

### **What is Multiple Chemical Sensitivity(MCS)?**

Multiple Chemical Sensitivity (MCS) also known as Toxic Chemical Injury is a very painful, debilitating chronic medical condition characterized by extreme sensitivity to chemicals. Reactions may be immediate or delayed and can be life-threatening. People with Multiple Chemical Sensitivity /Toxic Chemical Injury are made extremely ill by the slightest exposure to chemicals found in everyday life, such as, but not limited to pesticides, insecticides, fumigants, fertilizers, household cleaning products, air fresheners, deodorizers, glue, self – adhesives, carpets, new building materials, paint, ink, emission from photocopiers machines, inkless pads, carbonless paper, automobiles exhausts, gasoline, fumes from barbecue grill, wood burning, perfumes, scented products, carbon paper, shampoos, hair products, beauty products, incense, dry cleaning and virtually everything else in the environment.

### **What causes Multiple Chemical Sensitivity (MCS) /Toxic Chemical Injury?**

Recent Scientific/Genetic Research found that Multiple Chemical Sensitivity (MCS)/Toxic Chemical Injury, is caused by a combination of variation of genes and exposure to chemicals in the environment. It also has been found that numerous toxic chemicals are known to alter genes into susceptible genes. Once genes have been altered into susceptible/defective genes, all it takes is subsequent exposure to ANY chemical to trigger MCS.

### **How prevalent is Multiple Chemical Sensitivity/Toxic Chemical Injury?**

Multiple Chemical Sensitivity(MCS)/Toxic Chemical Injury, is an alarmingly increasing Public Health Problem

Worldwide. About 30% of the population Worldwide, including young children, have become sensitized following exposure to toxic chemicals in the environment. Dangerous pesticides used in schools, housing, offices, malls, lawns, public parks and facilities, contribute greatly to the incidence of Multiple Chemical Sensitivity (MCS)/Toxic Chemical Injury. The United States of America, Australia, Canada, China, Denmark, England, France, Germany, Italy, Japan, Spain, Switzerland are among the countries greatly affected by MCS.

### **Is Multiple Chemical Sensitivity (MCS)/Toxic Chemical injury, recognized?**

YES. Multiple Chemical sensitivity (MCS) is recognized by many Federal Governmental Agencies, including the Social Security Administration, Department of Housing and Urban Development (HUD), Environmental Protection Agency, and Americans with Disabilities Act, the US Access-Board, an independent Federal Agency devoted to accessibility for persons with Disabilities and numerous Governmental Agencies and Commissions. It is important to note that the US Access-Board has adopted a Fragrance-free environment for persons disabled by MCS, and has issued extensive Guidelines of Accommodations for persons disabled by MCS and Electromagnetic Sensitivity (EMS).

<http://www.access-board.gov/news/ieq.htm>  
<http://ieq.nibs.org>  
<http://www.access-board.gov/about/policies/fragrance.htm>

Employers, schools, offices, hotels, stores, Doctors and Dentists, Hospitals/ Health Care Facilities, and other public places and transportations, must make their

premises accessible and provide reasonable accommodations as required by Law, the Americans with Disabilities Act (ADA) for people disabled by MCS. The accommodations should be tailored to the specific needs of a person disabled by MCS and worked out satisfactorily between that person and the establishment. Due to the nature of the disability, fast service should be granted for persons disabled with MCS, to avoid potentially life-threatening reactions. It is not uncommon for an establishment not accessible for persons disabled by MCS to modify its policy and provide services at the home of the disabled person. The Governors of 35 States have Proclaimed Multiple Chemical Sensitivity/Toxic Chemical Injury Awareness. Notably, Multiple Chemical Sensitivity (MCS) Awareness has been proclaimed for 7 years in a row, in the State of Florida by Governor Jeb Bush. Other States where Multiple Chemical Sensitivity (MCS) /Toxic Chemical Injury have been proclaimed are: Alabama, Arizona, Colorado, The Commonwealth of Massachusetts, Connecticut, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Michigan, Maryland, Missouri, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Jersey, New Hampshire, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, West Virginia, Wisconsin, Washington. The respective Mayors of the City of Bradenton (FL) and of the District of Columbia have proclaimed MCS Awareness, and remarkably, the respective Mayors of Broward County (FL) have proclaimed MCS Awareness for 8 years in a row.

