been an actual increase in 2007 of unknowns reported for the Month Prenatal Care Began and the Number of Prenatal Visits. The increases reported are concentrated in a relatively small number of hospitals. If the hospital that you represent is one of these centers, you should hear from your Regional Perinatal Programs of California Representative that this is an issue and steps should be taken to correct it. In the meantime, please check with the birth clerks in your facility to assure that these fields are consistently filled in correctly.

Here is some interesting information: Did you know that California sends information collected from our birth certificates to the National Center for Health Statistics (NCHS)? This website is part of the National Center For Disease Control and Prevention (CDC) website (cdc.gov/nchs). It has taken California three years to revise the current birth certificate to conform to the new NCHS model. It is good to know that state birth data that is collected is being incorporated into the larger national health picture. There is no reporting of personal identification information, occupation related information, hearing screening or principle source of payment into this national database, but many other important items from our current birth certificates are sent on. Fact from the NCHS: the cesarean delivery rate in the US rose in 2006 to 31.1%, a new record.

Written by: Kathy Bird, RN, RPPC, Region 7

National Sudden and Unexpected Infant and Child Death and Pregnancy Loss Program

The National Sudden and Unexpected Infant/Child Death and Pregnancy Loss Cooperative Agreement Program (SIDS/ID) reflects both a new name and a broader focus for the SIDS/ID Program. Supported by the federal Maternal and Child Health Bureau, this cooperative agreement program comprises a national consortium of four centers. Like many state and local initiatives, the national consortium has expanded its program to include pregnancy loss (i.e., miscarriage) and stillbirth, as well as sudden and unexpected infant and child death. All four centers serve this mission, yet each center has a unique purpose and provides distinct resources and services. The centers maintain close collaborative relationships as they address cross-cutting issues. They serve a broad constituency in the public and private sectors, as well as individuals.

- The SIDS/ID Resource Center at Georgetown University serves as a gateway to critical information on risk reduction, prevention, and bereavement for pregnancy loss, stillbirth, and sudden unexpected infant and child death. http://www.sidscenter.org
- The SIDS/ID Support Center provides education, training, advocacy, and bereavement services, including a 24-hour bilingual bereavement counseling helpline. http://www.firstcandle.org
- The SIDS/ID – Project IMPACT serves as the communications hub for a national network of fetal, infant, and child mortality programs – convening, connecting, and providing technical support to state and local efforts. http://www.sidsprojectimpact.com
- The SIDS/ID at the National Center for Cultural Competence provides technical assistance and develops resources on cultural and linguistic competence to help programs effectively address racial and ethnic disparities in perinatal, infant, and child mortality and pregnancy loss. http://www11.georgetown.edu/research/gucchd/nccc/projects/sids
Cultural Perceptions of Breastfeeding

One word that is synonymous with the word “Mother” is “Nurturer”. After birth one way in which a mother nurtures her baby is through breastfeeding. However, what is the impact on the child and the mother if for some reason she elects not to do so? Is she any less of a nurturer – or any less of a mother? Researchers endeavored to learn why a mother would choose not to initiate breastfeeding even though this practice has numerous health benefits for her as well as the child. According to a study conducted by Singh et al entitled Nativity/Immigrant Status, Race/Ethnicity, and Socioeconomic Determinants of Breastfeeding Initiation and Duration in the United States, 2003; the results showed that when a woman breastfeeds, her child may be less susceptible to acquiring various childhood illnesses, is less prone to succumb to SIDS, has increased brain development, and is less likely to develop childhood obesity and diabetes. The results further concluded that mothers benefit from breastfeeding as well. By initiating and maintaining this practice, they decrease their chances of experiencing postpartum hemorrhage as well as developing ovarian and breast cancers. Thus, based on the aforementioned benefits of breastfeeding, all mothers in the US should breastfeed – right? However, this is not the case. In fact, to promote breastfeeding the US Surgeon General has challenged American mothers to strive to attain the Healthy People 2010 Objective of 50% of babies being breastfed by 6 months old; and the American Academy of Pediatrics went one step further to suggest exclusive breastfeeding at 6 months. These suggestions sound plausible; however, from a research standpoint there may be some perceived barriers that prevent these goals from being attained – one being cultural beliefs. Thus, how much of a woman’s culture impacts her ability to mother, and more particularly how much of a woman’s cultural experience impacts her decision to nurture her child through breastfeeding?

