

# Survey of injuries among West End performers

Randolph W Evans, Richard I Evans, Scott Carvajal

## Abstract

**Objectives**—To obtain more information about injuries of West End performers.

**Methods**—A retrospective survey of 269 performers appearing in 20 West End productions (12 dramas and eight musicals).

**Results**—In current productions, 46% of all performers sustained at least one injury for an average of 0.87 injuries per performer. Lower extremity injuries were the most common for dancers (52.2% of injuries) and actors (43.2%) with neck and back injuries the second most common. Sprains and strains were the most common diagnoses. 61% of performers thought that their injuries were preventable. Most performers consulted non-physician healthcare providers. Factors significantly influencing the risk of injuries for performers include female sex, a history of previous injuries, missed performances due to previous injuries, more physically demanding roles, and performing on raked (angled) stages.

**Conclusion**—West End performers commonly sustain injuries. Although primary prevention of most theatrical injuries is not possible, modification of raked stages may reduce the incidence. This study may be helpful to the growing number of healthcare providers who practice performing arts medicine and may stimulate additional concern and research in the medical and theatrical communities about the performance injuries of professionals, amateurs, and theatrical students worldwide.

(*Occup Environ Med* 1998;55:585-593)

Keywords: injuries; dancers; actors

For the audience, West End productions can offer insightful and witty dialogue, inspiring and enthralling music, and seemingly effortless, dazzling dancing by some of the world's outstanding performers. Behind the glamour and glitz, however, is a highly stressful workplace where the performers can sustain a variety of occupational injuries. After our recent study on the prevalence and risk factors for theatrical injuries in 23 Broadway companies,<sup>1</sup> we performed a similar survey of West End companies.

## Methods

### SAMPLING

The study was performed with the cooperation of the staff and members of the British Actors' Equity Association who selected 20 West End theatrical productions in London chosen for a mixture of dramas and musicals for the survey

(table 1). The productions are 12 dramas and eight musicals. The deputy of each company distributed the survey to all cast members on various dates in February 1996. An attached letter from the Association introduced and endorsed the survey. The respondent could either mail in their anonymously completed questionnaire to the Association or give it to the deputy to send in. The number of respondents was 269 out of 379 total cast members (71%).

### SOURCES OF ERROR AND BIAS

Retrospective surveys of injury, including this one, present potential problems with the accuracy of the respondents' recollections. As their occupations are at risk, professional performers may be especially likely to remember their injuries.<sup>1</sup> Additionally, the assurance of anonymity may also have encouraged candor in the responses. The injury rate may be slightly higher than described as disabled performers were not included in the survey. About five to 10 performers a year in all West End productions are disabled from injuries and not able to complete their contracts.

The overall response rate of 71%, with the response rates of the cast members in various productions ranging from 44.4% to 100%, is another potential source of bias. However, the degree to which the productions had a response rate above or below the mean for the sample was not significantly related to the number of injuries sustained in their current production ( $F_{(1,19)}=0.43$ ,  $p=0.52$ ) or to whether they sustained an injury in their current production ( $F_{(1,19)}=0.25$ ,  $p=0.63$ ). Likewise, having a 100% response rate versus a less than perfect response rate was unrelated to the number of injuries ( $F_{(1,19)}=1.9$ ,  $p=0.19$ ) or whether the performer sustained an injury ( $F_{(1,19)}=0.11$ ,  $p=0.75$ ). These findings suggest that the non-respondents may be similar to the respondents.

### STATISTICAL ANALYSIS AND VARIABLE SELECTION

The survey questionnaire (appendix) consisted of self reported items designed to provide information about theatrical injuries and possible risk factors. The questionnaire was based on our Broadway survey<sup>1</sup> with input from an official of the British Actors' Equity Association (Hilary Strange, Senior West End Theatre Organiser). In the covering letter from the British Actors' Equity Association, injury was defined as follows: "Injury constitutes any theatre-related injury resulting in physical damage to the person. Please report any injuries you have sustained even those not resulting in missed performances."

For the initial risk factor analysis, unconditional logistic regression was used to generate

Department of  
Neurology, University  
of Texas at Houston  
Medical School,  
Houston, Texas, USA  
R W Evans

Department of  
Psychology, Social  
Psychology and  
Behavioral Medicine  
Research Group,  
University of Houston,  
Houston, Texas, USA  
R I Evans

Education, Training,  
and Research (ETR)  
Associates, Santa  
Cruz, California, USA  
S Carvajal

Correspondence to:  
Dr Randolph W Evans, 1200  
Binz 1370, Houston, Texas  
77004 USA.  
Telephone 001 713 528  
0725; fax 001 713 528 3628.

Accepted 31 March 1998

Table 1 Productions surveyed and demographics of West End performers

Production	Questionnaires returned (%)	Respondents (n)	Mean weeks in production	Mean physical demands*	Mean injuries / performer	Injured during production (%)	Size of rake† (% slope)	Choreography in show**
Oliver	78	29	22.4	2.69	0.83	57	9	3
Mousetrap	54	07	24.1	2.00	0.14	14	0	0
Buddy	67	16	76.6	3.19	0.94	44	0	0
Fame	63	20	27.7	2.80	0.65	35	0	3
Blood brothers	86	12	91.9	3.27	1.33	83	8	2
Les misérables	69	22	75.6	3.50	1.80	77	4	1
Only the lonely	53	08	37.4	2.63	0.13	13	0	0
Phantom of the opera	67	24	83.9	2.63	0.75	50	0	1
Communicating doors	80	08	24.6	3.38	0.63	38	0	0
Dead funny	44	04	14.0	2.25	0.00	0	0	0
The hot house	70	07	10.3	1.67	0.00	0	3	0
Jolson	53	16	15.0	2.38	0.75	50	4	0
Indian ink	67	12	34.4	1.67	0.00	0	4	0
An inspector calls	71	05	23.6	3.40	0.00	0	10	0
The master builder	55	06	17.0	1.67	0.00	0	5	0
Mack and mabel	100	27	11.2	3.07	0.56	44	0	3
Starlight express	100	21	153.4	4.40	2.95	81	10	3
The wind in the willows	70	14	7.4	3.43	0.57	57	0	0
The women in black	100	05	174.5	2.20	0.00	0	0	0
Tommy Steele	63	05	33.6	3.80	0.80	80	0	3
Total	71.0	269	49.4	2.93	0.87	46	3	1.4

\*Mean physical demands is a self rating that ranged from 1 (least) to 5 (most).

