

Multiple Chemical Sensitivities Under Siege

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Movies like *Erin Brockovich* and *A Civil Action* depict the true stories of communities whose members became ill after drinking water contaminated with industrial waste. Their struggles clearly show how difficult it is for people to hold corporations responsible for the harm they have caused. Whether individuals are injured by exposures to contaminated air or water, silicone breast implants, cigarettes, or other chemicals, their quest for justice is usually a David versus Goliath battle that pits average citizens against giant corporations.

When confronted with the harm they have caused, corporations typically blame the victims, deny the problem, and try to avoid responsibility for the harm caused. The corporate response to people with multiple chemical sensitivities (MCS) has been no different. People with MCS are made sick from exposures to many common products, such as pesticides, paints, solvents, perfumes, carpets, building materials, and many cleaning and other products. But the manufacturers of these products would rather silence the messenger than acknowledge the message that their products are not safe. To that end, the chemical manufacturing industry has launched an anti-MCS campaign designed to create the illusion of controversy about MCS and cast doubt on its existence. What has been said about the tobacco industry could easily apply to the chemical industry regarding MCS, that is, “the only diversity of opinion comes from the authors with ... industry affiliations (1).”

It is a credit to the chemical industry’s public relations efforts that we frequently hear that multiple chemical sensitivities (MCS) is “controversial” or find journalists who feel obligated to report “both sides” of the MCS story, or attempt to give equal weight to those who say MCS exists and those who say it does not. But this is very misleading, since there are *not* two legitimate views of MCS. Rather, *there is a serious, chronic, and often disabling illness that is under attack by the chemical industry.*

The manufacturers of pesticides, carpets, perfumes, and other products associated with the cause or exacerbation of chemical sensitivities adamantly want MCS to go away. Even though a significant and growing portion of the population report being chemically sensitive, chemical manufacturers appear to think that if they can just beat on the illness long enough, it will disappear. To that end, they have launched a multipronged attack on MCS that consists of labeling sufferers as “neurotic” and “lazy,” doctors who help them as “quacks,” scientific studies which support MCS as “flawed,” calls for more research as “unnecessary,” laboratory tests that document physiologic damage in people with MCS as “unreliable,” government assistance programs helping those with MCS as “abused,” and anyone sympathetic to people with MCS as “cruel” for reinforcing patients’ “beliefs”

that they are sick. They also have been influential in blocking the admission of MCS testimony in lawsuits through their apparent influence on judges.

Like the tobacco industry, the chemical industry often uses non-profit front groups with pleasant sounding names, neutral-appearing third party spokespeople, and science-for-hire studies to try to convince others of the safety of their products. This helps promote the appearance of scientific objectivity, hide the biased and bottom-line driven agenda of the chemical industry, and create the illusion of scientific “controversy” regarding MCS. But whether anti-MCS statements are made by doctors, researchers, reporters, pest control operators, private organizations, or government officials, make no mistake about it – the anti-MCS movement is driven by chemical manufacturers. This is the real story of MCS.

Chemical Industry

In 1990, the Chemical Manufacturers Association (now the American Chemistry Council) vowed to work to prevent the recognition of MCS out of concern for potential lost profits and increased liability if MCS were to become widely acknowledged (2). It specifically committed to work through physicians and medical associations to accomplish this, stating that it was critical to keep physicians from legitimizing MCS. Unfortunately, this plan has been relatively successful. The industry has enlisted the aid of vocal anti-MCS physicians who promote the myths that people with MCS are “hypochondriacs,” “hysterical,” “neurotic,” suffer from some other psychiatric disorder, belong to a “cult,” or just complain too much. Most of these physicians work for industry as high-paid expert witnesses although their financial ties are usually not disclosed in their journal articles, interviews, or speaking engagements. Therefore, many people, including those in the health care profession, are often led to believe that these physicians’ opinions reflect an honest appraisal of MCS rather than the chemical industry’s agenda. At least one industry expert witness has authored two anti-MCS position papers for prominent medical associations. It is easy to see why these papers are biased against MCS and how by helping to combat MCS in the courts, these position statements are quite lucrative for industry and expert witnesses alike.

Pharmaceutical Industry

The pharmaceutical industry is also involved in the effort to suppress MCS. Drug companies, which usually work with the medical profession to try to *help* patients, are working to *deny* help for those with MCS. This is extraordinary, but can be explained by the fact that the pharmaceutical industry is intimately linked to the chemical industry. That is, many companies that make medications also manufacture pesticides, the chemicals most implicated in causing MCS and triggering symptoms in people who are chemically sensitive. For example, Novartis (formerly Ciba-Geigy and Sandoz) is a pharmaceutical company that makes and sells the widely used herbicide atrazine (3). This helps explain why a Ciba-Geigy lobbyist submitted material to a New Mexico legislative committee in 1996 opposing all legislation related to MCS and declaring that the symptoms of people with MCS “have no physical origins“ (4). The legislation being proposed would have, among other things, funded a prevalence study of MCS, an

information and assistance program and “800” telephone number, hospital accommodation guidelines, and an investigation of housing needs of people with MCS (5).