According to the results of the research study Breastfeeding Care in Multicultural Populations conducted by Riordan et al, the investigators concluded that “breastfeeding is less an instinctive act than one shaped by culture”; however, culture is not usually considered when assessing breastfeeding practices as “little attention has been paid to the importance of race and ethnicity in evaluating breastfeeding behaviors”. If American mothers are to achieve the Healthy People 2010 goal, it may be necessary to investigate their cultural beliefs associated with breastfeeding.

What might be some of the perceptions that influence initiation and maintenance of breastfeeding? When addressing this question, Riordan and colleagues concluded that the more acculturated a woman is in American culture the less likely she is to breastfeed even if she originates from a country where breastfeeding is customary. Thus, when investigating the aforementioned phenomena, researchers spoke with Vietnamese mothers who were new to the United States. These women shared that they chose not to breastfeed their children even though the practice of breastfeeding was revered in Vietnam. When asked why they had elected to stray from their cultural norm, the mothers indicated that they wanted to “fit in” to the culture of the United States. When African-American mothers were asked why they were hesitant to breastfeed they shared that they were concerned that they could not quantify how much milk their babies were consuming. In fact, they were under the impression that breastfeeding did not afford their children enough milk. They also stated that it was a challenge to maintain breastfeeding if they were employed. Asian-American mothers, interviewed by Riordan et al echoed similar sentiments as Black mothers in that they shared that their babies did not ingest enough milk through breastfeeding and that breastfeeding did not allow them to work outside of the home. They also mentioned that there was a cultural belief that formula feeding gave babies “harder bones” thus indicating that formula created healthier babies. Conversely, research conducted by Singh et al showed that Hispanic mothers had high initiation rates of breastfeeding compared to other groups due to the presence of social support. The previous explanations for not breastfeeding may in fact be anecdotal and not generalizable to all women who are members of these ethnic groups. Thus, research indicates that breastfeeding among “minority groups are either decreasing or remaining stable in the United States” thereby highlighting the possible challenge faced by these mothers to achieve the Healthy People 2010 Objective, and therefore raises the question of how the rates of breastfeeding can be increased for these populations.

According to the literature, social support may have a significant impact on increasing the rate of breastfeeding initiation and duration as it had with Hispanic mothers in the research conducted by Riordan et al. A study done by Gibson and colleagues also showed that “Hispanic mothers are more likely to rely on breastfeeding advice from their partner or mother”. Similarly, in a study conducted by Houghton et al, the data showed that “82% of [Native American] women felt support and encouragement to breastfeed from family members, friends and health professionals” and that when these individuals were not available to the mother she was more likely to not ever initiate breastfeeding but to instead rely on formula feeding. When non-Hispanic white mothers where interviewed during a research study conducted by Gibson et al, the findings showed that the type of social support that encouraged them to initiate breastfeeding came from healthcare providers. Thus, regardless of the women’s cultural experience the common thread was that when they were offered social support they were more likely to breastfeed.

The literature on culture and breastfeeding shows that there is not one precise explanation for why women of various ethnic and cultural backgrounds decide not to initiate or maintain breastfeeding. However, one possible way to assist women to adopt this practice may be by offering and creating an environment of social support during the postpartum period while they are still in the hospital. When conducting their research on Comparing Sociodemographic and Hospital Influences on Breastfeeding Initiation, Kruse et al found that “healthy breastfeeding practice in the United States depends decisively on high rates of initiation at the delivery hospital”.

