Every year, Iowa welcomes an average of 38,000 newborns. On the basis of known rates of drug use, we would expect 7-8 percent, or about 2800 infants, to have been exposed to drugs in utero. With an appropriate screening program, health care providers would identify about 1,200 of these newborns, and then refer them for evaluation and services.

In Iowa in 2004, however, as a result of inadequate screening and testing, only 549 newborns were confirmed as having been exposed to drugs in utero. Infants who have been exposed to drugs but who remain unidentified will be discharged to homes in which mothers are likely to continue to use drugs. Often these infants face continuing exposure to drugs and to the chaotic lifestyle and lack of nurturing so often associated with drug use.

Some states, such as California and Virginia, have mandated maternal and neonatal drug screening protocols.

A Statewide Screening, Testing, and Intervention Standard for Perinatal Illicit Drug Exposure

Resources

- 1-866-242-4111, Iowa Substance Abuse Information Center Help Line, information and referrals 24/7

Annual Iowa Conference on Perinatal Medicine

When: April 8-9, 2009 (Wednesday & Thursday)   Where: West Des Moines Marriott Hotel
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for hospitals. Other states, such as Arizona, Washington, and Indiana, have developed a statewide consensus on perinatal screening for drugs, and established education programs in all birthing hospitals. In addition to state-wide efforts, many individual hospitals, often in urban areas, have developed structured screening and testing protocols. State, community, and individual hospital efforts have been directed toward increasing awareness of the extent of perinatal drug exposure.

In Iowa, health care professionals have long recognized the need for programs to identify perinatal drug exposure. Some Iowa hospitals have developed and implemented protocols to guide medical staff in screening mothers and newborns for specific high-risk factors.

Parallel to this, Iowa code encourages health professionals to perform perinatal screening and testing for drugs when risk factors are recognized and documented. However, Iowa code leaves the specific definition of these risk factors to the discretion of the clinician. In addition, Iowa has not mandated that birthing hospitals develop screening and testing protocols. As a result, tremendous variation exists among Iowa birthing hospitals regarding perinatal drug screening. Most community hospitals do no screening at all. Some do randomized screening, such as testing every 15th or 20th infant. Often, whether a mother is screened, tested, or exempted depends on the personal perceptions (and biases) of the medical staff.

A study conducted in Iowa birthing hospitals found that hospitals using a structured screening or testing protocol test twice as many infants as hospitals that have no protocol. At hospitals that use a screening protocol, the rate of positive test results – infants identified as having in utero drug exposure -- is almost five times higher than in hospitals without such a protocol.

The Perinatal Care Program Advisory Council of the Iowa Department of Public Health has approved a screening protocol (see “Perinatal Illicit Drug Exposure Risk Assessment Tool,” page 62), and this is now included in the Guidelines for Perinatal Services, 8th edition, 2008. The Statewide Perinatal Care Team is currently disseminating this protocol to birthing hospitals around the state. It calls for screening for perinatal drug exposure to be performed in the prenatal clinic, labor and delivery unit, and newborn nursery unit or NICU. An electronic version of the Guidelines for Perinatal Services can be found at: www.idph.state.ia.us/hpcdp/statewide_perinatal_care.asp.

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Prenatal clinics play a key role in identifying perinatal drug use, and in offering the mother the opportunity for testing and intervention. Prenatal clinic staff should screen mothers when they first visit the prenatal clinic. If the initial screening is negative, staff should verify absence of illicit drug use at every subsequent visit. Mothers who are reluctant to abstain from drug use may not be willing to disclose addiction, and may refuse to give consent for testing and intervention. When that happens, hospitals need to have a system in place to ensure that information about this at-risk mother and child is communicated from the prenatal clinic to the labor and delivery unit and to the newborn nursery or NICU.

Implementing a standard protocol allows health care providers to identify most drug exposed newborns and provide or refer for treatment. Such a protocol also allows providers to link the mother to the services she needs to become the parent she wants and deserves to be.

— Remiijge Ojil, MD
Clinical Associate Professor of Pediatrics
Director, Child Protection Program
University of Iowa Hospitals and Clinics
http://www.uihealthcare.com/childprotection/
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As a result of growing concern about perinatal drug exposure, a statewide collaboration came together to develop a targeted, risk-based perinatal drug screening, testing, and intervention protocol to be adopted by every birthing hospital in Iowa. Participants in this collabora- tion include:

- Iowa Department of Public Health
- Iowa Hospital Association
- American Academy of Pediatrics, Iowa Chapter
- Drug Endangered Children Alliance of Iowa
- Iowa Child Protection Council
- Iowa Child Protection Centers and programs, includ- ing the University of Iowa Children’s Hospital in Iowa City, Blank Children’s Hospital in Des Moines, St Luke’s Hospital in Cedar Rapids, Mercy Hospital in Sioux City, and Davenport Child Abuse Task Force.