†These data were provided by the British Actors' Equity Association. Choreography in show ranged from 0 (none) to 3 (heavy).

odds ratios (ORs) for predictor variables, adjusted for the following covariates: number of weeks with the current production; number of performances with the current production; and number of minutes on stage each performance. Continuous predictors (height, age, etc), were categorised by quartiles of their distributions. The outcome for all analyses was whether the respondent indicated that they had been injured over the course of their current production.

As recommended when developing multi-variable logistic regression models through stepwise procedures,<sup>2</sup> all variables that predicted injury with even moderate probability of significance ( $p < 0.25$ ) were further tested with a criterion for inclusion in the final model being more restrictive ( $p < 0.15$ ). These selected models were further expanded by the forced inclusion of the three covariates implemented in the earlier risk factor analysis.

## Results

### CHARACTERISTICS OF THE STUDY POPULATION

Tables 1 and 2 present the demographic characteristics of the performers. The performers sustained 2.4 injuries per 1000 performances and 2.1 injuries per 1000 hours performing on stage during their current production. For

dancers and actors, respectively, 18.5% and 43.1% of injuries resulted in at least one missed performance. For the three most recent injuries, 60.8% of all performers thought that their injuries were preventable.

### RISK FACTORS FOR INJURY

The initial risk factor analysis identified various risk factors that significantly influence the risk of injury for performers (table 3): the performers' sex; age; age when they began instruction; duration as professional; previously injured; previously missed performing due to injury; physical demands of the role; and amount of choreography in the show.

As actors and dancers may have different patterns of risk factors,<sup>1</sup> a series of pairwise interactions with the type of performer and each predictor were modelled after the initial models (table 3). Of these moderating effects tested, the following were significant ( $p < 0.05$ ): sex, age, height, body mass, duration as professional, previously injured, previously missed performing due to injury, currently smoker, and performed on a raked (angled) stage. Male sex (OR (95% confidence interval (95% CI)) 0.5 (0.3 to 0.9) and 0.5 (0.1 to 2.6) in actors and dancers, respectively), older age (OR (95% CI) 0.3 (0.1 to 0.6) and 1.8 (0.4 to 7.8) in

Table 2 Demographics of West End performers surveyed

	Women (n=102)		Men (n=167)	
	Dancers (n=37)	Actors (n=65)	Dancers (n=21)	Actors (n=146)
Age (y)	25.8 (5.4)	33.1 (9.5)	25.0 (5.4)	38.2 (13.8)
Age began instruction (y)	6.5 (3.1)	12.9 (5.7)	10.8 (5.9)	17.0 (6.2)
Duration as professional (y)	8.4 (5.9)	12.8 (9.2)	8.5 (5.6)	16.0 (2.8)
Height (m)	1.64 (0.07)	1.63 (0.06)	1.79 (0.09)	1.77 (0.06)
Weight (kg)	53.3 (4.4)	57.1 (8.5)	72.3 (5.3)	76.6 (11.3)
Body mass index (kg/m <sup>2</sup> )	19.9 (1.5)	21.6 (3.3)	22.8 (2.4)	24.2 (3.5)
Injuries as performer (n)	5.7 (6.7)	3.9 (4.5)	11.2 (14.9)	4.0 (5.8)
Injuries in current production (n)	1.2 (1.5)	0.8 (1.0)	1.7 (1.6)	0.7 (1.3)
Time missed owing to all injuries (performances)	38.1 (85.0)	13.6 (35.3)	47.3 (56.7)	16.9 (39.4)
Time missed owing to current production injuries (performances)	8.2 (26.1)	0.9 (2.3)	12.8 (32.8)	3.0 (10.8)
Warms up before performing (%)	67	55	65	63
Currently exercising (%)	68	48	63	52
Currently in dance or acting classes (%)	48	35	43	17
Smokes cigarettes (%)	22	23	19	28

Table 3 Analysis of risk factors for injury in the current production (n=269)

	Adjusted OR	(95% CI)
Demographic variables:		
Dancer	2.4*	(1.3 to 4.5)
Male	0.5*	(0.3 to 0.9)
Age:		
Older	0.4*	(0.2 to 0.8)
Younger	1.9*	(1.1 to 3.3)
Height:		
Taller	1.0	(0.6 to 1.6)
Shorter	1.1	(0.6 to 1.8)
Weight:		
Greater	0.8	(0.5 to 1.4)
Lesser	1.4	(0.8 to 2.6)
Body mass:		
Greater	0.8	(0.5 to 1.5)
Lesser	1.1	(0.7 to 1.9)
Career variables:		
Age began instruction:		
Later	1.0	(0.5 to 1.7)
Earlier	2.3*	(1.3 to 4.0)
Duration as professional:		
Longer	0.5*	(0.3 to 0.9)
Shorter	1.6	(0.9 to 2.9)
Previously injured	5.0*	(2.7 to 9.1)
Previously missed performing due to injury	2.1*	(1.3 to 3.6)
Training or preparation variables:		
Currently exercising	1.6	(1.0 to 2.6)
Currently in dance or acting classes	1.3	(0.7 to 2.3)
Warms up before performing	1.9*	(1.1 to 3.1)
Currently smokes	1.1	(0.6 to 1.9)
Production feature variables:		
Physical demands of their role:		
≥3	3.1*	(1.7 to 5.6)
≤2	0.2*	(0.1 to 0.5)
Amount of choreography in show:		
≥2	2.1*	(1.2 to 3.5)
≤1	0.2*	(0.1 to 0.4)
Performed on a raked stage	1.6	(1.0 to 2.7)

Results were calculated with single predictor logistic models with control for the number of performances with that production, weeks with that production, and minutes on stage per show. Of the total sample, 124 were injured during their current production. The continuous risk factors were coded into two additional binary variables reflecting the two extreme quartiles of risk factor distributions in reference to the sex specific norm of each type of performer.

