



# Total Load Theory: How the Cumulative Effect of Many Factors Causes Developmental Delays

**W**hen the bridge collapsed last week in Minnesota, who or what was to blame? Improperly placed machinery? The engineer who conceived the design? The weight of the cars traveling over the bridge every day? The weather? Total load theory postulates that it is the cumulative effect of all these factors that brought down the bridge.

Every human body, like a bridge, has an individual load limit. One can handle only a certain number of stressors before collapsing. The accumulation of chemicals, heavy metals, sensory assaults or deprivation, and immune system stressors can produce a dangerous overload that puts children at risk for developmental problems. At last, according to August 14<sup>th</sup>'s *Boston Globe*, researchers at the University of California - Davis, are investigating the impact of some of these environmental issues.

### Total Load Starts Pre-Natally

Environmental factors begin to add up prenatally. For about 25 years, more or less, a woman builds up her personal body burden. According to a Swedish study, she dumps about 75% of her toxic load into her baby. That's why so many women experience first pregnancy miscarriages: nature's way of detoxing her body, and at the same time, assuring a healthy baby for the next pregnancy.

What happens if that first pregnancy is viable? That baby is born, not with a zero toxic load, but with toxic levels already approaching its body's threshold. Many of these firstborn children, mostly boys, are born with toxic levels of mercury and other dangerous substances. With the addition of more after birth, their immune systems collapse: diagnosis, autism.

### Genetics Loads the Gun

Parents with allergies and other immune system dysfunction, such as chronic fatigue and fibromyalgia, pass along hereditary risk factors to their unborn babies. The poor ability to detox is primary. Endocrine and nutritional factors also play a role. We now know the importance of a properly working thyroid, the master gland, for the unborn child. Sufficient levels of maternal essential fats (EFAs) are also vital for a healthy baby.

### Environment Pulls the Trigger

Any complications during pregnancy, such as gestational diabetes, conditions requiring bed rest, or repeated sonograms, add further to a baby's load factors, interfering with sensory and motor development. The amniotic fluid amplifies the vibration of the sonogram, making its strength analogous to a jet engine in the baby's immature ears. Research shows that the higher the number of sonograms, the more likely babies are to have frequent ear infections. Lessened maternal physical activity, due to prescribed bed rest, affects the vestibular system and the baby's ability to move against gravity. Add a cord wrapped around the neck, lengthy labor, forceps or vacuum aspiration at delivery, a C-Section, and/or a hepatitis B shot in the first 24 hours of life, and that baby is already very high risk for delays.

### Load Factors Add Up During the First Year of Life

The closer the baby's burden approximates its threshold at birth, the fewer factors are necessary in the first year of life to put that baby over the line. Welcome a newborn home to a freshly carpeted and painted nursery, with off-gassing materials, start that baby on a cow's milk based formula, rather than mother's milk, add vaccines, with or without mercury, put that baby on its back for sleeping, restricting motor development, and use antibiotics freely for any infections. Developmental delays, including autism, are now almost inevitable.

### The Body's Top Priority is Staying Well

How and why do the very common practices above interfere with development? Because the body prioritizes health over development, and automatically puts the bulk of its energy into staying well. Breathing, digesting, and surviving all supersede interacting with the outside world. Sensory, motor, language, and social-emotional development must take a back seat to biological functioning.

If a threshold exists, below which individuals are "well," and above which they are "sick," many of us sit precariously slightly below the tipping point of health. All it takes is one more load factor, such as a high pollen day, a powerful antibiotic for a sinus infection, or a booster vaccine to put us over the top into "sick."

### The Degree of Overload Determines a Diagnosis

The timing and number of total load factors is directly proportionate to the severity of a diagnosis. With early and multiple factors, a child is more likely to become autistic. Fewer and later factors might result in learning, behavioral, and sensory motor delays, with diagnoses such as pervasive developmental disorders, learning disabilities, and attention deficits.

### Specific Load Factors Determine Treatment

Taking a history, which includes environmental factors, is essential to choosing the right treatment. Just as headaches can be caused by both nagging mothers-in-law as well as brain tumors, speech-language delays and late reading can have multiple causes. Without knowing a child's unique history, considerable money, time, and effort can be wasted on inappropriate therapies.

### Prevention is the Key

All prospective parents should educate themselves about the risk factors for autism and developmental delays. Start *before* conception by putting the mother on a detoxification program. Check her thyroid, including TSH levels, switch to non-toxic cleaning, personal care, and pest control products. Decorate the nursery only with non-toxic products. Finally, read Dr. Dietrich Klinghardt's letter to potential and new parents, available on his website at [www.klinghardt.org](http://www.klinghardt.org).

**Make reducing the total load of everyone in your family top priority now!**