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The Iowa PERINATAL Letter

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

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

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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 statewide efforts, many individual hospitals, often in urban areas, have developed structured screening and testing protocols. State, community, and individual hospital efforts have continued to grow in response to our 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 been exposed to in utero drug exposure -- is almost five times higher than in hospitals without such a protocol. But less than half of the infants born in Iowa are delivered in hospitals that use a structured protocol for screening and testing.

However, even hospitals that use protocols often provide no specific training, which reduces the effectiveness of screening and testing. In one urban hospital in Iowa, and despite the availability of a structured protocol, almost one-third of eligible infants were not screened because staff did not follow the protocol.

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 collaboration 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, including 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.

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

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 abstinence from 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 insure 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 NIC.

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.

—Resmiye Oral, MD
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http://www.uihealthcare.com/childprotection/

SAMPLE--Perinatal Illicit Substance Exposure Risk Assessment Tool*

A. Obstetrics Clinic and Labor and Delivery Unit

▶Risk Factors Related to Current Pregnancy

Maternal urine drug screen positive	Yes	No
Maternal report of illicit drug use	Yes	No
No prenatal care or late prenatal care (> 16 weeks gestation)	Yes	No
Poor prenatal care (≤ 4 prenatal visits)	Yes	No
Abruptio placenta	Yes	No
Unexplained premature delivery	Yes	No
Unanticipated out-of-hospital delivery	Yes	No
Unexplained discrepancy between delivery/prenatal care facilities (hospital hopping)	Yes	No
Presented at hospital in second stage of labor	Yes	No
Precipitous labor (<3 hours)	Yes	No
Unexplained episode of acute hypertension (≥140/90 mmHg)	Yes	No
Unexplained seizures, stroke, or myocardial infarction	Yes	No
Tobacco/Alcohol use or prescription drug (i.e. Vicodin, Oxycotin) abuse	Yes	No
Physical attributes suggesting illicit drug use such as IV track marks, visible tooth decay, sores on face, arms or legs	Yes	No
Altered mental status suggesting influence/withdrawal from illicit drugs	Yes	No
Unexplained stillbirth	Yes	No

▶Risk Factors Related to Maternal Medical History

Unexplained hepatitis B or C, syphilis or HIV within the last 3 years	Yes	No
Untreated maternal depression or major psychiatric illness within the last 3 years	Yes	No
Ever used illegal drugs during any pregnancy	Yes	No
Ever delivered an infant who tested positive for illicit drugs	Yes	No

▶Risk Factors Related to Maternal Social History

History of illicit drug use by mother or partner within the last 3 years	Yes	No
History of illicit drug rehabilitation by mother or partner within the last 3 years	Yes	No
History of domestic violence by partner within the last 3 years	Yes	No
History of child abuse, neglect, or court ordered placement of children outside of home	Yes	No

_____ _____

Physician/CNM/Nurse Signature Date

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 Psychiatry 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

B. Newborn Nursery/NICU (please review maternal risk assessment from 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/intoxication: high pitched cry, irritability, hypertonia, lethargy, disorganized sleep, sneezing, hiccoughs, drooling, diarrhea, feeding problems, or respiratory distress……..	Yes	No
Unexplained congential 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

Iowa Alliance for Drug Endangered Children (DEC), www.iowadec.net/; and DEC response guidelines for law enforcement officials, …uploads/Law%20Enforcement%20Protocol%20-20Card%20ALL%20(2).pdf

Methamphetamine abuse in Iowa, A report to the legislature, 1-07, www.iowa.gov/odcp/docs/2007_Meth_Report_2-1-07.pdf

Prevent Child Abuse Iowa, www.pcaiowa.org; and data on Iowa drug-related child abuse, /documents/data/2007/ Iowa-Drug- Related-Abuse-02-07.pdf

Articles

Drug screening of newborns by meconium analysis, *Peds* 1992; 89(1):107-13.

Neonatal Illicit drug screening practices in Iowa: The impact of utilization of a structured screening protocol, *J Perinatol* 2006; 26(11): 660-6

Search for guidance: Examining prenatal substance exposure protocols, *Matern Child Health J* 2002; 6(3):205-212

Help line

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

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