

Association of School Nurses of Connecticut  
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**TESTIMONY RE: H. B. No. 6496 (RAISED) AN ACT CONCERNING GREEN  
CLEANING PRODUCTS IN SCHOOLS.  
Education Committee Hearing  
February 23, 2009**

Good afternoon Senator Gaffey, Representative Fleischmann and members of the Education Committee.

Thank-you for the opportunity to provide testimony on behalf of the Connecticut Nurses' Association (CNA), the professional organization for registered nurses in Connecticut and the Association of School Nurses of Connecticut, the professional association for school nurses. I am Polly T. Barey, RN, MS, a member of the Connecticut Nurses' Association's Government Relations Committee. I speak in support of H.B. 6496, An Act Concerning Green Cleaning Products in Schools.

Through the 2006 Executive Order #14 issued by Governor Rell and passage of PA -100, An Act Concerning the Use of Cleaning Products in State Buildings in 2007, the CT Department of Administrative Services with assistance from the CT Department of Environmental Protection has established green cleaning policies and procedures for state-owned buildings. These important first steps were essential to H. B. 6496 which will extend the requirement to include schools to make them safer and healthier.

**There are significant health issues making this requirement important:**

- School buildings are densely occupied indoor spaces with four times as many occupants per square foot found in schools compared to office spaces. Children are the majority of the occupants. Their size, increased metabolic rates and developing organs make them much more vulnerable to exposures to toxic cleaning chemicals.
- The chemicals contained in conventional cleaners are of concern because their use exposes children, custodial staff, and other building occupants to these chemicals.

- These products may contain carcinogens, respiratory irritants and asthmagens, and ingredients that are toxic to the central nervous system, reproduction, developmental systems and kidneys and liver. They can also be irritants to the eyes, nose and throat as well as sensitive to skin.
- Diseases related to ingredients in conventional cleaning products include
  - Allergies and chemical sensitivities
  - Asthma
    - An average of one out of every 13 school-age children has asthma
    - Asthma is a leading cause of school absenteeism with 14.7 million school days missed each year (EPA – Managing Asthma in the School Environment)
    - A 2008 British study links cleaning chemicals used by mothers to increased asthma risk (attached)
    - Chronic respiratory illnesses
    - Janitorial workers experience one of the highest rates of occupational asthma (F. Reinisch, et al., “Physician Reports of Work-Related Asthma in California, 1993–1996,” *American Journal of Industrial Medicine* 39)
- Hormone disrupting chemicals in cleaning products include alkylphenol ethoxylates – APEs and phthalates
  - Exposure may change how the endocrine systems work, resulting in:
    - Testicular cancer
    - Reproductive abnormalities
    - Lower sperm counts

**Other considerations:**

- The costs of lost work time, productivity, additional expenses for substitute teachers and potential liability issues from worker’s compensation and disability claims.
- The fiscal impact - the key components for school green clean legislation proposed by the CT Foundation for Environmentally Safe Schools (ConnFESS) include requirements that have saved money or been cost neutral.

We urge committee members to support this bill which will require “green cleaning programs” and making a critical switch to independent, third party certified cleaning products that will decrease toxic chemical exposures in schools and make schools safer and healthier for students and workers.

Thank you.



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## **Asthma risk in children linked to household chemicals used by their mums around the time of birth**

Women who use a lot of household cleaning products when they are pregnant or shortly after the birth of their baby, may be increasing the risk of their child developing asthma, suggests research from the Children of the 90s study.

The findings, published in this month's issue of the European Respiratory Journal, indicate high exposure to household chemicals during pregnancy or soon after birth was linked to the child developing wheezing and asthma by the age of seven years.

Asthma is the commonest cause of chronic wheeze in children and, despite large increases in asthma prevalence in many industrialised countries, the causes for the rise in prevalence of asthma have not been fully identified.

Researchers monitored the use of household chemicals by pregnant women who were part of the University of Bristol-based study, Children of the 90s – also known as Avon Longitudinal Study of Parents and Children.

They found that children exposed to high levels of chemicals contained in products such as bleach, paint and air freshener had a 41% increased risk of wheezing persistently to the age of 7 ½ years and had slightly lower than normal lung function.

Researchers also carried out skin prick tests on around 7,000 of the children at age 7 which to test for allergies and found that exposure to chemicals had a stronger effect on those children with asthma but without allergies.

Dr John Henderson, lead author of the study and an expert in paediatric respiratory medicine at the University Of Bristol, said small children might be more likely to develop asthma in homes where more chemicals are used.

“We think that is perhaps due to irritant effects of the chemicals on the child after birth, which may cause inflammation of the airways leading to the development of asthma,” he said.

He added, “The importance of this research is that it points to direct effects of chemical exposure on lung development or irritation of the airways after birth.”

Source: - *[Household chemical, persistent wheezing and lung function:effect modification by atopy? J Henderson, A Sherriff, A Farrow and J G Ayres – European Respiratory Journal, March 2008 ]*

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Editors note:

- ALSPAC The Avon Longitudinal Study of Parents and Children (also known as Children of the 90s) is a unique ongoing research project based in the University of Bristol. It enrolled 14,000 mothers during pregnancy in 1991-2 and has followed most of the children and parents in minute detail ever since.
- The ALSPAC study could not have been undertaken without the continuing financial support of the Medical Research Council, the Wellcome Trust, and the University of Bristol among many others.

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