Physical demands ranged from 1 (least) to 5 (most). Amount of choreography ranged from 0 (none) to 3 (heavy).

\*p<0.05 Wald statistics.

actors and dancers, respectively), and a longer duration as professional (OR (95% CI) 0.4 (0.2 to 0.9) and 1.2 (0.2 to 5.8) in actors and dancers, respectively), were significant protective factors only in the actor subpopulation. The following were significant risk factors only in actors: previously injured (OR (95% CI) 4.4 (2.3 to 8.8) and 3.8 (0.8 to 17.5) in actors and dancers, respectively), previously missing performance due to injury (OR (95% CI) 1.8 (1.0 to 3.4) and 1.9 (0.5 to 6.5) in actors and dancers, respectively), and performed on a raked stage (OR (95% CI) 1.8 (1.0 to 3.2) and 2.0 (0.4 to 10.2) in actors and dancers, respectively).

Table 4 Multivariate analysis of risk factors for injury in the current production (n=269)

Variables	Adjusted OR	(95% CI)
Male	0.5*	(0.2 to 1.0)
Older age	0.5	(0.2 to 1.0)
Began instruction earlier	2.0	(1.0 to 3.2)
Shorter duration as professional	1.8	(0.9 to 3.7)
Previously injured	4.9*	(2.4 to 10.0)
Warms up before performing	1.7	(0.9 to 3.1)
Most (>3) physically demanding role	2.6*	(1.3 to 5.4)
Least (<2) physically demanding role	0.3*	(0.1 to 0.9)
Highest (>2) amount of choreography in show	0.4	(0.2 to 1.0)
Least (<1) amount of choreography in show	0.3	(0.1 to 0.7)
Performed on a raked stage	1.6	(0.9 to 3.0)

Results from the final unconditional logistic regression model with covariates that included number of performances with that production, weeks with that production, minutes on stage each show, and all other variables presented in this table.

\*p<0.05 Wald statistics.

Table 4 presents the unconditional logistic regression multivariate model derived from the stepwise regression procedures used. This final model includes 11 predictors and three additional covariates (-2 log likelihood = 274.6;  $\chi^2$  (df=14)=102.0, p<0.0001). The overall correct classification as injured or not injured was 74.0% (75.2% of those who reported not being injured and 72.6% of those who reported having one or more injuries).

Performers with high physical demands of the role had an additional 4.5 injuries per 10 000 performances, accounting for 61.5% of the injuries to this group and 18.8% of the injuries to all performers surveyed. An additional 4.3 injuries per 10 000 performances can be attributed to performing on raked stages, representing 37.5% of the injuries to those performers who perform on a raked stage and 18.0% of the injuries to all performers surveyed.

INJURIES

Table 5 lists the number and sites of injuries from the current and previous productions for the dancers and actors. Previous productions include all earlier professional and amateur productions. In current productions, lower extremity injuries (mostly of the knee and ankle) were the most common for dancers (52.2%) and actors (43.2%) with neck and back injuries the second most common type for all performers. There were many other sites of injuries including the larynx or vocal cord strain as detailed. The relative percentages of sites of injury from earlier productions were similar to those from current productions.

HEALTHCARE PROVIDERS AND DIAGNOSES

Table 6 provides the types of healthcare professionals seen and diagnoses given for the injuries as reported by the performers. Medical attention was sought for 92% of the injuries to dancers and 73% of the injuries to actors. Most dancers and actors saw non-physicians, most commonly physiotherapists, masseurs, chiropractors, and acupuncturists. Ear, nose, and throat physicians were seen by 4.9% of actors for voice or larynx injuries. Sprains and strains were the most common diagnoses for the injuries of all performers.

Discussion

This is the first epidemiological survey of injuries to West End performers. Forty six per cent of all performers sustained at least one injury or an average of 0.87 injuries per performer for the current productions. The frequency, site, and type of injuries of actors and dancers are similar to those of Broadway performers.<sup>1,3</sup> The injuries of dancers are also consistent with earlier studies of professional ballet dancers in the United States<sup>4</sup> and professional dancers of classical ballet and modern dance in the United Kingdom.<sup>5</sup> As in the Broadway survey,<sup>1</sup> 60.8% of all West End performers thought that their injuries were preventable. Most Broadway<sup>1</sup> and West End performers saw non-physicians for their injuries. Although there is widespread use of non-physician providers

