

CHILDREN'S ENVIRONMENTAL HEALTH FACT SHEET

Our World is a Toxic Soup

- Approximately 80,000 synthetic chemicals have been developed for use in the marketplace, a great majority of which did not exist before the 1940s.
- More than 1500 new chemicals are introduced annually.
- The Toxics Release Inventory for 1997 reveals that a total of **2.58 billion** pounds of toxic chemicals were released in the U.S. by facilities required to report. This does not include toxic chemicals incorporated into products, or pesticides, which amounted to another **4.5 billion** pounds.
- Of the 15,000 of the chemicals registered for commercial use with the Environmental Protection Agency had moderate to high potential for human exposure. Less than half of these had been tested for toxicity at all, and fewer than 20% had been tested for toxicity in developing organisms. (4)
- Complete tests for developmental neurotoxicity have been submitted to the EPA **for only 12 chemicals** as of December 1998 and testing for developmental neurotoxicity is not required.
- None have been tested so far for their human health effects when they interact with one another and we are all exposed to dozens if not hundreds of chemicals in any given day.
- As testing procedures become more sophisticated, we are learning that lower and lower doses can be harmful, particularly to vulnerable populations like children. For example, the "safe" blood lead level has gone from 60 micrograms/deciliter (ug/dl) in 1960, to 10 ug/d/ in 1990, to current studies which suggest that lead may have no identifiable exposure level that is safe to the developing brain.

Children are Uniquely Vulnerable to Toxins

- Proportional to body weight, children eat, breathe, and drink more than adults, and thus take in far higher concentrations of the toxins in our environment. For example, proportionally they drink seven times more water and take in twice as much air as adults on average.
- As children's bodies and biological systems develop especially in the womb and as newborns they are
 uniquely vulnerable to damage from toxic substances. For example, small single doses of certain pesticides on
 critical days of a child's development can cause lifelong impacts on brain and body function, from learning
 disabilities such as Attention Deficit Hyperactivity Disorder (ADHD) to reproductive problems.
- Many neurotoxicants, such as mercury, dioxin and PCBs, bioaccumulate in body fat and are passed on from mother to child in utero or through breast milk.

Chronic Childhood Illness is on a Dramatic Rise

- The incidence of cancer in children jumped 26% between 1975 and 1998.
- The percentage of U.S. children with **asthma** doubled from 3.6% to 7.5% between 1980 and 1995. In 2001, 8.7% (6.3 million) of all U.S. children had asthma.
- It is estimated that nearly 12 million U.S. children (17%) under the age of 18 suffer from one or more learning, developmental, or behavioral disabilities.
- Autism in the U.S. doubled between 1966 and 1997.
- In 1997 to 2000, 6.7% of children ages 5 to 17 were reported to have been diagnosed with ADHD.
- One million children in the US exceed 10 ug/dl blood lead level exposure that affects behavior and cognition and 36% of those children are African-American and live in inner cities.
- The incidence of **testicular cancer** in young men has increased by 60% and the incidence of **hypospadias** (abnormal positioning of the opening of the urethra on the penis) in newborn boys doubled from 1968 to 1993.

We Need To Take Action Now

- Protecting our children from preventable and potentially harmful exposures requires a precautionary policy that
 can only occur with basic changes in the regulatory process. Remaining scientific uncertainties should not
 delay precautionary actions.
- We need to take preventative actions by **developing and using alternatives** to the substances known to contribute to learning disabilities, asthma, cancer and other childhood diseases. These actions can start at home!
- We need more mandated support for research on environmental contributors to these chronic childhood diseases.