Queensland Health
Position Statement on
Multiple Chemical Sensitivity

July 2011

Queensland
Government

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BACKGROUND

Definition and reported symptoms

In its report dated November 2010, the National Industrial Chemicals Notification and Assessment Scheme (NICNAS) and the Office of Chemical Safety and Environmental Health (OCSEH) defined multiple chemical sensitivity (MCS) as "the term most commonly used to describe a complex condition involving a broad array of physical and psychological symptoms, attributed to exposure to low levels of a wide variety of environmental chemicals".[1] The report also explains that there is a disconnect between the event of being exposed to low levels of chemicals and the underlying biological mechanisms that lead to the reported symptoms.[2]

The term, "multiple chemical sensitivity" is often used interchangeably with other terms such as "chemical intolerance", "environmental sensitivities", and "chemical sensitivity".[3] However on the basis of Consensus Criteria[4], MCS is distinguished from other more general types of chemical sensitivities and allergies on the basis of reactions to multiple, diverse chemical substances, the wide spectrum of non-specific symptoms reported in multiple organ systems and the extremely low levels of environmental exposures linked to responses.[5] In a literature review by Labarge and McCaffrey[6] 151 unique symptoms associated with MCS were identified. While there appears to be no characteristic symptom picture of MCS[7], commonly reported symptoms (reported by 20% or more of sufferers) include:

- Headache
- Fatigue
- Confusion
- Depression
- Shortness of breath
- Arthralgia
- Myalgia
- Nausea.[8]

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[1] National Industrial Chemicals Notification and Assessment Scheme and the Office of Chemical Safety and Environmental Health. (2010). *A Scientific Review of Multiple Chemical Sensitivity: Identifying Key Research Needs*. Retrieved June 24 2011, from http://www.nicnas.gov.au/Current_Issues/MCS/MCS_Final_Report_Nov_2010_PDF.pdf.
[2] *Ibid.*
[3] *Ibid*, p.8.
[4] In brief. (1999). Multiple Chemical Sensitivity: A 1999 Consensus. *Archives of Environmental Health: An International Journal*, 54(3), 147-149.
[5] *Ibid*.
[6] Labarge, X.S., & McCaffrey, R.J. (2000). Multiple chemical sensitivity: a review of the theoretical and research literature. *Neuropsychology Review*, 10(4),183-211.
[7] National Industrial Chemicals Notification and Assessment Scheme and the Office of Chemical Safety and Environmental Health, op. cit., p.9.
[8] Ross, G.H. (1992). History and clinical presentation of the chemically sensitive patient. *Toxicology and Industrial Health*, 8, 21-28.

MCS may be recognised as a condition by a clinician termed a "clinical ecologist". A clinical ecologist has been defined by the United States Federal Judicial Center[9] as:

> "*a physician who believes that exposure to certain chemical agents can result in damage to the immune system, causing multiple-chemical hypersensitivity and a variety of other disorders. Clinical ecologists often have a background in the field of allergy, not toxicology, and their theoretical approach is derived in part from classic concepts of allergic responses and immunology. There has been much resistance in the medical community to accepting their claims.*"

The term however, is not widely used in Australia.

Prevalence in Australia

In its report, the NICNAS and the OCSEH quoted studies examining the prevalence of MCS in Australia with the following caveat:[10]

> "*The lack of an objective biomarker for MCS is particularly problematic when considering estimates of the prevalence of MCS. Prevalence estimates exist but are generally not comparable across studies that use different case definitions. There are numerous studies (including Australian state health surveys) that have examined the extent to which people report sensitivity to chemicals. However, depending on the type and extent of questioning regarding the nature of their chemical sensitivity, and the extent to which their experiences fulfil available criteria for MCS, it may not be clear how many of these individuals would be diagnosed with MCS and not common, well defined sensitivities such as specific allergies.*"

The New South Wales Department of Health conducted a survey of adult health in 2002.[11] In response to the question "*Do certain chemical odours or smells regularly make you (or your children) fell unwell?*" 24.6% of respondents (from a total of 12,491 respondents

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[9] Federal Judicial Center. (2000). *Reference Manual on Scientific Evidence* (2nd ed.). Retrieved 24 June 2011, from http://www.fjc.gov/public/pdf.nsf/lookup/sciman00.pdf/$file/sciman00.pdf.

[10] National Industrial Chemicals Notification and Assessment Scheme and the Office of Chemical Safety and Environmental Health, op. cit., p.54.

