ADA Audio Conference Series
December 16, 2014

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Accommodating Persons with Environmental Sensitivities: Challenges and Solutions

ADA National Network
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December 16, 2014

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Overview

- Unique health, medical, and disability access needs faced by people with chemical and electrical sensitivities or intolerances (CS/ES)
- Importance of healthy indoor environmental quality (IEQ)
- Brief history of Federal recognition of chemical sensitivities; select policies, programs, and practices
- Eliminating or reducing environmental access barriers; accommodating people with CS/ES; examples of harassment and discrimination

Chemical Sensitivities/Intolerances

- A Two-Staged Illness: Initiation and Triggering
- Reactions are triggered by low level everyday chemical and environmental exposures such as:
  - **Pesticides:** weed killers, bug sprays, treated wood products
  - **Solvents:** paints, glues, gasoline, nail polish/remover
  - **Indoor Air VOCs:** new carpet, formaldehyde, plasticizers, fragrances and fragranced products, mold VOCs
  - **Cleaning Agents:** bleach, ammonia, phenolic disinfectants, air fresheners
  - **Combustion-related Products:** auto and diesel exhaust, tobacco smoke, natural gas, tar, asphalt
  - **Drugs/Medical Devices:** over-the-counter and prescription medications, anesthetics, implants, vaccines, chemotherapy
- Many individuals also react to foods, food additives and preservatives, natural substances, and electromagnetic fields
- Individual tolerances may vary
Who is affected by CS/CI?

California and New Mexico Behavioral Risk Factor Surveillance Surveys (BRFSS):
“Do you consider yourself allergic or unusually sensitive to everyday chemicals like those in household cleaning supplies, paints, perfumes, soaps, garden sprays, or things like that?”

California (1995):
- 16% are “allergic or unusually sensitive to everyday chemicals”
- 6.3% have a diagnosis of MCS or EI
- 4% unusual sensitivity to “a lot of chemicals”

New Mexico (1997)
- 16% are “allergic or unusually sensitive to everyday chemicals”
- 2% have a diagnosis of MCS or EI

Who is affected by CS/CI? (cont.)

Two national surveys (2002-2003) and (2005-2006) (Caress and Steinemann)
11.1% and 11.6%, respectively, reported hypersensitivity to common chemical products such as perfume, fresh paint, pesticides, and other petrochemical-based products; 2.5% and 3.9%, respectively, had been diagnosed with MCS.

20.3% of primary care patients at two clinics in San Antonio, Texas met criteria for chemical intolerance based on completion of the validated Quick Environmental Exposure Sensitivity Inventory (QEESI)
Finding: Chemical intolerance occurs in 1 of 5 primary care patients yet is rarely diagnosed by busy practitioners. (Katerndahl, et al. 2012)
Electrical or Electromagnetic Sensitivities/Intolerances

- People with ES react to electromagnetic fields (EMFs) from electrical devices and frequencies.

- Reactions are triggered by:
  - electrical appliances and devices, microwaves, transformers, high tension wires;
  - computers, cordless phones, cell phones and smart phones, cell towers, Wi-Fi, fluorescent lights, smart meters, etc.

- Individual tolerances may vary

- 3% of Californians report ES

Toxicant-induced Loss of Tolerance

- Diagnosis
- Symptoms
- Triggering
- Low Level Exposure
- Initial Exposure Event
- Loss of Specific Tolerance
- Susceptible Person
- Sensitive Person
- Masking
The Environmental Medical Unit

- **Ear, Nose and Throat**
  - sinusitis
  - polypos
  - tinnitus
  - recurrent otitis

- **Miscellaneous Syndromes**
  - Chronic Fatigue Syndrome
  - implant syndromes
  - "Gulf War Syndrome"
  - Post/other disaster syndromes

- **Skin**
  - eczema
  - hives
  - other rashes, eruptions

- **Connective Tissue/Musculoskeletal**
  - fibromyalgia
  - carpal tunnel syndrome
  - temporomandibular joint dysfunction (TMJ) syndrome
  - arthritis
  - lupus and other auto-immune diseases

- **Neuropsychological**
  - Attention Deficit Hyperactivity Disorder (ADHD)
  - depression
  - bipolar disorder
  - panic disorder
  - migraines and other headaches
  - seizures
  - autism

- **Cardiovascular**
  - arrhythmias
  - hypertension
  - hypotension
  - Raynaud's phenomenon

- **Respiratory**
  - asthma
  - Reactive Airways Dysfunction Syndrome (RADS)
  - toluene disocyanate (TDI) hypersensitivity

