

Evidence brief

Multiple chemical sensitivity

3 December 2025

Evidence check questions

1. How is multiple chemical sensitivity (MCS) defined?
2. What are the diagnostic criteria?
3. What are the management options?
4. What resources are available for clinicians and patients?

Plain language summary

- Overall, MCS (also known as idiopathic environmental intolerance) is not a well understood illness. The evidence available on the condition and its treatment is limited.
- MCS is a chronic condition that can be caused by low-level exposure to a range of everyday chemicals in the environment. These can include perfumes, detergents and artificial colours, and preservatives.
- MCS can have many different triggers and symptoms which can vary from mild to severe. In severe cases, it can affect a person's social life, daily activities or ability to work.
- There is no clear definition and no agreed way to diagnose MCS. The wide range of triggers and symptoms can also make it difficult for some healthcare professionals to identify. This may lead to negative experiences when people with MCS attend healthcare settings.
- There are currently no proven treatments for MCS. People with the condition can try to manage their symptoms by avoiding or limiting their exposure to triggers.
- Both Victoria and South Australia have produced patient information on MCS.

- [Victoria Multiple chemical sensitivities](#)

Source: Safer Care Victoria

- [Idiopathic environmental intolerance](#)

Source: South Australia Health

Rapid evidence checks are based on a simplified review method and may not be entirely exhaustive but aim to provide a balanced assessment of what is already known about a specific problem or issue. This evidence brief should not be a substitute for individual clinical judgement, nor is it an endorsed position of NSW Health.

Summary

- Overall, MCS remains a poorly understood condition,^{1, 2} with no evidence-based treatment options.³
- The evidence on MCS is scarce, so this evidence brief draws on a range of sources including reviews, clinical studies, reports, guidance and commentaries from both the peer-reviewed and grey literature.
- There is variation in how MCS is described in the literature. Other terms used include: idiopathic environmental intolerance/illness, environmental sensitivities or hypersensitivities, chemical sensitivity, chemical intolerance and toxicant induced loss of tolerance.^{1, 2, 4, 5} This range in terminology highlights the difficulty of identifying an agreed operational definition.^{1, 5, 6}
- The impact of MCS is also variable in its presentation. This often means the medical and social needs of those afflicted are not being met, adding further negative impact on function, quality of life and other stress and trauma-related disorders.^{3, 4}
- The World Health Organization has not allocated a unique code for MCS or related conditions in the International Classification of Diseases (ICD-10).¹ Similarly, a narrative review highlights that authoritative medical organisations such as the American Academy of Allergy, the American College of Physicians, the American College of Occupational and Environmental Medicine, the American Council on Science and Health, the American Medical Association, the Royal College of Physicians and Royal College of Pathologists are yet to accept MCS as a standalone disease entirely.¹

Definition

- While there is no universally accepted definition for MCS, descriptions of the condition typically include the following elements:
 - Chronic or recurrent condition^{2, 7-10}
 - Triggered by low-level, non-toxic exposures to a broad range of chemicals including anaesthetics; artificial colours, flavours and preservatives; perfumes and fragrances; detergents and other cleaners; smoke from tobacco; and solvents used in products such as paint^{1, 2, 4, 7-11}
 - Multiple, unrelated chemical triggers^{1, 5, 7, 9, 10}
 - Affecting multiple organ systems^{2, 7, 9}
- It is generally attributed to exposure to chemical substances in the absence of clinically detectable organ dysfunction-related physical signs.⁵
- There is marked variability in presentations, with some individuals experiencing mild symptoms and others facing severe limitations in daily functioning, including social isolation and inability to maintain employment.⁵ The underlying aetiology of the condition remains disputed.^{1, 4}

Disease categorisation and symptoms

- MCS patients have been found to have persistent or recurrent somatic and psychological symptoms attributed to chemical exposures.^{3, 4}
- MCS can be categorised by somatic distress upon exposure to odours. It has been described as both a comorbidity of and associated with chronic mental disorders including post-traumatic stress disorder, anxiety disorders, depression and somatoform disorder.^{3, 4}
- Common symptoms include nasal congestion, respiratory symptoms, skin rashes, pain, headaches, fatigue, dizziness, changes in heart rhythm, nausea, bloating, mental confusion, short-term memory

loss, mood changes, irritability, anxiety and depression.¹¹ Many of the symptoms, such as anxiety and chronic cough, are likely to be comorbid with each other.⁴

