

A cheerleading exposure was defined as one cheerleader participating in one practice, pep rally, game, or competition where s/he is exposed to the possibility of sustaining a cheerleading-related injury.

1.4.1 Sample Recruitment

All cheerleading teams with a designated, English-speaking reporter were eligible for participation in the 2006/2007 Cheerleading RIO™ study. Participants were recruited by asking the major cheerleading organizations that endorsed the study to send e-mails to all the cheerleading teams/gyms in their contacts database; placing ads in American Cheerleader magazine, Cheer Biz News, Cheer Coach & Advisor magazine, and Inside Cheerleading magazine; advertising at several coaches' conferences; talking about the study during an interview on Varsity Spirit Radio; and by word-of-mouth. All interested parties were directed to a website that contained detailed information about the study, and a link to an enrollment form and enrollment questionnaire. Upon completing the form and questionnaire, teams were enrolled in the study and assigned a unique reporter ID. They were then e-mailed information packets and directed to an online training program that was designed to teach them how to fill out the online exposure and injury reports.

In return for participating in the study for the entire year, participants received a generous incentive package, donated by various cheerleading organizations; an individual report documenting all the data and injury rates for their team for the study year; a certificate for completion of the study; for teams that were injury-free for the entire year, an injury-free certificate to hang in their gym or team office; and a copy of this final report.

1.4.2 Data Collection

The data were collected from June 5, 2006 through June 3, 2007. Every Monday throughout the one-year study period, reporters received an e-mail reminding them to log on to RIO™ to complete the weekly exposure report and applicable injury reports for the previous week. Reporters were asked to fill in all zeroes on the weekly exposure report for weeks that their team was inactive. Weekly exposure reports collected exposure data for cheerleading practices, pep rallies, games, and competitions, plus the number of reportable injuries sustained by team members during that week. Reporters were also able to enter exposures for other types of cheerleading-related events, such as gymnastics classes, parades, cheer clinics, cheerleading camp, etc. For each reportable injury entered on the exposure report, the reporter completed a detailed injury report form which collected information about the injured cheerleader (age, gender, etc.), injury (body part injured, type of injury, etc.), and injury event (type of maneuver being attempted, type of event at which injury occurred, etc.). RIO™ provided reporters with the ability to view all data they had reported throughout the study, as well as the option to update reports with information that was not available at the time the initial report was submitted.

1.4.3 Data Management

In an effort to decrease loss to follow-up, a log of reporters' data entries was maintained. Reporters who repeatedly failed to log on to complete the weekly exposure and injury reports were contacted via e-mail and/or telephone by Brenda Shields, who offered assistance and assessed the reporter's willingness to continue participating in the study.

To assess the completeness and accuracy of submitted data, data audits were conducted twice during the study and again at the end of the study. All reporters with missing data, or data

entry errors, were contacted via e-mail and/or telephone by Brenda Shields, given a list of missing/incorrect data, and asked to make the corrections.

1.4.4 Data Analysis

Data were analyzed using SAS software (Cary, NC, version 9.1) and SPSS software (Chicago, IL, version 14.0).

II. Response Rate and Demographics for Teams

2.1 Response Rate

- 896 cheerleading teams completed an enrollment form to participate in the study
 - 92 of these enrollment forms were incomplete
 - 1 enrollment form was a duplicate of another
 - 803 teams were officially enrolled in the study and assigned a Reporter ID
- Of the 803 teams that were officially enrolled in the study:
 - 243 teams completed all 52 weeks of the study
 - 173 teams withdrew from the study, but submitted valid data prior to withdrawing
 - 387 teams never reported any data
- Final data set: Data from 416 teams were used to prepare the Final Report for
Cheerleading RIO™ 2006/2007

2.2 Cheerleading Team Demographics

Table 2.1 Type of cheerleading team

Team Type	n	%
All-Star	114	27.4
College	39	9.4
High School	181	43.5
Middle School	39	9.4
Elementary School	3	0.7
Recreation League	40	9.6
Total	416	100.0

