



Multiple Chemical Sensitivity (MCS)

Guidelines for South Australian hospitals

May 2010



Government
of South Australia

SA Health

Acknowledgements

The need for Multiple Chemical Sensitivity (MCS) guidelines for South Australian health services was first raised by people with MCS.

Several groups and individuals should be acknowledged for their significant efforts in raising awareness for the need for MCS guidelines in South Australia and for their commitment to extending the knowledge base relating to MCS. These groups include the *SA Task Force on MCS*, the consumer group, and the *MCS Reference Group* which includes consumers, clinicians, Local and State Government representatives, and the *Myalgicencephalopathy/Chronic Fatigue Syndrome (ME/CFS) Society of SA*. The *MCS Reference Group* is now active in addressing issues around local Council use of pesticides, and will also serve as a forum for information exchange, particularly aetiological, clinical, and toxicological information.

In response to the Social Development Committee Parliamentary Review of MCS, the Department of Health was directed to develop MCS guidelines for SA hospitals. A review of national and international literature and MCS hospital guidelines was conducted that resulted in the decision to adopt the Royal Brisbane and Women's Hospital MCS Guidelines, and adapt these for use by South Australian Hospitals with acknowledgement and kind permission of:

Contents

Introduction	4
Purpose	4
Aim	5
Objective	5
Chemical Incitants	5
Common incitant triggers	5
Most Common Symptoms	5
Planning Hospital Admission	5
Preparation for Hospital Admission	6
Hospital Environment	6
During Admission	7
Equipment that may be required in the care of MCS patients	7
Hospital Staff	8
Dietary requirements	8
Medications	8
Emergency Department	9
Alternatives to hospital admission and discharge planning	10
References	10

Introduction

Multiple Chemical Sensitivity (MCS) is a debilitating condition described as serious physical symptoms initiated by chemical exposure. In a self-reporting survey, MCS was shown to affect around 1% of adults living in South Australia. In addition, about 16% identify as having some hypersensitivity to one or a small number of chemicals. Since there are no diagnostic or clinical guidelines for MCS in Australia, it is possible that some chemically hypersensitive individuals have symptoms more aligned with MCS.

Patients with MCS condition may suffer from a variety of physical symptoms as a result of exposure to chemicals. These symptoms of exposure may include respiratory and flu like symptoms, chest pain, muscle and joint pain, headaches, myalgia, nausea, abdominal pain and other somatic symptoms experienced with an intensity that may range from major to severe in some patients. The physical symptoms experienced by people with MCS to chemical incitants are likely to undermine patient treatment whilst in hospital, affecting recovery, health outcomes and wellbeing.

The types of chemicals or incitants to which people with MCS are sensitive vary considerably and are often found in hospital environments. These incitants may be in food and drink normally provided to in-patients and/or may include hospital cleaning and disinfectant products, as well as perfumes and aftershaves, personal hygiene and hair care products worn by hospital staff. Therefore hospital stay of patients with MCS is ideally planned with hospital administration prior to admission and managed by health professional staff on an individual, case-by-case basis.

Purpose

These MCS hospital guidelines are not provided as a definitive MCS text or to argue the aetiology of the condition. They are designed to help hospital administrators and health professionals to best respond to the needs of people with MCS requiring hospital treatment thus ensuring access to effective, quality care and improved patient health outcomes. Meeting the environmental needs of people with MCS who require medical or surgical treatment in hospital is likely to reduce length of hospital stay and improve individual health outcomes.

As the incitants to which people with MCS are sensitive and their responses to exposure vary widely, hospitalisations for people with MCS are ideally planned and will require consultation between the patient and/or carer and hospital administration regarding hospital accommodation management. Alternatives to hospitalisation (pg 10) may be considered where clinically possible in conjunction with patient, medical/nursing and allied health and as well as the GP. If admission can not be avoided, clinical assessment prior to admission will be required and include establishing the types of chemical incitants to which the patient is sensitive and documentation of the symptoms of exposure experienced by the patient so as to inform and develop individualised care plan and treatment regimes.

Discharge planning is an essential component in the overall care planning (as with all patients) and is particularly important for people with MCS, as early discharge as soon as clinically appropriate and practical, reduces incitants exposure during the recovery and rehabilitation period post hospital treatment.

Aim

The *Multiple Chemical Sensitivity - Guidelines for South Australian Hospitals* have been provided with the aim to minimise the effects of common hospital incitants on people who suffer from MCS and require treatment in a hospital setting.

Objective

The South Australian Department of Health is committed to improving health outcomes of people with MCS requiring hospital treatment by planning for and providing an appropriate treatment environment that reduces exposure to chemical incitants.

Chemical Incitants

The types of chemicals and their effect on people with MCS vary and therefore consultation and individual care planning are essential. The following section provides descriptions of *some* of the incitants that may affect people with MCS, *some* of the most common MCS symptoms, as well as the hospital procedures and processes that may be necessary when people with MCS require in-patient treatment. Also included are the alternatives to in-patient hospital services that may be planned for people with MCS condition.