- People with MCS frequently attribute respiratory symptoms, including rhinitis, dyspnoea and cough, to chemical exposures.⁴

Diagnostic criteria

- There is currently no universally accepted diagnostic criteria for MCS,^{1, 6, 9, 12, 13} and diagnosis is typically based on self-reports or interview-based clinical evaluations.¹³
- There are currently no laboratory tests, and diagnosis and understanding a patient's history can be helpful in understanding symptoms, triggers and measures taken to avoid triggers.^{5, 14}
- Some common elements of diagnostic criteria that have been proposed include:
 - acquired disorder following environmental exposure^{7, 15-17}
 - symptoms involving multiple organ systems^{7, 15, 17}
 - symptoms reproducible with exposure^{7, 15-17}
 - symptoms triggered by low-dose exposure^{7, 15-17}
 - symptoms recur with exposure to multiple unrelated substances^{7, 15-17}
 - no correlation with objective medical tests^{6, 15}
 - chronic condition (duration ≥ 6 months)^{7, 16, 17}
 - symptoms improve when incitants are removed^{7, 16, 17}
 - central nervous system symptoms as primary symptoms¹⁷
 - non-specific symptoms^{3, 17}
 - impact on social and occupational functioning¹⁷
 - psychological and emotional factors^{3, 6}
 - use of specialist evaluations/tests/questionnaires.^{6, 9, 18}

Management options

- There are no clear evidence-based treatment options for MCS.^{3, 12, 19}
- The most reported management option is for patients to avoid the triggers that are associated with their symptoms.^{1, 3, 19}
- Treatments may also be based on managing the comorbidities experienced by patients.³
- A multidisciplinary approach, including developing respectful partnerships and clear communication across healthcare staff.¹⁴
- Other reported treatments include:
 - Psychotherapy: referral to a mental health practitioner familiar with MCS has been suggested, however evidence of its effectiveness is limited.⁵
 - Mindfulness-based cognitive behavioural therapy: randomised controlled trial (RCT) evidence found no change in overall illness status, however there were positive changes in illness perception at 12 months.²⁰
 - Transcranial pulsed electromagnetic fields: RCT evidence showed no effect on functional impairments, however a significant decrease in symptom severity was observed.²¹

- Expert consensus in Italy on clinical and therapeutic management of MCS proposes that MCS patients should consider a medical kit for daily life and symptomatic treatments for non-emergency outpatients.⁶
- Other reported interventions include intravenous injections of vitamins and nutritional supplements, sauna and colonic irrigation. These have not been systematically tested.¹²
- It has been reported that some clinicians, when presented with contested, ambiguous or difficult to diagnose illnesses, including MCS, respond to this challenge by dismissing or invalidating patients' reported symptoms^{9, 22}. For patients, this may result in the following consequences that ultimately undermine health outcomes including: induced emotional states, beliefs and behaviour, and diagnostic delay.²²

Available resources

- Overall, there are limited resources available for clinicians and patients.
- Several state governments in Australia, including South Australia and Victoria, have webpages or factsheets that cover topics such as MCS diagnosis, triggers, symptoms and considerations (table 4).
- Both Victoria and South Australia have produced guidance on MCS. These cover triggers, symptoms, diagnosis, causes, treatment and considerations for health staff.^{11, 12}
 - [Victoria Multiple chemical sensitivities](#)
Source: Safer Care Victoria
 - [Idiopathic environmental intolerance](#)
Source: South Australia Health

Studies pre-dating the search

During expert review, key themes and papers were identified as relevant for inclusion that predated the search criteria for this review. These are summarised below.

