
A survey of television meteorologists about their sources for and understanding of pollen counts

David A Frenz*†; Alpa M Goswami*; Laura W Murray*; and Naomi L Lince*‡

Background: Pollen counts are widely used by television stations in news programming but little is known about the sources for and quality of this information.

Objective: The purpose of this investigation was to survey television meteorologists about their sources for pollen counts and to assess their general understanding of these data.

Methods: Sixty-seven meteorologists employed by television stations in the nation's 20 largest Designated Market Areas (DMAs) were contacted by telephone. A brief survey was administered verbally and their responses were recorded.

Results: Thirty-seven meteorologists indicated that their station used pollen counts in news programming. Most were aware of their station's source for this information and reported that viewers contacted them about the pollen count. Few meteorologists, however, knew the type of instrument that was used to obtain pollen samples they aired and only 10 selected the correct definition of a pollen count from a list of three choices.

Conclusions: Pollen counts are an important element in television news programming that are poorly understood by the meteorologists who present them to the public. Allergists are encouraged to better educate the personnel at stations to which they supply pollen counts.

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INTRODUCTION

Pollen counts are frequently broadcasted by television stations to assist allergy sufferers. A recent study demonstrated that at least 49 million American households have access to pollen counts via news programming in the nation's 30 largest television markets. Pollen counts were aired by at least one station in 28 markets and by two or more stations in 22 markets.¹

Despite the widespread use of pollen counts in television news programming, little is known about the sources for this information, its quality, and whether station personnel understand its meaning. Data on these matters are

critical, however, for assessing the value of pollen counts delivered to the public. The purpose of this investigation was to survey television meteorologists about their sources for pollen counts and to assess their general understanding of these data.

METHODS AND RESULTS

During the first two quarters of 1998, the authors telephoned meteorologists employed by the principal broadcast television stations in the 20 largest television markets in the United States (Table 1). These markets were defined as Designated Market Areas (DMAs) by the A.C. Nielsen Company (Schaumburg, IL) for the purpose of television marketing.² Together these DMAs represent 44.2% of television households in the nation.

Meteorologists at 67 television stations were reached. After explaining the reason for calling and the nature of the investigation, the meteorologist was asked to voluntarily participate in a brief survey. Questions were admin-

istered verbally and responses were recorded on standardized forms by the authors. The particular questions posed to the meteorologists and a summary of their responses are presented in Figure 1.

Thirty-seven meteorologists indicated that their station used pollen counts in news programming (Question 1). This subset of respondents was then presented with six additional questions about their knowledge of this news content. These supplemental questions were not administered to meteorologists who indicated their station did not broadcast pollen counts.

Of the meteorologists surveyed, 30 personally presented pollen counts on the air during the weather segment of news broadcasts (Question 2). Six meteorologists did not have this responsibility but had sufficient knowledge of this information to comment on its use.

Most of the meteorologists were aware of their station's source for pollen counts (Question 3). When presented with five choices, two-thirds of respondents indicated that this information was supplied by a local allergy clinic or hospital. In nine cases the supplier was a government organization. The remaining stations received pollen counts from a variety of sources including a medical foundation, universities and a consortium of local businesses. None of the television stations performed their own pollen counts.

Only seven meteorologists could indicate the type of equipment used to collect the pollen counts supplied to them (Question 4). Two stated that their supplier used a Rotorod Sampler and one responded that counts were obtained with a Burkard Spore Trap. Of the Rotorod group, one meteorologist also added that their source used a

* Multidata, Inc; 10801 Wayzata Boulevard; Suite 330; Minnetonka, Minnesota.

† School of Medicine; University of Minnesota, Duluth; 10 University Drive; Duluth, Minnesota.

‡ Macalester College; 1600 Grand Avenue; St. Paul, Minnesota.

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“slide” which may refer to a Durham strategy.³ The four remaining meteorologists could not name the sampling device but provided descriptions suggestive of the Rotorod Sampler (“little stick machine,” “sticky stick thing,” “spinning device,” and “spins on roof”).

Twenty-three meteorologists knew the general time of day that the pollen count was performed (Question 5). In 22 cases pollen samples were obtained in the morning and in one instance a 6-hour sample was collected at 3 PM. In addition, five meteorologists were able to specify an exact time of the morning that the count was performed by their supplier.

When presented with three choices, 10 meteorologists selected the correct definition of a pollen count (Question 6; the second choice is the correct answer).⁴ The majority of respondents believed that a pollen count represented the atmospheric pollen conditions at the time the sample was removed from the collecting device. Three meteorologists indicated that pollen counts have predictive value and three declined to answer the question.

