

PERINATAL NEWS

The *Perinatal News* is published four times per year by the *South Carolina Perinatal Association*. The newsletter's mission is to keep SCPA members, and other interested persons, informed of state, local, and regional events in the field of perinatal care. The views and opinions presented are not necessarily endorsed by the *South Carolina Perinatal Association*.

To submit comments, letters, and articles, call Laureen Lattin at 843-293-0049, or email at lattinlaureen@yahoo.com.

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DON'T MISS THE 16TH ANNUAL NC/SC PERINATAL CONFERENCE! 'TWO STATES CARING AND SHARING' AUGUST 30-SEPTEMBER 1, 2009

It's not too late to register for our annual conference in Greensboro. The conference will be held again at the wonderful Sheraton Hotel at Four Seasons and will begin on Sunday August 30th at 6:00 p.m. with a welcoming reception. Those of us who have attended in the past love the hotel and their restaurants, meeting rooms and best of all the great shopping (1.3 million square foot Koury Complex) conveniently located next door to the hotel! Those of you who have attended in the past know that our conference is consistently an excellent opportunity for learning and gaining new skills.

The planning committee has done an excellent job of providing a wonderful lineup of speakers presenting on a variety of perinatal topics. Here are just a few presentations:

- Assessing the Burden of Maternal Mortality and Morbidity, Judith T. Burgis, MD
- Obstetrical Emergencies, Joseph M. Ernest, III, MD
- The Case for Breastfeeding, Holly Prouty, BSN, IBCLC, RLC
- The World of Antimicrobials in Neonatal Medicine, Brian Smith, MD, MHS
- Intergenerational Nursing Impacting Our Profession, Pam Collins, RN, MSN, CMSRN
- Diabetes Mellitus Seen Through a Mother's Eyes, Theresa Blount, RN, BSN, IBCLC

To learn more and to register for the conference, just go to the South Carolina Perinatal Association website at www.scperinatal.org for registration information. The brochure is listed under the "Calendar" tab in the index.





SOUTH CAROLINA NURSE-FAMILY PARTNERSHIP

Through the dedicated work of a public-private partnership known as South Carolina Nurse-Family Partnership (SC NFP), a new program is being implemented in South Carolina that is working to improve the lives of first-time mothers and their families.

Nurse-Family Partnership® (NFP) is a nationally recognized, evidence-based, nurse home visiting program that improves the health, well-being and self-sufficiency of first-time, low-income parents and their children. This program serves children and families who are at the highest risk of experiencing significant health, education and employment disparities. Through regular home visits with a registered nurse, young mothers are educated and empowered to make a positive difference in the lives of their children.

The group of funding partners making up this public-private partnership includes, The Duke Endowment, The S.C. Department of Health and Environmental Control, South Carolina First Steps to School Readiness, The Children's Trust of South Carolina and the Blue Cross and Blue Shield of South Carolina Foundation.

Currently, SC NFP is serving families at six local sites that target nine counties. Anderson, Greenville, Lexington, Richland and Spartanburg counties have been operating their sites since October 2008. This March, Horry County became the sixth county to welcome the NFP program, followed shortly thereafter by Charleston, Berkeley and Dorchester counties.

Many sites are now fully staffed and enrolling mothers on a daily basis. At least one site has welcomed its first baby. Nurses continue to participate in intensive training sessions at the NFP National Service Office in Denver, Colorado. Recently, the SC NFP program reached a significant milestone when all six sites' nurse supervisors were hired.

In the coming months, NFP staff, funding partners and stakeholders will continue their work to expand the program to additional families and counties in need. For more information, please contact SC NFP Director, Grace Stewart, at 803-734-2332.

*The
Lazy
Days of
Summer...*



ANNOUNCING THE OPENING OF THE SOUTH CAROLINA CENTER FOR THE TREATMENT OF GENETIC DISORDERS

On July 21, 2009 a dedication ceremony was held at the new South Carolina Center for Treatment of Genetic Disorders. The beautiful facility is located on a lovely wooded site provided by Jim Self and the Self Family Foundation to the Greenwood Genetic Center. A distinguished panel of scientists led initial planning of the facility. Greenwood Genetic Center (GGC) then partnered with the SC Department of Disabilities and Special Needs (DDSN), SC Department of Health and Environmental Control (DHEC) and Health and Human Services (HHS) to develop this program. These partnerships gave visible evidence of the commitment of the GGC, the State of South Carolina and their many public and private partners to the prevention and treatment of disabilities and genetic disorders. Dr. Steven Skinner, Director of Clinical and Treatment Services, and Fran Annese, Clinical and Treatment Program Manager, will be responsible for operation of the Center.