III. Injury Epidemiology

3.1 Number of Injuries Reported

Table 3.1 Number of injuries by type of event

Event	# Injuries
Practice	479
Pep Rally	8
Game	47
Competition	47
Overall*	581

* Overall = Practice + Pep Rally + Game + Competition

3.2 Injured Cheerleader Demographics

Figure 3.1 Age distribution of injured cheerleaders

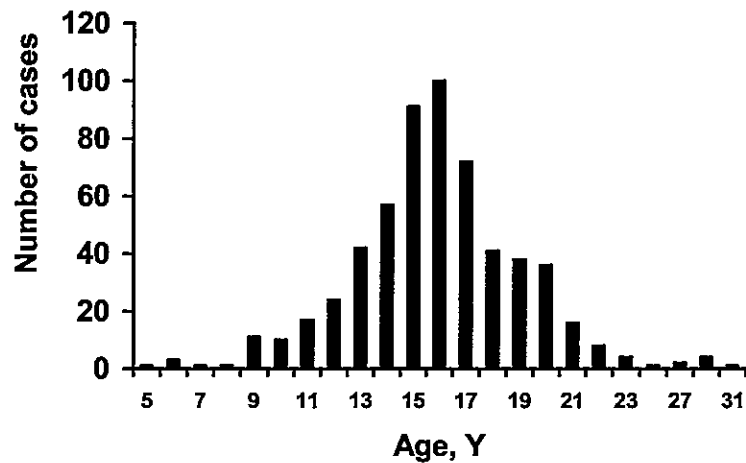


Table 3.2 Demographics for injured cheerleaders, by gender

	n	Mean	SD	Min	Median	Max
Age, Y						
Male	47	20.2	3.8	10	19	29
Female	534	15.6	2.9	5	16	31
Overall	581	15.9	3.3	5	16	31
Height, inches						
Male	47	68.6	3.4	55	69	74
Female	528	62.3	4.9	36	63	78
Unknown	6					
Overall	581	62.8	5.1	36	63	78
Weight, pounds						
Male	47	171.3	29.0	75	176	235
Female	533	115.8	22.0	50	115	215
Unknown	1					
Overall	581	120.3	27.2	50	117	235
BMI						
Male	47	25.5	3.7	17.4	24.8	34.7
Female	520	21.0	3.2	13.1	20.4	41.5
Unknown	14					
Overall	581	21.4	3.5	13.1	20.6	41.5

3.3 Injuries Sustained by Cheerleaders

- Only the most serious injury sustained by the cheerleader during the injury event will be described
- 14 of the 581 injured cheerleaders (2.4 %) sustained a second injury during the injury event
- 1 of the 581 injured cheerleaders (0.2 %) sustained more than 2 injuries during the injury event

Figure 3.2 Body part injured

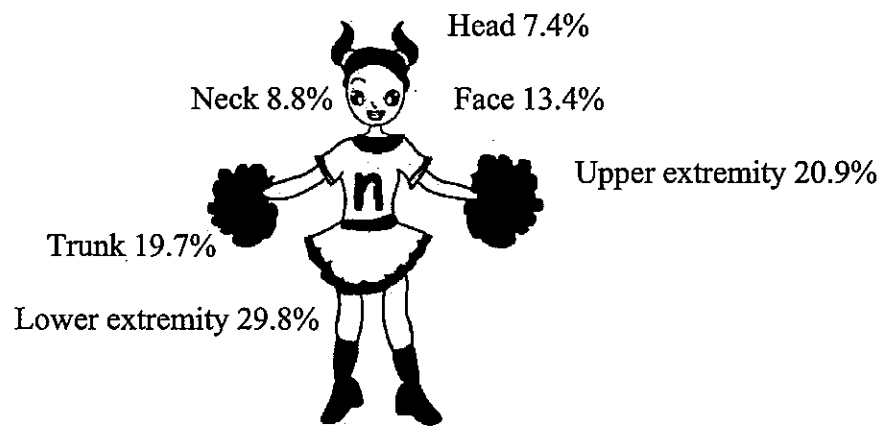


Figure 3.3 Part of face injured

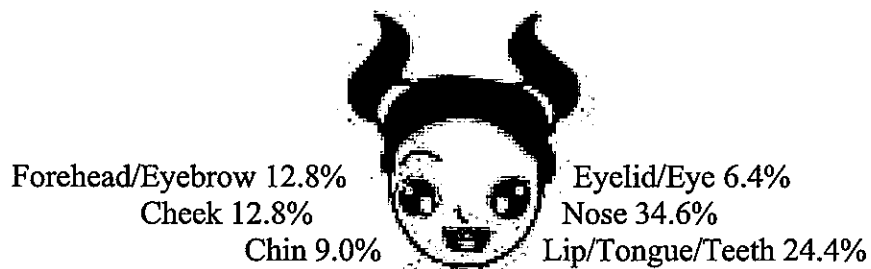


Figure 3.4 Part of arm injured

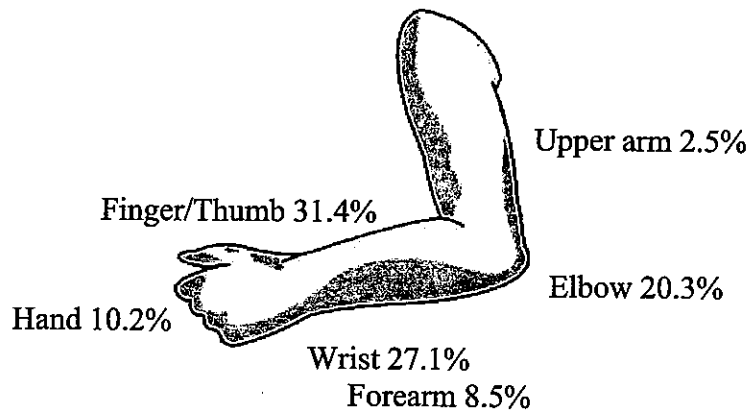


Figure 3.5 Part of leg injured

