

## **In Utero Drug Exposure - The Impact on Language Development**

by **Kimm E. Bolding**

It is estimated that each year in the United States, nearly 375,000 children are born drug-affected. Among the immediate problems often experienced by these infants are prematurity and low birth weight. A wide variety of problems is associated with these conditions. This broad variety often makes it very difficult even to differentiate between the effects — drug damage vs. prematurity. What is known though is that these babies all fit into one category: *at risk*.

Kimm E. Bolding's *Intricate Love*, a first-year guide to parenting infants affected by substance abuse, attempts to interpret medical and research information, putting it in useful lay-person language appropriate for a wide range of experiences in parenting. The following information is excerpted from *Intricate Love*.

Different substances have varying effects on infants. A variety of genetic factors, chemical structures of drugs, and use patterns along with a mixture of drugs, all contribute to the vulnerability of the unborn baby. In parenting these special babies, one of the most important elements to keep in mind is the value of early intervention. "Crack Kids: Not Broken," an article by Barry Zuckerman, MD, and Deborah Frank, MD, states:

"The newborn brain has a significant capacity for adaptation.

The prenatal effects of drugs on the central nervous system may create biologic vulnerability. Potentially associated developmental dysfunction may be compensated partially or completely by the brain itself and/or by competent caretaking. However, such biological vulnerability may render a child more vulnerable to the effects of poor caretaking. In studies of other populations of children with potential central nervous system vulnerability (*Scientific American* 1989; 106:111), high family stability and responsive caretaking protects against developmental impairment. Even among infants exposed to opiates in utero, the quality of postnatal environment and not the amount of maternal opiate use appears to be a more important determinant of developmental outcome."

With this in mind, one can only be encouraged by the fact that the interventions, therapies, long hours, and most often tears can help encourage a precious life to reach far beyond its birth potential.

One of the most significant developmental effects of infants exposed to drugs in utero has been in the area of speech and language development. Please use the information below as a guide to normal speech and language development. Contact your therapist or physician if you have any concerns about your child's speech development.

## Language Development and Interventions:

	<b>Expressive Language</b> (Information We Give Out)	<b>Receptive Language</b> (Information We Take In)
1 Month	Vowel-like sounds and crying emerge.	Responds to voice.
2 Months	Produces different kinds of cries.	Eyes follow movement.
3 Months	Begins using "m," "p," and "b" sounds. Uses lips.	Coos in response to pleasant voice.
4-5 Months	Learns to vary tone of voice to express feelings. Starts listening.	Turns head toward sound of voice.
6 Months	May start with simple syllables like "ma" and "pa." Vocal play.	May recognize words like "daddy," "bye-bye," and "mama."
7 Months	Begins to put two syllables together while babbling.	Shows interests in sounds of objects.
8 Months	Vocal play more often.	Recognizes names of some common objects.
9 Months	May sing along with music. May learn peek-a-boo or pat-a-cake. Shakes head "no."	Follows simple directions such as "find the ball."
10 Months	Asks for toys or food by pointing and making sounds	Understands "no" and "stop."
11 Months	Tries to imitate new words. May wave "bye-bye" when asked.	Appears to understand simple questions such as "Where is the ball?"
12 Months	Uses 1 - 3 spoken words. But may use "bird" not just for a bird but also for kites, airplanes, etc.	Recognizes names of objects, people, pets, and action verbs.

### Hints to Help Language Development

- Talk face-to-face with your baby (about 12 inches away) and use facial expressions (smiles, frowns, etc.).
- To hold baby's attention, change the pitch of your voice — high to low and loud to soft.
- Don't be afraid to look silly and have fun.
- Hold baby in front of a mirror.
- Encourage older children to talk and play with your baby.
- When your baby makes a sound or a face, imitate it.
- Keep in mind that play is a learning process. Peek-a-boo teaches trust and patience. Toys teach cause and effect. For example: If I drop this toy, mom will pick it up. I can make mom do something. If I squeeze the duck, it will make a noise.
- Use objects and toys to teach the sense of touch, oral stimulation, noise, smell, etc.
- Remember that listening is an important part of language development.
- Provide sounds children like — music and voices of special people.

Order "Intricate Love" from Kimm E. Bolding, PO Box 359, Colorado Springs, CO 80901. \$15.00 + \$3.00 shipping.