[11] New South Wales Public Health. (2003). The New South Wales Adult Health Survey 2002, *New South Wales Public Health Bulletin Supplement*, 14(s-4), 81-82.

surveyed) answered "*yes*".[12] In the same survey, 2.9% of respondents answered "*yes*" to the question "*Have you been medically diagnosed with a chemical sensitivity?*"[13]

In South Australia, SA Health conducted two surveys in September 2002 and June 2004 with the aim of determining the prevalence of MCS and general chemical sensitivity. Both surveys surveyed a total of 4,009 adults, of which 0.9% reported a medical diagnosis of MCS[14]. According to the NICNAS and OCSEH report, the prevalence of 0.9% from this survey, although limited, is similar to the prevalence reported overseas.[15]

Although the above data suggests that, based on population projections by the Office of Economic and Statistical Research, Queensland Treasury[16], 44,000 Queenslanders may report some form of chemical sensitivity, the true number of patients has not been identified.

Other Conditions with Similar Symptoms

Fibromyalgia

Fibromyalgia describes a medical disorder where a person suffers from chronic pain, often including a painful response to pressure. Symptoms may include fatigue and joint stiffness[17], and psychiatric symptoms including depression and anxiety.[18]

Chronic Fatigue Syndrome

Chronic fatigue syndrome describes a medical disorder in which a sufferer is plagued by persistent fatigue, along with other symptoms, not due to other causes such as exertion or other medical conditions, nor relieved by rest.[19] Chronic fatigue syndrome is classified as a disease of the nervous system by the World Health Organisation, and although its origin is unknown, it is not dissimilar to MCS, as it displays varying and multiple physiological and psychological symptoms.[20]

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[12] National Industrial Chemicals Notification and Assessment Scheme and the Office of Chemical Safety and Environmental Health, op. cit., p.54.
[13] *Ibid*.
[14] Fitzgerald, D.G. (2008). Studies on Self-reported Multiple Chemical Sensitivity in South Australia, *Environmental Health*, 8(3), 33-39.
[15] National Industrial Chemicals Notification and Assessment Scheme and the Office of Chemical Safety and Environmental Health, op. cit., p.54.
[16] Office of Economic and Statistical Research, Queensland Treasury. (2011). Queensland Government population projections to 2056: Queensland and statistical divisions 2011 edition. Retrieved 14 July 2011, from http://www.oesr.qld.gov.au/products/publications/qld-govt-pop-proj-qld-sd/qld-govt-pop-proj-2056-qld-sd-2011.pdf.
[17] Wolfe, F. (1989). Fibromyalgia: the clinical syndrome, *Arthritis & Rheumatism*, 15(1), 1–18.
[18] Schweinhardt, P., Sauro, K.M., & Bushnell, M.C. (2008). Fibromyalgia: a disorder of the brain?, *Neuroscientist.* 14(5), 415–421.
[19] Chronic Fatigue Syndrome: Diagnosing CFS. (2006). *United States Centers for Disease Control and Prevention*. Retrieved 13 July 2011, from http://www.cdc.gov/cfs/general/diagnosis/index.html.
[20] Afari, N., & Buchwald, D. (2003). Chronic fatigue syndrome: a review. *American Journal of Psychiatry,* 160(2), 221–236.

Current Treatment Approaches

People who identify themselves as suffering from MCS often experiment with a variety of both conventional and holistic health treatments, such as living in a completely fragrance- and chemical-free environment ("chemical avoidance"), taking nutritional supplements, and taking part in relaxation techniques such as yoga and meditation.[21] Many people who identify themselves as suffering from MCS and other groups also actively advocate for public facilities to maintain a fragrance- and chemical-free environment. Due to the wide range of services employed by public facilities to maintain their function, it is inevitable that these services, and staff employed by these services, will use or be exposed to some form of fragrance-containing or chemical substance that may cause a reaction in persons who identify themselves as suffering from MCS.

Due to the lack of consensus among clinicians worldwide about the definition and cause of MCS, there is a lack of research into the effectiveness of proposed treatment options.[22] A review by the United States Government in 1998 suggested that in light of the lack of an accepted definition and cause, people who identify themselves as suffering from MCS should not be offered ineffective, costly or potentially dangerous treatments.[23] However, it was recognised that patients may be greatly affected by their symptoms and require management.[24]

Within Queensland Health facilities, where it is suspected by the attending clinician that a patient is being affected by exposure to a fragrance or chemical, measures are generally taken to minimise the effect of the exposure to the patient. The attending medical officer, in consultation with other members of the health care team will determine what is appropriate in managing the patient.

