

Identifying Neonatal Abstinence Syndrome (NAS)

By John Berg

Neonatal abstinence syndrome, also known as neonatal withdrawal syndrome (NWS), is identified through a combination of maternal self-report of drug use, maternal and neonate drug screening, and NAS symptoms. Although it is sometimes difficult to obtain, maternal self-report of drug use during pregnancy is distinctly valuable because appropriate medical care for the neonate can be given quickly without a delay for drug screening results.

Maternal drug use is most commonly determined through urine analysis. Urine is easy to collect and provides a longer detection time compared to blood. Detection times differ depending on the particular drug being used (see the table below for detection time ranges).

Drug	Detection Time
Amphetamines	within 48 hours
Benzodiazepines	within 3 days
Alcohol	within 8-16 hours
Cocaine	within 2-4 days
LSD	within 2-3 days
Opiates / Methadone	within 2-3 days
PCP	within 8 days
Marijuana	within 5-20 days

Other methods can be used to detect maternal drug use within longer periods. Hair analysis and infant meconium are two common methods. Hair analysis can be particularly useful since the approximate time of use can be determined by the location along the hair shaft. However, most hospitals do not have the capacity to test infant hair. Infant meconium screening provides a large detection time window and most hospitals

are familiar with meconium screening procedures. Drug use as early as 20 weeks gestational age can be confirmed using meconium screening.

For further information regarding opiates and pregnancy, please contact Karen Kuehn Howell, Ph.D. at the Maternal Substance Abuse and Child Development Project, Emory University School of Medicine, Department of Psychiatry and Behavioral Sciences, 1256 Briarcliff Road, N.E., Suite 324W, Atlanta, Georgia, 30306. You can also phone us at 404-712-9800 or visit our website at <http://www.emory.edu/MSACD>

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References:

Beauman, S. S., (2005). Identification and management of neonatal abstinence syndrome. *Journal of Infusion Nursing*, 28(3), 2005.