

Women's Health Activist November/December 2009

Women's Health is Environmental Health: Avoiding Common Toxic Exposures

By Lisa Nagy, MD

Environmental toxins can cause medical problems that are difficult for the average doctor to identify and treat. The more severe 'Environmental Illnesses' include Chemical Sensitivity, Chronic Fatigue Syndrome (CFS), fibromyalgia and Gulf War Syndrome. Milder, environmentally induced illnesses are all around us and include anxiety, allergies, autoimmunity and intolerances to chemicals. The toxins found in pesticides, solvents, and heavy metals, and especially those produced by indoor mold can hit women especially hard. Women are four times more likely to exhibit symptoms of Chronic Fatigue Syndrome and Chemical Sensitivity than are men. Worse, it can be overwhelming for people (particularly those who are already ill) to learn about living a less toxic lifestyle and avoiding environmental contaminants. Environmental Medicine offers specific answers by giving both doctors and patients the tools to treat illnesses caused by toxic exposures. Sadly, very few people learn about Environmental Medicine until they are on death's door, as I was.

In 2001, a muscle biopsy showed my cells lacked oxygen and I was told I was dying from something resembling Amyotrophic Lateral Sclerosis (ALS, often called Lou Gehrig's Disease). My facial muscles couldn't produce a smile and I gasped for air all night. I was so weak I could no longer fold a towel or wash my hair. Eventually, my husband, dog, and I developed adrenal failure as well. I was very fortunate to get connected to the Environmental Health Center of Dallas, and to recover. Our household's illnesses were caused by mold found in the huge aquarium shed attached to my home, which produced dangerous mycotoxins called the "trichothecenes."

Trichothecenes are commonly found in the urine of sick people living in moldy homes. These toxins are used as bioterrorism agents and have been extensively studied by the Army. The Army has found that female rats exposed to airborne trichothecenes develop adrenal necrosis (death of the gland that makes steroid hormones).¹ In humans, adrenal insufficiency causes health problems including depression, fatigue, allergies, low blood pressure, dizziness on standing, anxiety and intolerance of stress, hypoglycemia, weight loss, tearfulness and increased sense of smell.² These are symptoms of environmental illness often found in women who live in moldy homes, like I did. The Army's research shows that testosterone may help protect men from toxins such as trichothecenes, which could explain why men are less likely to develop the same symptoms as women.³

A sizable proportion of the U.S. population suffers, often unknowingly, from environmental illnesses. About 15% of the population has been told by a doctor they are chemically sensitive and about 5% is disabled by the condition and cannot be exposed to chemicals such as those found in air fresheners, perfume, and smoke.^{4,5,6} Fully 30% of elderly and CFS patients are chemically sensitive.⁷ Yet, few doctors have learned about Chemical Sensitivity or Chronic Fatigue or learned how they can be treated with Environmental Medicine. In my many years of medical training, I never even heard of these Environmental Illnesses. That's because the symptoms of environmental illness are not included in either medical school curricula or residency training. To this day, the American Medical Association's (AMA) 18-year-old policy is that Environmental Medicine lacks substantiating data and that Environmental Illness (EI) and Chronic Fatigue are not valid diagnoses. My organization is working now to change that policy.

The American Academy of Environmental Medicine trains physicians to assess all potential causes of ill health. The term "environmental illnesses" describes these conditions' unifying symptoms, as well as hormonal, neurotransmitter, nutritional and genetic abnormalities that cause disease. A recent study examined cerebrospinal fluid proteins in patients suffering from Gulf War Syndrome, Chronic Fatigue Syndrome, and fibromyalgia, many of whom also showed symptoms of Chemical Sensitivity. The study "found a unique set of proteins" in these patients' cerebrospinal fluid. The author suggests that, "although the syndrome names are different, the presumed pathologic mechanisms may be shared." Environmental medicine practitioners also suspect that environmental factors affect diseases including Parkinson's Disease, Multiple Sclerosis, ALS, autoimmune diseases, autism, and Attention-Deficit/Hyperactivity Disorder (ADHD).

