

PERINATAL Perspectives



Vol. 11, Issue 1 • Quarterly news from the Indiana Perinatal Network (IPN) • www.indianaperinatal.org • Winter 2007


St. Mary's Hospital Hosts PCEP



Kim Butcher (left), a St. Mary's staff member who was instrumental in coordinating PCEP, joins Staff Nurse Angie Hasenour who served as Jasper Memorial's resource contact.

St. Mary's Hospital for Women & Children, Evansville, recently opened its doors to PCEP participants from Good Samaritan of Vincennes (in Knox county); Gibson General, Princeton (Gibson); and Memorial Hospital and Health Care Center, Jasper (Dubois).

A comprehensive program for those involved in the clinical bedside care of OB and neonatal patients, PCEP presents concepts and skills important to the care of patients within the hospital and those stabilized prior to transfer to a sub-specialty center.

The self-instructional, self-paced program is being successfully implemented statewide. Nearly all activities take place within the participating hospital. Each participant receives a set of manuals to use during and after the program. 

To find out more about PCEP and how your hospital can participate, contact Perinatal Education Coordinator Tina Babbitt, RN, MSN, IBCLC, ph: 317.924.0825, ext. 4228 or e-mail: tbabbitt@indianaperinatal.org.

Faith-Based "First Ladies Club" Advocates for Perinatal Health

The perinatal health message takes a seat in the front pew courtesy of The First Ladies Club, a new faith-based outreach group. Composed of African-American pastors' wives from assorted Indianapolis churches, The First Ladies aim to take important health information back to their congregations and become a driving force in promoting health in the black community.

The First Ladies Club was born during a meeting of the *Baby First Advocates*—a grassroots volunteer group in which the only requirement for membership is a desire to see fewer babies die in one's neighborhood. The Advocates meet monthly to brainstorm new ways to connect with consumers about maternal and child health issues and disparities in outcomes. During that planning meeting, Mary Payton, outreach coordinator for the Minority Health Coalition of Marion County, suggested the concept of connecting with "first ladies," an idiom for African-American pastors' wives. Enthusiastically approving the idea, the Advocates helped bring together the Minority Health Coalition, Marion County Healthy Start and IPN as partners to support the initiative.

During the inaugural planning summit of the First Ladies in November, the agenda was geared to educating the volunteers about health disparities between black and white communities. Supported by the March of Dimes, Indiana Chapter, the Summit had some 50 people in attendance, along with Virginia Caine, MD, Director, Marion

County Health Department.

During the group's first working meeting in January, The First Ladies agreed to bring more members on board for monthly meetings and received some inspirational advice and practical recommendations from guest speaker Paula Parker-Sawyers, executive director, Office of Faith-Based and Community Initiatives. "A lot of excitement was generated about the potential for The First Ladies Club in Indianapolis and for similar groups around the state," says IPN's Community Outreach Coordinator Julia Tipton Hogan, MPA. 

For more information on The First Ladies Club, contact Julia Tipton Hogan, MPA, IPN community outreach coordinator, e-mail: jthogan@indianaperinatal.org or ph: 317.924.0825, ext. 4229.



The Indiana Perinatal Network (IPN) is an alliance of hundreds of individuals and organizations across Indiana committed to the beliefs that:

- Every mother deserves a healthy and safe pregnancy; and
- Every baby deserves to be born healthy and into a safe and nurturing home.

INDIANA
PERINATAL
NETWORK
www.indianaperinatal.org


Four Community-Based Doulas Join Healthy-Families-MOM Project

Of 13 women who recently completed the community-based doula training, four are now working as full-time community-based doulas at the Indiana University School of Nursing's Healthy Families-MOM Project. Michelle Brown, Julie Daman, Latasha Day and Lalakesha Holmes-Allen provide home visitation and labor support services to young (age 24 and under), primarily African-American women in the MOM Project service area.

IPN has worked to bring the community-based doula program model to Indiana for more than two years. "We are proud to see community-based doulas providing direct service to young women who are at the greatest risk for poor birth outcomes," says Sherry Matemachani, IPN's special projects consultant. "Through IPN's partnership with the Healthy Families-MOM Project,

About Doulas

Doulas are women trained to provide labor support during child birth. They provide informed and caring support to expectant mothers before, during and after birth. Community-based doulas have a true understanding of the community they serve and often share the same cultural and socioeconomic background as the women they support.

and funding from the Nina Mason Pulliam Charitable Trust, these doulas are serving those in need.' 

For more information on the Indiana Doula Project, please contact IPN Special Projects Consultant Sherry Matemachani, ph: 317.490.6088.

CDC Recommendations for Rapid HIV Testing in the Perinatal Period

To develop a model for rapid HIV screening of women in labor, the Centers for Disease Control & Prevention (CDC) engaged a work group that maintains and regularly updates a guide at www.cdc.gov/hiv/projects/perinatal and http://www.cdc.gov/hiv/rapid_testing/.

Approved Rapid HIV Test Kits

Two of the four FDA-approved rapid HIV antibody tests, *OraQuick Rapid HIV-1* and *Reveal HIV-1*, are available for clinical use. The *UniGold Recombigen HIV Test* is expected to soon be available.

As new devices are developed, approved and marketed, the availability of tests changes. *Information on rapid HIV tests availability is routinely updated at www.cdc.gov/hiv/rapid_testing/ and www.fda.gov/cber/products/testkits.htm.*

Interpreting Preliminary & Confirmatory Testing Results

The manufacturer's instructions for rapid HIV tests should be strictly followed. Test results are interpreted the same as other HIV screening test results.

A negative result from a single test is considered negative. However, if it's suspected that a woman was exposed to HIV within the past three months, a repeat test at a later time is recommended since the rapid antibody test may not show very recent infection.

A positive (or reactive) result from a rapid HIV test is a preliminary positive and must be followed up by a confirmatory test, either a Western blot or an immunofluorescence assay (IFA). Confirmatory testing should be performed as soon as possible.

If a discrepancy occurs between the results of a rapid test and a confirmatory test, both should be repeated, and consultation with an infectious disease specialist is recommended.

Providing Results

When discussing a rapid HIV test with an expectant mother, she should be advised on when the results will be available. Usually, results are ready before

Continues on pg. 9



Indiana General Assembly Reconvenes; Debates Bills Related to Perinatal Issues

The Indiana General Assembly reconvened in January for its "long session" during which a two-year state budget is passed. Here is an update on the status of some key bills related to perinatal issues. *Please note: The status of these bills is current as of this publication's press date.*

SB4 Commission on Forensic Sciences

Sponsored by Sen. Pat Miller (R-Indianapolis), SB 4 aims to reestablish the commission on forensic sciences. To improve death investigations and certifications, including those involving infants, the bill requires the commission to submit a report on the creation of a medical examiner system to assist coroners. After passing out of committee, SB 4 was passed by the full Senate and is now being debated in the House.