Novartis is also a large manufacturer of the organophosphate insecticide diazinon (3), a neurotoxic pesticide currently being reviewed for its safety by the U.S. Environmental Protection Agency (6). The EPA recently banned a related organophosphate pesticide, chlorpyrifos (commonly sold as Dursban), from household uses because of concern about its toxicity, especially to children (7). The pharmaceutical company Eli Lilly used to be a part of DowElanco (now Dow Agrosience), the primary manufacturer of chlorpyrifos (8). Aventis (formerly Hoeschst and Rhone-Poulenc) manufactures the allergy medicine Allegra as well as the carbamate-containing insecticide Sevin (active ingredient carbaryl) (9). Monsanto, known for making Roundup and other herbicides, is a wholly owned subsidiary of a pharmaceutical company called Pharmacia (10, 11). Zeneca manufactures pesticides (12) and pharmaceuticals (AstraZeneca), including drugs to treat breast and prostate cancer, migraine headaches, and epilepsy (13) -- illnesses whose cause or exacerbation have been linked to pesticide exposures.

Pfizer and Abbott Laboratories make both pharmaceuticals (14) and pesticides (15), while BASF makes pharmaceutical ingredients and pesticides (16). Even Bayer, famous for making aspirin, manufactures the popular neurotoxic pyrethroid insecticide Tempo (active ingredient cyfluthrin) (17). Novartis, Ciba, Dow, Eli Lilly, BASF, Aventis, Zeneca, and Bayer are all members of the American Chemical Council (formerly the Chemical Manufacturers Association), as are other pharmaceutical manufacturers, such as Dupont, Merck, Procter & Gamble, and Roche (18).

The pharmaceutical industry has been able to spread misinformation about MCS and limit the amount of accurate information received by physicians and other health care providers through its financial influence over medical journals, conferences, and research. It is well known that magazines containing cigarette ads are less likely to publish anti-smoking articles. Similarly, because medical journals rely on pharmaceutical advertisements for funding, they are not likely to publish positive MCS articles. In fact, researchers supportive of MCS have long complained that it is very difficult to get their studies published in the medical literature. Pharmaceutical companies may also influence medical organizations such as the American Medical Association, whose funding relies in large part on the sales of drug advertisements in its journals (19), and the American Academy of Family Physicians, whose major donors are drug companies (20).

Corporate financing of medical conferences has also been shown to bias the information presented (21). Since continuing medical education is becoming increasingly reliant on corporate sponsorship, industry influence over physician education is a growing concern in the medical community (22). Other ways the pharmaceutical industry can influence physicians are also of concern. In a 2000 *Journal of the American Medical Association* article (23), the author states that “physicians have regular contact with the pharmaceutical industry and its sales representatives, who spend a large sum of money

each year promoting to them by way of gifts, free meals, travel subsidies, sponsored teachings, and symposia“ (p. 373). The study concludes that “the present extent of physician-industry interactions appears to affect prescribing and professional behavior and should be further addressed ... “ (p. 373). This is especially true regarding the effect that the pharmaceutical and chemical industries have had on physicians’ professional behavior in response to MCS. Because they do not receive appropriate and accurate information on MCS during their training or from medical journals and continuing education courses, physicians have been largely unprepared to deal with chemically sensitive patients. As a result, their responses to MCS patients have tended to range from dismissive to blatantly hostile.

One example of the pharmaceutical industry’s direct attempt to present anti-MCS information at a medical conference was at the 1990 meeting of the American College of Allergy and Immunology. Sandoz (now Novartis) was scheduled to sponsor a one day workshop that characterized people with MCS as mentally ill (24). This company was a large manufacturer of pesticides and pharmaceuticals (25), including anti-psychotic, anti-depressant, and sedative medications (14). Therefore, Sandoz stood to benefit both from pesticides being exonerated as the cause of MCS and from people with MCS being treated with psychiatric drugs. As it turned out, people with MCS outraged by the workshop risked their health to protest the event and were able to shut it down (26).