Table 5 Sites of reported injuries

	Dancers (n=58) n (%)	Actors (n=211) n (%)
During this production:*	65 (17.4)	132 (16.2)
Lower extremity injuries:	34 (52.3)	57 (43.2)
Hip	0 (0.0)	1 (0.8)
Groin	3 (4.6)	3 (2.3)
Thigh	3 (4.6)	3 (2.3)
Knee	11 (16.9)	26 (19.7)
Shin	1 (1.5)	5 (3.8)
Calf	0 (1.5)	1 (0.8)
Ankle	12 (18.5)	10 (7.6)
Foot or toe	3 (4.6)	8 (6.1)
Neck and back injuries:	22 (33.9)	28 (21.2)
Neck	7 (10.8)	4 (3.0)
Lower back	12 (18.5)	15 (11.4)
Mid (upper) back	3 (4.6)	9 (6.8)
Other injuries:	9 (13.9)	50 (37.9)
Head	1 (1.5)	3 (2.3)
Larynx (vocal cords)	1 (1.5)	15 (11.4)
Shoulder	2 (3.1)	5 (3.8)
Arm	1 (1.5)	5 (3.8)
Hand or finger	2 (3.1)	8 (6.1)
Rib cage	0 (0.0)	5 (3.8)
Multiple (sites)	1 (1.5)	5 (3.8)
Other	1 (1.5)	4 (3.0)
Before production:*	367 (82.6)	681 (83.8)
Lower extremity	170 (46.3)	257 (37.7)
Neck and back	90 (24.5)	151 (22.2)
Other injuries	107 (39.2)	273 (40.1)
Total number of injuries for current and past productions	432	813

\*These aggregated results were based on the entire history of injuries.

among the general population in the United States<sup>6</sup>, this is not the case in the United Kingdom. Performers may wish to obtain rapidly available physical treatments.

Several variables influence the likelihood of injury for performers. In both the West End and Broadway,<sup>1</sup> performers with the highest level of physical demands are at increased risk of injury by a factor of about 3. In this survey, dancers in productions with greater amounts of choreography were 2.1 times more likely to sustain injuries. A history of previous injuries and previously missed performances due to injury also significantly increased the risk of injuries for actors in the current production. As in the Broadway survey, women performers are more likely to sustain injuries than men.

Although the explanation is not known, wearing high heeled shoes may contribute.

A raked stage is a stage that is angled down toward the audience to improve the view. The percentage of the slope in the productions surveyed ranged from 3% to 10%. Raked stages can lead to increased injuries because of the performers' accommodating shift backwards in their centre of gravity.<sup>7</sup> In the current study, performing on a raked stage was a significant risk factor for injury in actors only whereas on Broadway, performing on a raked stage was a significant risk factor for dancers but not actors. These findings may be explained by the presence of more actors and fewer dancers in the current study compared with the Broadway survey leading to differences in the power to detect significant relations.

This investigation may be useful for the growing number of physicians and other health professionals who are involved in performing arts medicine.<sup>8</sup> Primary prevention is another application as one of the significant risk factors, raked stages, can be modified. With the findings from our Broadway survey, the 1996 production contract of the Actors' Equity Association of the United States has recommended a maximum slope of no more than 7.5% and instituted a physiotherapy programme (Kenneth Greenwood of Actors' Equity Association, personal communication). Also, this West End survey was influential in the West End production contract to be completed on 12 January 1998 (Hilary Strange of the British Actors' Equity Association, personal communication). In a new clause, if a performer is required to work on a steeply raked stage, the employer will provide a "rake specialist" (usually a physiotherapist) to show performers how to work safely on a raked surface with an exercise programme and will provide continuous supervision and support. This study may also be helpful for the planning of

Table 6 Healthcare providers seen and reported healthcare provider diagnosis for injuries during the current production

	Responses indicating injuries to dancers n (%)		Responses indicating injuries to actors n (%)
Healthcare providers seen:			
Physiotherapist	48 (56.5)	Physiotherapist	52 (31.7)
Masseur	8 (9.4)	General practitioner	28 (17.1)
General practitioner	6 (7.1)	Ear, nose, and throat	8 (4.9)
Osteopath	4 (4.7)	Masseur	7 (4.3)
Chiropractor	4 (4.7)	Orthopaedist	5 (3.1)
Acupuncturist	3 (3.5)	Osteopath	5 (3.1)
Podiatrist	2 (2.4)	Chiropractor	4 (2.4)
Ear, nose, and throat	1 (1.2)	Acupuncturist	2 (1.2)
Other	2 (2.4)	Podiatrist	2 (1.2)
None seen	7 (8.2)	Other	6 (3.7)
Total	85 (100.0)	None seen	45 (27.4)
		Total	164 (100.0)
Reported healthcare provider diagnosis:			
Sprain or strain	19 (38.8)	Sprain or strain	41 (51.9)
Pinched nerve	6 (12.2)	Inflammation	10 (12.7)
Dislocation	4 (8.2)	Pinched nerve	5 (6.3)
Inflammation (chronic)	3 (6.1)	Stress fracture	4 (5.1)
Snap or tear	2 (4.1)	Contusion	3 (3.8)
Contusion	1 (2.0)	Acute fracture	2 (2.5)
Other	14 (28.6)	Dislocation	2 (2.5)
No diagnosis	1 (2.0)	Snap or tear	1 (1.2)
Total	49 (100.0)	Puncture or cut	1 (1.2)
		Other	8 (10.1)
		No diagnosis	2 (2.5)
		Total	79 (100.0)

healthcare provider needs by theatrical unions and production companies<sup>4</sup> as well as for the evaluation and prevention of injuries to theatrical students and non-professionals worldwide.

We greatly appreciate the assistance and cooperation of the members and staff (Hilary Strange, Senior West End Theatre Organiser and Peter Finch, Assistant General Secretary) of the British Actors' Equity Association.