SB225 Breastfeeding in the Workplace

Sponsored by Senator Vi Simpson (D-Ellettsville), SB 225 requires employers to provide paid breaks for employees to express breast milk and to make reasonable efforts to furnish a private room and cold storage. An employer is prohibited from discriminating against an employee who breastfeeds or expresses milk during a break, and the bill stipulates that the civil rights commission will investigate any discrimination allegations.

Another bill (HB 1737), filed by Rep. Peggy Welch (D-Indianapolis), includes the same language, except for the provisions on discriminatory practices.

Due to the overall volume of bills, these were not scheduled for a hearing. However, the chairs seem supportive of breastfeeding issues and will be re-approached prior to next year's legislative session.

HB1457 Birth Problems Registry

Sponsored by Rep. Sheila Klinker (D-Lafayette), HB 1457 would continue the birth problems registry beyond its scheduled

abolition of July 1, 2007. The bill also establishes the prenatal substance abuse commission charged with developing a plan to help improve early intervention and treatment. The bill passed the full house and was unanimously approved by the Senate Health & Provider Services Committee. It's likely the commission will use the needs assessment study completed by the Bowen Center (see the study at www.in.gov/legislative/igareports/agency/reports/ISDOH30.pdf).

SB327 Immunization for School Age Girls

Sponsored by Sen. Lawson, SB 327 requires schools to provide information on the link between cervical cancer and HPV infection and immunization availability to the parents of female children entering sixth grade. Schools must also collect written statements from parents indicating whether the child received the immunization and file written reports with ISDH specifying the numbers of students who received the immunization. After substantial amendments in response to testimony by parental rights supporters, the bill passed the full Senate and is being considered by the House where **Reps. Carolene R. Mays (D-Indianapolis)** and **Cleo Duncan (R-Greensburg)** are sponsors.

Tobacco Tax Increase & SB 503 Healthy Indiana Insurance Plan

Sponsored by Sens. Pat Miller and Vi Simpson, SB 503 includes the Governor's

Continues on pg. 8

Order "Something's Not Right" PMD Booklet for Consumers



This consumer resource explores the symptoms of Perinatal Mood Disorders (PMD), explains how it can affect both mother and baby, and prompts women (and those who care about them) to get help. The "Something's Not Right" booklet (English: CH1006; Spanish: 1016) also provides many self-help tips, as well as recommended reading for the PMD sufferer. *Cost varies from \$.25 to \$.40 each, according to your organization's budget.*

SEE THE ENCLOSED ORDER FORM, visit www.indianaperinatal.org/education-materials.aspx or contact IPN at ipn@indianaperinatal.org.



Unique Hospital & Faith-Based Partnership Supports South Bend's At-Risk Mothers

Underserved and at-risk pregnant women face a host of barriers accessing prenatal care and adhering to the many appointments, restrictions and lifestyle changes ushered in by pregnancy. A program in South Bend, the Mentoring MOMS (Mothers Outreach Ministry Services), aims to reduce these barriers with education, advocacy and support in a faith-based setting.

Mentoring MOMS arose in response to decreasing numbers of St. Joseph County's African American pregnant women entering first trimester prenatal care and alarming increases in the incidence of low and very low birth weight births. Founded in 2003 by Memorial Hospital of South Bend's Office of Minority Health, the program targets minority pregnant women in underserved neighborhoods.

With funding from ISDH and the hospital, Mentoring MOMS partners with eight minority churches to recruit and train volunteers who mentor and support at-risk pregnant women. Each volunteer commits to bringing at least 25 women into the program, and to educating them about topics related to pregnancy such as smoking cessation, folic acid and prenatal nutrition. The 14 current volunteers—who receive extensive training and support from the hospital—assist the women with other problems they may be facing, such as connecting them with insurance, WIC, food pantries, mental health services or transportation to and from appointments.

"This is a new way of doing business," says **Barbara L. Murphy**, manager of Special Populations Health Services at Memorial, who oversees Mentoring MOMS. "Young pregnant women are often faced with complex barriers and have to

make decisions about whether to go to the doctor. Because of Mentoring MOMS, these women go to the doctor and comply with visits. They also enjoy the connection of having someone support them."

The initiative has assisted close to 300 clients since 2004. During 2005 to 2006, nearly half of the 170 women served were age 20 or younger, a trend that Murphy attributes to the program's strong relationships with the school corporation and school nurses. Of the remaining participants, 41 percent were between 21 to 30, and 11 percent were 31 or older.

"Health care providers need to tap into these groups," says Murphy, underscoring the role the faith community plays in helping underserved women access prenatal care and topple barriers. "When targeting a specific population, provide people who look like them. Working with the African American community, the message must be delivered by someone who provides information in a culturally sensitive manner."

One MOMS participant calls the program "a life-changing experience" for the pregnant women and herself. Volunteer **Beverly Milon** recalls a pregnant woman whose gas was cut off in the dead of winter and had no food or health insurance. "Knocking on her door was a breath of life," says Milon, who helped get the gas back on and assisted her in enrolling in Hoosier Healthwise and WIC. "It was a happy beginning as well as a happy ending." 🙌

For more information about the Mentoring MOMS (Mothers Outreach Ministry Services), please contact **Barbara Murphy** at Memorial Hospital of South Bend, ph: 574.251.6055 or e-mail: bmurphy@memorialsb.org.

Join the Indiana Perinatal Mood Disorders Task Force

IPN is convening a statewide task force to address perinatal mood disorders and related issues. If you are interested in participating or want more information, please contact **Caitlin Priest** at 317.924.0825, x4231 or e-mail cpriest@indianaperinatal.org.

A Heartfelt Message from IPN's Outgoing Executive Director

Dear IPN Supporter:

In 1994, I made a life-changing career decision to work in public health. As a Perinatal Clinical Nurse Specialist, I wanted to try a different approach to improving perinatal outcomes. The problem was, I didn't know the first thing about where to begin—I had no public health background. My friend, [Mary Jo Brock](#), heard from [Jim Lemons](#) that the Indiana State Department of Health (ISDH) needed a nurse consultant to help figure out why Indiana's infant mortality rate was so high and to write a strategic plan for improving outcomes. I talked [Judy Ganser](#) into picking me for the job, and she hooked me up with [Maureen McLean](#) at ISDH. What a gift! Two years later, after town meetings and task force groups all over Indiana, and with the help of the March of Dimes and many of you, we had a strategic plan. *The Indiana Perinatal Network was born. Wow!*

Now, 13 incredible years later, with a mixture of sadness and anticipation, I am leaving IPN. I'm saddened because this is one the most wonderful experiences of my life (number one is *being mom* to my 16-year-old, 6'6" musician son, [Ross](#)). I cannot say enough wonderful things about all of the people I've encountered in my years of service. *I love IPN.* Our work is critically important and vital to improving the health and lives of women, babies and families in Indiana. *I love our staff.* They are incredibly bright, compassionate, creative and fun people. Because of them, and all of our dedicated partners, IPN will continue to thrive and grow.

