



Breastfeeding Update

“Good health begins with breastfeeding.”

BREASTFEEDING IN HIGH RISK POPULATIONS: THE MOM WITH HEPATITIS

Nancy E. Wight MD, FAAP, IBCLC

Breastmilk is the ideal infant nutrition, and breastfeeding is the optimal delivery system. The American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of life and continued breastfeeding with the addition of appropriate complementary foods for at least one year, and thereafter for as long as mother and baby desire. The benefits of breastfeeding in terms of species specificity, balanced, changing nutrients and enzymes, host resistance factors, immunologic protection, allergy protection and psychosocial development, make breastmilk the most important and cost effective substance we have in medicine today.

Unfortunately, breastfeeding has been implicated as a possible mode of transmission of various forms of hepatitis from mothers to their infants. Acute viral hepatitis is a frequent cause of liver disease in the United States and results in significant morbidity and mortality. The range of viruses of concern is expanding significantly and has become a true alphabet soup, with Hepatitis A, B, C, D, E, and now Hepatitis G as well. Fortunately, vertical transmission of most forms of hepatitis via breastfeeding is rare.

Hepatitis A Virus (HAV)

Hepatitis A virus occurs worldwide and is transmitted predominantly by the fecal-oral route, through person-to-person contact or by contaminated food or water. Hepatitis A is characterized by an acute febrile illness with jaundice, anorexia, nausea and malaise. Newborns are rarely infected, and in infants and pre-school-aged children, most infections are either asymptomatic or cause mild, non-specific symptoms without jaundice. Fulminant Hepatitis A is rare, and

chronic infection does not occur.

Hepatitis A, even during the acute infectious period, is not a contraindication to breastfeeding. Perinatal transmission of hepatitis A is rare, and there is no evidence for transmission via breastmilk. Some experts have advised giving the infant immune globulin if the mother has the onset of symptoms in the period from 2 weeks before to 1 week after delivery. Even without immunoprophylaxis, severe disease has not been reported in infants. Careful hand washing should still be emphasized to the mother.

Hepatitis B Virus (HBV)

Hepatitis B virus is transmitted parenterally, by sexual contact, perinatally, and rarely congenitally. A major route of transmission from an infected mother to her baby is via contact with blood at the time of birth. Household contacts of Hepatitis B virus carriers are also at high risk of acquiring infection. Hepatitis B virus (HBV) causes a wide spectrum of infections, ranging from asymptomatic seroconversion, subacute illness with nonspecific symptoms (anorexia, nausea, malaise) or extrahepatic symptoms, and clinical hepatitis with jaundice, to fulminant fatal hepatitis. Asymptomatic infection is most common in young children.

Chronic HBV virus infection with persistence of Hepatitis B surface antigen (HBsAg) occurs in as many as 90% of infants who become infected perinatally, and in 6-10% of older children, adolescents and adults who become infected postnatally. Chronically infected persons are at increased risk for developing chronic liver disease (cirrhosis, chronic active hepatitis, chronic persistent hepatitis) or primary hepatocellular carcinoma in later life.

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ASK THE EXPERT

Question: A patient wants assistance with breastfeeding from a Lactation Consultant. Her chart shows a history of substance abuse. A toxicology screen was sent to the lab and the results of the test were positive. What should a Lactation Consultant tell this high-risk mom?

Answer: A careful assessment of the problem is needed. Are you dealing with a recreational drug user, a recovering addict, or an individual who is in denial about her abusive habit? So often, the subject of drug abuse is difficult for us to discuss. Sometimes we avoid talking about this with our client because we feel powerless to deal with the problem. Fortunately, pregnancy helps motivate many drug abusing mothers to give up their harmful habits. The decision to breastfeed provides an opportunity for positive change. It's up to us, as providers, to encourage that change.