- There is an absence of clinically detectable physical abnormalities and organ dysfunction in this condition. Diagnosis and management are generally based around symptoms. However, where blinded tests have been done, symptoms were not reproducible.²³⁻²⁵
- People with MCS frequently attribute respiratory symptoms, including rhinitis, dyspnoea and cough, to chemical exposures.⁴ There are also reports that chemical induced symptoms can include laryngeal symptoms, which may also induce vocal cord dysfunction.¹ Early, empathetic and effective management are important, such as through a multidisciplinary approach that includes mental health practitioners.^{4, 26, 27}

Background

The term multiple chemical sensitivity was introduced in the 1980s after observation that individuals develop extreme sensitivity to common chemicals after workplace exposure.¹⁵ In 2022, MCS had only been recognised as a debilitating illness in a small number of countries including Germany, Denmark, Austria, Spain, Luxembourg and Finland.¹ Due to its unclear presentation and diverse symptoms, there is ongoing doubt in the scientific and medical community as to whether MCS represents a distinct clinical condition.¹ A 2018 Australian study used an online survey to estimate prevalence, suggesting MCS affects over one million adult Australians.²⁸

Limitations

There is a lack of international consensus on key aspects of this illness, including terminology, definitions, diagnostic criteria, aetiology, symptoms and treatment. There is very limited evidence, and sources used in the document vary in their level of evidence. No quality assessment was undertaken.

Methods

PubMed search terms

Search string for questions 1–3:

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((("multiple chemical sensitiv*[Title/Abstract] OR "idiopathic environmental intolerance"[Title/Abstract] OR "toxicant-induced loss of tolerance"[Title/Abstract] OR "environmental illness"[Title/Abstract])) AND (((("defin*[Title/Abstract]))) OR (("diagnos*[Title] OR "differential diagnos*[Title]))) OR (("treatment*[Title/Abstract] OR "management"[Title/Abstract] OR "therap*[Title/Abstract] OR "clinical management"[Title/Abstract] OR "cognitive behavio* therapy"[Title/Abstract] OR "care"[Title/Abstract]))) OR ((("management"[Title/Abstract] OR "treat*[Title/Abstract] OR "therapy"[Title/Abstract] OR "pulse electromagnetic field*[Title/Abstract] OR "care"[Title/Abstract]))) AND ((humans[Filter]) AND (english[Filter]) AND (2015:2025[pdat])))
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85 hits on 24 July 2025

Several articles published prior to 2015 were identified as relevant for inclusion by an expert peer reviewer. These articles have been referenced in the summary above.

Google search terms

Search terms for question 4:

Multiple chemical sensitivity resources

Idiopathic environmental intolerance resources

Evidence tables

Table 1: How is multiple chemical sensitivity defined in the literature?

Note: while the search was limited to the past 10 years, several older papers have been included from when definitions were first established. Some information in this table has been copied directly from the source material.

Peer-reviewed sources	
Source	Definition or description of MCS
<u>Multiple chemical sensitivity: It's time to catch up to the science</u> Molot et al., 2023 ⁴	<ul style="list-style-type: none"> MCS is a complex medical condition associated with low-dose chemical exposures. The most distinguishing feature is intolerance to common airborne chemical exposures at levels previously tolerated, and tolerated by the healthy population. MCS is characterised by diverse features and common comorbidities, including fibromyalgia, cough, asthma, hypersensitivity, migraine and stress/anxiety, with which the syndrome shares numerous neurobiological processes and altered functioning within diverse brain regions.
<u>Multiple chemical sensitivity</u> Zucco et al., 2021 ¹	<ul style="list-style-type: none"> MCS is a controversial disorder in which patients claim to become ill from environmental exposure to low levels of largely petroleum-based and often unrelated chemicals, including cleaning products, detergents, diesel exhaust, formaldehyde, plastics, carpets, epoxy, pesticides, and some synthetic and natural fragrances.
<u>Multiple chemical sensitivity syndrome: A principal component analysis of symptoms</u> Del Casale et al., 2020 ⁸	<ul style="list-style-type: none"> MCS is a chronic or recurrent condition with somatic, cognitive and affective symptoms following a contact with chemical agents whose concentrations do not correlate with toxicity in the general population.
<u>Multiple chemical sensitivity: pursuit of a scientific consensus, need for a public health response. Commentary</u> Rossi et al., 2019 ²	<ul style="list-style-type: none"> On the international scene, MCS is defined, by several experts, as a multisystem syndrome that develops following chronic exposures to low doses of common chemical contaminants. Its general characteristics are, however, the object of conflicting opinions and a source of debate and research aimed at the appropriate nosological and therapeutic frameworks.
<u>Multiple chemical sensitivity: review of the state of the art in epidemiology, diagnosis, and future perspectives</u> Rossi et al., 2018 ⁹	<ul style="list-style-type: none"> MCS is currently included in the broader definition of idiopathic environmental intolerance, which also includes physical risk factors such as electromagnetic fields. It is a complex disease, a multisystem disorder that manifests as a result of exposure to various environmental contaminants (solvents, hydrocarbons, organophosphates, heavy metals) at concentrations below the threshold limit value that are considered toxic doses for the general population.
<u>Multiple chemical sensitivity: a 1999 consensus</u> Bartha et al., 1999 ⁷	<ul style="list-style-type: none"> Defines MCS as a chronic condition with symptoms that recur reproducibly in response to low levels of exposure to multiple unrelated chemicals, and improve or resolve when incitants are removed. An additional criterion was then proposed (also in 1999) requiring that symptoms occur in multiple organ systems.