Common incitant triggers

Some of the chemicals that trigger MCS symptoms are known to be irritants or to be potentially toxic to the nervous system. The products and other chemicals that cause problems vary among affected individuals and can include:

- > Anaesthetics
- > Artificial colours, flavours and preservatives in food, drinks and drugs
- > Perfumes and fragrances
- > Detergents and other cleaners
- > Prescribed medications
- > Smoke from tobacco products
- > Solvents from felt pens etc.

Most Common Symptoms

- > Respiratory symptoms
- > Headache
- > Fatigue
- > Flu-like symptoms
- > Mental confusion
- > Short term memory loss
- > Gastro-intestinal tract symptoms
- > Cardiovascular irregularities
- > Muscle and joint pain
- > Irritability and depression
- > Ear, nose and throat complaints

Planning Hospital Admission

In all cases wherever possible and other than an emergency admission, the patient with MCS needs to provide as much advance notice as possible to hospital management prior to any scheduled visit to the hospital, stating particular sensitivities. MCS patients should carry a medical alert at all times.

People with MCS are often well-informed regarding their condition and can educate others who they come into contact with. Ensure that the MCS patient is aware of the following, which will help to reduce exposure to incitants in hospital:

1. Patients may arrange to provide their own personal items that may not be readily obtainable at the hospital facility, e.g. toothpaste, linen, personal care products. The hospital cannot meet every special requirement as patients with MCS have highly variable needs.
2. The doctor who treats the patient's MCS should be contacted or should contact the hospital to provide information that will facilitate the patient's care.

Alternatives to hospital admission are available and should be considered as part of the patient assessment (refer to page 10). If admission to hospital is unavoidable, planning for admission is to be conducted with the view to discharge as early as possible if clinically appropriate to an alternative treatment environment in order to reduce the possibility of patient exposure to potentially harmful incitants.

Preparation for Hospital Admission

In preparing for a planned hospital admission, there are a number of simple changes that can be made in the general hospital environment designed to assist with the appropriate care of patients with MCS thus improving the outcomes of hospital treatment. Of utmost importance is the air quality.

Patient assessment and consultation with patient/carer and GP will help to develop an individual care plan. The following points provide a general overview of some of the preparation that may be required prior to admission for people affected by MCS.

Hospital Environment

The patient's room is probably the most important area in the hospital to concentrate on as the majority of the patient's time is spent there. While it is virtually impossible to ensure a completely chemical-free environment, measures can be taken to prevent unnecessary exposure to incitants in consultation with the patient/carer and GP.

It is recommended that a minimum of one staff member, in each department, on each shift be available to attend to the clinical needs of an MCS patient. Patients with MCS should have all incitants recorded in the patient's medical record (according to the clinical history). Incitants may or may not be recorded as allergens. All members of the health care team should be informed of the admission of the patient to enable them to ensure adequate preparation for care.

1. The MCS patient care is best planned in a single room accommodation with ensuite facilities if possible.
2. Cleaning staff should be contacted to ensure the room is cleaned prior to use,

3. The room should be free of any mould or dampness. If necessary, engineering should be contacted to change ceiling tiles and check ventilation systems for cleanliness.
4. Aerosol cleaners, disinfectants or room deodorisers should not be used. All perfumed items should be removed from the room.
5. Either sterile linen to make the bed, alternatively patient-supplied linen can be used.
6. A sign may be used on the outer door for visitors with instructions to contact the nurse in charge prior to entering the room.
7. To minimise contamination, allocate a member of staff to care for the patient and inform all health care personnel that will be looking after the patient about the admission. If a transfer to another department is required e.g. x ray, the staff should be notified prior to the patient's arrival.
8. Equipment that may be used when caring for the patient with MCS is listed below.

During Admission

The following points provide an overview of some of the preparation that may be required during admission depending on the individual patient requirements. The process of care during admission may include:

1. All hospital employees and visitors check in at the nurse's station for instructions prior to entering the patient's room.
2. The door of the room to be kept closed at all times.
3. Hospital staff to wash their hands prior to entering the room.
4. The medical chart is to be kept out of the patient's room.
5. No flowers / plants / newspapers or treated paper in the patient's room.
6. The cleaning is coordinated with cleaning personnel so no toxic chemicals are used in the general area during the patient's stay.
7. Daily cleaning of an MCS patient's room by the cleaning services should be minimal but include:
 - Dust with a clean cotton cloth moistened with only water
 - Use baking soda for tubs, sinks and toilet
 - Remove rubbish at least twice daily
8. Do not leave patient trays in the room after meals
9. Do not leave wet laundry and towels in the room. Remove immediately after patient has finished personal hygiene.

Equipment that may be required in the care of MCS patients

- > Sterile 100% cotton gowns
- > Red armband
- > Sterile 100% cotton linen
- > Fragrance-Free Hygiene products
- > Bottled drinking water
- > Door signs
- > Fragrance-Free Cleaning products
- > Latex-free products including no latex gloves
- > Sodium Bicarbonate (Baking Soda)
- > Non-toxic cleaning products/chemicals (pg 7)

Hospital Staff

MCS can be a debilitating condition. It is imperative that advice is sought from the patient and reassure them it is understood that they are chemically sensitive. Patients with MCS can severely react to clothing, products and chemicals worn by others. The following steps will assist in preventing contamination of the area where the MCS patient is housed.

