Background and significance:

EPA studies of human exposure to air pollutants indicate that indoor air levels of many pollutants may be 2-5 times and on occasion more than 100 times, higher than outdoor levels. These levels of indoor air pollutants are of particular concern because it is estimated that most people spend as much as 90% of their time indoors. Indoor air pollution is one risk that you can do something about.

- Asthma afflicts about 20 million Americans, including 6.8 million children
- 72% of asthmatic attacks are triggered by perfume and cologne
- 14 million school days missed each year
- 29.7% of those with asthma said air fresheners caused breathing difficulties and 37.2% found scented products irritating
- American Association of Poison Control Centers documented 14,000+ calls involving air freshener exposure in 2005 and 2,500+ exposures resulted in injuries of some type
- Peanut ingredients are found in personal care items (can result in anaphylactic shock)

"Up to 30% of the people are affected by perfumes and other fragrances although they are not aware of this", according to retired EPA scientist, Lance Wallace.

Childhood chemical injuries create future uncertainty:

- 100% not being given accommodations at college
- 86% have/intend to complete college level courses
- 100% employment future looks bleak as to receiving accommodations
- 100% change of college or major if assured of receiving accommodations
- Childhood cancers are on the rise
- NIH in October, 2007, announced they are going to spend 21 years following children to understand the effects of a wide array of factors on children’s health, “to find explanations for the rising rates of premature births, childhood obesity, cancer, autism, endocrine disorders and behavioral problems”. The anticipated budget is $2.7 billion
- Coroners have determined that the use of body sprays had caused deaths in young adults

Work related chemical exposures:

- Asthma also results in emergency room visits and inpatient stays that cost employers
- Asthmatics have absenteeism (10.8 days) and "presenteeism"(18.3 days) (impaired while at work) rates in excess of other, healthier employees.
- Using cleaning sprays at least once per week were 50 percent more likely to have increased asthma symptoms, wheeze, or asthma medication use in nine years than those who used such products less frequently
Employees who used sprays at least four times per week were significantly more likely to be diagnosed with asthma than those who used them less frequently.

The strongest association was found with air fresheners, glass cleaners and furniture-cleaning sprays.

Exposure to cleaning products may be responsible for as many as one in seven cases of adult-onset asthma.

Toxic volatile organic compounds such as terpenes (pine scented products), d-limonene (lemon scented), linalool (fragrance) etc., can react with ozone to form a variety of secondary pollutants including formaldehyde and ultra-fine particles that cause cancer and asthma.

Chemical Exposure Ups Brain Disorders:

Industrial chemicals may be responsible for a "silent pandemic" of brain development disorders affecting millions of children worldwide and not enough is being done to identify the risks, along with the increasing number of earlier onset of Parkinson’s Disease:

- 10% of 1.5 million with Parkinson’s are under 40 years of age
- Pesticides have been found in nursing mothers milk and the infants first bowel movement
- Women exposed to organo-phosphate pesticides had babies with smaller brains and impaired cognition
- ADD/ADHD has been directly linked to both allergies and environmental toxins and can be either eliminated or highly mitigated with proper diagnostic testing, control of electrolyte imbalances, reduction of environmental toxicants (pesticides, VOC’s, air fresheners, cleaning products) foods, chemicals or food additives
- Allergies do mimic ADD/ADHD, etc., and with proper identification can eliminate or reduce the use of prescription drugs (Ritalin etc.) that mask the underlying problem
- Child exposed to an allergen during testing will elicit neuro-behavioral conditions that resolve when allergen is neutralized, as demonstrated in the video, Is Your Child’s School Making Them Sick, by Doris Rapp, MD.
- 1 in 3 Americans living with a brain-related illness, injury or disease. 100 million Americans being affected
- Damage to a developing brain is irreversible
- 8% had learning disability: 4.7 million aged 3-17
- 7% estimated had ADHD
- Large epidemiological study showed regular exposure to pesticides had 70% higher incidence of Parkinson’s than no exposure
- Research utilizing twins has established that genetics probably plays a minor role in Parkinson’s disease, making environmental exposures more of a probability
- Parkinson's disease has been linked to pesticide exposure, mitochondrial damage and altered storage of the neurotransmitter dopamine
- 202 potentially harmful industrial chemicals that may be contributing to dramatic increases in autism, attention deficit hyperactivity disorder (ADHD), and other brain disorders among children
- Pesticides are required to be “safety” tested prior to marketing, but, the marketing strategies used by advertising agencies allude to the fact that some are “safe” to use, which is a direct violation of FIFRA. As a pesticide by it's very design is made to be toxic.
- Some reports show a 1.5-7 fold increase of Parkinson’s from pesticide exposure
- Consumers “believe” that reading a label on a pesticide and seeing that only the active chemical ingredient is listed, believes it to be barely harmful, when in fact the inert ingredients are more toxic.
- Early intervention is the key and education to recognize the warning signs to impede the progression of this problem.
• Children are going through puberty at an alarming younger rate due to the endocrine disruptors that they are exposed to through inhalation, dermal contact from cosmetics/fragrances and in their food (estrogen mimicking plastics)
• Anything that is put on the skin is absorbed into the body and introduced systemically, especially fragrances, as the alcohol denatures the skin and introduces into the vascular system (brain requires nourishment from the vascular system)
• Fragrances upon inhalation are introduced directly into the brain by the olfactory cells (most are lipophilic “fat loving”, brain is made up of lipids)

**Bottom line:** from gestation to geriatrics everyone can be protected and benefit from education regarding environmental toxicants and safer alternatives.