### **What are the symptoms of MCS?**

People with MCS become extremely ill, and experience a wide range of invisible, debilitating hypersensitivity reactions, even life-threatening, upon the slightest chemical exposure via inhalation, skin absorption, and

ingestion. Symptoms may include, but are not limited to, severe breathing and neurological problems, muscle and joint pain, trouble thinking, concentrating, short term memory loss, confusion, visual changes, disorientation, dysfunction of the senses, loss of smell, or acute sense of smell, sinus congestion, burning eyes and throat, nausea, digestive problems, difficulty swallowing, extreme fatigue, numbness, tingling sensations, convulsions, heart palpitations, irregular heart beat, mood and behavioral changes, headaches of varying severity, and rhinitis. MCS people usually have severe food intolerances and hypersensitivities to molds, pollen, algae, insect bites, and medications, which can be life-threatening. Regardless of which form, the symptoms of MCS manifest themselves, the key word is SEVERE REACTIVITY to chemicals in the environment.

### Is there a cure for Multiple Chemical Sensitivity(MCS)/Toxic Chemical Injury?

NO. Unfortunately, there is no cure at present time. Reducing exposures to chemicals and trying to avoid what is known to trigger reactions is the best way to control reactions for people with MCS. Further Scientific/Genetic research is urgently needed to fully evaluate the physiological mechanisms of this devastating environmentally triggered disease followed by research into possible treatment such as gene therapy.

### Resources

New Mexico Multiple Chemical Sensitivities Task Force. NM Department of Health, Public Health Division. Pall,M (2001),Multiple Chemical Sensitivity, the End of Controversy, Washington State University,School of Molecular Biosciences.

NM Governor's Committee on concerns of the Handicapped.  
NM Environment Department.  
Shapira Michael, et al., A transcription-activating Polymorphism in the ACHE promoter associated with acute sensitivity to anti-acetylcholinesterases, Human Molecular Genetics, 2000, Vol.9,No.9 1273-1281.  
Schnakkenberg Eckart et al, A cross-sectional study of self-reported chemical-related sensitivity is associated with gene variants of drug metabolizing Enzymes, Environmental Health 2007, 6:6 doi:10.1186/1476-069X-6-6.  
McKeown-Eyssen, et al, Case –control study of genotypes in multiple chemical sensitivity:CYP2D6, NAT1, PON1, PON2 and NTHFR, International Journal of Epidemiology 33 (5):1-8  
National Human Genome Research Institute, National Institute of Health.

### Websites:

<http://www.mcs-global.org>  
<http://www.nettally.com/prusty/mcs.htm>  
<http://www.mcs-america.org>  
<http://www.drrapp.com>  
<http://www.chem-tox.com>  
<http://www.ourlittleplace.com>  
<http://ciin.org>  
<http://www.rmeha.org>  
<http://thebestcontrol.com>  
<http://www.satori-5.co.uk>  
[http://www.princessstigerlily.com/mcs/mcs\\_by\\_area.html](http://www.princessstigerlily.com/mcs/mcs_by_area.html)  
<http://www.herc.org>

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*What you should know about.....*

## MULTIPLE CHEMICAL SENSITIVITY (MCS)

Also known as TOXIC CHEMICAL INJURY



**An increasingly alarming World  
Wide Public Health Problem triggered  
By our Toxic Environment**

*This brochure has been written by  
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[www.nettally.com/prusty/mcs.htm](http://www.nettally.com/prusty/mcs.htm)