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[21] Gibson, P.R., Elms, A.N., & Ruding, L.A. (2003). Perceived Treatment Efficacy for Conventional and Alternative Therapies Reported by Persons with Multiple Chemical Sensitivity, *Environmental Medicine*, 111(12), 1498-1504.
[22] NHS Bristol. (2008). Meeting of the Professional Executive Committee, Agenda Item 8.5: Multiple Chemical Sensitivity – Literature review of case definition, and effectiveness of treatment options, *NHS Bristol*.
[23] US Government. (1998). Review article – Interagency Workgroup on Multiple Chemical Sensitivity.
[24] NHS Bristol. (2008). Meeting of the Professional Executive Committee, Agenda Item 8.5: Multiple Chemical Sensitivity – Literature review of case definition, and effectiveness of treatment options, *NHS Bristol*.

POLICY RATIONALE

Generally, public policy is an authoritative statement by a government about its intentions that relies on hypotheses about cause and effect that are structured around objectives and characterised by the following:[25]

- Intentional, and designed to achieve a stated or understood purpose
- Involves decisions and their consequences
- Structured and orderly
- Political in nature
- Dynamic.

In light of the above definition of policy, coupled with the lack of consensus among clinicians within Queensland Health and in other jurisdictions both nationally and internationally about both the existence and clinical definition of MCS, it would be problematic to adopt an "umbrella policy" advocating for completely fragrance- and chemical-free environments in all Queensland Health facilities. Such an "umbrella policy" would require Queensland Health to enforce it on all patients, employees, visitors, volunteers, and other members of the public who visit Queensland Health facilities. It remains to be seen how such a policy could be implemented and enforced in a large public health system such as Queensland Health.

It is therefore proposed that Queensland Health adopt a policy based on the model adopted in the United Kingdom, whereby National Health Service (NHS) primary care trusts (for example, NHS Bristol[26] and NHS Plymouth[27]) have adopted policies that do not categorise MCS as a recognised clinical syndrome due to the absence of clinical consensus and that interventions (including the implementation of fragrance-free policies) that lack clinical evidence that suggest effectiveness will not be commissioned. The policies also recognise that patients who classify themselves as suffering from MCS may have health needs that require treatment in the public health system, and therefore should receive individualised medical and psychological assessment and treatment as determined by the treating medical officer. For more information about the NHS' policies on MCS, see *Local and international experience*.

[25] Althaus, C., Brisgman, P., and Davis, G. (2007). *The Australian Policy Handbook* (4th ed.). Crows Nest, NSW: Allen & Unwin.
[26] NHS Bristol Primary Care Trust. (2008). Multiple Chemical Sensitivity Policy. Retrieved 24 June 2011, from http://www.bristol.nhs.uk/your-services/what-we-do-and-dont-fund/idoc.ashx?docid=4614e232-137b-4bf6-95b7-6173e1787ec6.
[27] NHS Plymouth Primary Care Trust. (2010). Multiple Chemical Sensitivity Commissioning Policy. Retrieved 24 June 2011, from http://www.plymouthpct.nhs.uk/services/Pages/mcs.aspx.

LOCAL AND INTERNATIONAL POLICIES

Canada

Capital Health Canada's *Scent Free – Personal Products Policy and Procedure* indicates that all employees, medical staff, volunteers, patients, visitors and students are to refrain from wearing "scented personal products". If any of the aforementioned individuals are non-compliant with the policy, they may be asked to leave. As a last resort, security may be called. It is unclear how and whether this policy works in practice. It is also unclear whether the *Policy and Procedure* are still in operation as Capital Health was absorbed into the Alberta Health Services Board in 2008.

David Thompson Health Region's *Scent Free Workplace Policy* restricts the use of scents and fragrant products in its facilities and sets out ten "General Principles". It is unclear whether the policy applies to employees, patients, or visitors, or all groups. The policy also sets out exceptions to its application, including when maintenance or repair work is required to be carried out on sites or buildings. David Thompson Health Region also has a procedure entitled *Multiple Chemical Sensitivities – Care of Patients With*, which outlines responsibilities when caring for a patient experiencing MCS.

Germany

In February 2011, Agaplesion Diakonie Hospital in Hamburg, Germany, opened two rooms at the facility designed for patients with MCS and multiple allergies. The rooms were built with "safe building materials and furnishings to ensure the safety for hypersensitive patients". It is unclear how often these rooms are utilised and for how many patients. The hospital acknowledges that its facility is a hospital and not an "environmental clinic", in which case hospital procedures are regulated and special requests may not be able to be met.

Hospital employees are trained on awareness of MCS and environmental illness, and are instructed to ensure "low-emission patient care" by checking for fragrance-containing and damaging products in the patient's vicinity; asking patients about and taking into account possible food and drug intolerances; ensuring all patient information is appropriately documented; working with associated support groups; cleaning the rooms with fragrance-free detergents (although it is noted that disinfectants are necessary to neutralise odours); and allowing patients to bring to the hospital their own foods. It is unclear as to what level of training hospital employees have received.