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Director, Child Protection Program
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http://www.uihealthcare.com/childprotection/

### A Statewide Screening, Testing, and Intervention Standard for Perinatal Illicit Drug Exposure

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### SAMPLE--Perinatal Illicit Substance Exposure Risk Assessment Tool*

#### A. Obstetrics Clinic and Labor and Delivery Unit

<table>
<thead>
<tr>
<th>Risk Factors Related to Current Pregnancy</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal urine drug screen positive</td>
<td></td>
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</tr>
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- Maternal urine drug screen positive
- Maternal report of illicit drug use
- No prenatal care or late prenatal care (>16 weeks gestation)
- Poor prenatal care (≥ 4 prenatal visits)
- Abruptio placenta
- Unexplained premature delivery
- Unanticipated out-of-hospital delivery
- Unexplained discrepancy between delivery/prenatal care facilities (hospital hopping)

- Present at hospital in second stage of labor

- Precipitous labor (<3 hours)

- Unexplained episode of acute hypertension (≥140/90 mmHg)

- Unexplained seizures, stroke, or myocardiatic infarction

- Tobacco/Alcohol use or prescription drug (i.e. Vicodin, Oxycontin) abuse

- Physical attributes suggesting illicit drug use such as IV track marks, visible tooth decay, sores on face, arms or legs

- Altered mental status suggesting influence/withdrawal from illicit drugs

- Unexplained stillbirth

#### B. Risk Factors Related to Maternal Medical History

- Unexplained pre-eclampsia, preeclampsia, or eclampsia

- History of illicit drug use by mother or partner within the last 3 years

- Untreated depression or major psychiatric illness within the last 3 years

- Ever used illegal drugs during any pregnancy

- Ever delivered an infant who tested positive for illicit drugs

#### C. Risk Factors Related to Maternal Social History

- History of illicit drug use by mother or partner within the last 3 years

- History of illicit drug rehabilitation by mother or partner within the last 3 years

- History of domestic violence by partner within the last 3 years

- History of child abuse, neglect, or court ordered placement of children outside of home

#### This risk assessment should take place at the first encounter with the pregnant woman and at delivery. At other encounters the staff should document that the pregnant woman continues to be abstinent. If any of the above questions is answered with a YES, please do the following:

- Request informed consent from the mother to order urine screening for illicit drugs
- Contact the unit social worker to initiate detailed psychosocial assessment
- Request Chemical Dependency Services consult if the social worker and the physician believe it is warranted
- Request mental health consult if mental health problems recognized
- Communicate the risk status with Newborn Nursery or NICU staff verbally (for L&D staff)
- Attach copy of this form to Labor and Delivery Form and send to the Newborn Nursery or NICU along with the baby

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*Modified from the Guidelines for Perinatal Services, 8th edition, 2008. The assessment tool is available online at: www.idph.state.ia.us/hcppd/statewide_perinatal_care.asp.

**Note:** This tool is intended as a screening tool to identify at-risk mothers and should not be used to make medical decisions regarding maternal drug use. Maternal drug use should be confirmed using appropriate laboratory tests.

**References:**

- Iowa Department of Public Health
- Iowa Hospital Association
- American Academy of Pediatrics, Iowa Chapter
- Drug Endangered Children Alliance of Iowa
- Iowa Child Protection Council
- Iowa Child Protection Centers and programs
- University of Iowa Children’s Hospital
- Blank Children’s Hospital
- St Luke’s Hospital
- Mercy Hospital
- Sioux City Child Abuse Task Force
B. Newborn Nursery/NICU (please review maternal risk assessment form L&D unit)

- Risk Factors Related to Newborn Assessment

- Maternal risk factor(s) present: Yes No
- Mother was tested during this pregnancy or labor for illicit drugs: Yes No
- Mother tested positive for illicit drugs during this pregnancy: Yes No
- Gestation ≤37 weeks from unexplained preterm delivery: Yes No
- Unexplained birth weight less than 10th percentile for gestational age: Yes No
- Unexplained head circumference less than 10th percentile for gestational age: Yes No
- Unexplained seizures, stroke, or brain infarction: Yes No
- Unexplained symptoms that may suggest drug withdrawal/insufficiency: high pitched cry, irritability, hypertension, lethargy, disorganized sleep, sneezing, hiccoughs, drooling, diarrhea, feeding problems, or respiratory distress: Yes No
- Unexplained congenital malformations involving genitourinary tract, abdominal wall, or gastrointestinal systems: Yes No

Physician/Nurse Practitioner Signature ___________________________ Date __________

- Staff should order meconium and urine screening tests for illicit drugs if the answer is Yes to one or more questions under the Risk Assessment Tool parts A or B.

*Tool developed by task force of statewide perinatal experts in collaboration with Iowa’s Statewide Perinatal Care Program.

Resources

- Web sites

- Articles
  - Help line 1-866-242-4111, Iowa Substance Abuse Information Center Help Line, information and referrals 24/7

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EDITOR: Stephen K. Hunter, M.D., Ph.D., Obstetrics and Gynecology. ASSOCIATE EDITOR: Michael J. Acarregui, M.D., Associate Professor, Pediatrics. EDITORIAL ASSISTANT: Kathy Brogden, Pediatrics. Call 319-356-2637 to be added to the mailing list.

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