The SC Center for the Treatment of Genetic Disorders is founded on the concept that no disability should be beyond the reach of prevention or curative therapy. Decades of clinical observations and research discoveries have made this vision a reality today for many genetic disorders and a hope for others in the future. The completion of the world-class facility at Greenwood Genetic Center brings preventive and curative therapies to persons with disabilities in South Carolina. The Treatment Center provides a pleasant setting for patients and their families during diagnostic evaluations and comfortable rooms for patients receiving established therapies or participating in clinical trials to develop new therapies. Expanded state-of-the-art laboratories provide the capacity to conduct the testing necessary to diagnose and monitor patients receiving treatment.

Facets of the treatment program:

- Entry into the Treatment Program for many infants begins with a few drops of blood on a piece of filter paper in order to test for 33 genetic disorders. If left untreated, these conditions result in mental retardation, other disabilities or death. In collaboration with DDSN, DHEC and HHS, Greenwood Genetic Center developed a treatment program to assure that infants identified through

this newborn testing program have prompt follow-up evaluation and treatment to prevent long-term disabilities. Headed by Dr. Richard Shroer, the program currently operates six clinics throughout the state.

- Prevention of Neural Tube Defects (NTDs): Heralded as a “model of what should occur in every state,” the treatment program’s folic acid initiative has resulted in a greater than 50% reduction of severe birth defects of the brain and spine in South Carolina. Also, women who have experienced an NTD pregnancy are provided with follow-up education and multivitamins with folic acid to prevent recurrence.

- In addition to these well-established therapies, the Center will also carry out emerging therapies such as enzyme replacement, participate in clinical trials of new therapies, and add future treatments that are shown to be safe and effective.

Laboratories are essential components of the Treatment Center, providing the testing necessary for diagnosis and for monitoring the outcome of treatments. The second floor of the new facility contains cutting-edge labs, and has been named the Dr. Harold Taylor Laboratory in honor of his 33 years of service to Greenwood Genetic Center.

Whether mapping part of the vast unknown areas of the human genome, studying the effects of a single gene gone awry, or putting into practice a strategy for families to avoid hereditary disease, scientists and health care practitioners at Greenwood Genetic Center hope their work will bring the next generation closer to the goal of having all babies born healthy and free of physical and mental disabilities. South Carolina is incredibly fortunate to be home to GGC, and now to its SC Center for Treatment of Genetic Disorders.



NEW NOVEL INFLUENZA A (H1N1) (SWINE FLU) AND PREGNANCY

Eric Brenner, MD, Bureau of Disease Control-SC DHEC

Emergence of the New Novel “H1N1” Pandemic Influenza

This April cases of a new influenza virus began to be reported in Mexico and in the United States. The virus, was initially referred to as the “Swine Flu” virus, then came to be known by a variety of names, but is now commonly called the “Novel H1N1” virus or more simply as “H1N1”. This name is ambiguous in a formal sense as ordinary seasonal seasonal H1N1 viruses have been circulating worldwide for several decades. In this article we will use both the terms “Swine Flu” and “H1N1” virus to refer to the new virus. Whatever its name, this new virus is genetically and antigenically novel so that most humans are susceptible to it. However, an early study reported in CDC’s MMWR (1) showed that many persons 60 and older seem to have some antibodies to this virus. This may help explain why the average age of H1N1 patients has generally been somewhat lower than what is seen with typical seasonal flu – with many children and young adults but somewhat fewer older persons being affected. In just three months, the virus has spread not only to all 50 states in the USA, but as well to over 150 countries around the world. Accordingly, the World Health Organization has raised its pandemic influenza phase alert to level 6 (the highest phase) which signifies that transmission with this novel virus is now ongoing worldwide. Fortunately, although the virus has demonstrated the capacity to spread far and wide, to date it has not proven to be exceptionally virulent. That is, the observed case fatality rate (the proportion or percent of infections which end in death) has been only a fraction of one percent! Once this became clear, media interest, which had initially been very high, decreased somewhat. However media and public attention will surely refocus on the virus this fall when the combination of cooler weather and the start of the school year will most likely combine to lead to high levels of transmission. This will likely occur before the first vaccines for this virus, just now being prepared and tested, become available. (Availability of vaccines for novel H1N1 is not likely before October at the earliest.) Levels of transmission may be so high that some degree of social disruption may occur. All health professionals will need to be knowledgeable about the situation and to remain up-to-date- regarding the latest of probably ever-changing developments.