Let's suppose that the new mother you are to assist with breastfeeding has had little or no prenatal care and you are informed that the toxicology screening is positive for drug abuse. Before visiting the mother, meet with the baby's pediatrician and social worker, and discuss the risks and benefits of breastfeeding versus those of not breastfeeding. Whether there is evidence that breastfeeding is recommended or contraindicated in this situation, it is important to understand the rationale for the physician's recommendation, so that you can answer the parents' questions. Depending upon the drug involved, a physician may or may not advise that she nurse her baby. It is important to know what the pediatrician has recommended to the patient and to support that decision when meeting with the mother. A toxicology screen positive for marijuana is usually less alarming than a toxicology screen positive for cocaine, because there is little evidence that a mother who uses marijuana harms her baby by breastfeeding. Amphetamines become concentrated in breastmilk, causing infants to develop irritability and poor sleep patterns. Adverse ef-

fects of maternal cocaine abuse can be profound. Infants exposed to cocaine via breastmilk may develop vomiting, diarrhea, irritability, tremors and seizures. Interestingly, only trace amounts of methadone are found in the milk of recovering heroin addicts participating in methadone maintenance programs, and these amounts may mitigate infant withdrawal symptoms.

After gaining approval from the pediatrician for breastfeeding, the next step is to assess the mother's true desire to breastfeed her infant. If she is motivated, then counsel about the impact of the abused substance while breastfeeding during your assessment. Emphasis on eliminating infant exposure should be made clear. It is important to provide her privacy during the discussion. It is also helpful to be encouraging and supportive of all the positive benefits there are for both the baby and the mother if she has chosen to breastfeed. A breastfeeding support group should also be recommended.

Mothers with serious ongoing drug problems harm themselves and jeopardize their babies' health. Legal action may ultimately be taken to remove the infant from their custody. Sadly, there are those who are unwilling to face their addiction without these harsh consequences.

For more information about substance abuse and breastfeeding, please see the September 2001 American Academy of Pediatrics Policy Statement titled The Transfer of Drugs and Other Chemicals into Human Milk at: <http://www.aap.org/policy/0063.html>.



"Maggie" Mary M. Dahms RN, BSN, IBCLC.

Maggie is a hospital based lactation consultant for Sharp Healthcare. She is currently providing patient care at Grossmont Hospital Women's Center in La Mesa.

SAVE THE DATE

2001 American Academy of Pediatrics National Conference and Exhibition—San Francisco Marriott/Moscone Center, San Francisco, California, October 20-24, 2001.

Attend the National Conference and you will: hear comprehensive updates from experts in the field of pediatrics; practice your techniques and apply new skills; view the latest technological advances in products and services; discuss your challenging cases; network with your colleagues from both the United States and abroad; and earn hour-for-hour AMA PRA Category 1 CME credit hours. Registration Program is available on-line at www.aap.org.

Sixth International Meeting of the Academy of Breastfeeding Medicine—Wyndham Hotel, Washington DC, November 1-5, 2001.

The Sixth International Meeting of the Academy of Breastfeeding

Medicine provides physicians with the opportunity to meet other physicians from around the world who are dedicated to an interest in breastfeeding and human lactation, share experiences in physician education and clinical management of breastfeeding patients, and attend workshops, abstract presentations, and lectures regarding relevant and controversial topics such as human milk banking, maternal depression, breastfeeding advocacy, and more. For further information please contact ABM Executive Office. Phone: (877) 836-9947 Fax: (619) 295-0056 E-mail: abm@bfmed.org Website: www.bfmed.org

LLL Conference—Costa Mesa Hilton, Costa Mesa, CA, May 25-26, 2002.

More information TBA. Mark it on your calendar!

ABOUT THE SDCBC

Become a member of the San Diego County Breastfeeding Coalition!

What is the San Diego County Breastfeeding Coalition?

The San Diego County Breastfeeding Coalition (SDCBC) is a non-profit association whose mission is to promote and support breastfeeding through education and outreach in our community.

The SDCBC and the Children and Families "Prop 10" Commission

The SDCBC has promoted and supported breastfeeding through education and outreach in San Diego County since May 1994. With an entirely volunteer work force, minimal annual dues, small grants and significant contributions from many San Diego institutions, we have managed to address many of the County's needs in a limited, but effective, manner. In October 2000, \$100,000 in grant funding was received from the Children and Families "Prop 10" Commission to expand the SDCBC's activities and to establish a formal office and organizational structure.

