

# Beyond Medicine: Reach Out and Read + Toxic Stress



CAROLINAS

## TOXIC STRESS

The future of any society depends on its ability to foster the healthy development of the next generation. Extensive research on the biology of stress now shows that healthy development can be derailed by excessive or prolonged activation of stress response systems in the body and brain. Such toxic stress can have damaging effects on learning, behavior, and health across the lifespan. When a young child's stress response systems are activated within an environment of supportive relationships with adults, these physiological effects are buffered and brought back down to baseline. The result is the development of healthy stress response systems; a strong foundation for brain architecture.

Toxic stress is long lasting, incessant stress in the absence of support and insufficient social-emotional buffering, such as physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, and/or the accumulated burdens of family economic hardship—without adequate adult support. Parents' stress levels can leave lasting marks on children's genes. Historically, genes were thought to be set in stone and determine development. However, scientific research has shown that early experiences, including toxic stress can cause stress induced changes in gene expressions. This change in genes through experiences is called epigenetics. Brain architecture is experience-dependent, early experiences influence the foundational architecture and ongoing connectivity and functionality.

## WHAT IS THE ROLE OF THE MEDICAL PROVIDER?

Primary care providers are one piece in a multipronged approach to helping families buffer toxic stress by using clinic-based interventions, like Reach Out and Read, that promote responsive parenting. Increasing the quality of the day-to-day parent child interaction by promoting shared reading as a positive and consistent routine in the home can increase warmth and consistency in parenting, both of which have been shown to be powerful predictors of healthy child development.

During well-child visits, primary care providers encourage parents to spend time engaging with their young children through looking at books together starting at birth, and building the parent-child bonds that will alleviate the effects of adverse circumstances in the early years.

## HOW CAN REACH OUT AND READ HELP?

Reach Out and Read offers a two- generational approach addressing parents' needs, children's needs, and attending to the parent-child interaction and relational health.

Research indicates that supportive, responsive relationships with caring, attentive adults as early in life as possible can buffer the damaging effects of toxic stress on the brain and body. To effectively address toxic stress issues in the home, parents need concrete advice and modeling as well as clear guidance from those they most trust. By providing advice and guidance on book-sharing with clear-cut advice on dialogic reading that can be easily modeled in the exam room, providers play an important role in helping families develop a more nurturing, supportive home environment.

Reading aloud builds motivation, curiosity and memory. It also helps children cope during times of stress or anxiety; taking children to places and times they have never been - enlarging and enhancing their worlds.

**RECOMMENDED READING:** <http://developingchild.harvard.edu/science/key-concepts/toxic-stress/>

To learn more about the value of Reach Out and Read in Pediatric Primary Care, please visit [www.rorcarolinas.org](http://www.rorcarolinas.org).

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