# Multiple Chemical Sensitivity in the Clinical Setting

An American Journal of Nursing (AJN) feature article, March 2007, vol. 107, no. 3, pgs. 66-73

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### What is MCS?

- Multiple Chemical Sensitivity (MCS) is a condition in which exposure to trace amounts of common chemicals causes a broad array of physical symptoms in multiple body systems.
- Odors that are barely noticeable—and easily tolerated by most people—can cause acute respiratory distress, heart palpitations, and other physical symptoms.
- Over time individuals with MCS become intolerant to an increasing number of unrelated chemicals at lower and lower levels of exposure. Their reactions become more severe and long-lasting.
- Some individuals adopt chemical-free, virtually isolated, lifestyles in order to minimize accidental exposures.

## **Common Triggers**

- Odors and fragrances: perfumes, soaps, hygiene & cleaning products, fresh paint, ink, newsprint, rubber, latex, formaldehyde, phenols, cigarette smoke, pesticides, petroleum products (grease, oil, gasoline), "out-gassing" odors from new carpeting & items made from plastics.
- Medications such as non-steroidal antiinflammatory drugs & sulphonamides.
- Foods & food additives: dairy & soy products, peanuts, dyes & preservatives.

#### Who is affected?

- At least 15% of the population report some degree of unusual chemical sensitivity while 2.5% of the population may meet the criteria for MCS (Caress & Steinemann, 2004)
- Women are most frequently diagnosed with MCS
- Onset is typically between 30-50 years of age.
- Past chemical exposure—either a prolonged or sudden massive exposure—is often implicated with the development of MCS.



MCS patient Rodger Norris dons his protective mask. While artificial fragrances initiate a severe asthmatic episode for Rodger, he is not affected by pollen from trees or flowers—and he easily tolerates exposure to the dander from his pet dog, Pepper.

#### **Literature Cited**

- Caress, S.M. & Steinemann, A.C. (2004). A national population study of the prevalence of multiple chemical sensitivity. Archives of Environmental Health, 2007.
- Cooper, C. (2007). Multiple chemical sensitivity in the clinical setting. AJN, 107(3), 66-73.



Even subtle fragrances from cleaning supplies, soap, personal hygiene products, and odors that emanate from sharps containers, trash cans, or the area outside the patient's room will adversely affect some individuals afflicted with MCS.



#### **Acknowledgements**

I am indebted to Rodger Norris of Timberon, New Mexico for his willingness to participate in the photos and case study that accompanied this poster and the published article.

## Interventions in the clinical setting

- Enforce a strict "no-added-scent" hygiene policy for all caregivers.
- Ask each patient to inform you about their specific sensitivities & document accordingly in the medical record
- Ensure that the pharmacist is advised of medication and chemical triggers
- Protect chemically sensitive patients from triggers by providing a private room or an isolated cubicle in outpatient or emergency room settings
- Don't place MCS patients in rooms that have been recently painted or wallpapered; avoid rooms that are carpeted and have draperies that may hold inciting odors.
- Keep the patient's door closed to avoid ambient exposures
- Place a sign on the door (with the patient's permission) reminding staff about the patient's sensitivity and advising them to knock before entering
- Anticipate the need for latex-free equipment
- Allow patient to bring linens, supplies, and equipment from home for use in the clinical setting.
- Only fragrance-free, non-aerosol products should be used to clean the patient's room.
- Ensure that only unscented soap is available for hand washing in the patient's room.
- Place a new, empty sharps container in the patient room
- Don't bring items in (including standard hospital admission kits & hospital hygiene products) without consulting the patient.