Learning Disabilities Association of America
4156 Library Road
Pittsburgh, PA 15234

Statement Of

Maureen H. Swanson
Healthy Children Project Coordinator
Learning Disabilities Association of America

Before

The U.S. House of Representatives
Committee on Energy and Commerce
Subcommittee on Commerce, Trade, and Consumer Protection

At a Hearing On

Revisiting the Toxic Substances Control Act of 1976

February 26, 2009

Thank you for this opportunity to address the House Subcommittee on Commerce, Trade and Consumer Protection regarding the need to revise the Toxic Substances Control Act.

My name is Maureen Swanson and I direct the Healthy Children Project for the Learning Disabilities Association of America (LDA). LDA is the oldest and largest national volunteer organization advocating for children and adults with learning disabilities, with headquarters in Pittsburgh and affiliates in 43 states. My work focuses on raising awareness of toxic chemicals that can harm brain development, and on finding ways to prevent exposures to toxic chemicals, especially among pregnant women and children.

I also am here today on behalf of the leading member organizations of the Learning and Developmental Disabilities Initiative (LDDI), a national working group of the Collaborative on Health and the Environment. In addition to LDA, these organizations include the American Association on Intellectual and Developmental Disabilities, the Autism Society of America and the National Association for the Dually Diagnosed (those with mental health issues and developmental disabilities). Together, our organizations and other LDDI members represent almost 500,000 people in the United States.

We believe there is an urgent need to reform the way our country regulates toxic chemicals. We need to test chemicals for health effects, and keep toxic chemicals out of consumer products, so that we better protect our children from increasing incidences of diseases and disorders linked to toxic chemical exposures.

Our particular concern is with neurotoxins: chemicals that interfere with brain development and function. LDA began its focus on neurotoxins decades ago by supporting efforts to get lead out of gasoline, and continues to advocate for research to better understand the effects of low levels of lead exposure on brain function and behavior.

LDA also has a long-standing interest in preventing exposures to chemicals that interfere with the hormonal system, particularly through effects on the thyroid gland. A healthy thyroid is essential for healthy brain development. These chemicals are called "endocrine disruptors" and include phthalates, PCBs, Bisphenol A, dioxins and brominated flame retardants (PBDEs).

On behalf of LDA and our partner organizations, I would like to thank Congress for its overwhelming bipartisan support of the Consumer Product Safety Improvement Act, which will keep lead and phthalates out of children's products. This is a crucial step toward preventing toxic chemical exposures that can affect brain development.

As a mother, I know how difficult it is to figure out which toys, sippy cups, shampoos and foods are safest and healthiest for my young children. No parent should have to stand in front of a store shelf full of toys and guess which ones have toxic constituents. They most certainly should not be forced to pay a premium for a specially made non-toxic product. None of us should have to buy our way out of health risks to our children.

We focus our concerns on children because they are particularly vulnerable to toxic chemicals. The CDC's 2005 report on environmental exposure to chemicals shows that the youngest Americans sampled – ages 6 to 11 years old – often have higher levels of particular chemicals in their bodies than adolescents and adults.[i]

For their body weight, children consume more food, drink more water and breathe more air than adults. Children spend a lot of time on the ground and put things in their mouths. Most importantly, the time from conception into early childhood is a period of rapid brain development. We know that exposure to chemicals that are neurotoxins during early fetal development can harm the brain at doses much lower than those affecting adult brain function.[ii]

The incidence of neurological problems in children is increasing, especially for autism and attention deficit hyperactivity disorder (ADHD).[iii] Some physicians now talk about autism and asthma as epidemics, based on the exponential increase in the numbers of children suffering from them. Today, 1 in 150 American children are diagnosed with autism spectrum disorder.[iv]

Dr. Joel Forman, a professor of pediatrics at Mt. Sinai School of Medicine and practicing pediatrician, describes, "the new pediatric morbidity: a range of chronic, disabling and sometimes life threatening conditions…that affect increasing numbers of American children today." These conditions include asthma, obesity, endocrine and sexual development disorders, cancers and neurodevelopmental disorders.[v]

Ask any teacher in any school district in any state, and they will confirm this trend. Many of the teachers in LDA tell me how many more special education students they have in their schools compared to a decade or two ago. Doctors and nurses report seeing more and more children with behavior disorders and neurological problems in their practices.

