

Multiple Chemical Sensitivity

People with environmental sensitivities experience symptoms when they are exposed to environmental agents/chemicals at levels of exposure that are lower than previously or commonly tolerated. This condition has been broadly termed environmental sensitivities, or environmental illness.

Table: Symptoms potentially triggered by exposure to environmental chemicals in people with MCS include:

Body System	Symptoms
Nervous System	Heightened sense of smell Difficulty concentrating Difficulty remembering Variability in mental processing Feeling dull or groggy Feeling spacey Headache Restlessness, hyperactivity, agitation, insomnia Depression Lack of coordination or balance Anxiety Seizures Tinnitus
Upper Respiratory System	Stuffy nose, itchy nose (the "allergic salute") Blocked ears Sinus stuffiness, pain, infections
Lower Respiratory System	Cough Wheezing, shortness of breath, heavy chest Asthma Frequent bronchitis or pneumonia
Eyes	Red, watery eyes Dark circles under eyes Pain in eyes Disturbed vision
Gastrointestinal System	Heartburn Nausea Bloating Constipation Diarrhea Abdominal pain
Endocrine System	Fatigue, lethargy Blood sugar fluctuations
Musculoskeletal System	Joint and muscle pain in the extremities and/or back Muscle twitching, spasm or weakness
Cardiovascular System	Rapid or irregular heartbeat

	Cold extremities High or low blood pressure
Skin (Dermatological System)	Flushing (whole body, or isolated, such as ears, nose or cheeks) Hives Eczema Other rashes Itching
Genitourinary System	Frequency and urgency to urinate Painful bladder spasms

Reference: Cullen M.R. The worker with multiple chemical sensitivities: an overview. Occupational Medicine, 1987; 2, 655-661.

Multiple Chemical Sensitivity 1999 Consensus Definition Criteria:

1. MCS is a chronic condition.
2. Symptoms recur reproducibly.
3. Symptoms recur in response to low levels of chemical exposure.
4. Symptoms occur when exposed to multiple unrelated chemicals.
5. Symptoms improve or resolve when trigger chemicals (incitants) are removed.
6. Multiple organ systems are affected.

Multiple Chemical Sensitivity: a 1999 Consensus. Archives of Environmental Health. 54: No 3, May/June 1999; 147-149.

Additional Diagnostic MCS Criteria from further epidemiological research

having a stronger sense of smell than others
difficulty concentrating
feeling dull or groggy
feeling spacey

Reference: McKeown-Eyssen GE, Baines CJ, Marshall LM, Jazmaji V, Sokoloff ER. Multiple chemical sensitivity: discriminant validity of case definitions. Archives of Environmental Health. 2001; 56(5): 406-412.

¹ An incitant is a chemical or other agent that triggers a reaction