The California Children and Families Commission was established by the California Children and Families Act (Proposition 10), passed by voters in November 1998. This statewide ballot initiative increased the tax on cigarettes and tobacco products. The revenue is used to provide health, child development, and parent support programs to promote the well-being of children from the prenatal period to age five.

The San Diego County Children and Families Commission was established to implement Prop 10 on a local level. The Commission's vision is that all children in San Diego County will enter school physically, mentally, emotionally and developmentally ready to learn.

We would like to thank the San Diego County Children and Families Commission for their continued support of our efforts. Visit the San Diego County Children and Families Commission website at www.cfcf.ca.gov/sandiego.

What are the benefits of being a SDCBC member?

As a member of the SDCBC you will:

- Network with a growing body of people dedicated to the promotion and support of breastfeeding.
- Have access to lactation professionals and the most up-to-date breastfeeding resources.
- Receive a supply of free Breastfeeding Resource Guides in English and Spanish.
- Receive a discount for Coalition sponsored education programs.
- Receive our newsletter, "Breastfeeding Updates".
- Be listed, as appropriate, in the "Breastfeeding Resource Guide" without a fee.
- Have a home page or link, as appropriate, on the SDCBC website: www.breastfeeding.org

You can show your support of the SDCBC by:

- Making a monetary contribution to support Coalition activities.
- Donating your time by serving on a committee:

Community Outreach	Professional Outreach
Resource Guide	Research and Evaluation
- Attending Coalition meetings and providing your expertise and experience.

We offer the following types of membership with the SDCBC:

- Sponsor - \$100 (Business/Organization /Professional)
- Contributing Member - \$50 (Individuals)
- Friends of the Coalition - any amount under \$50

Have you renewed your SDCBC membership for 2002?

Your continued support is needed! If you are interested in becoming a member or renewing your membership, visit our website at www.breastfeeding.org or contact our office for more information.

Ph: (858) 966-5981 Email: cerickson@chsd.org

2001 SDCBC MEMBERS INCLUDE:

Christina Alcala, PHNI
American Academy of Pediatrics, San Diego Chapter
American Red Cross WIC Program
Baby Love
Barbi-Care Lactation Services
Beach Area Breastfeeding (Annie Ver Steeg)
Dr. & Mrs. Ronald Becker
Birth Resource Network (Gerri Ryan)
Breastpumps and More (Lois Scott)
Janna Cataldo, MD
CHDP/Public Health and Nutrition Program
Children's Hospital and Health Center
Diana Lee, RD, CNSD, CLC
Foundation for the Children of the Californias
Grossmont Hospital Women's Center
HealthShare Lactation Services, Inc.
The Health Concern - Palomar, Pomerado Health System

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La Leche League International
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Lily Carter, PHN
March of Dimes
Medela, Inc. (Tim Johnson)
Margaret Meyer, MD, FAAP
Michelle Sharit, RN, LLLL
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James G. Murphy, MD
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Navy New Parent Support Program
Neighborhood House (Nilkita Smith)
NHA Headstart - Perinatal Home Visitor Program
North County Health Services, WIC
Not to Worry, Inc. (Ellen Brown)
Paradise Valley Hospital
Pomerado Hospital

Regional Perinatal System
San Diego State University Foundation, WIC Program
Scripps Health - Mercy Hospital, WIC Program
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BREASTFEEDING IN HIGH RISK POPULATIONS

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Hepatitis B surface antigen (HBsAg) has been detected in breast-milk from HBsAg-positive women. However, studies from Taiwan and England have shown that breastfeeding by HBsAg-positive women does not significantly increase the risk of infection among their infants above that which exists for perinatal infection. Infants born to known HBsAg-positive women should receive Hepatitis B immune globulin (HBIG) and Hepatitis B vaccine, effectively eliminating any theoretical risk of transmission through breastfeeding. Mothers with Hepatitis B should be encouraged to breastfeed.

