Center for Health, Environment & Justice
P.O. Box 6806 • Falls Church, VA 22040 • Phone: 703.237.2249 • Fax: 703.237.8389 • www.chej.org

CHILDREN'S HEALTH AND SAFE SCHOOL SITING

Today there exists few state and no federal laws preventing the building of schools on or near sources of pollution. The average US public school is almost 50 years old. As of 2005, forty percent of America's schools report needing $36 billion to repair or replace building features such as a roof or plumbing. At the same time, schools show record enrollments and school districts are struggling with budget concerns.

Why are safe school siting policies necessary?

Environmental Health Impacts from Tight School District Budgets: When constructing and renovating schools, thousands of school districts and school boards choose to build school on contaminated property because they are so pressed to save money and are often enticed to accept donated contaminated land or hire uncertified or poorly trained contractors to evaluate environmental risks. In poor, and often communities of color, children already suffer disproportionately from asthma, lead poisoning, and developmental disabilities. Constructing schools on contaminated land exacerbates the disproportionate injustices these communities face.

A Wide Spread Problem: There is currently a critical gap in legislation with respect to siting schools on or near contaminated land or sources of pollution. Despite the health hazards that on-site and off-site environmental contaminants pose to children. 20 states have no laws that restrict the siting of schools near manmade or natural environmental hazards. Only 10 states have laws that prohibit this practice outright. This often vaguely worded criterion rarely provides school districts with the tools necessary to select, evaluate, and either eliminate from consideration, or if absolutely necessary, remediate a contaminated site. This means that districts often select and build on sites where they are unaware of the existence and extent of contamination.

Prevent Toxic Exposures to Ensure Healthy Communities: Health protective educational facilities siting regulations will prevent toxic exposures to children and school staff, reducing their daily exposures to chemicals that can cause cancer, immune system impairment, birth defects, learning disabilities, asthma and other health problems. The US mandates its schools to educate our children so that they can become vital contributors to society. Not only is education the foundation of a stable, just society, but critical to national economic competitiveness. Continued rises in rates of learning disabilities, lower IQ scores, hyperactive behaviors, and more could imperil our nation's future economic base.

Children are More Vulnerable: During prenatal development, infancy, and adolescence, children are growing and adding new tissue more rapidly than at any other period of their lives. Because their systems are still developing and mature at different rates, they are susceptible to environmental chemical influences over an extended time. Crucial systems continue to develop

from birth through adolescence, such as that of the reproductive system. Insulation of brain nerve fibers is not complete until adolescence. Similarly, air sacs in the lung, where oxygen enters the blood stream, increase in number until adolescence. [1]

Children are More Sensitive: Children's immature systems are less able to handle toxic chemical exposures. For example, children absorb about 50% of the lead to which they are exposed, while adults absorb only 10–15%.

Children Have More Susceptible Activities: Normal school activities heighten children's exposure to site contamination. After school sports, recess, classes in which children explore the school site's ecosystem, children's natural curiosity, tendency to explore, and inclination to put their hands in their mouths all opens them to high levels of exposure.

Children Diseases Increasing: Environmentally linked diseases in children are on the rise across the board. Cancer is the number one disease-related cause of death in children.[2] Childhood learning disabilities, hyperactive behavior, and the inability to maintain attention have also soared nationwide. Attention deficit hyperactivity disorder has been estimated at an all time rate of 17%.[3] The number of children in special education programs increased 191% from 1977 to 1994[4], and federal Special Education grants increase each year[5]. Autism appears to be skyrocketing. In California, childhood autism rose over 200% between 1987 and 1998.[6] Asthma affects over 2 million people, and over 14% of New Yorkers over their lifetime, and is the primary cause of school absenteeism, which contributes to the national financial burden of $16.1 billion dollars per year due to asthma-related direct costs. [7]

Additional CHEJ Resources

The ABC's of Healthy Schools
Creating Safe Learning Zones
Poisoned Schools: Invisible Threats, Visible Actions
Building Safe Schools: Invisible Threats, Visible Actions
Fight to Win Leadership Handbook
How to Win Public Hearings

Please contact Renee Blanchard by email at rblanchard@chej.org or by phone at (703) 237-2249 ext 21 on how to receive a copy of these reports.

[1] Needleman, H.L. and Landrigan, P.J. (1994) *Raising Children Toxic Free*, New York, NY: Farrar, Straus, and Giroux.
[2] American Cancer Society (ACS) (2005) *Cancer Facts and Figures 2005*, Atlanta, GA.
[3] Goldman, L. R., Genel, M., Bezman, R.J., and Slanetz, P.J. (1998) "Diagnosis and treatment of attention deficit disorder in children and adolescents" *Journal of the American Medical Association* 279 (14): 1100-1107.
[4] Greater Boston Physicians for Social Responsibility (GBPSR) (2000) *In Harm's Way: Toxic Threats to Child Development,* Greater Boston Physicians for Social Responsibility, Cambridge, MA, May.
[5] U.S. Department of Education (USDE) (2004) "Special Education: Grants to States." Available at http://www.ed.gov/programs/osepgts/funding.html.
[6] California Health and Human Services Agency (CHHS) (1999) *Changes in the Population of Persons with Autism and Pervasive Developmental Disorders in California's Developmental Services System: 1987 through 1998, A Report to the Legislature*, CHHSA, Department of Developmental Services, Sacramento, CA, March.
[7] American Lung Association (2005) *Trends in Asthma Morbidity and Mortality*, ALA Epidemiology & Statistics Unit, January.