Most of the meteorologists reported that viewers contact their television station about pollen counts (Question 7). When presented with five ranges, 11 respondents indicated that they hear from viewers at least one time per week. Of this group, one meteorologist added that he receives two or three telephone calls per day dealing with pollen. In contrast, three respondents indicated that viewers never contact their stations about the pollen count.

DISCUSSION

Pollen counts continue to be widely used in television news programming. Of the 67 meteorologists surveyed for this present investigation, over half reported that their station included pollen counts in news programming. This finding was similar to data collected in the same DMAs during the 1995 pollen season.¹

Thirty-seven meteorologists were asked supplemental questions designed to characterize their sources for pollen counts and general understanding of these data. From their responses, four significant conclusions emerged.

First, allergy clinics and hospitals were the most common suppliers of

pollen counts to the television stations surveyed. This finding was somewhat anticipated since allergists in most major cities routinely perform pollen counts.⁵

Second, most meteorologists did not know what type of pollen collecting device their supplier used to obtain atmospheric samples. Although it was encouraging that seven respondents specified or described volumetric devices, in most cases it was unclear how pollen counts provided to stations were collected. The mention by one meteorologist of a method involving a “slide” raises the possibility that pollen data supplied to some stations may be obtained with non-volumetric devices that are no longer recommended for routine pollen sampling. Use of these devices would severely compromise the quality and usefulness of the pollen counts supplied to viewers.³

Third, the majority of meteorologists were not able to select the correct definition of a pollen count from a list of three choices. Many believed that a pollen count represented the atmospheric pollen conditions at the time the sample was removed from the collecting device. This response perhaps reflects their familiarity with weather instruments that provide instantaneous measurements of variables such as temperature and humidity. Few believed pollen counts have predictive value, a flatly erroneous answer.⁶

Fourth, it appears that pollen counts are important to viewers and stimulate a substantial number of inquiries to many stations. This finding is consistent with the nature of television news programming: stations generally present information that is desired by a large percentage of viewers.⁷ Data from general practitioners in the United Kingdom corroborate this conclusion: 15% of patients reported that pollen information on television played a major role in their decision to seek a medical consult for their allergies.⁸

Taken together, these findings demonstrate that pollen counts are an important element in television news programming that are poorly understood by the meteorologists who present

Table 1. The 20 Largest Designated Market Areas in the United States

Designated Market Area (DMA)	Rank
New York, NY	1
Los Angeles, CA	2
Chicago, IL	3
Philadelphia, PA	4
San Francisco/Oakland/San Jose, CA	5
Boston, MA	6
Washington, DC	7
Dallas/Ft. Worth, TX	8
Detroit, MI	9
Atlanta, GA	10
Houston, TX	11
Seattle/Tacoma, WA	12
Cleveland, OH	13
Minneapolis/St. Paul, MN	14
Tampa/St. Petersburg/Sarasota, FL	15
Miami/Ft. Lauderdale, FL	16
Pittsburgh, PA	17
Denver, CO	18
Phoenix, AZ	19
St. Louis, MO	20

1. Does your station air pollen counts?	
Yes (proceed with Question 2)	37
No (terminate survey)	30
2. Do you personally present pollen counts on the air?	
Yes	30
No	6
No answer	1
3. Where do you obtain your pollen counts?	
Local allergy clinic or hospital	22
City or county public health office	9
Collect your own data at the station	0
Not sure	1
Other (please specify)	5
4. Do you know what type of instrument your source uses to collect the pollen count?	
Yes (please specify)	7
No	30
5. Do you know what time of day your source performs the pollen count?	
Yes (please specify)	23
No	14
6. What statement best describes what a pollen count is?	
A predictor of tomorrow's pollen conditions	3
The average pollen conditions during the collection period	10
The atmospheric pollen conditions at the time the sample is removed from the pollen collecting device	21
No answer	3
7. How often do viewers contact your station about the pollen count?	
At least once per week	11
Twice per month	11
Once per month	4
Several times per year	3
Never	3
No answer	5

Figure 1. Survey questions administered to the meteorologists and a summary of their responses.

these data to the public. Allergists, the primary suppliers of pollen counts, are encouraged to better educate station personnel about pollen sampling instruments and the nature and limita-

tions of these data. A number of publications should prove useful in this process.⁹⁻¹⁵

Helping meteorologists achieve a better understanding of pollen counts

would ensure the reliability and meaningfulness of pollen information delivered on the air and in conversations with individual viewers. This step would also underscore that allergists

are a credible source for television news content.

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Request for reprints should be addressed to:
David A. Frenz
Vice-President/Director of Research
Multidata, Inc.
10801 Wayzata Boulevard
Suite 330
Minnetonka, MN 55305-1533