I'm excited because I'm moving to a new opportunity in public health where I believe I could possibly make an even bigger impact on the lives of the families we serve. It is only the beginning.

A heartfelt thank you to the IPN Board, staff, partners, constituents, and my family and friends for your commitment, hard work and support. In a world of politics, turf issues and competition, IPN is successful because of its ability to bring diverse groups to the table to find the common ground on important perinatal issues. I have found that we all agree more than we disagree. I believe that when we find that common ground, we can more effectively help the families we serve.

I've learned so much about public health in these 13 years. My most powerful lessons come from the families we serve. They are the experts, too. We don't need cultural competency classes if we just allow them to teach us. I believe that we can transform health care and impact outcomes if we treat each family (and each other) with honesty, dignity and respect—person to person.

Thank you so much for all of your support throughout the years! I hope I can continue to call upon many of you for your advice and expertise as I develop and work on projects in communities throughout Indiana. I am looking forward to our continuing collaboration as I move into this new chapter in my life.

With Warmest Regards,

Julia B. Brillhart, RN, MSN

Top Three Reasons to Join IPN

1 IPN is a leader in perinatal education and advocacy in Indiana. We undertake cutting-edge and data-driven research on the causes and effects of poor perinatal outcomes and develop pilot projects to improve outcomes at the community level—*projects that can be replicated statewide.*

2 Members help build collaborative efforts and work together on statewide initiatives that make a difference in the lives of babies and their mothers. Collaborations can involve medical professionals and others such as community groups, nonprofit organizations, professional associations, businesses and government agencies.

3 Your membership provides you with *networking opportunities you can't get anywhere else!*

Individual Member Benefits Include:

- IPN e-bulletin highlighting national and state trends.
- IPN's quarterly *Perinatal Perspectives* newsletter.
- Discounted registration at select IPN events.
- Help to shape the organization by electing Board members and voting on bylaws.

Corporate memberships available.

Find out more by calling IPN at 317.924.0825, x4221, e-mailing ipn@indianaperinatal.org or visiting www.indianaperinatal.org.

IN MEMORIAM

SUZANNE WASHLER, a neonatal nurse for Lutheran Hospital, Fort Wayne, and member of ISDH's Community Council on Infant Health for more than 20 years. A long-time friend to IPN, she was a driving force in educating families about safe sleeping practices and brought several IPN regional conferences to Lutheran Hospital. Her gentle and quiet reasoning is greatly missed. She is survived by husband **Ed Washler**, two sons, two daughters and four grandchildren.

Reducing the Burden of Asthma in Indiana

By Ingrid Ritchie, PhD, Associate Professor & Director of Academic Affairs, IU School of Public & Environmental Affairs, Indiana University-Purdue University (IUPUI), Indianapolis and Frederick E. Leickly, MD, Professor of Clinical Pediatrics, Indiana University (IU) School of Medicine, Allergy/Clinical Immunology, James Whitcomb Riley Hospital for Children, Indianapolis

What is asthma and how is it managed?

The National Heart, Lung & Blood Institute (NHLBI) defines asthma as a *chronic inflammatory condition of the lungs characterized by airflow obstruction, inflammation and hyper-reactivity*. Symptoms (coughing, wheezing, shortness of breath and chest tightness) can be triggered by allergens, irritants, viruses and other factors (see table below). Asthma is controlled, not cured. The hope is that one day primary preventative efforts will keep children and adults from developing asthma.

Effective asthma management is a cooperative effort between the patient and clinician to develop an individualized treatment plan. The plan centers on educating the patient and family, avoiding or eliminating asthma triggers, effectively using medications, and monitoring the effectiveness of treatment and disease progression. While patients and families have a significant responsibility in managing asthma (see www.in.gov/isdh/programs/asthma/index.htm for tips and other resources), schools, businesses and government also share this responsibility.

Who is affected by asthma?

Despite evidence suggesting that asthma morbidity and mortality rates are either declining or holding steady nationwide, asthma remains a major public health concern. *In Indiana, asthma ranks third (after hypertension and obesity) as an indicator of adult health and is the most prevalent chronic disease among children.*

A 2005 estimate shows 8.2 percent of Indiana adults and 9.5 percent of children have asthma—placing Indiana slightly above the national average. In the Indiana Medicaid population in 2003, the prevalence of asthma is 14.2 percent for adults compared to 10.4 percent for children from birth to age 17.

Asthma disproportionately affects Hoosiers females who are African American, poor and less educated. Indiana Behavioral Risk Factor Surveillance System Survey self-reports indicate that among adults age 18 and older:

- ❖ 10.3 percent among females and 6 percent for males;
- ❖ 9.2 percent for blacks compared to 8.2 percent for Caucasians;
- ❖ 14.3 percent for incomes of less than \$15,000 versus 5.9 percent for incomes of more than \$50,000; and
- ❖ 11.3 percent among those with no high school education versus 6.3 percent for college graduates.

A 2005 ISDH survey of 53 public schools estimates that 18.2 percent of high school students have current asthma, and 40.9 percent experienced an attack during the past 12 months.

A survey conducted by Children & Asthma in America reports that Indiana children with current asthma have more hospitalizations for any reason (11 percent) compared to children without asthma (6 percent) and more emergency room visits (24 percent versus 13 percent). This survey concluded that in Indiana, “a

About the Indiana Joint Asthma Coalition (InJAC)

InJAC is a voluntary network of people and organizations working to reduce the burden of asthma. The coalition consists of work groups on data and surveillance; health care providers; public education; children and youth; and environmental quality.

Among Indiana children 19 years of age and younger, the prevalence of asthma doubled since 1990. Asthma is the most prevalent chronic disease among children and is the number one reason for school absences.

significant number of children with asthma do not have their condition under control, falling far short of national treatment goals established by NHLBI.”

What are the costs of asthma?

Nationwide, the annual economic cost of asthma is estimated at \$16.1 billion (\$11.5 billion in direct health care costs and \$4.6 billion in lost productivity). The lifetime direct medical costs range from \$50,000 for an average patient to \$220,000 for a patient with poorly managed moderate to severe asthma.