The pharmaceutical industry also influences research on MCS. First and foremost, it is not pursuing research on MCS (other than to perhaps fund a few studies to try to discount it), despite being a major source of funding for medical research to help those with other diseases. Secondly, as was evident when the Ciba-Geigy lobbyist opposing funding for MCS research in New Mexico, the industry is not only refraining from doing research on MCS itself but is attempting to block research by others as well.

A recent editorial in the *New England Journal of Medicine* outlined a myriad of ways that financial ties with the pharmaceutical industry may influence physicians (27). “The ties between clinical researchers and industry include not only grant support, but also a host of other financial arrangements. Researchers serve as consultants to companies whose products they are studying, join advisory boards and speakers’ bureaus, enter into patent and royalty arrangements, agree to be the listed authors of articles ghost written by interested companies, promote drugs and devices at company-sponsored symposiums, and allow themselves to be plied with expensive gifts and trips to luxurious settings” (p. 1516). In fact, some industries, including the tobacco industry, have paid authors up to \$10,000 to publish letters in high-profile scientific journals (28, 29). The author of another *New England Journal of Medicine* article wrote, “The practice of buying editorials reflects the growing influence of the pharmaceutical industry on medical care” (30). Since these conflicts of interest are increasingly encroaching on the medical profession in general, it is highly likely that some of them apply to physicians opposed to MCS as well.

Environmental Sensitivities Research Institute

Several nonprofit organizations and trade associations sponsored by the chemical industry are particularly active in opposing MCS. For example, lobbyists for RISE (Responsible Industry for a Sound Environment), a pesticide trade association, and the Cosmetic, Toiletry, and Fragrance Association testify against MCS each year in the New Mexico legislature. The Chemical Specialties Manufacturing Association, which represents companies who manufacture and distribute home, lawn and garden pesticides, antimicrobial and disinfectant products, automotive specialty products, waxes, floor finish products, and many types of cleaners and detergents, has also submitted anti-MCS comments to the NM legislature (31). And individuals from a lesser-known organization calling itself the Advancement of Sound Science Coalition published an opinion-editorial in two New Mexico newspapers several years ago that was critical of the positive steps being taken by the New Mexico legislature on MCS (32, 33).

The leading opponent of MCS, however, is unquestionably the Environmental Sensitivities Research Institute (ESRI). This corporate-financed nonprofit organization was founded in 1995 specifically to combat MCS. According to MCS Referral and Resources, ESRI was founded to “serve the needs of industries affected by MCS litigation” (34). But since ESRI tends to be secretive about its membership, board members, and activities, it is hard to know exactly who is involved with ESRI and what the organization does. However, it is known that ESRI is primarily supported by its member companies and trade associations, who pay \$5000 or \$10,000 a year in annual dues (35, 36). It is also known that the past board of directors have included representatives or employees of DowElanco, Monsanto, Procter and Gamble, RISE, the Cosmetic, Toiletry and Fragrance Association, and other chemical companies and trade associations (36).

Although ESRI has in the past claimed to be a scientific and educational organization dedicated to the open exchange of scientific information (37), this is belied by its decidedly anti-MCS views. ESRI’s bias against MCS is evident in its fact sheet that claims that MCS is a “phenomenon” that “defies classification as a disease” (38). It appears that this organization’s main work consists of disseminating anti-MCS literature, holding anti-MCS conferences, intervening in legal and government affairs, and otherwise trying to impede progress on MCS. And despite its name as a research institute, ESRI has only recently begun to award small MCS research grants. It will be a great surprise, however, if the majority of these studies do not support a psychological basis for MCS.

Besides lacking objectivity, some of ESRI’s activities demonstrate questionable ethics. For example, ESRI published an “advertorial,” advertisements made to look like legitimate news stories, in newspapers around the country that stated that MCS “exists only because a patient believes it does and because a doctor validates that belief.” Then, according to Albert Donnay of MCS Referral in Resources, ESRI anonymously tried to get the American Academy of Family Physicians Foundation (AAFPP) to endorse its

anti-MCS brochure (36). Fortunately, the AAFPF withdrew its support for the brochure when ESRI would not put its name on it.

One of the more flagrant misrepresentations in the brochure (39) was the answer “No” to the question, “Is MCS listed as a disability under the Americans with Disabilities Act?” One might consider this an honest mistake if it were not for the fact that an article published at almost the same time by ESRI’s then executive director clearly demonstrated he knew better. In the article, he states that “although not categorically noted to be a disability in the body of the law, the ADA [Americans with Disabilities Act] does allow for the consideration of MCS as a disability on a case-by-case analysis that is applied to all other physical and mental impairments” (40). And he also writes that “in 1991, the Department of Housing and Urban Development stated that people suffering from MCS can seek protection under federal housing discrimination laws.” It appears that ESRI was attempting to mislead physicians and the public into believing that MCS is not a covered disability, while its executive director was warning an industry-oriented audience that MCS *was* a covered disability and offering suggestions for how to defend themselves against a claim.