Hepatitis C Virus (HCV)

Hepatitis C is characterized by mild or asymptomatic infection with insidious onset of jaundice and malaise. In some cases, the course is remittent. An average of 50% of the patients develop chronic liver disease, including cirrhosis. Hepatocellular carcinoma may be associated with Hepatitis C as well as chronic Hepatitis B infections. Hepatitis C virus (HCV) occurs worldwide and has several modes of transmission. It is well recognized that HCV can be transmitted by contact with blood or blood products through transfusions, intravenous drug use, sexual contact and needle-stick exposure.

The risk of perinatal transmission is approximately 4 % although reported rates of transmission vary depending on virus genotype, co-infection with HIV and HCV-RNA antigen titers. Overall, the risk of perinatal transmission of HCV appears extremely low if mother is HCV-antibody positive but HCV-PCR (antigen) negative at the time of delivery. Several recent studies demonstrate no increased risk of transmission attributable to breastfeeding. All major health organizations (i.e. World Health Organization, Centers for Disease Control, National Institutes of Health and American Academy of Pediatrics) recommend or support breastfeeding by Hepatitis C carrier mothers. As the risk of vertical transmission of HCV appears to increase with HCV-RNA titer, one approach would be to breastfeed if the mother's HCV PCR is negative or low titer, and recheck the mother's titer periodically. HCV antibodies and HCV-PCR should be followed periodically in the infant during the first 12 to 18 months of life whether or not the infant is breastfed.

Hepatitis D (Delta) Virus (HDV)

Hepatitis Delta virus (HDV) infection causes hepatitis, but only in conjunction with Hepatitis B virus (HBV) infection. Infection in a person with acute or chronic HBV infection can result in acute, possibly fulminant hepatitis, or in chronic hepatitis that may progress to cirrhosis. HDV can cause an infection at the same time as the initial HBV infection (co-infection), or it can infect an individual already chronically infected with HBV (superinfection). Transmission is similar to that of HBV, that is, by parenteral, percutaneous, or mucous membrane inoculation. HDV can be transmitted by blood or blood products, injecting drug use, or

sexual contact as long as the patient is concurrently actively infected with HBV (and is therefore HBsAg positive).

Transmission from mother to newborn is uncommon and can be prevented by appropriate HBV prophylaxis in the newborn. Intra-familial spread can occur among HBsAg carriers. There is no information available on the transmissibility of HDV through breastmilk, but we must presume it will pass through just as Hepatitis A, Hepatitis B, and Hepatitis C do. Mothers should be encouraged to breastfeed as long as their infants are given HBIG and HB Vaccine.

Hepatitis E Virus (HEV)

Hepatitis E is an acute illness with jaundice, malaise, anorexia, fever, abdominal pain and arthralgia which tends to appear during compromises in good public health such as flooding or other natural disasters. Endemic HEV transmission has not been recognized in Western Europe or in the United States. It is very similar to Hepatitis A disease and appears to be self-limiting. Transmission of HEV is by the fecal-oral route. HEV occurs most frequently in children and young adults, but children are less commonly jaundiced. Liver failure can occur with HEV, particularly during pregnancy. Mortality rates over 30% have been reported in women infected during the third trimester.

There is currently no evidence of perinatal transmission of the virus. There is no current evidence regarding the transmissibility of HEV through breastmilk, or regarding the consequences of its transmission for the infant. At the present time, it appears that it would be especially important to continue breastfeeding during epidemics of HEV in underdeveloped, endemic areas to prevent a greater risk of infant mortality from other infectious diseases.

Hepatitis G Virus (HGV & GBV-C)

Although found in human bloodstreams, there is scant evidence that HGV/GBV-C actually causes hepatitis, and no evidence that it causes chronic hepatitis, cirrhosis, or hepatocellular carcinoma. There appears to be a 40-60% vertical perinatal transmission rate, but no clinical illness in the infant. There is no evidence that breastfeeding increases transmission to the infant. Although data is limited, breastfeeding appears safe.