In 2003, Indiana began a multi-year effort to develop and implement a strategic plan aimed at reducing the burden extracted by this chronic illness. Nearly two years in the making, the plan was developed by the Indiana Joint Asthma Coalition (InJAC) under the joint sponsorship of the Indiana Department of Environmental Management and ISDH (see box above).

Indiana’s businesses can help reduce the burden of asthma by partnering with InJAC to educate Hoosiers, help adults and children manage the disease and improve the environments in which Hoosiers work, learn and play.

For more information, visit www.in.gov/isdh/programs/asthma/InJAC/index.htm or e-mail Marcie Memmer mmemmer@isdh.IN.gov. Reprinted with permission of authors. “Asthma in Indiana: Reducing the Burden of Asthma Among Hoosiers,” originally appeared in *Indiana Insight*, Fall 2006. References for this article are available from IPN upon request.

Triggers of Asthma Symptoms

ALLERGENS

- ❖ Animal dander
- ❖ Dust mites (contained in house dust)
- ❖ Cockroaches
- ❖ Pollen from trees and grass
- ❖ Mold indoors and outdoors

IRRITANTS

- ❖ Cigarette smoke
- ❖ Air pollution
- ❖ Cold air or changes in weather
- ❖ Strong painting or cooking odors
- ❖ Scented products
- ❖ Strong expressions of emotion (crying, or laughing hard) and stress

OTHERS

- ❖ Medicines such as aspirin and beta blockers
- ❖ Sulfites in food (dried fruit) or beverages (wine)
- ❖ A condition called gastro-esophageal reflux disease that causes heartburn and can worsen asthma symptoms, especially at night
- ❖ Exposure to irritants or allergens at work such as special chemicals or dusts
- ❖ Infections

Indra Frank: Tackling Environmental Risk Factors to Help Improve the Health of Hoosiers

As a hematopathologist, [Indra Frank, MD](#), was accustomed to viewing blood cells to identify diseases such as lymphoma.

She never dreamed that one day she would step away from her microscope to help prevent some of these diseases.

Now serving the Hoosier Environmental Council and Improving Kids' Environment, Frank's interest in environmental influences on health goes back to medical school. "I came across data on the hundreds of millions of pounds of pesticides spread on American soil each year," she recalls. "The number shocked me. It also scared me."

Years later, when an oncologist friend referred to a "lymphoma belt" in the U.S., Frank learned that pesticides were a suspected cause. This discovery prompted her to comb medical literature on the health effects of pesticides. "Such information is often buried and isn't required on the labels of pesticide products," she notes.

In 2004, Frank left pathology to chair the Health and the Environment committee for the Hoosier Environmental Council (HEC). With an interest in children's environmental health issues, she also chairs a committee for Improving Kids' Environment that looks into such issues as lead poisoning and asthma in Central Indiana. "I am blessed to work on issues that I feel are important and to work with some wonderful people."

"The unborn and newborn are particularly sensitive to environmental exposures." Given the prevalence of tobacco use in Indiana, Frank regards perinatal exposure to smoke as a critical issue. "Exposure to tobacco smoke causes low birth weight and is associated with an increased risk of Sudden Infant Death Syndrome."

Several other environmental health issues have the potential to impact maternal and child health in Indiana. "Most of these issues haven't been studied well enough to know how many babies might be affected."

Many Indiana lakes and rivers are contaminated with mercury and PCBs, leading to possible exposure for fish eaters. Since the state is a heavy user of agricultural chemicals, surface waters are more likely to contain them. "Water companies process surface water for use as tap water in about half of all Indiana homes." Similar to the rest of the nation, Frank says that Hoosiers are exposed to contaminants with endocrine effects—also known as "endocrine disruptors." These include *bisphenol* (a synthetic organic compound used to manufacture epoxy resins and other polymers) from food and beverage containers; and *phthalates* (a crystalline acid derived from benzene) from cosmetics and personal care products.

"Prenatal physiology is very sensitive to alterations in endocrine signaling and a disruption could contribute to the rising incidence of endocrine-related disorders such as hypospadias [*opening of the urethra is on the underside of penis*] and undescended testicles."

An important first step on the road to an environment that supports maternal and child health is to reduce fetal and infant exposure to contaminants. "Because of their developing bodies, environmental contaminants affect a child more than an adult."

All in all, "tens of thousands of chemical compounds are released into the environment and the health effects of most of them are poorly understood," says Frank. Studies from the Centers for Disease Control & Prevention (CDC)




"I am blessed to work on issues that I feel are important and to work with some wonderful people."

—Indra Frank, MD

show surprising amounts of contaminants enter the body, including compounds never intended for food or water.

"As a society we should take a cautious approach and attempt to reduce or prevent exposures until we are certain they are harmless, especially for the infant in whom ill effects of exposure could mean altering the body's development." For the most part, chemical regulation in the U.S. allows human exposure until a compound is proven harmful.

"Unfortunately, that approach means waiting until people are harmed." 

Reach Indra Frank, MD at indfrank@aol.com. To learn more about the Hoosier Environmental Council (HEC), visit www.hecweb.org or call 317.685.8800.

Riley Plans Summit to Explore Children's Environmental Health Problems

On April 13, Riley Hospital for Children sponsors the first Indiana Summit on Environmental Health to explore the topic of "Children's Environmental Health: Problems and Solutions." The event brings together a diverse group of professionals and policy-makers to explore potential collaborations and solutions to three timely environmental health issues: healthy housing, fine particulate air pollution and endocrine disruptors.

Organizers include the IU School of Medicine Center for Environmental Health, the Hoosier Environmental Council (HEC), Improving Kids' Environment (IKE), and SPEA IUPUI. For more information, visit www.ceh.iu.edu/events.php and www.ikeycoalition.org/Environmental_Summit_2007.htm or contact Ingrid Ritchie, e-mail: iritchie@iupui.edu, ph: 317.274.3752.

OPINION FORUM

Questioning Pregnancy Outcomes & Environmental Factors

Paul D. Winchester, MD, Clinical Professor of Neonatology,
Indiana University School of Medicine

Does a variance in birth outcomes by month of conception suggest the influence of environmental factors? After plotting pregnancy outcomes from conceptions in January through December, it was found that *women are more likely to conceive a child with a birth defect when conception occurs from April through July.* This suggests that something in the environment during those months might increase the likelihood of birth defects.

We studied common environmental contaminants that could be harmful to pregnancy. While many are nearly constant throughout the year, some can be predicted to rise and fall based on surface water findings.