- 1 Evans RW, Evans RI, Carvajal S, *et al.* A survey of injuries among Broadway performers. *Am J Public Health* 1996;**86**:77–80.
- 2 Hosmer DW, Lemeshow S. *Applied logistic regression*. New York: John Wiley, 1989.
- 3 Evans RW, Evans RI, Carvajal S. A survey of injuries among Broadway performers: types of injuries, treatments, and perceptions of performers. *Medical Problems of Performing Artists* 1996;**11**:15–19.
- 4 Solomon R, Micheli LJ, Solomon J, *et al.* The “cost” of injuries in a professional ballet company: anatomy of a season. *Medical Problems of Performing Artists* 1995;**10**:3–10.
- 5 Bowling A. Injuries to dancers: prevalence, treatment, and perceptions of causes. *BMJ* 1989;**298**:731–734.
- 6 Eisenberg DM, Kessler RC, Foster C, *et al.* Unconventional medicine in the United States. Prevalence, costs, and patterns of use. *N Engl J Med* 1993;**328**:246–52.
- 7 Howse J, Hancock S. Causes and complications of dance injuries. In: *Dance Technique and Injury Prevention*. London, England: A&C Black;1992;73–7.
- 8 Ostwald PF, Baron BC, Byl NM, *et al.* Performing arts medicine. *West J Med* 1994;**160**:48–52.

Appendix: Survey questionnaire

### SURVEY OF WEST END PERFORMERS

**SURVEY MARKING INSTRUCTIONS**  
For the multiple choice items, please mark fully in the oval that corresponds to your answer. Unless otherwise indicated, mark only one oval for each question. Please write in the numbers within the dotted-lined boxes in response to a numeric question.  
*Examples.*  
If you are primarily a dancer you would mark: ( ) Dancer ( ) Actor  
If you were born in the month of December you would mark in the box underneath: MONTH

**PART 1: YOUR BACKGROUND**

1. What type of performer are you in your current production? If you have dancing and acting roles, please mark the one that describes your major activity.  
( ) Dancer ( ) Actor (including singing)

2. What is your date of birth and current age?  
Date of birth: MONTH  DAY  YEAR   
Current Age

3. What is your gender?  
( ) Female ( ) Male

4. What is your height and weight?  
Height [inches]  Weight [stones]

5. At what age did you begin dancing, acting, or other performance related instruction, and for how long have you been a professional performer?  
AGE BEGAN  YEARS AS INSTRUCTION  PROFESSIONAL

6. How many performing related injuries have you sustained as a professional and as an amateur (before you began receiving any monetary compensation for performing)?  
TOTAL AS AN AMATEUR   
TOTAL AS AN PROFESSIONAL

### SURVEY OF WEST END PERFORMERS

**PART 2: ACTIVITIES & TRAINING**

7. Are you a regular cigarette smoker?  
( ) Yes ( ) No

8a. Are you involved in an exercise or weight training regimen (activities)?  
( ) Yes ( ) No (Skip to question 10)

b. How often do you participate in the following activities as part of your exercise regimen?  
PLEASE MARK FOR ALL ACTIVITIES.  
Once per week times 1-3 4 or more times per week

Weight training	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Running	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Swimming	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Football	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Tennis/Squash	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Cricket	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Rowing	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Cycling	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Aerobics	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Other (please specify): _____	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

9a. Do you warm-up before a performance?  
( ) Yes ( ) No

b. What type of warm-up do you do?  
PLEASE MARK ALL THAT APPLY.  
( ) Stretch ( ) Barre (bar)  
( ) Other (please specify) \_\_\_\_\_

**PART 3: INFORMATION ABOUT YOUR CURRENT PRODUCTION**

10. In what production are you currently performing?  
( ) Cats ( ) Five Guys Named Moe  
( ) Oliver ( ) Blood Brothers  
( ) Mousetrapp ( ) Les Miserables  
( ) Buddy ( ) Only the Lonely  
( ) Fame ( ) Phantom of the Opera  
( ) Miss Saigon ( ) Sunset Boulevard  
( ) Grease ( ) Other (please specify) \_\_\_\_\_  
( ) Crazy for You

---

### SURVEY OF WEST END PERFORMERS

**PART 4: INJURIES SUSTAINED IN YOUR CURRENT PRODUCTION**

17. How many injuries have you sustained over the course of THIS PRODUCTION and how many performances have they caused you to miss?  
( ) None (skip to question 21)  
( ) One injury ( ) PERFORMANCES MISSED DUE TO THESE INJURIES   
( ) Two injuries ( ) PERFORMANCES MISSED DUE TO THESE INJURIES   
( ) Three injuries ( ) PERFORMANCES MISSED DUE TO THESE INJURIES   
( ) Four injuries ( ) PERFORMANCES MISSED DUE TO THESE INJURIES   
( ) Five injuries ( ) PERFORMANCES MISSED DUE TO THESE INJURIES   
( ) Six or more ( ) PERFORMANCES MISSED DUE TO THESE INJURIES

For each of the 3 most recent injuries in your current production, please provide the following information. If you have more than 1 injury, Injury One is your most recent injury, while Injury Two refers to the second most recent injury in your current production.  
\*\*\*\*\*Injury One information (most recent injury or your only injury in this production)\*\*\*\*\*

18a. Location of Injury One?  
( ) Head ( ) Mid section/rib  
( ) Vocal chords ( ) Hip/tail bone  
( ) Larynx ( ) Groin  
( ) Neck ( ) Upper leg/thigh  
( ) Shoulder ( ) Knee  
( ) Arm ( ) Shin  
( ) Wrist ( ) Calf  
( ) Elbow ( ) Ankle  
( ) Hand ( ) Foot  
( ) Finger(s) ( ) Toe(s)  
( ) Upper/mid back ( ) Other ( please specify \_\_\_\_\_)  
( ) Lower back

b. At what point in your current production did the injury occur, and about how many total performances did you miss due to this injury?  
WEEKS IN THE PRODUCTION WHEN THE INJURY OCCURRED   
PERFORMANCES MISSED BECAUSE OF THIS INJURY

11. Over the whole show on average, how would you rate the physical demands of your role?  
LEAST DEMANDING (1) (2) (3) (4) (5) MOST DEMANDING

12. How long have you been involved in this production? Please report both total weeks and total number of performances.  
WEEKS  PERFORMANCES

13. On average, roughly how many minutes do you perform on stage?

14a. How many dance numbers are you in? Please mark "0" if you were in none.  
 (Number of dance numbers)

b. Are you being required to do something you are not trained to do in these dance numbers?  
( ) Yes ( ) No  
( ) I am not in any dance numbers

15. How many times per week (0-9) have you been going to classes during this production?  
(NOTE: This question pertains to only dance related classes for dancers, and only acting or voice related classes for actors.)