Conclusion

In the years to come, no doubt we will extend the hepatitis alphabet even further. It is highly likely that **all** will be proved transmissible through breastmilk. However, as noted above, each hepatitis virus carries its own risk of long-term morbidity and mortality. Based on current evidence, it would seem prudent to recommend breastfeeding to mothers infected with Hepatitis A, mothers infected with Hepatitis B and Hepatitis D whose infants have been immunized for Hepatitis B and treated with HBIG, mothers living in areas endemic for Hepatitis E, and mothers infected with Hepatitis G. Unless the mother is

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PROMOTING BREASTFEEDING IN TEEN MOMS

Lily L. Carter, RN, BSN, PHN, CLE

I recently worked with a 15-year-old mom (Jane) who was ready to quit breastfeeding her four-day-old baby. Jane wanted to stop because it was too difficult to breastfeed and the baby always cried! After I assisted her through a successful breastfeeding session, she told me that her mother breastfed her and that she wanted to do the same for her baby. Jane also said that her friends with babies choose not to breastfeed because they do not know much about it and find it painful and embarrassing. This is a typical scenario and numerous surveys have shown that teen moms are less likely to breastfeed than older mothers. In a 1990 survey, 39% of teen moms having their first baby breastfed in comparison to 86% of mothers over the age of 30. (Ineichen, et al, 1997).

As health care providers, we need to identify our own personal attitudes and feelings towards teen pregnancy. Effective communication with a teen mom starts with putting negative feelings aside, using simple visual aids and handouts, avoiding the use of specialized medical or biological terminology, and by working from a genuine, honest level of communication. Furthermore, understanding certain issues and barriers in this young age group will aid in reaching them. Some barriers include a lack of knowledge about breastfeeding, lack of family/friend support, body image issues, emotional immaturity, and returning to school. "The difficulties of working with this group of mothers, due to their immaturity and frequent social problems should not be underestimated." (Ineichen, et al, 1997). The following strategies can help teen moms to breastfeed:

1. Use strong peer role models, videos, and role-playing.
2. Mention the benefits of breastfeeding and discuss concerns and myths. Emphasize breastfeeding as an aid to returning to an optimal weight more quickly, and mention that breasts sag due to pregnancy and not from breastfeeding.

3. Begin breastfeeding education in early pregnancy. Include the baby's father, maternal grandmother and other family members.
4. Praise the mom for her time and effort with breastfeeding.
5. Boost the mom's confidence by emphasizing that only SHE can breastfeed her baby.
6. Provide tools to continue breastfeeding upon returning to school. Schools with minor programs allow teens to nurse in the school's daycare center.
7. Close follow-up is essential with this young population.

Mothering and nurturing may be challenging for teens since they are very focused on their body image and peer approval. As health care providers, we must correct misconceptions, increase positive attitudes and promote and support breastfeeding among teen moms. Weave the quilt while they are young!

Through advocacy and education, public health nurses promote health and prevent illness in the individual, family and community. To refer a potential client residing in San Diego county for this free nursing service, please call (858) 490-4400.

References:

1. Ineichen, B., Pierce, M., & Lawrenson, R. (1997). Teenage mothers as breastfeeders: attitudes and behaviour. *Journal of Adolescence*, 20, 505-509.
2. Wambach, K.A., & Cole, C. (2000). Breastfeeding and adolescents. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 29, 282-294.
3. Wiemann, C. M., DuBois, J. C., & Berenson, A. B. (1998). Racial/ethnic differences in the decision to breastfeed among adolescent mothers. *Pediatrics*, 101 (6), e11.

Breastfeeding In High Risk Populations: The Mom with Hepatitis

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actively, heavily viremic, the risk of transmission of Hepatitis C also appears very small, but carries an increased risk of serious and possible fatal sequela to an exposed infant. In all cases, the risks of breastfeeding with maternal hepatitis should be weighed against the known risks of NOT breastfeeding in each individual case and environment.

References:

1. American Academy of Pediatrics Committee on Infectious Disease. (2000). *2000 Red book: Report of the committee on infectious diseases* (23rd ed). Elk Grove Village, IL: American Academy of Pediatrics.