New Mexico has had direct experience with ESRI representatives and tactics. In 1996, ESRI mailed anti-MCS literature to a state disability agency that was developing a report to the legislature on MCS. Among other things, this material included advice on how to avoid accommodating chemically sensitive employees (41). Then, ESRI staff visited New Mexico in person. The ESRI manager attended a Town Hall Meeting on MCS at which she offered to help the state epidemiologists develop a prevalence study protocol. Shortly thereafter, however, she reportedly told another member of the prevalence study working group that MCS can’t be studied because it doesn’t exist. This circular reasoning, that you can’t prove MCS exists without more study and you can’t study it because it doesn’t exist, is commonly used by industry lobbyists. A corollary to this is the lobbying strategy of calling for more research on MCS while attempting to block it at the same time.

ESRI’s then executive director also visited Santa Fe in 1996. Among other things, he went to a Medicaid Advisory Committee meeting and urged that Medicaid benefits be denied for the diagnosis and treatment of chemical sensitivities, spoke against MCS at a continuing medical education (CME) conference for physicians where he failed to disclose his industry affiliations as required by CME guidelines, and berated the staff at an independent living center for providing a support group for people with MCS.

Another ESRI project involved paying a medical journal to publish the proceedings of an anti-MCS conference in its supplement (42). This conference was organized, in part, by a consulting firm that was owned by ESRI’s then executive director and supplied expert witnesses to testify against MCS. Later these papers were cited as references to support anti-MCS statements in material ESRI gave to the Ciba-Geigy lobbyist, which she submitted to the legislature. In keeping with its attempts to keep a low profile, however, ESRI did not put its name on the documents that were submitted.

A Rose By Any Other Name

Even though MCS has gone by that name for over a decade, industry associates would have you believe that it goes by a myriad of other names, so many that it must not be describing anything legitimate. In fact, if an article starts out with a long list of possible names for MCS, you can be almost positive it is going to be critical of MCS. Referring to MCS as a “phenomenon” rather than an illness and using the term “multiple chemical sensitivity *syndrome*” also tend to be code for “it doesn’t really exist” or if it does, “it’s all in people’s heads.” Articles using these names are usually accompanied by other myths and put-downs, such as MCS has no definition, no objective findings, and no known prevalence, and is “only symptom-based,” a “belief system,” or “chemophobia.” People with MCS are also frequently dismissed as having an “unexplained illness,” as if they, rather than their physicians, were to blame for not adequately “explaining” it.

Since 1996, however, the chemical industry has taken a bold new approach to the name for MCS. It has made a concerted effort to rename MCS “idiopathic environmental intolerances (IEI).” It is quite clear that its motivation is to get the word “chemical” out of the name. This would be analogous to the tobacco industry trying to change the name of “smokers cough” to “idiopathic respiratory paroxysms.” Anything to try to distance the disease from its products.

But despite frequent claims to the contrary by its users, the term IEI has *not* replaced the name for MCS. Its use, however, has slowly increased over the years in anti-MCS journal articles, industry propaganda, and medical association position papers. Fortunately, the use of the term IEI is like a tracer dye that immediately alerts the reader, patient, or constituent that the person or organization using the term is biased against MCS. The most frequent users of the name IEI are doctors who work for industry as expert witnesses or allegedly “independent” medical examiners, industry-sponsored organizations, and allergy or occupational medicine organizations that have long been critical of environmental doctors who treat people with MCS. While there may be some individuals who innocently use the term IEI, the overwhelming majority who use it appear to be connected to industry in some way.

One of the more outrageous claims that the chemical industry and its associates make is that the World Health Organization (WHO) supports the name change from MCS to IEI. The WHO was one of the sponsors of an International Programme on Chemical Safety (IPSC) workshop on MCS held in Germany in February 1996. This workshop was dominated by industry-associated participants and had no representatives from environmental, labor, or consumer groups. Instead, the non-governmental participants were individuals employed by BASF, Bayer, Monsanto, and Coca Cola (43). It was at this meeting that the decision was made to try to change the name of MCS to IEI.

Besides getting the word “chemical” out of the name, the workshop participants chose to add the term “idiopathic,” apparently because they thought it meant the illness was “all in someone’s head” rather than of unknown etiology (cause) (44). But lots of “real” illnesses are considered idiopathic, such as idiopathic epilepsy (i.e., epilepsy not resulting from trauma, surgery, infection, or other obvious cause). Still, implying that MCS has no

known cause helps the industry. They do not want to be held responsible for their products causing MCS, or for that matter, triggering symptoms in people sensitized to them. It's hard to understand, however, how IEI is much of an improvement over MCS, since the term MCS does not address the cause of the illness either. It is just a good description of the condition, that sufferers are sensitive to multiple chemicals, which is not that different from having multiple "environmental intolerances."