Seasonal Flu Vaccine, Swine Flu Vaccine, and Pregnancy

Even though severe illness and death have in general been relatively rare, certain sub-groups – including pregnant women -- have already been found to be at higher risk of complications, such as pneumonia, and even death. Even though we are still early in the pandemic, the special risks of H1N1 and pregnancy has already been documented in an emerging a mix of published case-reports and review articles (2,3). In addition to these dangers for the mother, the hyperthermia which accompanies influenza in pregnancy places fetuses at risk for complications such as birth defects or preterm birth. In the coming flu season, we can therefore expect to see considerable attention paid to prevention of influenza in pregnancy. In recent years there has, in any case, been a gradual evolution in use of trivalent inactivated influenza vaccines (TIV) in pregnancy. For example, in 1993 vaccine was recommended only for pregnant women with medical conditions known to increase risk for complications from influenza. By 1998 indications had broadened to include any women who would be in the 2nd or 3rd trimester of pregnancy in the flu season. More recently, recommendations have broadened to the point that vaccination is now advised for all women who are pregnant during the flu season -- regardless of the trimester of gestation. This approach has been maintained in the just published ACIP recommendations regarding *Prevention and Control of Seasonal Influenza with Vaccines* (4). As is clear from the title, these recommendations apply specifically to vaccines for “seasonal flu”. Because of the exceptional flu situation this year, CDC will also be publishing in the MMWR, most likely later in August or September, an additional set of recommendations which will apply to the separate H1N1/Swine Flu vaccine which vaccine manufacturers are now working to prepare. Even though this second set of recommendations has not yet been published, the CDC has already posted a “sneak preview” which lists six priority groups for receiving H1N1/Swine Flu vaccine when it becomes available later in the fall (5). Table 1 shows the anticipated priority groups, with pregnant women leading the list!

NEW NOVEL INFLUENZA A (H1N1) (*SWINE FLU*) AND PREGNANCY (continued)

Table: Groups recommended to receive the novel H1N1 influenza vaccine include (5)

Pregnant women because they are at higher risk of complications and can potentially provide protection to infants who cannot be vaccinated;
Household contacts and caregivers for children younger than 6 months of age because younger infants are at higher risk of influenza-related complications and cannot be vaccinated. Vaccination of those in close contact with infants less than 6 months old might help protect infants by “cocooning” them from the virus;
Healthcare and emergency medical services personnel because infections among healthcare workers have been reported and this can be a potential source of infection for vulnerable patients. Also, increased absenteeism in this population could reduce healthcare system ca-
All people from 6 months through 24 years of age Children from 6 months through 18 years of age because we have seen many cases of novel H1N1 influenza in children and they are in close contact with each other in school and day care settings, which increases the likelihood of disease spread, and Young adults 19 through 24 years of age because we have seen many cases of novel H1N1 influenza in these healthy young adults and they often live, work, and study in close proximity, and they are a frequently mobile population; and,
Persons aged 25 through 64 years who have health conditions associated with higher risk of medical complications from influenza.

Antivirals in pregnancy

Both Oseltamivir (Tamiflu) and Zanamivir (Relenza) are “Pregnancy Category C” medications, reflecting the fact that formal clinical studies have not been conducted to evaluate their safety in pregnancy. In the past, therefore, the ACIP has recommended that these drugs should be used during pregnancy only if the potential benefit justifies the potential risk to the embryo or fetus. Fortunately neither drug has been demonstrated to be a human teratogen. Now, in the face of novel H1N1 which seems to affect not so much older as younger persons – and hence pregnant women as well - several CDC web site pages (6,7) now address this issue in a helpful manner, and in particular include the following unambiguous message (7):

“Early treatment with influenza antiviral medications is recommended for pregnant women with suspected influenza illness. Clinicians should not wait for test results to initiate treatment since these medications work best if started as early as possible after illness onset. ... Pregnancy should not be considered a contraindication to Oseltamivir or Zanamivir use. Pregnant women appear to be at higher risk for severe complications from novel influenza A (H1N1) virus infection, and the benefits of treatment or chemoprophylaxis with Oseltamivir or Zanamivir outweigh the theoretical risks of antiviral use. Although a few adverse effects have been reported in pregnant women who took these medications, no relation between the use of these medications and those adverse events has been established.” (7). These CDC recommendations are consistent as well with a recent review published by the Canadian Medical Association Journal (8).

Conclusion

The 2009-2010 influenza season is likely to be challenging for all health care and public health professionals. Not only is the H1N1 virus a “novel” one, but the global pandemic situation itself is novel. It will thus be important to keep abreast of guidelines and recommendations which may rapidly evolve as new information becomes available. Nonetheless, at the time this article was prepared (August 10, 2009), all signs point (i) to the important role that both seasonal and novel H1N1 vaccines will have in preventing influenza in pregnant women, and (ii) to the fact that neuraminidase inhibitors, especially Oseltamivir (Tamiflu), will have a key role to play in helping prevent complications of influenza in pregnant women whose special risks include pneumonia and pre-term delivery.

NEW NOVEL INFLUENZA A (H1N1) (*SWINE FLU*) AND PREGNANCY (continued)

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