2. American Academy of Pediatrics Work Group on Breastfeeding. (1997). Breastfeeding and the use of human milk. *Pediatrics*, 100, 1035-1039.
3. American Medical Association Advisory group on Prevention, Diagnosis, and Management of Viral Hepatitis. (1995). *A guide for primary care physicians*. Chicago: American Medical Association, Division of Health Science.
4. Lawrence, R.A. (1997). *A review of the medical benefits and contraindications to breastfeeding in the United States*. (Maternal and Child Health Technical Information Bulletin). Arlington, VA: National Center for Education in Maternal and Child Health.

BREASTFEEDING AND BREASTPUMPS

What to Look for in a Breastpump

Tim Johnson, BS, CLE

Breastpumps are meant to complement breastfeeding, not replace it. Choosing the right breastpump when needed can make a big difference—both in initiating and sustaining breastfeeding. Every breastfeeding mother has unique needs. The pump that works best for her is an individual choice depending on lifestyle and pumping frequency. Here are eight standards of excellence you can use when evaluating breastpumps.

1. Physiological Action — *Does the pump automatically provide the proper breast stimulation for sustaining lactation while collecting milk?*

A breastpump is more than a collection device for breastmilk. To be completely effective, it also must act as a surrogate baby in breastmilk production. Although no two babies' nursing actions are the same, all do follow a similar cycle of suction and suction relaxation.

2. Vacuum — *Is the pump's vacuum always within safe, natural limits? Can it be regulated?*

To create proper stimulation, a breastpump uses suction to duplicate baby's suck-and-release action. To be most effective, this suction should be neither stronger nor longer than a baby's suck. Many pumps can allow the mother to build high levels of suction, thereby decreasing the number of pumping cycles per minute and prolonging negative vacuum pressure on the breast. This pattern provides breast stimulation which is insufficient for maintaining the mother's milk supply, and can also damage sensitive tissues.

In order to create suction at the breast, breastpumps have to suck air out of the airspace between the breast, milk container and suction source. This suction begins when the breast is inserted into the breastshield and a seal is formed. The shape of the breast, as well as the breastshield design determines the effectiveness of the pump in creating vacuum.

3. Biomechanics — *If it is a manual pump, does it properly use the appropriate muscle groups to avoid stress, fatigue and possible injury?*

A well-designed manual breastpump works with the muscles in the shoulder, arm, forearm and hand to minimize user fatigue and the chance of injury.

4. Hygiene — *Does the pump have safeguards against cross contamination? Is it easy to clean thoroughly? Are the parts autoclavable?*

Hygiene is a vital consideration when evaluating any breastpump, whether for hospital or home use. The hygienic flow of breastmilk in the breastpumping system is always a critical safety consideration. A pump's design should minimize any "traps" through which breastmilk can flow into the suction source, thus creating potential contamination. This consideration is especially important for hospital-grade electric pumps that are typically used by a number of mothers.

5. Ease of Use — *Is the pump comfortable and simple to use?*

To ensure comfort, breastshields should be designed with a flange and nipple tunnel that accommodates different nipple shapes and areola tissue, since these soft tissues undergo extensive changes during pumping. The nipple tunnel is designed to allow comfortable elongation of the mother's nipple, even if the breast is engorged.

6. Initiating and Sustaining Milk Supply — *Does the pump not only help sustain lactation, but help initiate it as well?*

Breastpumps have been used to initiate, as well as sustain milk supplies, a critical benefit for mothers of premature or sick infants who cannot breastfeed at birth. Some brands, especially manual or handheld battery models, may not be effective in sustaining lactation once it has begun.

7. Availability — *Are parts and accessories readily available?*

A breastpump that is used in hospitals should also be available for at-home use through rental stations, pharmacies, medical supply stores, baby stores, the WIC Program, corporate lactation programs and breastfeeding specialists.

8. System Integration — *Is the breastpump part of a system that allows a variety of types of pumping?*

Some hospital breastpumps are designed as integrated systems with interchangeable components.