In any case, the WHO issued a statement to the workshop participants after the meeting to try to put a stop to claims that WHO supported the name change from MCS to IEI. It stated that "A workshop report to WHO, with conclusions and recommendations, presents the opinions of the invited experts and does not necessarily represent the decision or the stated policy of WHO." It goes on to say that "with respect to 'MCS,' WHO has neither adopted nor endorsed a policy or scientific opinion" (45). Despite this explicit disclaimer, claims that the World Health Organization supports IEI continue to be made by MCS opponents.

MCS In Court

Perhaps the area where the chemical industry is most aggressively fighting MCS is in the courts. This is not surprising considering the fact that ESRI was founded to assist industries involved in MCS litigation. MCS cases commonly involve workers compensation, social security, toxic tort, disability or health insurance, and disability accommodations. MCS can also arise in divorce proceedings, child custody battles, and landlord-tenant and other disputes. In lawsuits where chemical manufacturers are directly involved, for example, when they are being sued for harm caused by their products, it is clear that attacks on the plaintiff's credibility and medical condition, including MCS, come from the manufacturers. It is often unrecognized, however, how much the chemical industry is also involved in suppressing MCS in other lawsuits, through filing of briefs, supplying "expert" witnesses, and distributing anti-MCS literature to attorneys and witnesses.

The chemical industry also seems to have been influential in convincing many judges that MCS testimony should not be allowed in court. They argue that MCS does not satisfy the Daubert criteria for the admission of scientific testimony established by the U.S. Supreme Court in 1993. This ruling eliminated the requirement that expert testimony be "generally accepted" in the scientific community to be admissible and replaced it with the requirement that the reasoning or methodology underlying any proposed testimony merely be scientifically reliable and relevant (46). Thus, the intent of the ruling was to allow testimony on emergent theories of disease even if they had not yet been generally accepted by the medical community. But in the case of MCS, this has backfired. The Daubert ruling, which was intended to make it easier to admit scientific testimony in court, has increasingly been used to block testimony on MCS.

Some judges have ruled that MCS does not satisfy the Daubert criteria, despite the fact that it clearly satisfies at least three of the four factors specified in the Daubert ruling to assess proposed testimony. The Daubert ruling states that the following considerations will bear on admissibility of expert testimony: 1) whether the theory or technique in

question can be (and has been) tested, 2) whether it has been subjected to peer review and publication, 3) whether the reasoning or methodology has a known or potential error rate, and 4) whether it has widespread acceptance within a relevant scientific community (46). According to these criteria, testimony on MCS should be admitted because, it “can” and “has” been tested (47), has been subjected to extensive peer review and publication (48), and is widely accepted in the environmental medicine community. The factor regarding potential error rates is largely irrelevant because MCS is a clinical diagnosis that does not rely on tests.

But whether an illness or theory satisfies the Daubert criteria is obviously in the eye of the beholder. A judge in New Mexico, for example, ruled there was not enough published literature on MCS to fulfill the Daubert criteria (49). Yet there are over 600 articles on MCS and related conditions in the published literature, the majority of which support a physiological rather than psychological basis for MCS in a ratio of two to one (48). The judge rejected testimony on MCS even though he thought there would be enough literature in 5 to 10 years for it to satisfy the Daubert requirements. But if a judge is convinced MCS will be well established in the future, then testimony on MCS is credible and ought to be admitted now. After all, the intent of the Daubert rule is to admit testimony on just such valid emerging theories of disease as this one. In addition, it is unclear how much this judge was swayed by the anti-MCS opinions of the defendant’s expert witness, who admitted she relied on material sent by ESRI for her testimony and did not know who funded the organization (50). It is, indeed, unfortunate that the subjective nature of the Daubert criteria has allowed judges to misinterpret them in favor of the chemical industry. This has resulted in many people with MCS being denied disability benefits, compensation for toxic injuries, and reasonable accommodations under the ADA, among other things.

A case in point is a recent ruling by the Massachusetts Supreme Court that rejected MCS testimony in a work-related injury case because the physician’s testimony was not based on “reliable methodology,” that is, because he did not use a test to diagnose MCS (51). This conclusion was reached even after stating that “a new theory or process might be so ‘logically reliable’ that it should be admissible, even though its novelty prevents it from having attained general acceptance in the relevant scientific community” and that “in many cases personal observation will be a reliable methodology to justify an expert’s conclusion.” This is another example of a biased interpretation of the law against MCS. And again we find the chemical industry involved. Though not a defendant in the case, the American Chemical Council (formerly the Chemical Manufacturers Association) filed a “friend of the court” brief against the worker and expressed delight with the court’s anti-MCS decision (52).