One recommendation may be for hospitals to investigate ways to offer breastfeeding education that is culturally appropriate while keeping in mind that the literature indicates that the type of social Continued on page 7
Breastfeeding (continued from page 6)

support offered may in fact differ according to the cultural background of the mother as well as her personal preference3. Therefore, how can hospitals adequately address the issue of breastfeeding from a cultural perspective? They may choose to offer breastfeeding education not only to the mother, but to her family and friends as the literature overwhelmingly shows that social support greatly impacts a woman’s decision to breastfeed and ultimately impacts her ability to nurture and/or mother her baby9.

Written by: Tabia Richardson, MPH, RPPC Region 9

References

Diabetes Increases Risk of Birth Defects

Women who receive a diagnosis of diabetes before they become pregnant are three to four times more likely to have a child with one or even multiple birth defects than a mother who is not diabetic, according to a study by the Centers for Disease Control and Prevention (CDC), released in the American Journal of Obstetrics and Gynecology (2008;199.3:237e1-237e9).

The article from the National Birth Defects Prevention Study (NBDPS), Diabetes Mellitus and Birth Defects, shows that pregnant women with pre-gestational diabetes mellitus (pre-pregnancy diagnosis of diabetes, such as type 1 or type 2 diabetes) are more likely than a mother with no diabetes or a mother with gestational diabetes mellitus (pregnancy-induced diabetes) to have a child with various types of individual or multiple birth defects. This includes heart defects, defects of the brain and spine, oral clefts, defects of the kidneys and gastrointestinal tract and limb deficiencies. This study is the first to show the broad range and severity of birth defects associated with type 1 and type 2 diabetes.

The continued association of diabetes with a number of birth defects highlights the importance of increasing the number of women who receive the best possible preconception care, especially for those women diagnosed with diabetes. Early and effective management of diabetes for pregnant women is critical in helping to not only prevent birth defects, but also to reduce the risk for other health complications for them and their children.

Researchers also found that some of the pregnant women with gestational diabetes were more likely to have a child with birth defects. Because birth defects associated with diabetes are more likely to occur during the first trimester of pregnancy and before a diagnosis of gestational diabetes is made, the observed associations suggest that some of the mothers with GDM probably had undiagnosed diabetes before they became pregnant. However, symptoms went unnoticed until pregnancy. Further, the associations of gestational diabetes with various birth defects were noted primarily among women who had pre-pregnancy obesity, which is a known risk factor for both diabetes and birth defects. Preconception care also should be considered and promoted for women with pre-pregnancy obesity to prevent birth defects and reduce the risk for health complications.

The NBDPS is a population-based, case-control study that incorporates data from nine birth defect centers in the United States (Arkansas, California, Georgia, Iowa, Massachusetts, New York, North Carolina, Texas and Utah). These centers have been working on the largest study of birth defects causes ever undertaken in the United States. Researchers have gathered information from more than 30,000 participants and are using this information to look at key questions on potential causes of birth defects.

In the United States, the prevalence of gestational diabetes has been increasing in recent years and currently affects about seven percent of all pregnancies, resulting in more than 200,000 cases annually. While it is usually resolved shortly after delivery, women who have had gestational diabetes are at increased risk of developing type 2 diabetes in the future.

For more information about birth defects, please visit http://www.cdc.gov/ncbddd/bd/facts.htm. For more information on diabetes, please visit http://www.cdc.gov/diabetes/, or call toll-free 1-800-CDC-INFO.
August 30, 2008 is the last day for any bill to be passed. September 30, 2008 is the last day for the Governor to sign or veto a bill. The following is a list of bills to watch over the next few months.

**ASSEMBLY INITIATIVES**

**AB 30: Evans - Inborn Errors of Metabolism**
This bill would require health plans to cover the cost of treatment, including formula and food, for children with metabolic disorders. Coverage is not required except to the extent that the cost of the necessary formulas and special food products exceeds the cost of a normal diet.

**AB 1605: Lieber - State Department of Public Health: Public Health Nurse**
This bill requires the Director of the State Department of Public Health to appoint one of the chief deputies as the State Public Health Nurse, to act as a liaison to public health nursing agencies in addition to other duties.

