

MCS prevalence in New Mexico

In 1997 the state of New Mexico conducted an MCS prevalence study as part of a larger health survey. The results were not publicized in a journal, but buried in the 1997 New Mexico Behavioral Risk Factor Survey report. We reprint a letter with the results.

Keywords: MCS prevalence, multiple chemical sensitivity prevalence, New Mexico, Ronald Voorhees

March 18, 1998

To: Joe Thompson, Special Counsel
Office of the Governor

From: Ronald E. Voorhees, MD, MPH
Deputy State Epidemiologist

Re: Information on Multiple Chemical Sensitivity (MCS)

The Office of Epidemiology, a unit of the Public Health Division in the Department of Health, was approached by the Multiple Chemical Sensitivity Task Force in 1996 to determine the prevalence of this condition in New Mexico. Other states, most notably California and North Carolina, had undertaken similar projects. The state of California received federal support to study this condition fairly extensively.

Our approach was to add three questions related to MCS onto the annual Behavioral Risk Factor Survey (BRFS). The BRFS is a federally-supported telephone survey of a sample of adult New Mexicans which is conducted annually to determine the prevalence of certain health risks in the population, such as cigarette smoking, diabetes, and lack of health insurance. The 1997 sample consisted of approximately 1,800 persons.

2 *New Mexico MCS prevalence*

While working definitions of MCS exist, the approach used by us (and other states) is to ascertain the prevalence of reported symptoms of chemical sensitivity. Our office worked with the MCS Task Force to develop questions very much like those used in California. The questions were:

1. Compared to other people do you consider yourself allergic or unusually sensitive to everyday chemicals like those in household cleaning products, paints, perfumes, detergents, insect sprays and things like that?
2. Have you ever been diagnosed with multiple chemical sensitivity, which is also known as environmental illness?
3. Due to chemical sensitivities, have you ever lost or had to give up a job or occupation?

The possible responses to each were: Yes, No, Don't Know/Not sure, and Refused.

Results:

Statewide, 17% of respondents reported being allergic or unusually to everyday chemicals. While we have not received the final weighting data from CDC, this data suggests that approximately 150,000-200,000 adults consider themselves chemically sensitive to some degree.

Just under two percent (1.9%) reported having been diagnosed with MCS. This would suggest that approximately 20,000 adults may have been diagnosed with MCS.

Just over two percent (2.2%) reported losing or giving up a job or occupation due to MCS. (Not all persons who reported giving up a job reported being diagnosed. Similarly, not all persons who reported being diagnosed reported losing or giving up a job.) This indicates that roughly 24,000 adults may have left jobs due to sensitivity to certain chemicals.

As seen on the attached maps, there was not much difference in the proportion of respondents in the different quadrants of the state. The proportion of reported sensitivity to chemicals ranged from 14.1% in the southeast part of the state to 20.2% in the northeast. The proportion reporting a diagnosis of MCS was highest in Bernalillo County (2.4%), followed by the southwest quadrant (2.3%). Reported loss of job was highest in the southwest (3.4%), followed by the northeast (3.3%).

Discussion:

While the causation of MCS is not entirely clear, what is evident is that a significant proportion of the adult population in New Mexico report symptoms or have been diagnosed with the condition. (By way of comparison, approximately 5% of respondents report being diagnosed with diabetes, although almost twice that number actually have the disease.)

The impact of the condition may be substantial. If, for example, those reporting losing a job or occupation experienced an average net loss of \$10,000 in annual income, the resulting loss to the state in tax revenues alone would be approximately \$15,000,000 (assuming 6% tax on the lost income).

Please let me know if I can be of further assistance.

cc: J. Alex Valdez, Secretary NMDOH
Norty Kalishman, MD, Chief Medical Officer, NMDOH
William H. Wiese, MD, MPH, Director, Public Health Division, NMDOH
C. Mack Sewell, DrPH, MS, State Epidemiologist

Results of Analyses of Multiple Chemical Sensitivity Questions**NOTES:**

Estimates based on less than 50 respondents are considered unreliable by the CDC.

Individuals who responded “Don’t know/Not sure” or who refused to respond have been excluded from Table 4 through 57.

4 *New Mexico MCS prevalence*

Table 1. MCS1: Compared to other people, do you consider yourself allergic or unusually sensitive to everyday chemicals like those in household cleaning products, paints, perfumes, detergents, insect sprays, and things like that?

	Sample size	Weighted percent	Approximate 95% Confidence Interval
Yes	309	16	(14.1, 17.5)
No	1463	82	(80.2, 83.9)
Don't Know/Not sure	3	--	--
Refused	38	2	(1.3, 2.7)
Total	1813		

Table 2. MCS2: Have you ever been diagnosed with multiple chemical sensitivity, which is also known as environmental illness

	Sample size	Weighted percent	Approximate 95% Confidence Interval
Yes	34	2	(1.1, 2.4)
No	1738	96	(95.2, 97.1)
Don't Know/Not sure	3	--	--
Refused	38	2	(1.3, 2.7)
Total	1813		

Table 3, MCS3: Due to chemical sensitivities, have you ever lost or had to give up a job or occupation?

	Sample size	Weighted percent	Approximate 95% Confidence Interval
Yes	39	2	(1.3, 2.7)
No	1724	96	(94.9, 96.9)
Don't Know/Not sure	2	--	--
Refused	38	2	(1.3, 2.7)
Total	1813		

Table 43. MCS1 versus RACENM (row percents)

Table values are:	Compared to other people, do you consider yourself allergic or unusually sensitive to everyday chemicals like those in household cleaning products, paints, perfumes, detergents, insect sprays, and things like that? (MCS1)		
N			
Weighted Percent			
95% Confidence Interval			
Race/Ethnicity			

(Calculated from Q37 (Are you of Spanish or Hispanic Origin?) and Q38 (What is your race?))	Yes	No	Total
White	157 14% (11.9, 16.5)	849 86% (83.5, 88.1)	1006 100%
Hispanic	117 17% (14.0, 20.2)	521 83% (79.8, 86.0)	638 100%
American Indian/Alaskan Native	21 27% (15.9, 38.3)	49 73% (61.7, 84.1)	70 100%
Other	12 22% (9.9, 34.2)	36 78% (65.8, 90.1)	48 100%

More information

Other articles about MCS on www.eiwellspring.org.