- **Gastrointestinal**
  - irritable bowel reflux

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**TOXICANT-INDUCED LOSS OF TOLERANCE?**

**The Environmental Medical Unit**

- Porcelain walls/ceiling
- Joints: clear silicone
- All cotton linen and mattress
- Metal chair
- Hardwood or metal door
- Terrazo baseboards and flooring with acid-free grout
- Vertical metal blinds
- Metal bed
- Glass-enclosed television
Importance of Healthy Indoor Air Quality & Environmental Access Barriers

90% of Americans spend 90% of the day indoors (home, school, office, vehicle)

80,000 chemicals introduced into our environment since World War II

- Increased indoor air pollution sources
- Decreased fresh air intake
- New or reformulated substances and products
Healthy Indoor Environmental Quality

- Healthy indoor and outdoor environmental quality are critical to the health and well-being of everyone, but particularly for people impacted by environmental access barriers.

- Improving indoor environmental quality makes indoor environments healthier for everyone and more accessible for people with chemical and electrical sensitivities.

- Healthy and accessible environments, at the most elemental level, must be smoke, pesticide, and fragrance-free with minimal electromagnetic pollution.


Funded by the U. S. Access Board

Collaborative project conducted by the National Institute of Building Sciences (NIBS)

Purpose: make public and commercial buildings more accessible for people with chemical and electromagnetic sensitivities and healthier for everyone

http://www.access-board.gov/research/completed-research/indoor-environmental-quality
Federal Recognition of CS

Social Security Administration
Program Operations Manual, February 1988

Department of Justice, Civil Rights Division
Americans with Disabilities Act Guidelines, July 26, 1991
Those severely affected by MCS “will satisfy the requirements to be considered disabled under the regulation.” Case by case basis
Federal Register, Vol. 56, No. 144, pp. 35549; 35699.

Department of Education

Department of Housing and Urban Development
HUD Legal Memorandum, April 14, 1992
Recognizes MCS/EI as “handicaps” under the Fair Housing Act entitling reasonable accommodations on a case by case basis

US HUD Recognition of CS

  - Recognition of the disability
  - Reasonable accommodations for those disabled under the Fair Housing Act and the Rehabilitation Act of 1973
- June 6, 1991: Draft Technical Guidance Memorandum 91-3
  - Discusses HUD recognition of MCS as a handicap
  - Provides examples of accommodations which are considered reasonable (carpeting; pesticides)
- April 14, 1992: HUD Legal Memorandum
  - Recognition of MCS/EI as a physical disability entitling reasonable accommodations on a case by case basis
  - Excludes allergies
  - Extends coverage to those recognized as disabled by the Social Security Administration
  - Lists other federal agencies that recognize MCS
Federal Policies and Healthier Housing

EPA Promotes Integrated Pest Management (IPM)

Food Quality Protection Act of 1996
  EPA restricts the use of the pesticide chlorpyrifos June 8, 2000

“IPM in Multi-Family Housing Maintenance Training Manual,” 2009

HUD PIH 2011-22, April 26, 2011, Promotion of Integrated Pest Management (IPM) as an environmentally sound, economical, and effective means to address a major resident concern

HUD PIH-2009-21 (HA), July 17, 2009, Non-Smoking Policies in Public Housing

EEOC: Tracked CS Charges Since 1993

CS charges for failure to accommodate are nearly double all other charges;

CS has lower rate of resolution than all other charges;

CS not yet litigated

Workplace Policies

- No Smoking Policy
- Fragrance-Free Policy
- IPM (Integrated Pest Management) Policy: eliminate conventional pesticides for buildings and grounds; organic or low impact products and practices, if necessary
- Cleaning and Maintenance Policy: promote least toxic/low impact products and practices for cleaning and maintenance; materials and furnishings; remodeling
- Notification Policy
- Vehicle Idling Policy
- Cell Phones and Smart Phones, Wi-Fi, and EMF Shielding Policy
Federal Fragrance-Free Policies

CDC Indoor Environmental Quality Policy, June 2009

Fragrance-Free Policy

“Scented or fragranced products are prohibited at all times in all interior space owned, rented, or leased by CDC.” (p. 9)

“Fragrance is not appropriate for a professional work environment, and the use of some products with fragrance may be detrimental to the health of workers with chemical sensitivities, allergies, asthma, and chronic headaches/migraines.” (p. 9)

Census Bureau, March 2009

Issued fragrance-free policy and implementing language to protect employees and accommodate disabled workers