Utilizing U.S. Geological Survey (USGS) and Environmental Protection Agency (EPA) databases on pesticides and nitrates in Indiana water (1990 to 2002), the concentrations of these contaminants were calculated for each month of the year. *The levels of nitrates and pesticides were highest in April through July.* Of the 22 categories of birth defects from the Centers for Disease Control & Prevention (CDC) birth records, *11 were significantly associated with surface water concentrations of pesticides and nitrate.*

We recently found that Indiana babies conceived from April through July have lower ISTEP (Indiana Statewide Testing for Educational Progress) scores. Some evidence suggests this could be related to the influence of environmental contaminants on maternal thyroid hormone levels. Several studies show that pesticides, nitrates and PCBs can lower maternal thyroid levels.

Could environmental factors contribute to the incidence of birth defects and/or lower ISTEP scores? We can't yet prove that nitrates, pesticides and 100,000 other environmental


We can't yet prove that nitrates, pesticides and 100,000 other contaminants cause these outcomes. But a growing body of evidence suggests that they could.



contaminants cause these outcomes. But a growing body of evidence suggests that they could.

It is hard to believe that Indiana ranks last in the U.S. in funding for birth defects surveillance; or that like several states at the turn of the millennium, it did not have a birth defects program. It is hard to believe that infertility and miscarriages aren't monitored by the CDC. We need to link pregnancy outcomes with environmental exposure. Yet, in the U.S., the absence of a due date on the birth certificate effectively "unlinks" the start of pregnancies from infant deaths.

My passion is driven by the need to protect our most valuable national asset: pregnant or soon-to-be-pregnant women. Our future depends on a fundamental shift in priorities.

"What is the safest time to conceive a baby and what do I need to do to help ensure I have a healthy baby?" These are prudent questions posed by an expectant mother. It is time we spent more of our resources on finding her the answers. 

Reach Paul Winchester, MD, Clinical Professor of Neonatology, Indiana University School of Medicine at Paul.Winchester@ssfhs.org. References for this article are available from IPN upon request.

Indiana Environmental Health Organizations

- ❖ **IMPROVING KIDS' ENVIRONMENT**—Works to reduce environmental threats to children's health through education, advocacy and coalition building. www.ikeycoalition.org
- ❖ **INDIANA ENVIRONMENTAL HEALTH ASSOCIATION**—Works to facilitate optimal health by controlling environmental hazards. www.iehind.org
- ❖ **INDIANA JOINT ASTHMA COALITION**—Aims to reduce Indiana's asthma burden. www.in.gov/isdh/programs/asthma/InJAC/index.htm
- ❖ **INDIANA LEAD SAFE & HEALTHY HOMES TASK FORCE**—Coalition of public and private organizations focused on assuring healthy housing. www.ikeycoalition.org
- ❖ **INDIANA PUBLIC HEALTH ASSOCIATION**—Promotes public health through educational programs, training and research, public education and advocacy. www.inpha.org

ISDH Lead Poisoning Prevention Campaign Builds Awareness of a "Silent Menace"

Lead, the Silent Menace...Is Your Child Safe? That's the message of a public health



awareness campaign launched by the Indiana State Department of Health's (ISDH's) Children's Lead Poisoning Prevention Program.

Lead poisoning may cause hearing, behavioral and learning problems, as well as often irreversible damage to the kidneys, nervous system and brain. Lead poisoning is especially a concern for children under six years of age due to incomplete development of the organ systems. Often lead poisoning goes undetected because its initial signs are similar to common ailments.

For more information on "Lead, the Silent Menace..." visit www.in.gov/lead/leadabout.htm

The Effects of Mercury and Lead Exposure on Perinatal Health

By Indra Frank, MD, Hoosier Environmental Council and Janet G. McCabe, Executive Director, Improving Kids' Environment

Unless precautions are taken, pregnant women can easily be exposed to the common environmental contaminants of mercury and lead.

Health Effects of Mercury & Lead

These heavy metals are neurotoxic and exposure affects children more severely than adults. Children exposed in utero to mercury at doses measured in micrograms score lower on tests for dexterity, language, memory and attention. At doses one thousand times higher, prenatal mercury exposure can cause severe mental deficits, deafness, blindness and spasticity.

Lead exposure decreases intellectual skills and can cause behavioral problems. The recommended limit for lead exposure, currently a blood level of 10 ug/dl, dropped during the past 40 years as data on lead poisoning mounted. *Many pediatricians now believe there is no safe level.* Studies show the impact on a child's intellect is most pronounced around 28 weeks gestation (at blood levels less than 10 ug/dL).

Sources & Routes of Exposure

Mercury is or was used in thermometers, thermostats, barometers, blood pressure cuffs, switches, batteries and other products. Coal-fired power plants are the largest source of mercury pollution in the U.S.

After release into the atmosphere, mercury deposits into waterways via precipitation and accumulates up the food chain to fish. Larger, older and more predatory fish bear the highest levels. Annual ISDH advisories indicate the locations, types of fish and safety for consumption and should always be consulted before eating locally caught fish.

Store-purchased fish can also contain mercury. However, by choosing fish carefully, an expectant mother can benefit from it as a healthy source of protein and omega-3 fatty acids. For a

...Six percent of childbearing age women exceed EPA-designated safe blood mercury level for protection of a fetus...

list of mercury in seafood, visit www.mercuryaction.org/fish/images/Healthy%20Fish.pdf. CDC studies show six percent of childbearing age women exceed EPA-designated safe blood mercury level for protection of a fetus (5.8 micrograms per liter).

Lead continues to pop up in unexpected places and a legacy remains from prior uses. For example, the soil in many neighborhoods is still heavily contaminated from years of vehicle emissions. Exposure to "legacy lead" can occur in play areas, by eating home-grown vegetables, and through dust tracked into houses. Although lead was banned from house paint in 1978, millions of homes built before then pose hazards to thousands of young children.

The chief concern with lead exposure is its ingestion by young children (ages one to six). Among pregnant women, key routes of exposure are ingestion and inhalation. Ingestion can occur through the consumption of vegetables planted in heavily contaminated soil, high levels of residential lead dust combined with insufficient hand washing, and drinking water from lead-soldered pipes. Some imported food items (such as candy from Mexico) contain lead, as well as some imported pottery. At this time, no national labeling is required for products that contain lead, and the system for identifying products imported into the U.S. is imperfect. 🐾

Reach Indra Frank, MD at indfrank@aol.com and Janet G. McCabe at mccabe@ikecoalition.org. References for this article are available from IPN upon request.

Legislative News (from pg. 3)

proposal to provide health insurance to a portion of uninsured individuals. The bill also provides funding for immunization programs and The Indiana Tobacco Prevention and Cessation Trust Fund. A provision would expand Medicaid coverage for pregnant women whose income is up to 200 percent of the federal poverty level.

After extensive testimony, the committee, Senate Appropriations Committee and full Senate unanimously approved the bill. It will now be debated in the House.

For details on the Healthy Indiana Plan, visit www.in.gov/fssa/GovernorsPlan.html.

