

## **Baseline Levels of Symptom Reporting**

What patients say and what their doctors do and do not know

How often do we get common symptoms and common disorders?

In a lawsuit, an association between a set of symptoms and the alleged exposed is often central to the claim. A mother may say, "My child has been sick with cough, runny nose, congestion, ever since we moved into the moldy apartment." Or, "I have constant headaches, ever since the waste site was built, the tank car spilled, the fires took place, or...." To put these claims into an objective framework, two things are needed. One is a factual assessment of how many such episodes actually occurred. This information can be approximated using medical records. The second, often ignored, but equally important, is an understanding of how common certain symptoms and illnesses are generally: in other words, what their background rates are. This is information unknown to most people and even to most physicians, although they certainly have the sense that they see lots of folks with those symptoms or illnesses. Both investigation of the medical records and questioning of treating or expert physicians can be enhanced by an understanding of these background data. Thus, if it is claimed that the child had a lot of upper respiratory infections, the logical next question is: "'A lot,' relative to what?"

A respected, peer reviewed published consensus concluded that normally children have between six and eight upper respiratory infections per year. Adults average two to three (Benninger et al, 2003). From these data, it has been estimated that there are approximately a billion cases of viral and bacterial rhinosinusitis annually in the U.S. Thus, it takes a great many upper respiratory infections before one exceeds the average.

Symptoms are subjective measures of an individual's health. They may be indicators of a serious disease: more often they are "normal" travails of life. Non-specific symptoms, including headache, fatigue, skin, eye and throat irritation, nausea, stomachaches and backaches are common in everyone. They are more common in community symptom surveys when pollution, hazard, contamination, or health threats are perceived (Williams and Lees-Haley, 1993; Watson and Pennebaker, 1989). Symptom prevalence rates are often used as an index of the health consequences of environmental and/or occupational exposure. They are, however, unreliable measures because they are so colored by fears, other emotional triggers, and by litigation (Lees-Haley and Brown, 1992).

Much data have described the symptom frequency or prevalence among those claiming sick building syndrome, pesticide exposure, hazardous waste exposures, and other perceived environment risks. These individuals report headaches, fatigue, stuffy nose, nausea and other somatic symptoms with a frequency that seems excessive, but how many of your neighbors wake each morning with a backache or headache? While data exist and have been published, little attention has been given to information about what symptoms healthy individuals commonly experience. The ones who have collected much of these data are physicians and scientists who study somatization and hypochondriasis. They need to know how their patients compare to normal individuals whose symptoms are simply part of everyday life.

Can we really have numerous symptoms for no apparent reason? Just walk into your neighborhood pharmacy. Dozens of brands of medications are sold for nearly every imaginable symptom, from nausea to headaches to arthritis. If it weren't for those symptom medications, there would be no CVS or Walgreens.

Barsky found that 86 to 95% of us within the general population report at least one of the common somatic symptoms in a given two to four week period. A typical adult reports non-specific health symptoms every four to six days (Barsky and Borus, 1995).

The CDHS (California Department of Health Services) survey found 183 women responding to self administered questionnaires (SAQ) to have a one year period prevalence rate for skin irritation of 21.9%, eye irritation 45.9%, sleep disturbance 42.1%, and fatigue 49.2% (Lipscomb et al, 1992).

The California study concluded that these symptom reporting rates may be used as reference for a quick, initial impression of expected rates in community-based studies. Additional data found in this study are available.

A South Australian Health Commission survey of over 3000 individuals asked about a variety of symptoms during the previous two weeks. This study found that a stuffy nose, headaches, unusual tiredness, cough, sore throat, and itchy eyes were each experienced by at least one-fifth of those questioned. Almost half (46%) of the subjects reported they had a stuffy nose within the last two weeks. Headaches, unusually tired, cough, itchy eyes, and sore throat occurred in about one-in-four to one-in-five individuals, 33.0%, 29.8%, 25.9%, 24.7%, 22.4%, respectively, during the previous two week period. Skin rash, wheezing, trouble breathing, nausea, diarrhea, and vomiting were indicated by less than 15% of the 3016 respondents, 12.0%, 10.1%, 10.0%, 9.0%, 5.7% and 4.0%, respectively, within the previous two-week period (Heyworth and McCaul, 2001).