16. What type of shoes do you wear in the performance?  
( ) High heel ( ) Platforms  
( ) Ballet slippers ( ) Boots  
( ) Tap shoes ( ) Street shoes  
( ) Jazz/other dance shoes  
( ) No shoes  
( ) Other ( please specify \_\_\_\_\_ )

**SURVEY OF WEST END PERFORMERS**

**g.** Specifically, what type(s) of health care provider(s) did you consult about this injury? PLEASE MARK ALL THAT APPLY.

None  Podiatrist  
 Physiotherapist  Orthopedist  
 General practitioner  Neurologist  
 Masseur  ENT (throat specialist)  
 Chiropractor  Other: \_\_\_\_\_  
 Acupuncturist  Other: \_\_\_\_\_

**h.** If you consulted with a doctor or other health care provider, what was the primary diagnosis of this injury?

No provider was seen  
 No diagnosis was made  
 Strain/sprain  Contusion  
 Dislocation  Pinched nerve  
 Stress fracture  Other ( please specify \_\_\_\_\_ )  
 Acute fracture  Chronic inflammation

**i.** What specific tests were used to diagnose the injury? PLEASE MARK ALL THE TESTS THAT WERE USED.

No provider was seen  
 No tests were used  CAT scan  
 standard X-ray  Bone scan  
 MRI  Other: \_\_\_\_\_  
 Stress film of ankle or knee

**j.** If you had surgery because of this injury, what type of surgery was it?

No surgery was performed  
 Surgery was performed ( please specify the kind(s) of surgery(s) \_\_\_\_\_ )

**k.** Did management provide treatment free of charge for this injury and if so what? PLEASE MARK ALL THAT APPLY.

No services provided  
 Complimentary doctor  
 Complimentary physiotherapist  
 Complimentary masseur  
 Other complimentary health care provider ( please specify \_\_\_\_\_ )

**SURVEY OF WEST END PERFORMERS**

**19a.** Location of Injury Two?

Head  Mid section/rib  
 Vocal chords  Hip/tail bone  
 /Larynx  Groin  
 Neck  Upper leg/thigh  
 Shoulder  Knee  
 Arm  Shin  
 Wrist  Calf  
 Elbow  Ankle  
 Hand  Foot  
 Finger(s)  Toe(s)  
 Upper/mid back  Other ( please specify \_\_\_\_\_ )  
 Lower back

**b.** At what point in your current production did the injury occur, and about how many total performances did you miss due to this injury?

WEEKS IN THE PRODUCTION MISSED BECAUSE OF THIS INJURY  
 \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**c.** How did the injury occur?

Rehearsal  Performance  
 Slow onset  Classes  
 Other ( please specify \_\_\_\_\_ )

**d.** In how many shows did you perform while experiencing significant pain due to this injury? Please mark "0" if you did not perform in pain.

\_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**e.** Do you currently have any symptoms from this injury?

Yes  No

**f.** How long did you experience any symptoms due to this injury?

1 day or less  10 days to 4 weeks  
 2-4 days  4 weeks to 3 months  
 5-10 days  greater than 3 months

**SURVEY OF WEST END PERFORMERS**

**j.** If you had surgery because of this injury, what type of surgery was it?

No surgery was performed  
 Surgery was performed ( please specify the kind(s) of surgery(s) \_\_\_\_\_ )

**k.** Did management provide treatment free of charge for this injury, and if so what? PLEASE MARK ALL THAT APPLY.

No services provided  
 Complimentary doctor  
 Complimentary physiotherapist  
 Complimentary masseur  
 Other complimentary health care provider ( please specify \_\_\_\_\_ )

**l.** Are you pursuing a claim for compensation for this injury through Equity?

Yes  No

**m.** If this injury could have been prevented, which of the following may have contributed to the occurrence of this injury? PLEASE MARK ALL THAT APPLY.

The injury could not have been prevented  
 Poor floors  
 Rake of stage  
 Prevalence of fog/stage smoke  
 Other features of the set or stage  
 Excessive demands from choreographer or director to have the overall performance shine  
 Excessive physical demands required of the role you perform  
 Features of the show's choreography or directing  
 Pressures from other performers  
 Your having an inadequate warm-up  
 Your personal training habits/physical conditioning  
 Other personal or lifestyle factors (examples: If your diet, sleep, stress, smoking, etc. may have contributed)  
 Excessive pressures from yourself to excel  
 Ignoring your own pain  
 Ignoring your own physical fatigue  
 Other ( please specify \_\_\_\_\_ )

**n.** How long did you experience any symptoms due to this injury?

1 day or less  10 days to 4 weeks  
 2-4 days  4 weeks to 3 months  
 5-10 days  greater than 3 months

**g.** Specifically, what type(s) of health care provider(s) did you consult about this injury? PLEASE MARK ALL THAT APPLY.

None  Podiatrist  
 Physiotherapist  Orthopedist  
 General practitioner  Neurologist  
 Masseur  ENT (throat specialist)  
 Chiropractor  Other: \_\_\_\_\_  
 Acupuncturist

**h.** If you consulted with a doctor or other health care provider, what was the primary diagnosis of this injury?

No provider was seen  
 No diagnosis was made  
 Strain/sprain  Contusion  
 Dislocation  Pinched nerve  
 Stress fracture  Other ( please specify \_\_\_\_\_ )  
 Acute fracture  Chronic inflammation

**i.** What specific tests were used to diagnose the injury? PLEASE MARK ALL THE TESTS THAT WERE USED.

No provider was seen  
 No tests were used  CAT scan  
 standard X-ray  Bone scan  
 MRI  Other: \_\_\_\_\_  
 Stress film of ankle or knee

**SURVEY OF WEST END PERFORMERS**

1. Are you pursuing a claim for compensation for this injury through Equity?  
 Yes  No

m. If this injury could have been prevented, which of the following may have contributed to the occurrence of this injury? PLEASE MARK ALL THAT APPLY.