The need to understand environmental exposure is particularly essential for women with cancer. Research indicates that mold toxins and pesticides can cause cancers, including breast and uterine cancer. There is even a test for trichothecenes in food that indicates that it increases DNA transcription in breast cancer cells.⁸ This could mean that living in a moldy home may increase the growth of existing breast cancer. Avoidance of potentially dangerous chemicals, including Bisphenol A (BPA) and phthalates, commonly used industrial compounds that are often found in plastic containers and food cans, would be wise as well.

I firmly believe that one reason that environmental illnesses are not taken more seriously is because it is chiefly women who develop them. Many women experience cognitive and mental health problems along with environmental illness.¹⁰ When they go to the doctor, they may suffer from mental or cognitive impairment, but their behavior actually results from being environmentally ill. Too often, physicians focus on women's mental health symptoms and insultingly recommend psychiatry, when these patients actually need an environmental medicine specialist. When toxicity is treated, mental and physical symptoms can dramatically improve or disappear.

There has been tremendous and hostile resistance to educating doctors on the dangers of environmental illness and toxic mold, generated mainly by the fields of Occupational Medicine, Public Health, Allergy, and Psychiatry. As a new delegate to the Massachusetts Medical Society (MMS), I introduced a resolution calling for increased awareness about the environmental illnesses and implementation of a one-hour Continuing Medical Education course on Chemical Sensitivity. The resolution received unanimous support after a consensus meeting of five districts — until it was opposed by the Occupational Medicine and Public Health Committee, whose members appear to believe that environmental illnesses are “just” psychiatric. Many MMS members told me they Chemical Sensitivity symptoms, but fear damaging their careers if they spoke in favor of environmental illness education. In September, I had a discussion with the Occupational Medicine Committee about my resolution. If the resolution passes, I will gain the MMS’ support for reversing the national AMA’s policy on environmental illness.

As a result of my horrific personal experience, I founded the Preventive and Environmental Health Alliance to advance clinical and public awareness of environmental illnesses. I am pleased to have the interest of leadership of the major institutions that need to incorporate changes. We meet in October with directors from the National Institutes of Health (NIH) and the AMA for a groundbreaking discussion of the need for bridging research on environmental toxins (especially mold and mycotoxins) to the clinical practice of Environmental Medicine.

Women have to know about environmental illness and the need for change in governmental policies. The AMA needs to change its stance and promote a sanctioned specialty (Environmental and Integrative Medicine) to train doctors to correctly identify these diseases. Insurance companies need to expand reimbursement for allergy testing, nutritional assessments, and effective treatments. More research is needed at the NIH and elsewhere on detoxification treatments that work, such as sauna, intravenous vitamins, oxygen therapy, chelation, immune modification, hormone replacement and antigen therapy.

This is the preventive medicine of the future. If you are concerned about exposure, I encourage you to get involved! Help us to push for Congressional support for environmental health legislation. No one should suffer alone from these conditions. Women suffering from environmental illnesses do not need drugs and condescension, they need referral and information from better-informed doctors! We must insist on being heard; we must help the millions of women, our sisters, who are too ill to help themselves. We must work together and present a unified force to demand a greater focus on this women’s health issue, right now.

Lisa Nagy, MD, was recently appointed to the Centers for Disease Control and Prevention’s (CDC) Working Group on the Scientific Understanding of the Effect of Chemicals on Human Health. The founder and president of the Preventive and Environmental Health Alliance, she can be reached at lisa@nagy1.com. She has no medical practice, products, or financial investment in the promotion of environmental medicine.

Resources

- The Preventive and Environmental Health Alliance: 508.696.6998, www.EnvironmentalMedicineinfo.com
- Environmental Health Center of Dallas: www.ehcd.com
- American Academy of Environmental Medicine: www.AAEMonline.org
- [Living with Environmental Illness](#), Stephen Edelson
- [Prescriptions for a Healthy House](#), Erica Elliot.