HB 1008 Health Coverage

Sponsored by Rep. Charlie Brown (D-Gary), this bill would provide coverage to the uninsured with the provision of increasing the tobacco tax. After extensive amendments, it contains several maternal and child health provisions: increasing children's Medicaid coverage up to 300 percent of the federal poverty level; increasing coverage for pregnant women up to 200 percent of the federal poverty level; providing insurance coverage for the parents of children covered by Medicaid whose income is at or below 100 percent of the federal poverty level; reinstating presumptive eligibility for Medicaid women and increasing the tobacco tax by .25.

After extensive testimony, the bill was approved by the Public Health Committee with a vote of 8-0 and recommitted to the House Ways and Means Committee where it was approved 12-11. Surprisingly, the bill was defeated by the full house, but a tobacco tax increase could still be included as part of the two-year state budget bill.

Expanded health insurance and a resulting tobacco tax promise to be highly visible and contentious issues that won't likely be resolved until the very end of the legislative session. As Rep. Bill Crawford (D-Indianapolis) says, "We're still in the 'first quarter' and this won't be decided until 'overtime!'" 🐾

For more information concerning these bills or to contact your legislator, visit www.ai.org/legislative/ic/search.html or e-mail IPN's Interim Executive Director and Director of Indiana Access & Public Policy Larry Humbert, MSSW, PG Dip at Lhumbert@indianaperinatal.org.

Recommendations for Rapid HIV Testing...

(from pg. 2)

delivery and provided during labor. At that time, if the preliminary result is positive, ask the woman to consent to antiretroviral (ARV) prophylaxis. She can also elect to learn the results after the baby's birth. In this case, consent for prophylaxis should be obtained when testing is discussed. If possible, the clinician who discusses the test should provide the results. Privacy is essential and the woman's physical comfort should be assessed and monitored when delivering test results.

Negative Results

No further medical intervention is necessary with a negative result. Advise the expectant mother that she is likely not infected, but the test may not show a recent infection. The clinician should ask if she is concerned about any recent specific risk of exposure. If so, retesting after three months is recommended.

Positive Results

When a rapid HIV test delivers a positive result, care providers should explain to the expectant mother that she likely has the HIV infection and her baby is exposed to the virus. Assure her that a second test will be performed immediately to confirm the results, but those results won't likely be available before delivery. Explain that the rapid test results are preliminary and false-positives are possible. However, it is best to start ARV prophylaxis as soon as possible to reduce the risk of transmission to the baby. The clinician should add that if the confirmatory test result is negative, all ARV prophylaxis will be stopped. Explain the medication regimen, including the known effects and possible adverse effects, and provide the opportunity to ask questions. Advise the expectant mother that breastfeeding should be postponed until the confirmatory results are available.

Labor & Delivery

If labor is rapid or the woman is admitted for care late in labor, preliminary results might be unavailable. If the preliminary HIV test result is positive, ARV prophylaxis for the neonate should be initiated

immediately. To help prevent perinatal transmission, ARV prophylaxis for the infant should continue if the confirmatory HIV test result is positive.


In the instance of positive results, the care provider is faced with communicating complicated and sensitive information privately to a laboring woman who might feel quite vulnerable. The clinician should allow time for questions and assure the delivering mother that with her permission, every measure will be taken to reduce the infant's risk of acquiring HIV. Also assure that effective treatment is available to help her stay healthy while she raises her child.

Discharge

In some settings, the results of the confirmatory Western blot or IFA become available after hospital discharge. As part of discharge planning, the new mother should be informed of the importance of returning so that she and her infant can receive appropriate medical care. It is important to have a system for contacting new mothers who miss confirmatory test result appointments—especially those who didn't receive prenatal care. If the woman agrees and has disclosed her rapid test results to family members or other support persons, the care provider should encourage them to participate in discharge planning.

See recommendations at www.aidsinfo.nih.gov/guidelines or visit www.cdc.gov/hiv/topics/testing/resources/guidelines/rt-labor&delivery.htm

Treatment to decrease the vertical transmission of HIV from the mother requires recognition of maternal HIV as early as possible to significantly reduce transmission. Early identification in the mother allows early treatment with ARV prophylaxis which can reduce the risk of transmission from 20 to 8 percent. Elective cesarean section combined with ARV treatment of the infant within 8 to 12 hours of birth can further reduce the risk of transmission to only 2 percent.

Thus, the use of reliable rapid screening tests that allow the earliest recognition of HIV is of utmost importance to both the mother and her infant. 

FOR YOUR INFORMATION

NEWS & INFORMATION

- ◆ **New Childhood & Adolescent Immunization Schedules Released**—The Centers for Disease Control and Prevention (CDC), American Academy of Pediatrics (AAP) and American Academy of Family Physicians (AAFP) jointly released new recommendations for immunization against human papillomavirus (HPV), rotavirus, varicella (chickenpox) and influenza.
→ New schedules at www.cdc.gov/mmwr/PDF/wk/mm5551-Immunization.pdf
- ◆ **Breastfeeding Promotion Act Re-Introduced in Congress**—Rep. Carolyn Maloney (D-New York) reintroduced the Breastfeeding Promotion Act to help protect the practice; provide tax incentives for businesses with private lactation areas; establish a performance standard for breast pumps and grant tax deductions for the purchase of breastfeeding equipment.
→ See maloney.house.gov/index.php?option=com_content&task=view&id=102&Itemid=63
- ◆ **Literature Review on Acculturation & Sexual/Reproductive Health Among U.S. Latino Youth**—While the national teen birth rate dropped 67 percent in the last decade, the Latina teen birth rate declined only 21 percent and remains the highest among all ethnicities. The December 2006 issue of *Perspectives on Sexual and Reproductive Health* reviews research on how acculturation influences the sexual and reproductive health of Latina teenagers.
→ See the abstract at www.guttmacher.org/pubs/journals/3820806.html

STUDIES & REPORTS

- ◆ **Simple Antenatal Preparation Improves Breastfeeding Practice**—A single antenatal counseling session with educational materials improved breastfeeding practices up to three months after delivery, according to the results of a randomized trial reported in the January issue of *Obstetrics and Gynecology*.
→ www.medscape.com/viewarticle/550406?src=mp
- ◆ **New Monitoring Technology Fails to Decrease Cesarean Rates**—The OxFirst Fetal Oxygen Saturation Monitoring System, a new technology for measuring a baby's blood oxygen

Continues on pg. 10

For Your Information (from pg. 9)

levels during labor, offers no apparent benefit in preventing birth complications. Researchers found no overall change in cesarean delivery rates when the monitor was used.