The injury could not have been prevented

Poor floors  
 Rake of stage  
 Prevalence of fog/stage smoke  
 Other features of the set or stage director to have the overall performance shine the role you perform  
 Excessive physical demands required of or directing  
 Pressures from other performers  
 Your having an inadequate warm-up  
 Your personal training habits/physical conditioning  
 Other personal or lifestyle factors (examples include diet, sleep, stress, smoking) ignoring your own pain  
 Ignoring your own physical fatigue  
 Other (please specify \_\_\_\_\_)

k. Did management provide treatment free of charge for this injury and if so what? PLEASE MARK ALL THAT APPLY.

No services provided  
 Complimentary doctor  
 Complimentary physiotherapist  
 Complimentary masseur  
 Other complimentary health care provider (please specify \_\_\_\_\_)

l. Are you pursuing a claim for compensation for this injury through Equity?  
 Yes  No

m. If this injury could have been prevented, which of the following may have contributed to the occurrence of this injury? PLEASE MARK ALL THAT APPLY.

The injury could not have been prevented

Poor floors  
 Rake of stage  
 Prevalence of fog/stage smoke  
 Other features of the set or stage director to have the overall performance shine the role you perform  
 Excessive physical demands required of or directing  
 Pressures from other performers  
 Your having an inadequate warm-up  
 Your personal training habits/physical conditioning  
 Other personal or lifestyle factors (examples include diet, sleep, stress, smoking) excessive pressures from yourself to excel  
 Ignoring your own pain  
 Ignoring your own physical fatigue  
 Other (please specify \_\_\_\_\_)

**SURVEY OF WEST END PERFORMERS**

c. How did the injury occur?  
 Rehearsal  Performance  
 Slow onset  Classes  
 Other (please specify \_\_\_\_\_)

d. In how many shows did you perform while experiencing significant pain due to this injury? Please mark "0" if you did not perform in pain.

0  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76  
 77  
 78  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100

e. Due you currently have any symptoms from this injury?  
 Yes  No

f. How long did you experience any symptoms due to this injury?  
 1 day or less  
 2-4 days  
 5-10 days  
 10 days to 4 weeks  
 4 weeks to 3 months  
 greater than 3 months

g. Specifically, what type(s) of health care provider(s) did you consult about this injury? PLEASE MARK ALL THAT APPLY.

None  
 Physiotherapist  
 General practitioner  
 Masseuse  
 Chiropractor  
 Acupuncturist  
 Other: \_\_\_\_\_

h. If you consulted with a doctor or other health care provider, what was the primary diagnosis of this injury?

No diagnosis was made  
 Strain/sprain  
 Dislocation  
 Stress fracture  
 Acute fracture  
 Chronic inflammation  
 Contusion  
 Pinched nerve  
 Other (please specify \_\_\_\_\_)

i. What specific tests were used to diagnose the injury? PLEASE MARK ALL THE TESTS THAT WERE USED.

No tests were used  
 MRI  
 CAT scan  
 Bone scan  
 MRI  
 Stress film of ankle or knee  
 Other: \_\_\_\_\_

j. If you had surgery because of this injury, what type of surgery was it?  
 No surgery was performed  
 Surgery was performed (please specify the kind(s) of surgery(s) \_\_\_\_\_)

20a. Location of Injury Three?  
 Head  
 Neck  
 Shoulder  
 Arm  
 Wrist  
 Elbow  
 Hand  
 Fingers(s)  
 Upper/mid back  
 Lower back

Mid section/rib  
 Hip/tail bone  
 Groin  
 Upper leg/thigh  
 Knee  
 Shin  
 Calf  
 Ankle  
 Foot  
 Toe(s)  
 Other (please specify \_\_\_\_\_)

b. At what point in your current production did the injury occur, and about how many total performances did you miss due to this injury?

WEEKS IN THE PRODUCTION MISSED BECAUSE WHEN THE INJURY OF THIS INJURY OCCURRED

0  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76  
 77  
 78  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100

**SURVEY OF WEST END PERFORMERS**

b. Indicate how many injuries you have sustained in the following locations. Please mark a "0" if you have not been injured in that location.

Head  
 Vocal chords/Larynx  
 Neck  
 Shoulder  
 Arm  
 Wrist  
 Elbow  
 Hand  
 Fingers(s)  
 Upper/mid back  
 Lower back

Mid section/rib  
 Hip/tail bone  
 Groin  
 Upper leg/thigh  
 Knee  
 Shin  
 Calf  
 Ankle  
 Foot  
 Toe(s)  
 Other (please specify \_\_\_\_\_)

c. Indicate about how many WEEKS IN TOTAL you have missed performing due to injury in the following locations? Please mark "0" if you have not missed any performances due to injury in those locations.