1. The staff member caring for the patient must be familiar with the condition and what constitutes an incitant.
2. Laundry soaps, fabric softeners, deodorants, shampoo, hair lotions, hair spray, make-up, hair mousse, gels and bath soaps can all contain perfume or masking fragrances and deodorisers, and should be avoided by staff during the patient's stay.
3. All staff members who are in contact with the MCS patient should ensure they obtain a supply of non perfumed personal hygiene products and sterile scrub caps and surgical gowns, as staff should:
 - be fragrance-free
 - use hypoallergenic products
 - not use aerosol sprays
4. Staff members who smoke should not care for the patient with MCS.
5. The medical officer will provide suggestions for special orders regarding MCS.
6. Be on alert for any possible environmental triggers for the MCS when following normal hospital procedures. The patient's medical and nursing team are responsible for coordinating with all other hospital departments the patient may be sent to. Whenever possible, arrange to have the patient treated in his / her room.

Dietary requirements

MCS patients may have different food sensitivities and allergies. If the patient is aware of specific food sensitivities and / or allergies and requires a special diet in hospital, the ward dietician should be contacted. This should occur as soon as admission is arranged.

The patients should be allowed to bring in their own food if requested and if consistent with clinical management.

Medications

MCS patients may have significant reactions to medications. Referral should be made to the pharmacist as soon as admission is arranged. Do not use substitutes or generic drugs for medications unless unavoidable.

- > Standard ingredients of medications should be known, as MCS patients react to things including but not limited to: dyes, preservatives, artificial sweeteners and flavourings.
- > Drug reactions should be reported to the medical officer immediately. Be observant for symptoms such as:
 - > Muscle spasm
 - > Local swelling, hives
 - > Syncope
 - > Hyperventilation
 - > Seizures
 - > Asthma
 - > Severe anaphylaxis

Emergency Department

People who suffer MCS presenting at an emergency department often carry a medical alert. Staff will need to check with all patients if they have any alerts and/or allergies. If the patient is conscious and able to communicate, they are a valuable resource for temporary care instructions. In addition the following could be done:-

- > Subject to the clinical requirements of managing the condition necessitating admission, MCS patients should be treated in an area that is not close to:
 - o Areas being remodelled or renovated
 - o Highly trafficked areas within the hospital
 - o Chemical storage and supply areas
 - o Chemotherapy treatment areas
 - o Computers, photocopy, fax machines
- > Utilise the equipment listed on page 7 when caring for the patient.
- > Wherever possible, liaise early with the patient's general practitioner.
- > Confirm with the patient their specific chemical sensitivities and mark them clearly on the alerts and allergy sheet of the medical chart. In addition:
 - o Ask patient to identify any serious reactions they have experienced and identify what exposures have caused such reactions in the past.
 - o Ask patient to detail what can be done to reduce the severity and list the information in the patient's medical chart.
 - o Check the patient's medical record for previous documentation in relation to MCS.
- > Personnel other than those having direct care for the patient should avoid entering the area when the patient is being accommodated.

- > Patients with MCS may be irritated by chemically treated papers or documents. A family member or other designated person may sign for the patient, but verbal consent with witnesses present should always be obtained and fully documented.

Alternatives to hospital admission and discharge planning

Alternatives to in-patient care may be appropriate for people suffering MCS contingent on clinical assessment and service criteria. Care and discharge planning should encompass issues covered in these guidelines.

Further Information on Accommodating People with MCS

US National Institute of Building Sciences, "IEQ, Indoor Environmental Quality", which includes MCS hospital and nursing protocols and assistance with implementing fragrance control policies, <http://ieq.nibs.org/>.

Canadian Human Rights Commission, "The Medical Perspective on Environmental Sensitivities", http://www.chrc-ccdp.ca/pdf/envsensitivity_en.pdf.

References

Anema, S. *Hospitalization for the Chemically Sensitive Patient* Hospital Protocol Guidelines Dallas 1999.

Fitzgerald, D.J., Studies on Self-Reported Multiple Chemical Sensitivity in South Australia. *Environmental Health*, (2008) 8(3): 33-39.

Institute for Human Development / AzTAP. *Multiple Chemical Sensitivity* Arizona 2001.

National Institute for Building Sciences, IEQ Indoor Environmental Quality, 2005.

Sears, M., The Medical Perspective on Environmental Sensitivities, Canadian Human Rights Commission, 2007.

Smith, S. *A Review of the Multiple Chemical Sensitivity* NSW Parliamentary Library Research Service 2001.

Temple, T. *Healthier Hospitals A Comprehensive Guide to Assist in the Medical Care of the Patient with Multiple Chemical Sensitivity (MCS) Disability* Ohio 1996.