Peer-reviewed sources	
Source	Definition or description of MCS
<u>Report of multiple chemical sensitivities (MCS) workshop</u> World Health Organization, 1996 ¹⁰	<ul style="list-style-type: none"> • Idiopathic environmental tolerance is an acquired disorder with multiple recurrent symptoms, associated with diverse environmental factors tolerated by most people, and cannot be explained by any known medical or psychiatric disorder.

Table 2: What are the diagnostic criteria for MCS?

Note: while the search was limited to the past 10 years, several older papers have been included when diagnostic criteria were first established. Some information in this table has been copied directly from the source material.

Peer-reviewed sources	
Source	Diagnostic criteria
<u>The worker with multiple chemical sensitivities: An overview</u> Cullen, 1987 Seminal criteria ¹⁵	<ul style="list-style-type: none"> • Proposed the first clear-cut operational criteria for case definition: <ul style="list-style-type: none"> – The presence of an acquired disorder following documentable environmental exposure to chemicals or toxins – Symptoms involving more than one organ – The occurrence of symptoms as a response to predictable different classes of chemicals or odours – Doses not harmful to most people – The absence of a correlation between the presence of the symptoms and objective routine medical tests
<u>Multiple chemical sensitivities syndrome: toward a working case definition</u> Nethercott et al., 1993 ¹⁶	<ul style="list-style-type: none"> • Identified the following diagnostic criteria: <ul style="list-style-type: none"> – The symptoms are reproducible with exposure – The condition is chronic – Low exposure levels result in manifestations of the syndrome – Symptoms improve or resolve with the stimuli are removed – Responses occur to multiple and chemically unrelated substances
<u>Multiple chemical sensitivity syndrome (MCS) – suggestions for an extension of the US MCS-case definition</u> Lacour et al., 2005 ¹⁷	<ul style="list-style-type: none"> • Validated, revised and extended Cullen's case diagnostic criteria, providing further guidelines: <ul style="list-style-type: none"> – Self-reported odour sensitivity symptoms should primarily involve the central nervous system, i.e. non-specific complaints, like headache – Such symptoms can secondarily adversely affect other organs, i.e. optional complaints, like gastrointestinal, musculoskeletal, dermatological and related complaints – Symptoms should persist at least for 6 months (to rule out persons with self-limited acute or subacute toxic reactions) – Symptoms should adversely impact social and occupational lifestyles – Medically unexplained syndromes which overlap MCS, such as CFS and primary FM, should be considered exclusion criteria regardless of whether they appear to be a direct consequence of MCS.
<u>Multiple chemical sensitivity: A clinical perspective</u>	<ul style="list-style-type: none"> • This review proposed the following criteria for diagnosis: <ul style="list-style-type: none"> – Exposure to odours at a dose not considered toxic – Low odour threshold