Department of Health and Human Services, October 10, 2010

Restricts application of fragranced products at work; exempts fitness centers and day-care centers

List of non-permissible fragranced cleaning and maintenance products identical to CDC Fragrance-Free Policy

FEMA

Blanket purchase agreements (BPAs) for medical supplies require products to be latex and fragrance-free (Source: Getting Real I, September 2010)
U.S. Access Board

1999 Holds training for Board and staff on fragrances and IAQ

2000 Adopts Fragrance-Free Policy for Board Meetings
http://www.access-board.gov/the-board/policies/fragrance-free-environment

2000 Creates committee to examine CS/ES

2003; 2007 Contracts with National Institute of Building Sciences to study indoor environmental quality (IEQ) and CS/ES

2006 “Indoor Environmental Quality Project Report”
http://www.access-board.gov/research/completed-research/indoor-environmental-quality

2010 Opens permanent meeting space designated fragrance-free: all participants refrain from perfume and cologne; unscented personal care products; scent-free cleaning and maintenance (July 2010)
Accommodating the CS Employee

*Chemical sensitivity may be a preventable disability*

*Avoidance of exposures triggering reactions is the key*

*Early intervention is critical to avert disability*

*Many accommodations are modest and inexpensive and can be accomplished with common sense*

*The affected individual is frequently the best judge of what needs to be done*
Responding to Environmental Sensitivities in the Workplace

**Employee:**
- Identify exposures triggering reactions
- Request product labels, Material Safety Data Sheets (MSDS), and other pertinent information
- Seek advice and support from advocates, indoor experts, union leaders, co-workers, and others
- Develop accommodation request
- Discuss situation with physician and request letter of support
- Meet with supervisor or employer to discuss accommodation request

**Employer:**
- Listen to employee’s request and work toward a solution
- Be aware that many modifications necessary to accommodate the environmentally sensitive employee make the workplace healthier for everyone
- Failure to accommodate may create or sanction an atmosphere of harassment and retaliation and ostracize the disabled employee

Accommodating the Environmentally Sensitive Employee: The Basics

- A private office with a window that opens
- A well-ventilated work environment free of pollutants such as tobacco smoke, pesticides, fragrances and fragranced products, etc.
- Use of least toxic/allergenic building materials, furnishings, and supplies
- Shielding from electromagnetic fields
- Prenotification of building events such as painting, remodeling, roofing, and similar activities with provisions for alternative work arrangements
- Flexible work time and place; option to work at home
- Education of coworkers to avert stigma and harassment
Assistive Technology

- Charcoal mask, industrial respirator, or other personal protection equipment or device
- Oxygen with ceramic or stainless steel mask and tygon or stainless steel tubing
- Charcoal, HEPA (high efficiency particulate air), and/or electronic air filter, or other air filtering device or equipment
- Reading box
- Low emission computers, VDT terminals, and other equipment
- Restrict cell phones, smart phones, and Wi-Fi
- Hardwired phones and internet access
- Shielding from electromagnetic fields

Assistive Technology (cont.)

- Localized exhaust for computers, printers, and other equipment
- Separate person with CS/ES from exposure to computers and electronic equipment
- Turn off fluorescent lighting; incandescent or natural lighting in lieu of fluorescent lighting
- Speaker phone or intercom system to participate in meetings; to communicate with others
- Assistant or errand runner who can take care of tasks that the affected individual cannot perform due to chemical or electromagnetic exposures
Incidents of Harassment and Discrimination

- Employee forbidden to use a charcoal mask or oxygen at work in private office
- Employee forbidden to open window, even in a private office
- Window(s) nailed shut to prevent opening
- Signs that request a specific accommodation and name the disabled employee:
  "Please refrain from the use of perfumes for Bonnie"

Harassment and Discrimination (cont.)

- Intentional or intensified use of perfume or other scented or problematic products (nail polish, hair spray, etc.) in the workplace
- Perfume poured on CS person’s chair; air freshener sprayed on CS employee’s phone
- Use of cell phone, smart phone, or microwave oven in the vicinity of ES employee
- Employee “accommodated” by selecting worst possible/least accessible worksite:
  - CS employee moved into janitorial storage office
  - Teacher with CS moved to copy center; another teacher moved into art room
  - ES employee moved next to an electrical transformer
Cleaner Air Room & Paths of Travel

- No smoking
- Fragrance-Free
- Pesticide-Free (Indoors and Outdoors)
- Least Toxic/Risk Cleaning Products
- No Recent Construction or Remodeling Including Carpet Installation
- Cell phones and Wi-Fi turned off
- Ability to turn off or unplug computers and other electrical equipment by occupant or staff
- Ability to turn off fluorescent lighting by occupant or staff
- Ability to adjust temperature and air flow by occupant or staff, or the availability of operable window(s)

http://www.access-board.gov/research/completed-research/indoor-environmental-quality
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Accommodating Persons with Environmental Sensitivities: Challenges and Solutions

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Darrell Lynn Jones
If You’re Feeling Overwhelmed about Accommodating People with Sensitivities….