→ Visit content.nejm.org/cgi/content/abstract/355/21/2195

◆ **Rural Children's Health**—*The Health and Well-Being of Children in Rural Areas: A Portrait of the Nation 2005* presents national and state data on the health status, health care use, and risk factors experienced by infants, children, and adolescents who reside in rural areas.

→ The report is available at www.mchb.hrsa.gov/ruralhealth/pdf/01rh.pdf. For more detailed analyses of the survey results visit www.nschdata.org

◆ **A Response to Findings on Prematurity & Gum Disease Treatment**—The Academy of Periodontology responds to a new study that suggests gum disease treatment in pregnant women doesn't affect rates of preterm birth, low birth weight or fetal growth restriction. Calling the outcome "at variance with the findings of other studies that suggest periodontal treatment positively affects birth outcomes," the Academy states the need for additional research to clarify the potential effects of gum disease on pregnancy outcomes.

→ See the complete statement at www.perio.org/consumer/nejm-statement.htm

◆ **Public Roles of U.S. Physicians**—A recent study assessed the degree to which practicing physicians are supportive of assuming public roles and the

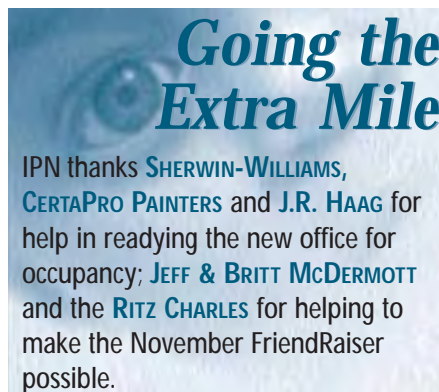
socio-demographic and practice factors that influence their attitudes and activity. More than 90 percent of respondents rated community participation, political involvement and collective advocacy as important.

→ See the abstract at jama.ama-assn.org/cgi/content/abstract/296/20/2467

RESOURCES

◆ **Guidelines for HPV Vaccine Use**—The American Cancer Society (ACS) has issued guidelines for the use of the prophylactic human papillomavirus (HPV) vaccine to prevent cervical intraepithelial neoplasia (CIN) and cervical cancer. The new guidelines address who should be vaccinated and at what age, and summarize policy and implementation issues and implications for screening, based on a formal review of the available evidence.

→ See January/February 2007 issue of *CA: Cancer Journal for Clinicians*



Going the Extra Mile

IPN thanks **SHERWIN-WILLIAMS, CERTA PRO PAINTERS** and **J.R. HAAG** for help in readying the new office for occupancy; **JEFF & BRITT McDERMOTT** and the **RITZ CHARLES** for helping to make the November FriendRaiser possible.

High School Class Project Helps to Promote Safe Sleep



Students in Kathy Tinder's family and consumer science class at Roncalli High School, Indianapolis, display "sleep sacks" they made as part of a class project. The one-piece garment reduces the need for loose blankets that can pose a suffocation risk.

Important Upcoming Events

April 22-23, 2007

THE INDIANA PERINATAL INSTITUTE PRESENTS:

Pre-Term & Near-Term Infant Development Topics for Professionals

RITZ CHARLES • CARMEL, INDIANA

FEATURES Joy V. Browne, PhD, RN, Associate Professor of Pediatrics, University of Colorado School of Medicine; Robert Cicco, MD, Associate NICU Director, Western Pennsylvania Hospital, Pittsburgh, PA.

DEADLINE April 1, \$55 (members), \$70 (non-members). After April 1, \$70 (members) and \$85 (non-members).

For registration brochure, visit www.indianaperinatal.org/event-detail.aspx?id=1071

April 26, 2007

INDIANA PERINATAL EDUCATOR CONFERENCE

What's Cookin'? Adding New Life to an Old Recipe

RITZ CHARLES • CARMEL, INDIANA

FEATURES Teri Shilling, MS, CD(DONA), IBCLC, LCCE, FACCE, Director, Passion for Birth, an agency providing family-centered education and support.

DEADLINE April 1, \$75; after April 1, \$100 and \$40 for student nurses.

For registration brochure, visit www.indianaperinatal.org/event-detail.aspx?id=1064

April 27, 2007

THE INDIANA PERINATAL INSTITUTE PRESENTS:

Substance Use Disorders & Pregnancy

THE WESTIN • INDIANAPOLIS, INDIANA

FEATURES Barry M. Lester, PhD—Brown Medical School, Brown Center for the Study of Children at Risk, Providence, Rhode Island; James J. Nocon, MD, Indiana University of Medicine, Wishard Health Services, Indianapolis.

DEADLINE April 1, \$55 (members), \$70 (non-members). After April 1, \$70 (members) and \$85 (non-members).

For registration brochure, visit www.indianaperinatal.org/event-detail.aspx?id=1063

Save this Date: Sept. 12-13
Unintended Pregnancy Summit
The Fountains, Carmel

INDIANA PERINATAL NETWORK NEWS

IPN's Office Gains a Home of Its Own

In December, IPN moved a few miles northeast in Indianapolis to occupy a two-story building at 1991 East 56th Street (zip 46220). The new home accommodates IPN's growing staff; and for the first time, IPN is the sole occupant. The facility is leased from Bennett Innovations, an Indianapolis provider of video and audio production services to the advertising and corporate communications markets.



New Board Members Elected

IPN welcomes newly elected Board members Luis Fernando Escobar, MD, MS, St. Vincent Hospitals & Health Services, Indianapolis; Howard B. Harris, MD, Methodist Hospital of Indiana, Indianapolis; and Daniel R. Sunkel, MD, Woman's Clinic, Lafayette, IN. Members re-elected Christopher S. Sears, Ice Miller LLP, Indianapolis.

NEW IPN MEMBERS*

INDIVIDUAL CONTRIBUTING MEMBERS (\$250)

Howard Harris, MD

INDIVIDUAL MEMBERS (\$55)

Yvonne Beasley, MN, RSN
Nancy Belei
Darla Berry, CNM
Marcia Cherry, RN
Teri Conard, RN, MS
Clementine DuBose, MS

INDIVIDUAL MEMBERS (con't)

Shirley Gamble
Jody Liming, CCE
Tamara Moore, ICCE
Sara Rich Wheeler, DNS, RN
Belya Willis
Sharon Worden, MHS, PT
CONSUMER, STUDENT & COMMUNITY OUTREACH WORKER (\$20)
Jennifer Myers, RN, BSN

RENEWING IPN MEMBERS*

CORPORATE CONTRIBUTING PARTNERS (\$5,000)

Greater Lafayette Health Services
Marion County Health Dept.

