



## Let's face it, stress is a part of life



And modern life seems to present us with more of it than ever before. Adults struggle to balance work and family life. Adolescents are stressed about school, relationships, and their future. When our well-being is in some way threatened, our bodies react with what is called a stress response—we feel anxious or tense!

Babies are no exception. When their basic needs for food, touch, and loving care are neglected, infants show signs of a stress response.

Researchers are beginning to discover that too much stress, may affect babies' physical and mental health, not only now but also later in life. During the early months and years of life, some researchers think that babies develop the foundations of their stress response system. The way this system develops may shape how children react to stressful situations for years to come. Too many stressful situations early on may set a pattern for the way children respond to stress in later years (Gunnar, 2000).

### You know it when you feel it

For such a common word, stress is very complex. What's stressful to one person may not be stressful to another. Even scientists studying it don't always agree on what it is. In general, stress is a combination of events that we find threatening and our responses to those events. Much of the leading scientific work on stress so far has been conducted with animals, but these results, though informative, can't be applied directly to humans. Some research has been done with adults, and even less with children and infants. Even so, scientists are beginning to come up with clues that may help us understand stress in ways that may help improve the health of our children. To understand how stress affects us, it's helpful to have an idea of how we respond to threatening situations.

## It's a Stressful Life?

Our youngest ones may be especially vulnerable to the effects of stress



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## Studying babies, neglect, and stress

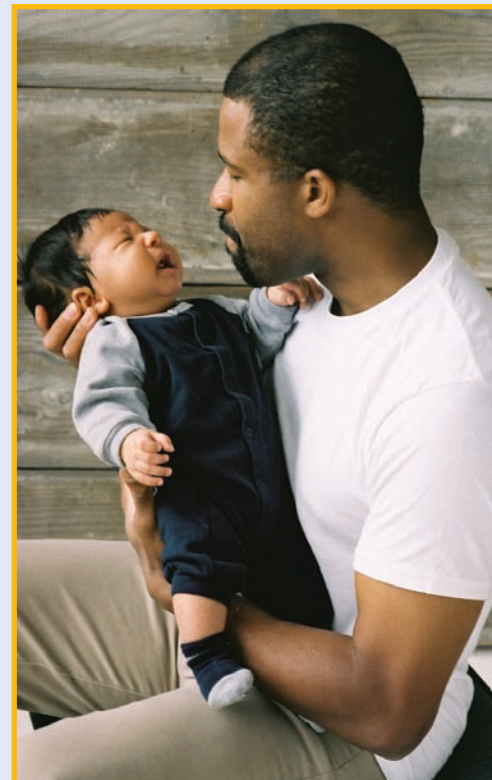
When it comes to stress and babies, the stakes may be even higher. Studies with rats and monkeys show that neglectful care, early in life, and lack of parental support when an infant is distressed, have a powerful influence on the development of stress response systems. If stressful conditions like these continue during early development, they may set in place a lifelong pattern for higher levels of stress hormones. Also, these studies show that living in a deprived environment with little personal contact and few things to see or touch can result in higher stress hormone levels. On the other hand, when little ones receive consistent, nurturing attention from caregivers and the opportunity to explore their world, they are more likely to develop healthy stress response systems (Gunnar, 2000).

It's hard to conduct stress experiments on humans—especially children. Subjecting babies to parental neglect and threatening situations and then measuring the levels of their stress hormones is unthinkable. But in a study of children adopted from Romanian orphanages, where living conditions were harsh, researchers found that the longer a child lived under extreme conditions, the higher his or her stress hormones were, even six and a half years after adoption (Gunnar, Morison, Chisholm & Schuder, 2001).

### Stress early and often?

To examine the effects of stress on children scientists studied three groups of children, all between 6 to 12 years old and living with families in western Canada. One group had been adopted after spending more than eight months of their early lives in orphanages. Members of the second group had been adopted from the orphanages when they were four months old or younger. Members of the third group were born in Canada and raised in their original families (Gunnar et al., 2001).

Parents took samples of their children's saliva on three days when nothing unusual was scheduled: once in the morning, again at noon, and finally within a half-hour of bedtime. After analyzing the saliva samples, the scientists found that the children who spent more than eight months in orphanages had significantly higher average levels of cortisol than either the children adopted earlier in life or the Canadian-born children. And the longer the children had lived in orphanages, the higher their average levels of cortisol (Gunnar et al., 2001).



### Protecting babies from undue stress

More research is needed before scientists can say for sure that living in stressful situations early in life causes children to have higher levels of stress hormones later on, or even that increased hormone levels always lead to health problems. But, the researchers noted, their results are consistent with studies in rats that point to a sensitive time in early development when the response to stress may be set (Gunnar et al., 2001).

# Show empathy to your children

## Helpful parenting tips

- ★ Attend to your baby's needs by providing a warm and supportive environment and responding to your baby when she needs you.
- ★ Get to know your baby and try different ways to soothe her. One baby may be soothed by a bath, another may like to be cuddled, and some prefer rocking.
- ★ Try to identify stressful situations for your baby.
- ★ There is no such thing as spoiling babies with love and attention.
- ★ Encourage your baby to experience new and exciting things, but be there to provide a calm, supportive presence so that she experiences success in her exploration of the world.
- ★ Recognize serious traumatic experiences when they happen, and don't ignore them. Getting help soon after trauma may be effective in preventing brain changes that may be harder to treat later in life.



For more information on parenting and early learning, or to order copies of this Spotlight, visit [www.ParentingCounts.org](http://www.ParentingCounts.org).

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