• You’re in good company.
• Imagine what the person who lives with environmental and chemical sensitivities is faced with every day. It’s down right mindboggling.
• But you don’t need to do EVERYTHING. You just need to start.

*Do what you can, with what you have, where you are.* ~ Theodore Roosevelt

Getting Started

• As with all aspects of managing an organization or business, you widen your impact one policy at a time, one procedure at a time, keeping a vision of inclusion in mind as you move forward.
• Let’s talk about some myths and realities for a moment to make sure we have clarity about some basic things.
**Myth #1**

Myth: Environmental and Chemical Sensitivities are “psychological.”

There was a time when there was insufficient research and much misinformation was circulating that caused people to believe a reaction to low level environmental exposures can only be psychological. But today, anyone who still believes it’s psychological probably hasn’t read the available literature.

Selected Bibliography of Research Articles at http://www.chemicalsensitivityfoundation.org/chemical-sensitivity-research_bibliography.html

**Myth #2**

Myth: It’s the odor of something that people with chemical sensitivities react to.

In order for you to smell something, molecules from that thing have to make it to your nose and then bind to the hair-like cilia & trigger the neuron that causes you to perceive a smell. A perfume, for example, may smell very pleasant to an individual, but once molecules of the chemicals in that perfume make it into the bloodstream of the person, they can still make the person very sick.

Myth #3

Myth: If a chemical has passed an inspection as being safe, it’s not possible for daily low level exposures to harm an individual. This belief does not take into account that almost everyone on the planet today is exposed to far more than just one chemical on a daily basis. Safety testing is not done on the combination effect of all the chemicals in one’s environment.

Myth #4

Myth: Sensitivity to chemicals is limited to very few people and is almost non-existent. As Mary mentioned, reliable research has shown that about 16% of the population is “unusually sensitive” to chemicals; up to 6% of the population is chronically ill and disabled by exposures to chemicals; and about 3% report electrical sensitivities.
Reality #1

Reality: Many individuals with environmental/chemical/electrical sensitivities feel pretty beat up by a medical system that can’t help them, friends and loved ones who don’t believe them, and constant assaults on their well being by the thousands of chemicals and other substances in the environment. Their sense of self may be traumatized by the time they find their way to you. They may be very fearful about approaching yet another agency or applying for a job, if they are able to work.

You don’t look sick…oh to be understood

• “Our presentation communicates the double message of ‘invisible illness’—that we can look perfectly fine, but feel absolutely crummy.”

~ anonymous
Reality #2

Reality: Many people with environmental sensitivities have lost everything they own, declared bankruptcy, and gone through long stretches of time in which they could not work or participate in anything.

Reality #3

Chemicals can affect any body system, so an individual may experience symptoms as diverse as:

- Physical (headaches, severe fatigue, chronic viral/bacterial infections, muscle pain, metabolic disorders)
- Cognitive (memory loss, ADD, ADHD, confusion)
- Neurological (tics, nerve pain, seizures, coordination problems)
- Psychological (irritability, depression)
Reality #3, cont’d.

This has implications for a wide range of accommodations that may need to be considered when serving or employing someone. For example, it may not just be removal/reduction of chemicals that’s necessary; if the person has cognitive problems, you may need to make services and employment accessible in ways that you would for people with head injuries, ADD, or learning disabilities, for example. The key is to know the individual.

Reality #4

Reality: As a non-profit organization, small business or government entity you may not have the budget to take on all the issues that are related to environmental sensitivities, but you can take on some things, and make a difference. Many things are low cost or no cost.
**15 Things You Can Easily Do**

1. Take the person at their word. If they tell you they react to the plastic in their telephone, or to the electro-magnetic field from their computer, accept that at face value.

2. Assist the person to focus on functional issues and needs rather than on all the things they’re reacting to and all their physical symptoms. Use a structured interview, guided by well thought out forms and checklists to assist them to identify needs, barriers, and goals.