LOWER LEG OR BACK LOCATION  
 0  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76  
 77  
 78  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100

22. How frequently have you observed that the following features may contribute to the injury of theatrical performers?

Never  Seldom  Occasionally  Frequently

Rake of stage  0  0  0  
 Poor floors  0  0  0  
 Steps/access  0  0  0  
 /traps  0  0  0  
 Relative darkness  0  0  0  
 of set  0  0  0  
 Props or stage  0  0  0  
 features  0  0  0  
 Inappropriately  0  0  0  
 designed shoes  0  0  0  
 Fog/stage smoke  0  0  0  
 Cumbersome  0  0  0  
 costumes  0  0  0  
 Other: \_\_\_\_\_  0  0  0

**PART 5: RELATED EXPERIENCES AND THOUGHTS ABOUT INJURIES**

21. The following items pertain to all performing-related injuries you may have sustained BEFORE YOUR CURRENT PRODUCTION.

a. Of the total injuries have you sustained, about how many resulted in you missing at least one performance, and how many in surgery?  
 RESULTED IN MISSED PERFORMANCE(S)  0  
 SURGERY  0

**PART 5: RELATED EXPERIENCES AND THOUGHTS ABOUT INJURIES**

21. The following items pertain to all performing-related injuries you may have sustained BEFORE YOUR CURRENT PRODUCTION.

a. Of the total injuries have you sustained, about how many resulted in you missing at least one performance, and how many in surgery?  
 RESULTED IN MISSED PERFORMANCE(S)  0  
 SURGERY  0

**PART 5: RELATED EXPERIENCES AND THOUGHTS ABOUT INJURIES**

21. The following items pertain to all performing-related injuries you may have sustained BEFORE YOUR CURRENT PRODUCTION.

a. Of the total injuries have you sustained, about how many resulted in you missing at least one performance, and how many in surgery?  
 RESULTED IN MISSED PERFORMANCE(S)  0  
 SURGERY  0

**PART 5: RELATED EXPERIENCES AND THOUGHTS ABOUT INJURIES**

21. The following items pertain to all performing-related injuries you may have sustained BEFORE YOUR CURRENT PRODUCTION.

a. Of the total injuries have you sustained, about how many resulted in you missing at least one performance, and how many in surgery?  
 RESULTED IN MISSED PERFORMANCE(S)  0  
 SURGERY  0



**SURVEY OF WEST END PERFORMERS**

23. Do you feel that making a claim for compensation with Equity may be detrimental or "bad" to PERFORMERS' careers?  
 Not bad to their careers  
 Possibly bad to their careers  
 Definitely bad to their careers

24. Do you believe that warm-up before a performance is generally necessary?  
 Yes  No

25. How often do you believe the following conditions MAY CONTRIBUTE TO PERFORMERS' INJURIES:

a. Features of show choreography or direction that place performers at risk?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
b. Inadequate warm-up?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
c. Cigarette smoking?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
d. Having roles that push performers to their physical limits?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
e. Inadequate warm-up?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
f. Performers' ignoring physical fatigue?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
g. Insufficient physical conditioning?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
h. Performers' ignoring their own pain?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
i. Stress from a performer's personal life?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
j. Excessive pressure on performer by him/herself to excel?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
k. Pressures by other performers?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
l. Poor nutrition or diet?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
m. Alcohol or drug consumption?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently
n. Excessive demands by director/choreographer to have the overall performance shine?	<input type="radio"/> Never	<input type="radio"/> Seldom	<input type="radio"/> Occasionally	<input type="radio"/> Frequently

26. Please estimate the chance that the following problems will be faced (within the next 12 months) by a performer comparable to yourself in experience, physical conditioning and expertise?

She/he will be injured during training or exercising.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
She/he will sustain an injury that was caused by the mistakes of another person involved in the show.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
She/he will miss 10 or more performances due to injury.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
She/he will be injured due to faulty props or equipment.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
She/he will have an injury that requires surgery.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
She/he will push her/himself to the physical limits and sustain an injury.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100

27. How sure or confident are you that YOU PERSONALLY CAN PREVENT the following situations from occurring in the next 12 months.

Having an injury due to the deterioration of your technique or physical conditioning.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Having an injury due to your not taking precautions when you are fatigued.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Having an injury due to your own lack of concentration or caution.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Having an injury become more serious because of your not seeking therapy or consultation.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Having an injury because of you having an inadequate warm-up or stretch.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Having an injury because you pushed yourself beyond your physical limits.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

**SURVEY OF WEST END PERFORMERS**

28. Please indicate how much you agree with each of the following items.

a. I have excellent muscle tone.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
b. If something can go wrong for me, it will.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
c. There are lots of ways around any problem.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
d. I'm always optimistic about my future.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
e. Even when others get discouraged, I know that I can find to solve the problem.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
f. I have excellent reflexes.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
g. I rarely count on good things happening to me.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
h. My physique is rather strong.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
i. Overall, I expect more good things to happen to me than bad.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
j. I can think of many ways to get the things in life that are most important to me.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
k. I hardly ever expect things to go my way.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
l. I can think of many ways to get out of a jam or "rut".	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
m. In uncertain times, I usually expect the best.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
n. I have a strong grip.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

29. Approximate the likelihood that the following will happen to YOU within the next 12 months?

You will miss 10 or more performances due to injury.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
You will be injured due to faulty props or equipment.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
You will push yourself to your physical limits and sustain an injury.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
You will be injured during training or exercising.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
You will sustain an injury that was caused by the mistakes of another person involved in the show.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
You will have an injury that requires surgery.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100
You will be severely injured from your own mistakes.	<input type="radio"/> 0	<input type="radio"/> 10	<input type="radio"/> 20	<input type="radio"/> 30	<input type="radio"/> 40	<input type="radio"/> 50	<input type="radio"/> 60	<input type="radio"/> 70	<input type="radio"/> 80	<input type="radio"/> 90	<input type="radio"/> 100

END OF SURVEY

Please make sure all the appropriate pages of the survey were completed. We would appreciate your writing additional comments and questions here, or attach a separate page to the survey.

*Thank you very much for your participation!*

Randolph W. Evans, M.D.  
 Department of Neurology, University of Texas  
 at Houston Medical School and Baylor College of Medicine.

and

Richard L. Evans, Ph.D. and Scott C. Carvajal, M.A.  
 Social Psychology/Behavioral Medicine Research Group  
 Department of Psychology, The University of Houston.