**AB 1962: De La Torre—Maternity Services**
Under existing law, a health insurer that provides maternity coverage may not restrict inpatient hospital benefits, as specified, and is required to provide notice of the maternity services coverage. This bill would require specified health insurance policies to provide coverage for maternity services, as defined.

**AB 2129: Beall - Maternal Health: Alcohol and Substance Abuse**
This bill would require the State Department of Public Health to develop, coordinate, and oversee the implementation of a model program for the universal screening, assessment, referral, and treatment of pregnant women and women of childbearing age who are suffering from drug and alcohol abuse.

**AB 2262: Torrico—Child Protection: Safe Surrender**
This bill appropriates funds from the General Fund to the State Department of Social Services to conduct a statewide awareness campaign publicizing the existence of the Child Protection Safe Surrender Program and to establish a toll-free telephone number for the purpose of providing education and assistance to the public regarding the program.

**AB 2599: De Leon – Birth Defects Monitoring Program**
This bill makes technical, non-substantive changes to existing law that relates to the activities of the Birth Defects Monitoring Program.

**AB 2726: Leno – Healthy Food Purchase Pilot Program**
Existing law, until January 1, 2011, requires that the State Department of Public Health to develop a “Healthy Food Purchase” pilot program to increase the sale and purchase of fresh fruits and vegetables in low-income communities. This bill would extend the program to January 1, 2012. It would also expand the variety of funding sources to allow more fresh fruits and vegetables to get to inner city grocery stores and to give food stamp participants rebates on purchases of fruits and vegetables.

**AB 2898: Mullin – Coroners**
This bill relates to situations where the suspected cause of death is sudden infant death syndrome. It authorizes the coroner to retain only those parts of the body as may be necessary or advisable to the inquiry into the case, or for the verification of his or her findings.

**SENATE INITIATIVES**

**SB 164: Migden – Prenatal Screening**
Changes the name of the Birth Defects Monitoring Program. Requires the Department of Public Health to charge investigators who are approved by the department to use pregnancy blood for research purposes, a fee for costs related to data linkage, storage, retrieval, processing, data entry, reinventory, and shipping of newborn blood samples or their components, and related data management. Protects identifying information. Requires billing of specified entities to cover the costs of confidentiality protection.

**SB 840: Keuhl - Single-Payer Health Care Coverage:**
This bill would establish the California Healthcare System and make all California residents, including those who travel out of state, eligible for specified health care benefits. The California Healthcare System would, on a single-payer basis, negotiate for or set fees for health care services provided through the system and pay claims for those services. The bill would create the Office of Health Planning to plan for the health care needs of the population, and the Office of Health Care Quality, headed by a chief medical officer, to support the delivery of high quality care and promote provider and patient satisfaction.

**SB 179: Ashburn – CalWORKS Reporting Requirements:**
Current law requires the county to implement a recipient monthly reporting system where the county would redetermine recipient eligibility and grant amounts on a quarterly system. This bill would repeal the requirements relating to quarterly redetermination and prospective determination grant amounts, and would impose similar requirements for a semiannual redetermination, to take effect January 1, 2009.

**SB 825: Padilla – Public Health: Shaken Baby Syndrome**
This bill establishes the Shaken Baby Syndrome Education Program. It requires the Department of Health Services to select eligible counties which are designated to provide new parents and other adult caregivers of newborns and young infants with information and education relating to the prevention of shaken baby syndrome. It requires a report on the effectiveness of the program in reducing the number of injuries and infant deaths resulting in shaken baby syndrome. This bill provides that the funding will be from the Children's Trust Fund.

**SB 1661: Kuehl – Unemployment Compensation: Family Leave**
This bill elates to the family temporary disability insurance program for workers who take time off work to care for a seriously ill family member, or to bond with a new child. This bill provides that an individual shall be deemed to have left his or her most recent work with good cause if individual's employment terminated as a result of the individual's taking a qualifying leave under the family temporary disability insurance program.