The Women's Hospital

CORPORATE MEMBERS (\$250)

Ball Memorial Hospital Perinatal Center
Bloomington Hospital
Heaton & Eadie
March of Dimes, Indiana Chapter
MDWise
Memorial Hospital of South Bend
National City Bank

INDIVIDUAL CONTRIBUTING MEMBERS (\$250)

Maria Del Rio Hoover, MD
Jeff & Britt McDermott
James Sumners, MD

INDIVIDUAL MEMBERS (\$55)

Carla Ault, RN
Tina Babbitt, RN, MSN, IBCLC
Sharon Berry, RN
Michelle Bisesi, RNC, MSN
Mary Black, RN
Mitzi Lu Boilanger, RNC, MS
Julia Brillhart, RN, MSN
Marcia Clouse, RNC, MSN
Kathryn Copak, RN, BSN
Karla Duke, RN
Lisa Eagans, RN
Julie Elliott, MD
Michelle Farris, RNC
Julie Fine, RNC, PhD
Julie Foster
Tamyra Freeman
Joanne Goldbort, RN, PhD

INDIVIDUAL MEMBERS (con't)

Linda Hess, RNC
Josephine Hughes, MSW, LCSW
Julia Tipton Hogan, MPA
Kandi Jamison, RN, BSN
Linda Justus, RNC
Nancy Kinzie, MSN, RN, BC
Thomas Kundenreich, MD
Sherry Matemachani
Lauri McCoy, MSN, RN
Angela Mehninger, RN
Marsha New, RN
Cheryl Roberts, RN
Judith Roepke, PhD, RD
Max Rudicel, MD
Todd & Julie Schulte
Mary Schuster, RNC, CNM
Carol Shieh, RNC, MPH, DNSc
Paula Stephens-Bibeau, RNC, CNM
Mary Sumners, RN, CNP
Dan Sunkel, MD
Kinga Szucs, MD, FAAP, IBCLC
Donna Tucker, RN, BSN
Donna Vandergraff, MS, RD
Dana Watters, RNC, MSN
Leah Summers York
PUBLIC HEALTH ORGANIZATIONS (\$100)
Healthy Families of Grant County
Healthy Mothers Healthy Babies of Delaware County
Indiana Family Health Council
CONSUMER, STUDENT & COMMUNITY OUTREACH WORKER (\$20)
Sandy Arnold, BS, IBCLC

* As of February 28, 2007

2007 IPN CONTRIBUTING PARTNERS (\$5,000)



INDIANA PERINATAL NETWORK CONTACTS

LARRY HUMBERT, MSSW, PG Dip
Interim Executive Director and
Director, Indiana Access & Public Policy
Lhumbert@indianaperinatal.org

LEAH SUMMERS YORK
Administrative Director
Lyork@indianaperinatal.org

TINA BABBITT, RN, MSN, IBCLC
Perinatal Education Coordinator
Tbabbitt@indianaperinatal.org

JULIE FOSTER
Communications Coordinator
Jfoster@indianaperinatal.org

BARBARA HIMES, CLC
Infant Health & Survival Coordinator
Voice Mail (Direct): 317.725.3754
sidsbhimes@aol.com

JULIA TIPTON HOGAN, MPA
Community Outreach Coordinator
Jthogan@indianaperinatal.org

SARAH HUNDAGEN
Program Assistant
Shundagen@indianaperinatal.org

SHERRY MATEMACHANI
Special Projects Consultant
shebasse@yahoo.com

CAITLIN FINNEGAN PRIEST
Special Projects Consultant
CPriest@indianaperinatal.org

KARLA SCHROEDER
Office Coordinator
Kschroeder@indianaperinatal.org

BETH JOHNSON, RN, MSN
State Perinatal Liaison
Indiana State Dept. of Health
317.233.1344
bmjohnso@isdh.IN.gov

IPN ON THE WEB:
www.indianaperinatal.org

INDIANA FAMILY HELPLINE:
800.433.0746

PUBLISHING SCHEDULE

Issue	Mails	Deadline
Winter	February	December 15
Spring	April	March 15
Summer	July	June 15
Fall	November	October 15



1991 East 56th Street
Indianapolis, IN 46220
P 317.924.0825 • F 317.924.0831
E ipn@indianaperinatal.org

Printed on recycled paper.





Indiana State
 Department of Health

Funded by Title V through the Indiana State
 Department of Health Maternal Child Health Services.

How Are We Doing?

Tell us how IPN's publications such as Perinatal Perspectives can best meet your needs.

Please take *five minutes* to complete this brief readers' survey. IPN will use your feedback to help ensure we communicate in the most cost-effective manner possible about the issues and topics of greatest interest to you.

1. Do you prefer to receive *Perinatal Perspectives* as a (select one):

- Mailed hard copy
- Link to electronic PDF
- Both

2. If *Perinatal Perspectives* is only available by link to an electronic PDF, would you still read it?

- Yes
- No
- Maybe

3. Generally, how many articles do you find that interest you?

- Many in each issue
- Some in each issue
- Some issues don't interest me at all
- None, I really don't read it

4. How would you rate the content of *Perinatal Perspectives*?

- Excellent
- Very good
- Fair
- Poor

5. Focusing specifically on this issue, please rate each article on a scale of 1 to 5 (with "1" as least liked; "5" as

most liked). Refer back to an article by page number as needed.

- 1 2 3 4 5 IPN News (pg. 11)
- 1 2 3 4 5 For Your Information (pg. 9)
- 1 2 3 4 5 Focus (pgs. 5-8)
- 1 2 3 4 5 Indiana Model Program (pg. 3)
- 1 2 3 4 5 Legislative News (pg. 2)
- 1 2 3 4 5 General Editorial (Articles not mentioned above)

6. Please rate (in order of preference starting with "1") the top five topics of greatest interest to you.

- For Your Information (briefs of clinical news, studies and resources)
- Legislative News
- Regional Update (activities in various parts of the state)
- Model Programs
- Minority Health
- Perinatal Education
- Perinatal Profiles (personal profiles of those active in the perinatal field)
- Opinion Forum (opinion on a perinatal issue)

7. Do you pass along your copy of the newsletter to others?

- Yes No Sometimes

8. If "yes" or "sometimes," to previous question, do you share the newsletter by:

- Passing along the hardcopy
- Forwarding the PDF (or link to it)
- Both

Please complete the information requested below.

_____ Contact Name

_____ Organization

_____ Address

_____ ZIP & Phone Number

_____ Fax

_____ E-mail

DUPLICATES? NO LONGER WANT TO RECEIVE Perinatal Perspectives newsletter? Simply enclose the mailing label(s) you want IPN to remove and accept our thanks!

Return:

MAIL 1991 East 56th St., Indianapolis, IN 46220
 FAX 317.924.0831
 E-MAIL ipn@indianaperinatal.org with "Reader Survey" in the subject line