There is no substitute for a baby, who is the best breastpump available. However, if breastfeeding is not always possible, effective use of a breastpump can make sure that the infant will get his or her mother's breastmilk, and all of the benefits breastmilk provides!

Interested in what we do? Attend one of our meetings!

General Coalition Meetings are held the second Thursday of each odd month at Sharp Mary Birch Hospital for Women, 3003 Health Center Drive, San Diego in the Grace Benbough Room, located on the 2nd floor, 3:00 – 5:00 pm. Please call (858) 541-4185 for directions. 2002 meeting dates are as follows: January 10, March 14, May 9, July 11, September 12, and November 14.

COMMUNITY SPOTLIGHT



Welcome Baby Kit for New Parents

The Regional Perinatal System (RPS) has been chosen to implement and distribute the Welcome Baby Kit for new parents in San Diego County. The Kit is a state-wide project of the California Children and Families Commission. Packaged in a compact, colorful box, the kit contains a wealth of information and resources for new parents, including: six videos on the early years, child care, safety, health and nutrition, discipline, and early literacy; a series of parenting education brochures with information on child development, early literacy, prenatal care, nutrition, dental care, immunizations, child care, child safety, and tobacco; a Parent's Guide with information on topics including pregnancy, newborn feeding, early childhood development, childcare and parenting; an easy-to-use resource and referral guide to local information and services, and a small book for parents to read to their babies.

In the fall of 2000, RPS held a series of meetings countywide to ask parents, health care providers, child development experts and others to help customize the contents of the Kit for San Diego County parents. RPS also surveyed 18 hospitals and birthing centers about how they currently provide information to new parents. Based on this broad input,

RPS made recommendations to the San Diego County Commission about the contents of the Kit and how and when it should be distributed to expectant or new parents. RPS will begin distribution of the Kits at several pilot sites, and will quickly move to distribution throughout the county, reaching new parents through such venues as: hospitals, prenatal clinics, physicians' offices, home visiting programs, WIC programs, public health and safety programs, and parenting classes. RPS will train providers who distribute the Kits to ensure that they are familiar with the contents and can use them in their work with parents. Beginning in winter 2001, the Kit will be provided to all new parents in San Diego County – over 40,000 families per year. It is available in English and Spanish at this time. The Regional Perinatal System is a collaborative project of Children's Hospital, Sharp HealthCare and UCSD Medical Center and is funded by the California Department of Health Services. RPS serves as a nonpartisan liaison, consultant and resource for all perinatal providers in San Diego and Imperial Counties.

For more information please contact the San Diego & Imperial Counties Regional Perinatal System, 4542 Ruffner St. Suite #140, San Diego, CA 92111-2250, Tel: 858-467-4990 or Email: regionalperinatal@ucsd.edu.

JOB CENTER

Volunteer Opportunities: If you have experience with coordinating membership and fundraising activities, the SDCBC needs you!

Paid Opportunities: Are you IBCLC certified? We need presenters for our in-office lactation education program. (\$100/session)

Please call the SDCBC at (858) 966-5981 for more info.

LICENSED VOCATIONAL NURSE

Biweekly Salary : **\$1060.00 - \$1168.80**
(+ \$40 biweekly for bilingual skills)

The County of San Diego, Health & Human Services Agency, has an immediate vacancy for a bilingual (Spanish) Licensed Vocational Nurse for the North Inland Public Health Center in Escondido, Clinical Services. Excellent benefit package. Applications are available at the North Inland Regional Center, 600 E. Valley Parkway, Escondido (760) 740-4199 or Dept. of Human Resources, 1600 Pacific Highway, Rm. 207, San Diego, (619) 236-2191. EOE

Paradise Valley Hospital, National City, CA

Couplet Care RN and Lactation Educator to do substitute baby care teaching, lactation support and 1 or 2, 12 hour a week shifts as couplet Care Nurse. Call Martha Lee at (619) 216-0119.