United Kingdom

In the House of Commons Hansard dated 13 October 2009, in response to being asked what steps were being taken by the United Kingdom Department of Health to ensure proper and effective NHS treatment for those diagnosed with multiple chemical sensitivity, the Minister for Health responded that "*(t)he provision of services for investigation and treatment of allergy is decided locally by the national health service depending on need. The Department expects general practitioners to exercise their clinical judgment to decide appropriate specialist referrals for investigation of particular symptoms which may be due to allergy*."

The above statement is reflected in the policies implemented by NHS primary care trusts; several (NHS Plymouth[28] and NHS Bristol[29]) NHS primary care trusts have commissioning policies on MCS. The policies state that "[i]n the absence of consensus among clinicians that multiple chemical sensitivity is considered to be a recognised clinical syndrome, it will not be recognised by the NHS Plymouth/Bristol". The policies further state that "[p]rimary care trusts recognise that patients who choose to classify themselves using this description have health needs. Patients should be treated by local NHS services which may include medical and psychological assessment and treatment". The policies also state that "[i]ndividual cases [of MCS] will be reviewed at the primary care trust Exceptional Treatment Panel upon receipt of a completed application form from the patient's GP, Consultant or Clinician. Applications cannot be considered from patients personally".

POLICY CONTEXT

MCS has attracted myriad differences in clinical opinion amongst Queensland Health's clinical staff, which is a reflection of the medical profession internationally. In the absence of consensus amongst clinicians that MCS is considered to be a recognised clinical condition, it would pose difficulties in recognising MCS in a Queensland Health policy context.

LEGAL CONTEXT

Clinicians owe patients a duty to exercise reasonable care and skill when providing them with health services[30]. In most cases, Queensland Health will be vicariously liable for the acts of its employees and as such, will have an obligation to ensure its employees comply

[28] NHS Plymouth Primary Care Trust, op. cit.
[29] NHS Bristol Primary Care Trust, op. cit.
[30] *Rogers v Whitaker* (1992) 175 CLR 479 at 483.

with the law and any legislative requirements relevant to their practice. Queensland Health also has concurrent obligations to its employees to ensure that workplaces are safe and that workplace practices conform to accepted professional standards as well as relevant workplace legislation. In this regard, Queensland Health must also minimise and manage risk where both patients and employees are concerned.

Essentially, this means that whenever a change in policy, procedure or workplace practice is contemplated, Queensland Health must consider the impact that any such change will have on its patient population as a whole and its employees and attempt to reach a balance between the competing interests that present. Queensland Health must also ensure that it continues to provide accessible and equitable treatment and care to all patients and balance the health needs of the majority with those of the minority.

POSITION STATEMENT OBJECTIVES

This position statement intends to strike a balance that is both workable for Queensland Health clinicians and other individuals who may visit Queensland Health facilities, such as patients, their visitors and volunteers, and those patients who identify themselves as suffering from MCS, who may require both medical and psychological assessment and treatment in Queensland Health facilities.

STAKEHOLDER ANALYSIS AND RISK ASSESSMENT

People who identify themselves as suffering from MCS may find that the position statement inadequate for their needs, as self-reported. It should be maintained however, that in absence of any evidence to suggest effectiveness of proposed interventions and treatments (such as the implementation of a “fragrance-free policy”), Queensland Health does not endorse the proposed interventions and treatments.

Key Queensland Health Executive staff who have previously been consulted regarding MCS (the District Chief Executive Officer, Metro North Health Service District and the Executive Director and Director, Medical Services, Princess Alexandra Hospital and Executive Director, Medical Services, Metro South Health Service District) have again been consulted and express their agreement to the Position Statement.

KEY CHALLENGES

In the past, lobby groups have corresponded with Queensland Health, requesting advice on Queensland Health's policies and guidelines for people who identify themselves as suffering from MCS. In the event this group of people express their displeasure with the proposed way forward, Queensland Health may again be lobbied to provide this advice.

QUEENSLAND HEALTH'S POSITION

Queensland Health has reached the position that due to the lack of consensus among clinicians in defining and identifying the cause of MCS, and robust evidence that reports the effectiveness of treatments highlighted, Queensland Health will not implement a policy deeming all Queensland Health facilities to be "fragrance-free".

Queensland Health has developed a process outlining how patients who identify themselves as suffering from MCS will be managed in Queensland Health facilities (Attachment 1). This process is based on the policies from the NHS Bristol (Attachment 2) and the NHS Plymouth (Attachment 3).

Queensland Health will review this policy stance in light of new data that may become available that suggests an evidence-based alternative approach to managing these patients.