Finally, there are growing attempts to get medical licensing boards to revoke the licenses of physicians who diagnose and treat chemically sensitive patients. One physician is in a legal battle with the California Medical Board to keep his license, in part, for this reason (53). In an anti-MCS booklet, an author who is known as an industry sympathist, has called for state licensing boards to “scrutinize” the activities of doctors who treat MCS patients. He also stated that he thought “most of them should be delicensed” (54).

Trying to put physicians who treat MCS out of practice or harassing them until they quit on their own is an extremely insidious way of trying to get rid of MCS. It is also a threat to the independent practice of medicine by everyone.

Impacts of MCS

The impact of MCS on individuals and society is huge, both in terms of its potential severity and the number of people affected. Many people with MCS have lost everything – including their health, homes, careers, savings, and families. They are chronically ill and struggle to obtain the basic necessities of life, such as food, water, clothing, housing, and automobiles, that they can tolerate. Finding housing that does not make them sicker, that is, housing that is not contaminated with pesticides, perfume, cleaning products, cigarette smoke residues, new carpets or paint, and formaldehyde-containing building products, is especially difficult. Many people with MCS live in cars, tents, and porches at some time during the course of their illness. In addition, people with MCS usually have financial difficulties. One of the most unjust aspects of the anti-MCS movement is that many expert witnesses are paid \$500 per *hour* to testify against people disabled with MCS who are seeking that much money to live on per *month*.

The impact on society is no less severe. An increasing number of physicians, lawyers, teachers, computer consultants, nurses and other skilled workers who were once productive members of society can no longer support themselves or contribute their skills to society. Their loss of earning power also translates into less money spent in the marketplace and less tax revenues. Deputy state epidemiologist Ron Voorhees of New Mexico estimated in a letter to the governor that the state may be losing 15 million dollars a year in tax revenues due to the decreased earning capacity of those with MCS (55).

And this medical condition is not rare. Prevalence studies in California (56) and New Mexico (57) found that 16% of the respondents reported being chemically sensitive. Additionally, in New Mexico 2% of the respondents reported having been diagnosed with MCS -- the more severe form of chemical sensitivities -- and in California, 3.5% reported having been diagnosed with MCS and being chemically sensitive. Although women report being chemically sensitive twice as often as men, which contributes to its “hysteria” label, those reporting chemical sensitivities are otherwise evenly distributed with respect to age, education, income, and geographic areas. Chemical sensitivities are also evenly reported among ethnic and racial groups, except for Native Americans, who reported a higher prevalence in both studies.

It should be of great concern to everyone that this devastating and potentially preventable illness is affecting an increasing percentage of the population and disabling a significant portion of the work force. It is affecting people in all walks of life throughout the country and around the world. It is vitally important, therefore, that MCS be squarely addressed and not swept under the rug as the chemical and pharmaceutical industries are trying to get the medical profession and government to do. But ignoring MCS is not only ill-advised, it is inhumane.

Conclusion

MCS is under siege by a well-funded and widespread disinformation campaign being waged by the chemical and pharmaceutical industries. Their goal is to create the illusion of controversy about MCS and cast doubt on its existence. These industries feel threatened by this illness, but rather than heed the message that their products may be harmful, they have chosen to go after the messenger instead. While corporations are only beholden to their stockholders, medicine and government need to be responsive to the needs of their patients and citizens. Unfortunately, industry has convinced many in the medical and legal professions, the government, the general public, and even loved ones of people with MCS, that this illness doesn't exist or is only a psychological problem. As a result, people whose lives have already been devastated by the illness itself frequently are denied appropriate health care, housing, employment opportunities, and disability benefits. On top of this, people with MCS often have to endure hostility and disrespect from the very agencies, professionals, and people who are supposed to help them.

For example, an elderly woman with MCS was forced out of public housing and became homeless when staff insisted on remodeling her apartment, even though she warned them ahead of time that the new carpet and cabinets would make her too sick to continue living there. The physician of a woman, hospitalized because she was having anaphylactic reactions to all foods, tried to transfer her to the psychiatric ward for "force feeding." A school district fired a chemically sensitive teacher for excessive absenteeism after it failed to provide her with the accommodations she had requested and needed in order to work. A former airline attendant had to camp in the desert and a mother and her small child had to live in their car because they could not find housing that did not make them severely ill. And a man disabled with MCS is unable to obtain vocational rehabilitation services even though he wants to work.