Interested in having your jobs posted here? All lactation related jobs can be posted here for free! For more information, please call us at (858) 966-5981 or email us at cerickson@chsd.org.

Breastfeeding and HIV: A Dilemma for the Developing World

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fed at least 3 months had the same transmission rate at 6 months (19%) and were only slightly higher at 15 months (25%). Mixed feeding (breastmilk and formula) had the highest transmission rates (36%) and was, unfortunately, the most popular method of feeding. The increased infection rate associated with mixed feeding is thought to result from decreased protection from breastmilk and intestinal damage from contaminated foods that allows the HIV virus present in the breastmilk to invade tissue. The next step will be to define the safest duration of exclusive breastfeeding and to determine when and how to wean.

References:

1. Coutoudis, A., Pillay, K., Kuhn, L., Spooner, E., Tsai, W.Y., & Coovadia, H.M. (2001). Method of feeding and transmission of HIV-1 from mothers to children by 15 months of age: Prospective cohort study from Durban, South Africa. *AIDS 2001, 15*, 379-387.
2. De Cock, K.M., Fowler, M.G., & Mercier, E. (2000). Prevention of mother-to-child HIV transmission in resource poor countries: Translating research into policy and practice. *Journal of the American Medical Association, 283*, 1175-1182.
3. Nduati, R., John, G., Mbori-Ngacha, D., Richardson, B., Overbaugh, J., Mwachira, A., Ndinya-Achola, J., Bwayo, J., Onyango, F.E., Hughes, J., & Kreiss, J. (2000). Effect of breastfeeding and formula feeding on transmission of HIV-1. *Journal of the American Medical Association, 283*, 1167-1174.

Breastfeeding Update

“Breastfeeding and High Risk Groups”

December 2001



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“Good health begins with breastfeeding.”

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Breastfeeding and HIV: A Dilemma for the Developing World

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Worldwide, more than 14 million women are living with HIV. Most are in Africa where, in some countries, more than 25% of all pregnant women screened are HIV positive. Very few African women have access to either HIV testing or antiretroviral therapy. In the year 2000, it was estimated that over 500,000 African infants became infected with HIV through vertical transmission from mother to child before, during or after delivery. Surveys in Africa show that approximately 15-30% of all infants born to HIV positive mothers are HIV positive shortly after delivery. An additional 15-20% acquire HIV as a result of breastfeeding. Overall, 30-50% of all infants born to HIV positive mothers without access to antiretroviral therapy are HIV positive at 6 months of age (De Cock, Fowler, & Mercier, 2000). Two recent studies suggest that the rate of HIV transmission via breastmilk is about 16%, resulting in approximately 40% of all infant HIV infections being attributable to breastfeeding (Coutsoudis, et al., Nduati, et al.). In industrialized countries such as the US, the rate of maternal to child HIV transmission has been dramatically reduced by a combination of prenatal screening, maternal and infant antiretroviral treatment, C-section delivery and formula feeding. Most of these interventions are unrealistic in developing countries due to

lack of personnel, infrastructure and financial resources, problems exacerbated by the devastating social and economic impact of AIDS. Attention has therefore been focused on the most “low tech” solution—substituting formula feeding for breastfeeding.

But is formula feeding feasible either? First, universal HIV screening would still be necessary to assure that formula feeding be recommended *only* for infants at risk of acquiring HIV after birth. After all, 75-90% of infants born in Africa are not at risk for HIV at all because their mothers are HIV negative. Formula feeding in these infants would substantially increase infant mortality and undermine years of successful breastfeeding promotion. Second, even if HIV screening were available, formula feeding requires ready access to clean water, the economic resources to buy sufficient amount of formula, clean feeding equipment, and cultural acceptability, all of which are lacking in most African countries.

Can breastfeeding be modified to simultaneously retain health benefits and reduce the risk of HIV transmission? Coutsooudis et al. examined the effect of duration and exclusivity of breastfeeding on vertical HIV transmission in a prospective cohort study of South African infants. The lowest rate of HIV transmission by 15 months (19%) was in exclusively formula fed infants. However, infants exclusively breast

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