A growing body of evidence shows that some of this increase in neurological problems is associated with toxic chemical exposures. In January, scientists at the University of California studied all factors that might be contributing to the state's huge increase in autism cases, and found that a potentially large portion of the increase is linked to environmental exposures. They have called for a national focus on toxic chemical exposures and links to autism, with an initial emphasis on fetal and infant exposures to pesticides and toxic chemicals in products.[vi]

The costs associated with the increasing incidence of these childhood diseases are enormous. On average, it costs twice as much to educate a child who has learning or developmental disabilities than it does to educate a child who does not. A 2006 Harvard study estimated that the costs of autism to the U.S. exceed $35 billion annually.[vii]

A 2002 study by Dr. Philip Landrigan assessed the contribution of environmental pollutants to the incidence and costs of four categories of illness in American children: lead poisoning, asthma, cancer, and neurobehavioral disorders. The total annual costs

attributable to the environmentally related portion of these diseases are estimated at $54.9 billion – which is the middle of the cost range estimate in the study results.[viii]

There are more than 80,000 chemicals on the TSCA Inventory, and many tens of thousands in active commerce. Approximately 3000 chemicals are produced at more than one million pounds per year.[ix] More than half of these high volume chemicals lack even a basic set of toxicity information. This data gap includes a lack of information on developmental toxicity. This appalling lack of information under TSCA has persisted for more than 30 years, despite EPA's efforts over the past decade to get chemical producers to voluntarily develop such data.[x] Even fewer data are available for lower volume chemicals despite the fact that many of them are used in consumer products or can otherwise result in human exposure.

Of these 3000 high volume chemicals, we know for certain that 10 are neurotoxins that can cause learning and developmental disabilities. There is good evidence that another 200 of these chemicals are also neurotoxins. We don't have better information because there is no requirement under TSCA to test chemicals for effects on brain development.[xi]

Isn't it right for parents to assume that the government will protect their children from exposure to toxic chemicals? When people find out that the vast majority of chemicals used in products and services are not tested for health effects, they are aghast and outraged. American consumers should have the assurance that if a product is on a store shelf, then its ingredients have been tested and found to be safe.

But TSCA demands that the government prove beyond all reasonable doubt that a chemical is toxic after it has already been put on the market, after it has already infiltrated our homes and our bodies. According to a 2006 Lancet article by Drs. Grandjean and Landrigan, the two main impediments to prevention of neurodevelopmental deficits of chemical origin are the great gaps in testing chemicals for developmental neurotoxicity and the high level of proof required for regulation.[xii]

We need legislation that requires manufacturers to prove that a chemical is safe and nontoxic before it can be used in products – before it puts our children at risk.

We know that a preventive policy works. When lead, one of the most potent and well-researched neurotoxins, was finally removed from gasoline, blood lead levels in American children plummeted from an average of 15.5 micrograms per deciliter in 1975 to about 2 micrograms per deciliter in 1990, which is the current average blood lead level. During the same time period, children's IQ levels increased.[xiii]

Chlorpyrifos is a widely used pesticide and a neurotoxin. CDC data collected for 1999-2002 showed that young children have greater levels of chlorpyrifos in their bodies than adolescents and adults.[xiv] Since EPA banned the residential use of chlorpyrifos in 2001, a New York City study showed that levels of this potent neurotoxin in maternal and umbilical cord blood have decreased by a factor of 10, with a corresponding increase in newborn weight and length, which are measures of healthy development.[xv]