Countless others have failed to find tolerable housing, including a former marathon runner who has lived in her car for 7 years and struggles to fight off frostbite every winter. In another case, a chemically sensitive woman living in her trailer was forced to leave a state park when hostile staff insisted on spraying pesticides while she was there. The park supervisor said that he had seen a television show on MCS which convinced him that he did not have to make accommodations for people claiming to have MCS because it did not exist. The show had featured ESRI's then executive director and portrayed people with MCS as freeloaders and misfits.

Despite the chemical industry's disinformation campaign, however, and its influence over doctors, lawyers, judges, and government, incremental progress is being made with respect to MCS. This is a testament to the strength, courage, dedication, and sheer numbers of people with MCS. In fact, there are so many people becoming chemically sensitive that attempts to ignore or silence them are ultimately doomed to fail. But even though it is just a matter of time before MCS gets the recognition it deserves, each day it is delayed prolongs the suffering of millions of people with MCS and puts millions more at risk of developing it. Therefore, it is essential that those in medicine, government, and society begin to see past the industry disinformation campaign in order to recognize the true nature of MCS and the urgent need to address this growing epidemic.

REFERENCES

1. Bero LA, Barnes D, Industry Affiliations and Scientific Conclusions, letter, *JAMA* 1998; 280(13):1141.
2. Chemical Manufacturers Association, Environmental Illness Briefing Paper, *The Reactor* 1990; V(4):1,2,9-13.
3. Novartis, <http://www.novartis.com> (10/25/00).
4. Rhodes D, Ciba-Geigy Corporation, Comments for the legislative education study committee, November 18, 1996.
5. Governor's Committee on Concerns of the Handicapped, Report to the legislature on multiple chemical sensitivity (MCS) pursuant to senate joint memorial 10, New Mexico, August 27, 1996.
6. U.S. Environmental Protection Agency, Office of Pesticide Programs, Public docket opens for diazinon, http://www.epa.gov/oppfead1/cb/csb_page/updates/diazinon.htm (10/24/00).
7. United States Environmental Protection Agency, Agreement reached to eliminate Dursban pesticide for nearly all household uses, http://www.epa.gov/epahome/headline_0608.htm (6/13/00).
8. Bowean L, EPA moves to end home use of pesticide but doesn't pull it from store shelves, *The Wall Street Journal*, 6/9/00.
9. Aventis, <http://www.aventis.com> (10/24/00).
10. Monsanto, <http://www.monsanto.com> (10/26/00).
11. Pharmacia, <http://www.pharmacia.com> (10/26/00).
12. Zeneca, <http://www.zeneca.com> (10/29/00).
13. AstraZeneca, <http://www.astrazeneca.com> (10/29/00).
14. *Physicians Desk Reference*, 46 edition, Medical Economics Data, 1992.
15. National Pesticide Telecommunications Network, Pesticide manufacturer, formulator, producer, and registrant company information, <http://nptn.orst.edu/manuf.htm> (10/29/00).

16. BASF, <http://www.basf.com> (10/24/00).
17. Tempo 20 WP specimen label, Bayer Corporation Specialty Products, Kansas City, MO, 5/5/95.
18. American Chemistry Council, Member companies, <http://www.cmahq.com/cmamembers.nsf> (9/24/00).
19. Moran M, AMA rings up 3rd straight year of big financial gains. *Amer Med News* 1997; Dec 22/29:4, 6.
20. Rothman, JR, Medical professionalism, focusing on the real issues. *NEJM* 2000; 342(17), <http://www.nejm.com/content/2000/0342/0017/1284.asp> (6/10/00).
21. Bowman MA, Pearle DL, Changes in drug prescribing patterns related to commercial company funding of continuing medical education. *J Contin Educ Health Prof* 1988; (8)1:13.20.
22. Tenery RM, Interactions between physicians and the health care technology industry. *JAMA* 2000; 283(3):391-3.
23. Wazana A, Physicians and the pharmaceutical industry, is a gift ever just a gift? *JAMA* 2000; 283(3):373-380.
24. American College of Allergy & Immunology, Environmental illness, multiple chemical sensitivities, diagnostic and treatment strategies, November 9, 1990, San Francisco, CA, brochure.
25. Sandoz Corporation, Sandoz corporation fact sheet, 86858/83 (Rev. 9).
26. Hileman B, Multiple chemical sensitivity. *Chem Eng News* 1991; 69(29):26-42.
27. Angell M, Is academic medicine for sale? *NEJM* 2000; 342(20):1516-18.
28. Winker MA, Fontanarosa PB, Letters: a forum for scientific discourse. *JAMA* 1999; 281(16):1543.
29. Kaiser J, Tobacco consultants find letters lucrative. *Science* 1998; 281:895-7.
30. Brennan TA, Buying editorials. *NEJM* 1994; 331(10), <http://www.nejm.com/content/1994/0331/0010/0673.asp> (6/24/00).
31. Ziman BR, Chemical Specialties Manufacturers Association, letter to Eric Dibner, New Mexico Governor's Committee on Concerns of the Handicapped, 7/1/96.