Easy Tips for Avoiding Environmental Toxins¹¹

- Don’t use perfume or chemically scented products with ‘fragrance’
- Don’t use pesticides at all
- Use non-toxic detergent and fabric softener
- Use non-toxic cleaning products
- Do not live in a musty home: dehumidify and fix leaks
- Avoid plastic bottles
- Use charcoal air filter to cleanse air of chemicals
- Eat organic foods especially milk, butter, eggs, meat, apples
- Take supplements to detoxify (including Vitamin C)
- Shop at www.needs.com

Common Symptoms of Chemical Sensitivity¹²

- Allergies and intolerances to new things like clothing stores, foods, pollens, mold
- Dislike of perfume, diesel exhaust, grocery store detergent aisle, and/or chemicals of all kinds
- Intolerance to wood or cigarette smoke, air fresheners, tire stores, airplanes
- Frequent headaches in response to wine, certain foods or smells, newspapers, and mold
- Red face or nose; dark or puffy eye circles.
- Memory loss, decreased cognition, difficulty concentrating and reading
- Dysautonomia: blurry night vision, experiencing tired legs after prolonged standing
- Feeling chilly after eating meals or in grocery stores (adrenal and thyroid)
- Behavioral and emotional dysfunction: anxiety, confusion, talkativeness, mania
- Muscle weakness and fatigue (hypoxic mitochondria), exhaustion after physical exertion, chest pain, adrenal and thyroid insufficiency
- Hypotension, weight loss, stress intolerance
- Sensitivity to clothing tags itching one's neck, one's bra feeling too tight, pain from inflation of blood pressure cuff
- Cell phone heating up in one's hand, dislike of sitting near fluorescent lighting, computers, phones, TV, or refrigerators.

References

1. Joffres MR, Williams T, Sabo B, et. al., Environmental Sensitivities: Prevalence of Major Symptoms in a Referral Center, The Nova Scotia Environmental Sensitivities Research Center Study, *Environ Health Perspect.* 2001;109(2):161-5.
2. Thurman JD, Creasia DA, Trotter RW, "Testosterone Prevents T-2 (Mold)-Toxin Induced Adrenal Cortical Necrosis in Mice," US Army Research and Development Command, Fort Detrich, MD: Army Medical Research Institute of Infectious Diseases, 1988.
3. Fauci, A., Braunwald, E., Kasper, D., Harrison's Principals of Internal Medicine, New York: McGraw Hill Medical, 2008, Chapter 336.
4. Mitchell F (ed), *Multiple Chemical Sensitivity: A Scientific Overview*, Washington, DC: U.S. Department of Health and Human Services, and the National Academy of Science, 1995.
5. Kreuzer R, Neutra R.P., Lashuay N. Prevalence of people reporting sensitivities to chemicals in a population based survey, *American Journal of Epidemiology* 1999; 150:1-12.
6. Caress S, Steinemann AC. The prevalence of multiple chemical sensitivities in a population-based study, *American Journal of Public Health* 2004, 94:746-747.
7. Bell IR, Schwartz GE, Peterson JM, Amend D. Cognitive dysfunctions and disabilities in geriatric veterans with self reported intolerance to environmental chemicals, *Journal of Chronic Fatigue Syndrome* 1997, 2:5-42
8. Baraniuk JN, Casado B, Maibach H, et al., A chronic fatigue syndrome-related proteome in human cerebrospinal fluid, *Bio Med Central Neurolog* 2005; 5-22.
9. Bowens, P, Lancova, K, Dip, R, "A new PCR-based bioassay strategy for the detection of type A trichothecenes in food, *Analyst* 2009; 134:939-944.
10. Brown JS, "Toxicological Theories of Mental Illness: A Clash of Paradigms and Call for Reunification," *NADD Bulletin* 2008; 11(5):97-100.
11. Rea WJ, Chemical Sensitivity: Tools of Diagnosis and Methods of Treatment (vol. 1-4) Boca Raton, FL: CRC-Leis Publishers, 1998.
12. Rea WJ, Chemical Sensitivity: Tools of Diagnosis and Methods of Treatment (vol. 1-4) Boca Raton, FL: CRC-Leis Publishers, 1998.