**Assessing Needs & Planning**

Example items for your checklist:

__What limitations is the person experiencing?
__How do these limitations affect the person’s daily activities?
__What specific activities are problematic?
__What accommodations would assist in reducing or eliminating these problems?
__Which ones are non-negotiable, and which ones could be phased in over time as resources allow?
15 Things You Can Do, cont’d.

3. Enact a fragrance free policy. Don’t get caught up in debates about individual rights to put whatever you want to on your body. If you are a federally funded program, a government agency, or a public business, you have an obligation to be as accessible as you can be. Advertise your policy liberally.

Example Announcement

To accommodate those with allergies, breathing conditions or multiple chemical sensitivities please do not smoke or wear scented products when attending ABIL events or visiting ABIL offices. ABIL’s events are accessible and in compliance with ADA guidelines. Upon request we provide sign language interpreters and materials in alternate formats.

~ Arizona Bridge to Independent Living
Example Agency Policy

[The] *CDC encourages employees to be as fragrance-free as possible when they arrive in the workplace. Fragrance is not appropriate for a professional work environment, and the use of some products with fragrance may be detrimental to the health of workers with chemical sensitivities, allergies, asthma, and chronic headaches/migraines.*

~ Centers for Disease Control


CDC Non-Permissible Products

- Incense, candles, or reed diffusers
- Fragrance-emitting devices of any kind
- Wall-mounted devices, similar to fragrance-emitting devices, that operate automatically or by pushing a button to dispense deodorizers or disinfectants
- Potpourri
- Plug-in or spray air fresheners
- Urinal or toilet blocks
- Other fragranced deodorizer/re-odorizer products
4. Enact a policy that the least toxic cleaning products will be used in your offices, and that potpourri, air fresheners, incense, and lighted candles will not be used.

5. Be conservative about renovations, using least toxic paint and building products.

6. Provide advance notice of chemical usage such as carpet shampooing, floor waxing, or painting through email or signage.
7. Use only Integrated Pest Management practices that will be safe for ALL your staff, visitors, and customers.

8. When possible, have cleaning done when the building is not occupied to reduce exposure.

9. If your space and resources allow, create a safe room, using individuals with environmental sensitivities to advise you on the design and construction of the room.

10. As a job accommodation, provide an office or workspace that has working windows.

11. If consumers/customers are too ill to come to your office, find ways of providing services that are safe, i.e. over the phone, via email or regular mail, or through Skype.

12. If your organization provides housing location assistance, when you survey landlords, include questions about planned renovations, use of pesticides, neighborhood features such as industrial emissions, or whatever is relevant for your area.
A Note About Integrated Housing

Acknowledge that safe and accessible housing for a person with environmental sensitivities may mean segregated housing of some kind which may seem at odds with the civil rights objective of integration (but may be essential for some people).

15 Things You Can Do, cont’d. 5

13. Provide the option of an employee with environmental sensitivities working at home if their job can be done at a distance. If not feasible, work with the individual to create a safe zone within the office that will make their continued employment manageable.

14. Recognize that an employee with sensitivities may need to rest during the course of a day. Provide a cot or other place where they can lie down.
Example Accommodations

Clerical employee having difficulty breathing due to coworker fragrances and new carpet fumes. Coworkers were asked to eliminate the use of fragrances and time the employee spent in the office was reduced by altering face-to-face communication with coworkers to telephone, email, or fax. Also suggested that carpet be detoxified or removed and replaced with tile or wood.

~ Job Accommodation Network

15 Things You Can Do, cont’d. 6

15. Educate yourself about the key issues that people with MCS face so you can provide support and advocacy. The three top issues you will likely encounter are:

- Constant challenges to identity—if new sensitivities develop, the person’s world may continue to shrink. Talking this through with a compassionate person could be life saving.
- Safe housing—it’s hard to come by, so everything you can learn will be helpful.
15 Things You Can Do, cont’d. 7

#15 continued:
Brainstorming solutions—if the person is severely fatigued or dealing with cognitive problems, assistance in sorting through the myriad of resources and accommodations needed may be very welcome.

Resources

- Job Accommodation Network MCS page—http://askjan.org/media/MCS.html
- MCS Housing—http://www.healsoaz.org/housing.htm
- MCS Referral & Resources—http://www.mcsrr.org/
- The Chemical Sensitivity Foundation—http://www.chemicalsensitivityfoundation.org/
- Chemical Injury Information Network—http://ciin.org
For more information

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Questions?
Thank you for participating in today’s ADA-Audio Conference Session

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