32. Carruthers G, Staudenmayer H, Advancement of Sound Science Coalition, Analyze syndrome before making policy, *Albuquerque Journal*, 7/6/96, A11.
33. Carruthers G, Staudenmayer H, Chemical sensitivities: know facts, *Las Cruces Sun News*, 6/24/96.
34. Donnay A, Undisclosed bias and misrepresentations of Dr. Ronald Gots, *MCS Referral & Resources*, 8/15/96.
35. Environmental Sensitivities Research Institute, <http://www.esri.org> (10/11/00).
36. Donnay A, Junk science meets junk journalism, presented to the American Public Health Association, November 11, 1997.
37. Richard CL, Environmental Sensitivities Research Institute, letter to Eric Dibner, New Mexico Governor's Committee on Concerns for the Handicapped, 6/19/96.
38. Environmental Sensitivities Research Institute, What is idiopathic environmental intolerances?, undated fact sheet.
39. The facts about multiple chemical sensitivity (MCS), American Academy of Family Physicians Foundation, 1997 (withdrawn).
40. Gots R, Multiple Chemical Sensitivities. *Hippocrates' Lantern* 1997; 4(3):1-5.
41. Dolin LH, How to marshal the power of the Americans with Disabilities Act to minimize your company's exposure to liability to individuals seeking accommodations for "multiple chemical sensitivity disabilities". *Reg Tox Pharm* 1996; 24(1):S168-S181.
42. Annals of multiple chemical sensitivities: state-of-the-science symposium. *Reg Tox Pharm* 1996; 24(1).
43. Ashford NA, Miller CS, *Chemical Exposures, Low Levels and High Stakes (2nd ed.)*, Van Nostrand Reinhold, NY, 1998, p. 283.
44. *Ibid.*, p. 284.
45. World Health Organization, Note to invited participants in "MCS" workshop, 21-23 February 1996, Berlin, Germany, 6/7/96.
46. *Daubert vs. Merrell Dow Pharmaceuticals, Inc.*, 509 US, 125 L Ed 2d 469, 113 S Ct [No. 92-102].
47. Kailin EW, Brooks CR, Systemic toxic reactions to soft plastic food containers. *Med Ann DC* 1963; 32(1):1-8.

48. MCS Referral & Resources, MCS bibliography, <http://www.mcsrr.org/resources/bibliography> (10/24/00).
49. Transcript of proceedings regarding a motion in limine to exclude expert testimony regarding multiple chemical sensitivity, G.M. “Jeri” Rundquist vs. Long John Silver’s, Inc., 4/1/98.
50. Deposition of Katherine Jean Abernathy-Carver, M.D., G.M. “Jeri” Runquist vs. Long John Silver’s, Inc., Albuquerque, NM, February 16, 1998.
51. Cowin JJ, Massachusetts Supreme Judicial Court, Theresa Canavan’s Case, Docket No. SJC-08226, 8/17/00, *SJC Slip Opinions*, <http://www.socialaw.com/sjcslip/8226.html> (8/28/00).
52. Ranalli R, SJC tells judges to evaluate experts. *Boston Globe*, 8/20/00, B01.
53. Hurvitz C, Division of Medical Quality, Medical Board of California, Department of Consumer Affairs, State of California, Decision in the matter of the accusation against Robert Sinaiko, M.D., No. 13 93 28495, OAH No. N 9611106, August 4, 1998.
54. Barrett S, *A close look at Multiple Chemical Sensitivity*, Quackwatch, Inc., Allentown, PA, (undated), pg. 40.
55. Voorhees R, Deputy State Epidemiologist, Letter to Joe Thompson, Special Counsel, Office of the Governor, New Mexico, March 18, 1998.
56. Kreutzer R, Neutra RR, Lashuay N, Prevalence of people reporting sensitivities to chemicals in a population-based survey. *Am J Epidemiol* 1999; 150(1):1-12.
57. Voorhees R, Results of analyses of multiple chemical sensitivities questions, 1997 behavioral risk factor surveillance system, New Mexico Department of Health, February 8, 1999.

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