Peer-reviewed sources	
Source	Diagnostic criteria
Jacques, 2024 ³	<ul style="list-style-type: none"> - Rapidity of occurrence of symptoms following exposure - Generalisation to related and unrelated chemicals - Non-specificity of symptoms - Similarity of symptoms to those of acute stress reaction, panic attack or hyperventilation - Normal physical examination, normal usual tests in the target organs, and no other explanation for the reactions - Intolerance affecting other sense(s) - Erroneous beliefs about chemicals or odours - Comorbidities, physical and psychological, associated with trauma and stress - History of unresolved emotional traumas.
<u>Italian expert consensus on clinical and therapeutic management of multiple chemical sensitivity (MCS)</u> Damiani et al., 2021 ⁶	<ul style="list-style-type: none"> • Proposed the need for clinical and therapeutic consensus on MCS to orient clinicians, with agreement was reached on: <ul style="list-style-type: none"> - a selection of blood tests - two screening tests - the main diagnoses to exclude - several specialist evaluations
<u>A proposal for clinical biomarkers in multiple chemical sensitivity</u> Vadalà et al., 2020 ¹⁸	<ul style="list-style-type: none"> • New biochemical markers and diagnostic imaging techniques have emerged • Discusses a list of biomarkers studied for the diagnosis of MCS, based on the available literature • Proposes 4 levels of MCS tests to help clinicians in the diagnosis of the pathology via quantifiable serological parameters: <ul style="list-style-type: none"> - The first level includes basal test, e.g. QUEESI questionnaire, serological laboratory tests, main organs functioning, brain instrumental diagnostics neurological, psychological and psychiatric clinical examination. - The second level involves antioxidant power and oxidative stress status assessment. - The third level checks autoimmune and allergic profile and systemic inflammation. - The fourth level considers genetic predisposition to develop MCS by single nucleotide polymorphisms (SNPs examination).
<u>Multiple chemical sensitivity: review of the state of the art in epidemiology, diagnosis, and future perspectives</u> Rossi et al., 2018 ⁹	<ul style="list-style-type: none"> • The review examined 24 cross-sectional studies and 22 cohort and case-control studies and found that in most epidemiological studies, questionnaires were used to assist diagnosis. The most frequently cited questionnaire being the environmental exposure and sensitivity intolerance (EESI) or its short version quick environmental exposure and sensitivity inventory (QEESI).

Table 3: What are the management options for multiple chemical sensitivity?*Note: some information in this table has been copied directly from the source material.*

Peer-reviewed sources	
Source	Key points
<u>Multiple chemical sensitivity: A clinical perspective</u> Jacques, 2024 ³	<ul style="list-style-type: none"> Few studies have been conducted to evaluate the effectiveness of treatments for MCS, and there is no treatment for MCS that is evidence-based. Many authors have recommended treatments based on those that are formally recommended for the comorbidities, which may partly explain why little research has been performed specifically to document the effectiveness of treatments for only MCS. Another factor is the reluctance of many patients to consider psychotherapy as they reject the proposed aetiology.
<u>Multiple chemical sensitivity/idiopathic environmental intolerance: A practical approach to diagnosis and management</u> Binkley et al., 2023 ⁵	<ul style="list-style-type: none"> When a proper diagnosis is reached, the patient is agreeable to addressing the psychophysiological origins of the condition, and referral is made to an appropriate mental healthcare professional, the eventual outcome can be a positive and life-changing event, essentially allowing the patient to reclaim a normal life.
<u>Ignored, dismissed, and minimized: Understanding the harmful consequences of invalidation in health care – A systematic meta-synthesis of qualitative research</u> Bontempo et al., 2025 ²²	<ul style="list-style-type: none"> This systematic review elucidated the negative consequences of symptom invalidation, and the dismissal or minimization of a person's experiences with illness The prevalence of contested, ambiguous, and difficult-to-diagnose illnesses presents challenges for clinicians who too often respond by invalidating patients' symptoms. Identified 4 broad classes of consequences: induced emotional states and beliefs (e.g. shame, suicidality), induced healthcare emotional states and beliefs (e.g. healthcare-related anxiety and trauma), induced healthcare behaviour (e.g. healthcare system avoidance), and diagnostic delay. developed a novel conceptual model explaining how symptom invalidation leads to these consequences and thereby undermines health outcomes.
<u>Mindfulness-based cognitive therapy (MBCT) for multiple chemical sensitivity (MCS): Results from a randomized controlled trial with 1 year follow-up</u> Hauge et al., 2015 ²⁰	<ul style="list-style-type: none"> This RCT examining the effect of MBCT found: <ul style="list-style-type: none"> MBCT had no effect on overall illness status or levels of depression or anxiety MBCT had resulted in positive changes in illness perception, sustained at 12-month follow-up low dropout rates suggest MBCT is an acceptable intervention for people living with MCS.
<u>A randomised, placebo-controlled trial of transcranial pulsed electromagnetic fields in patients with multiple chemical sensitivity</u> Tran et al., 2017 ²¹	<ul style="list-style-type: none"> This RCT examining the effect of pulsed electromagnetic field (PEMF) found: <ul style="list-style-type: none"> PEMF had no effect on functional impairments in MCS 6 weeks of PEMF treatment resulted in a significant decrease in symptom severity
<u>Italian expert consensus on clinical and therapeutic</u>	<ul style="list-style-type: none"> Agreement was reached on:

<u>management of multiple chemical sensitivity (MCS)</u> Damiani et al., 2021 ⁶	<ul style="list-style-type: none"> - a medical kit for MCS patients for daily life (mask, air purifier, water purifier) - symptomatic treatments for non-emergency outpatients - hospitalisation domain (a kit, hospital environment, hospital admission, hospital access policy, pharmacy, canteen) - emergency domain (first aid, ambulance transportation, arrival at emergency).
<u>Multiple chemical sensitivity (MCS) – a guide for dermatologists on how to manage affected individuals</u> Harter et al., 2020 ¹⁹	<ul style="list-style-type: none"> • To date, there are no evidence-based treatment recommendations for MCS. • As most patients perceive avoidance as a particularly useful strategy, this is frequently the intervention of first choice. • Treatment of MCS should primarily focus on coping strategies in order to prevent reinforcement of anxiety. • The physicians communicative and psychosocial skills: <ul style="list-style-type: none"> - Professional doctor-patient communication; promoting a bio-psycho-eco-social understanding of the condition. - Knowledge of and skills in bio-medical interventions and surgical options. - Knowledge of and psychological skills in the management of behavioural risk factors; actively and supportively helping patients to help themselves; resource orientation.

Table 4: What resources are available for clinicians and patients?

Note: some information in this table has been copied directly from the source material.

Grey literature sources	
Source	Key points
<u>Multiple chemical sensitivity: Literature review and state of the science</u> Intrinsik Corp. 2021 ²⁹	<ul style="list-style-type: none"> • This review states that there is a fundamental need for the diagnostic criteria for MCS to be reviewed, updated and harmonised to help ensure appropriate and consistent diagnosis of the condition. • Standardised criteria impact everything from the development of a concise clinical profile, the consistent diagnosis of patients and the design of research studies, to effective clinical management and health care provision.
<u>Idiopathic environmental intolerance</u> MSD Manual, 2024 ³⁰	<ul style="list-style-type: none"> • Resource for physicians covering symptoms, diagnosis and treatment.
<u>Idiopathic environmental intolerance (IEI)</u> SA Health, Government of South Australia, 2023 ¹²	<ul style="list-style-type: none"> • Government webpage covering: <ul style="list-style-type: none"> - what triggers IEI - the symptoms of IEI - how IEI is diagnosed - Whether IEI can be treated - Whether trigger avoidance helps - considerations for health staff - further information.
<u>MSC factsheet</u> Safer Care Victoria, Victorian Government, 2023 ¹¹	<ul style="list-style-type: none"> • Government factsheet covering: <ul style="list-style-type: none"> - what MCS is - MSC triggers

	<ul style="list-style-type: none"> - most common symptoms - what causes chemical sensitivities - caring for MSC (prevention, treatment) - what to expect
<u>Multiple chemical sensitivity: A guide for Victorian hospitals</u> Quality, Safety and Patient Experience Branch, Victorian Government, Department of Health 2011 ³¹	<ul style="list-style-type: none"> • The purpose of this MCS guide is to provide guidance and raise awareness of the need for hospitals to develop local policies and guidelines for patients with MCS that take into account each patient's condition, care requirements and local environmental factors. It covers: <ul style="list-style-type: none"> - chemical Incitants - planning hospital admission - during admission - alternatives to hospital admission/discharge planning.
<u>Multiple chemical sensitivity (MCS) guidelines for South Australian hospitals</u> SA Health, 2010 ¹⁴	<ul style="list-style-type: none"> • Aims to minimise the effects of common hospital incitants on people who suffer from MCS and require treatment in a hospital setting.
<u>Allergy and Environmental Sensitivity Support and Research Association Inc. (AESSRA)</u> ³²	<ul style="list-style-type: none"> • A support group for people with allergies and sensitivities, particularly MCS. • Information on: <ul style="list-style-type: none"> - what chemical sensitivity is - how common it is - symptoms of chemical sensitivity - what causes chemical sensitivity - how chemical sensitivity is diagnosed. • Publishes <i>Sensitivity Magazine</i> three times per year

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