



The Overlooked Crisis: How Climate Change is Intensifying Challenges for People with Multiple Chemical Sensitivity (MCS)

The increasing frequency of climate-related disasters—from wildfires to hurricanes and extreme heat waves—is a growing concern for all. However, for people with Multiple Chemical Sensitivity (MCS), these environmental shifts present an even greater crisis, exacerbating an already difficult daily existence. The intersection of climate change and MCS highlights an often-overlooked consequence of our changing world: the intensification of chemical exposures and the resulting health consequences.

Climate Disasters and Increased Chemical Exposure

Natural disasters, which are becoming more frequent due to climate change, pose heightened risks for people with MCS. Wildfires, for example, release vast amounts of toxic smoke containing fine particulate matter, heavy metals, and volatile organic compounds (VOCs) (1). These pollutants linger in the air for weeks and can travel hundreds of miles, significantly worsening air quality and triggering severe reactions in individuals with MCS. For those who are already sensitive to minute amounts of chemicals, the presence of widespread smoke can mean prolonged periods of debilitating symptoms and, in many cases, forced displacement to find clean air.

Similarly, hurricanes and flooding events contribute to another layer of chemical exposure. When floodwaters recede, they often leave behind mold infestations, which release mycotoxins into indoor environments (2). Mold exposure is a well-documented trigger for people with MCS, causing symptoms ranging from respiratory distress to neurological issues (3). Additionally, the cleanup process after hurricanes or floods typically involves the use of industrial disinfectants, chemical sprays, and construction materials that off-gas harmful substances—further limiting safe spaces for those with MCS (4).

The Dilemma of Emergency Shelters and Disaster Relief

For the general population, emergency shelters serve as temporary safe havens during climate crises. Unfortunately, these shelters are rarely designed with chemical sensitivity in mind. Many are housed in buildings with poor air quality, treated with pesticides or cleaning agents, and filled with people using scented personal care products (5). The



presence of synthetic materials, such as flame-retardant-laden bedding or off-gassing plastic supplies, creates an unlivable environment for those with MCS.

As a result, people with MCS often face an impossible choice: remain in unsafe conditions with environmental hazards or enter shelters where their symptoms may worsen due to chemical exposures. With limited disaster planning that considers the needs of chemically sensitive individuals, many are left without viable options, increasing their risk of prolonged health deterioration.

Heat Waves and Air Pollution: An Unseen Threat

Heat waves, another consequence of climate change, further compound the struggles of those with MCS. High temperatures intensify the release of ground-level ozone and other air pollutants, leading to increased chemical exposure even in urban areas that may not experience direct climate disasters (6). Additionally, extreme heat can make indoor air quality worse by increasing off-gassing from synthetic building materials and household items (7). For those with MCS, this means that even staying indoors does not necessarily guarantee protection from harmful exposures.

Solutions and Advocacy for Climate-Resilient MCS Support

Addressing the intersection of climate change and MCS requires a multi-faceted approach. First, emergency preparedness plans must be updated to include accommodations for individuals with MCS. This includes designating fragrance-free shelters, ensuring access to clean air spaces, and providing alternative forms of transportation for safe evacuation.

Additionally, greater awareness is needed among policymakers and disaster response organizations. Investing in healthier, non- to least-toxic building materials and advocating for air purification technologies in public spaces can create a more inclusive environment for those with MCS. More research is also necessary to better understand the compounding effects of climate-related chemical exposures on this vulnerable population.

Conclusion

Climate change is not just a distant environmental issue—it is a pressing human health crisis that disproportionately affects those with Multiple Chemical Sensitivity. The increasing prevalence of wildfires, hurricanes, extreme heat, and poor air quality only adds to the daily struggles faced by individuals with MCS. Without intentional changes to disaster response plans and environmental policies, those with MCS will continue to suffer in silence. Recognizing and addressing this issue is not just a matter of accessibility but a fundamental step toward climate justice and inclusive public health strategies.

References

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