Brominated flame retardants, or PBDEs, provide another example. PBDEs are used in electronics, carpet, furniture and clothing, and accumulate in household dust. They have a chemical structure similar to PCBs and are a known neurotoxin. A 2008 study showed that toddlers had levels of PBDEs in their bodies three times higher than adults in the same households.[xvi]

Since Sweden began an accelerated phase-out of PBDEs in the late '90s, PBDE levels in breast milk have plummeted. In the same time period, levels of PBDEs in North American breast milk have skyrocketed, exposing our tiniest and most vulnerable citizens to a known neurotoxin in the very first hours of their lives.[xvii]

In the absence of federal action on these neurotoxins, which are linked to other serious health effects as well, Maine and Washington banned the use of PBDEs in 2007. We applaud these and other states that are seeking to protect children's health and development, but we need a national solution.

To stem the rising incidence of childhood diseases such as asthma, autism and cancer, we need a preventive approach to toxic chemical policy at the federal level. The government must require manufacturers to test chemicals for health effects, including neurodevelopmental effects, and prohibit the use of toxic chemicals that can harm the developing fetus, infants and children.

For more than 30 years, TSCA has enabled the chemical industry to take risks with our children's health that no parent would ever knowingly permit. We urge Congress to reform TSCA without further delay, and provide all children the opportunity to lead healthier, fuller lives.

Thank You.

[ii] Third National Report on Environmental Exposures to Chemicals. Centers for Disease Control and Prevention National Center for Health Statistics; 2005. www.cdc.gov/exposurereport.

[ii] Grandjean, P, Landrigan, PJ. Developmental neurotoxicity of industrial chemicals. Lancet 2006; 368(9553):2167-78.

[iii] Forman, J. Pediatric Environmental Health: Evidence and Public Policy. Presentation, February 4, 2009.

[iv] Marguerite Kirst Colson, Director of Communications, Autism Society of America. Personal communication, 2009.

[v] Forman, J. Pediatric Environmental Health: Evidence and Public Policy. Presentation, February 4, 2009.

[vi] Cone, Marla. "New Study: Autism Linked to Environment," Scientific American, January 9, 2009.

[vii] Ganz, Michael. "The Costs of Autism" chapter in Understanding Autism: From Basic Neuroscience to Treatment. CRC Press, 2006.
[viii] Landrigan, P et al. Environmental Pollutants and Disease in American Children: Estimates of Morbidity, Mortality and Costs for Lead Poisoning, Asthma, Cancer and Developmental Disabilities. Environmental Health Perspectives, 110(7), July 2002.
[ix] EPA Inventory Update Reporting from 2006, www.epa.gov/oppt/iur.
[x] U.S. EPA HPV Challenge, www.epa.gov/HPV; Environmental Defense Fund, HPVTracker (www.edf.org/HPVTracker, and personal communication, Dr. Richard Denison, February 2009.
[xi] Grandjean, P, Landrigan, PJ. Developmental neurotoxicity of industrial chemicals. Lancet 2006; 368(9553):2167-78.
[xii] Grandjean, P, Landrigan, PJ. Developmental neurotoxicity of industrial chemicals. Lancet 2006; 368(9553):2167-78.
[xiii] Needleman, H., Landrigan, P. "What level of lead in blood is toxic for children?" American Journal of Public Health, 94(11), 2004.
[xiv] "Third National Report on Environmental Exposures to Chemicals," Centers for Disease Control and Prevention National Center for Health Statistics; 2005. www.cdc.gov/exposurereport
[xv] Whyatt, RM et al. Prenatal Insecticide Exposure and Birth Weight and Length Among an Urban Minority Cohort. Columbia Center for Children's Environmental Health, 2004.
[xvi] Environmental Working Group. "Young Children in U.S. Among World's Most Polluted with Fire Retardants." September, 2008. www.ewg.org
[xvii] Forman, J. Pediatric Environmental Health: Evidence and Public Policy. Presentation, February 4, 2009.