Prevalence (% of Respondents) with Somatic Symptoms in Past Two Weeks in Community Survey (n=3016)								
Stuffy nose	headache	fatigue	cough	itchy eyes	sore throat	skin rash		
46.2	33.0	29.8	25.9	24.7	22.4	12.0		

Wheezing	trouble breathing	nausea	diarrhea	vomiting	
10.1	10.0	9.0	5.7	4.0	

Adapted from Heyworth and McCaul, 2001

The National Institutes of Health analyzed data collected on four somatic symptoms: headache, stomachache, backache, and morning fatigue, experienced in the previous six months by a sample of 8250 adolescent United States school girls, grades six through ten. About one third of these girls reported headaches and morning fatigue more than once each week. Stomachache was present more than once a week in one fifth of the sample. Stomachache occurred about once a month in nearly 40% of these students. Backache was reported to occur more than once a week by almost one-quarter of the girls. Morning fatigue and backaches were experienced in about a quarter of the girls, as often as once each month. This study points to high rates of somatic

complaints, headache, stomachache, backache and morning fatigue, among adolescent girls (Ghandour et al, 2004).

## **Symptoms Reported by US Adolescent Girls**

Symptoms	Occurrence	Frequency (%)
Headache	more than once a week	29.1
Stomachache	more than once a week	20.7
Stomachache	about once every month	37.9
Backache	more than once a week	23.6
Backache	about once every month	23.2
Morning Fatigue	more than once a week	30.6
Morning Fatigue	about once every month	26.2

Adapted from Ghandour et al, 2004

Nasal symptoms were evaluated among respondents to 2,114 questionnaires returned in a British survey of individuals over fourteen years of age. Of the respondents, 16.9% reported that in the previous year they had experienced "symptoms of nasal obstruction every day for more than fourteen consecutive days," 19.8% had a "runny nose," 7.1% reported sneezing bouts (sneezing for more than one hour/day for more than two weeks' duration), 19.6% had hay fever symptoms (Jones et al, 1998).

A postal survey among 2662 English adults found 70% reported a headache within the previous three months. Of these individuals, 23% reported headaches at least weekly and 16% found their pain to be severe (Boardman et al, 2003).

In a recent study from the Department of Symptom Research at the University of Texas, the presence of fatigue among community-dwelling adults measured by a self-administered questionnaire found 9% to report no fatigue, 41% reported mild fatigue, 42% reported moderate fatigue, and 8% reported severe fatigue (Reyes-Gibby et al, 2003). Thus, 91% reported mild to severe fatigue.

From the responses of 25,580 non-institutionalized, general population Europeans interviewed about their sleep, the prevalence of nonrestorative sleep was 10.8%. In women, the prevalence was 12.5% compared to 9.0% in males (Ohayon, 2005).

General populations rates of insomnia symptoms were reported by 27.6% of Italians aged fifteen years and older. They were interviewed by telephone in a study conducted by the Stanford Sleep Epidemiology Research Center (Ohayon and Smirne, 2002).

Almost 21,000 community based adults, 20-44 years of age, living in five geographic areas in Canada, were surveyed for asthma symptoms using a standardized, mailed questionnaire. The prevalence rates for asthma

symptoms among women were wheezing 28.2%, breathless without wheezing 15.4%, wheezing without cold 18.4%, chest tightness 19.8%, nocturnal shortness of breath 9.4% and nocturnal cough 37.6%. In men, the rates were similar (Manfreda et al, 2001).

Thus, symptoms, either related to common disorders such as asthma, or, simply as part of life with no identified cause, are common. It behooves both treating physicians and attorneys who deal with symptom-based claims to have a basic knowledge of this issue and the underlying data.

**Note:** A more comprehensive version of this article, complete with <u>references</u>, is available upon request. Please send an email to <u>info@ictm.com</u> with the subject line noted "Symptom Reporting Request."