



# ARCHERY

SAFETY BROCHURE

2016



Photo by: Charlie Baglan

# IS ARCHERY SAFE? YES!

## Introduction

With archery participation rising in popularity among youths and adults, the question “How safe is archery?” becomes even more important when considering the sport. Archery is not only a sport for people of all ages, sizes and skill levels, it’s also one of the safest when comparing its statistics to those of other mainstream sports. Archery’s safety record helps increase programming in many organizations and locations. Administrators from schools, 4-H, camps, clubs, churches, community events, parks-and-recreation departments, and many other venues all contribute to archery’s surge.

**Is Archery Safe? YES!** Data in Figure 1 show that despite increases of 2.5 million archers from 2007 to 2014, the injury rate did NOT increase. Archery consistently caused less than one injury per 1,000 participants from 2007 to 2014.

**Figure 1:** 2007 to 2014 Archery Injury Rates and Participation

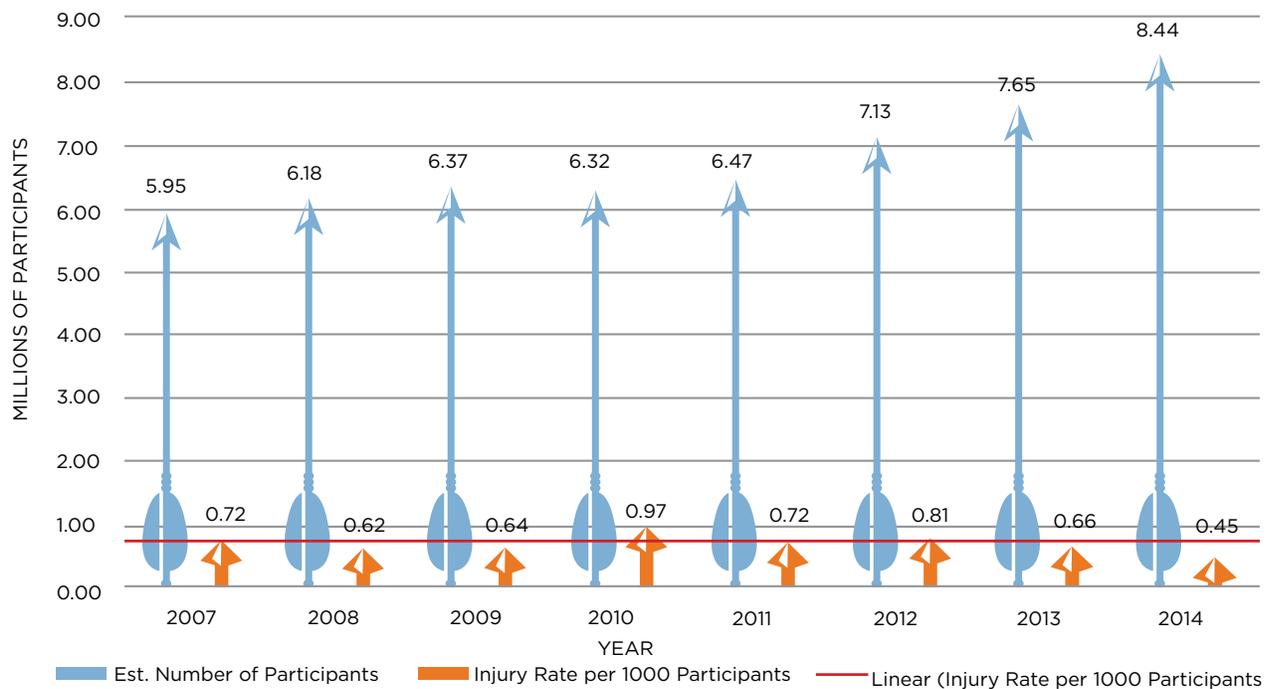


Figure 1. Sub-notes: Data in Figure 1 were collected and calculated for each year in the same manner as data in Table 1.

\*SFIA archery participation data have been found to be substantially underreported. Data are used here for year to year comparison using consistent methodology.

**Testimonial:** “People of all ages participate in archery, and it’s being taught in safe environments from gyms to fields because sound training protocols were developed, instituted and followed. As a result, educators are introducing archery to youths to develop a deep appreciation for the sport while boosting their self-esteem, self-discipline and life-long skills.”

**Todd Roggenkamp**, Deputy Director of Education - Safari Club International Foundation

Note: The Sports & Fitness Industry Association (SFIA) data have been found to substantially underreport archery participation. These data are used in this brochure as a basis for year to year comparison of archery participation and comparison of archery participation to other sports using consistent methodology. For more accurate archery participation numbers, see the Archery Trade Association’s 2013 and 2015 Archery Participation & Equipment Reports listed in the Reference section of this brochure.

# COMPARISON OF SPORTS PARTICIPATION AND INJURY RATES

## HOW SAFE IS ARCHERY WHEN COMPARED TO OTHER MAINSTREAM SPORTS? AMONG THE SAFEST.

Table 1. Data show that archery is one of the safest sports. Soccer, baseball and basketball have injury rates 20 to 45 times higher than archery's injury rate. Archery's injury rate per 1,000 participants ranks it below golf, fishing and tennis, and just slightly above badminton, bowling and table tennis.

For example, 22.5 participants per 1,000 were injured playing basketball in 2014, while ONLY 0.45 participants per 1,000 were injured in archery that year. That's less than one injury for every 2,000 archery participants in 2014.

**Table 1.** 2014 Sports Participation and Injury Rates per 1,000 Participants (ages 6 and older)

	Actual number of cases (a)	Estimated number of cases (b)	Estimated number of participants (c)	Injury Rate per 1000 participants (d)
Basketball	15,452	519,830	23,067,000	22.54
Football (all types)	11,508	393,414	18,072,000	21.77
Soccer (all surfaces)	7,422	235,866	17,122,000	13.78
Cheerleading	986	35,713	3,456,000	10.33
Softball (all pitches)	2,264	95,358	950,1000	10.04
Baseball	3,320	124,431	13,152,000	9.46
Gymnastics	1,038	33,049	4,621,000	7.15
Volleyball (all surfaces)	1,397	52,505	14,866,000	3.53
Inline Skating	296	11,589	6,061,000	1.91
Ice Skating	664	19,389	10,649,000	1.82
Golf	615	28,466	24,700,000	1.15
Fishing	1,116	63,357	55,480,000	1.14
Tennis	483	19,631	17,904,000	1.10
<b>Archery</b>	<b>78</b>	<b>3,786</b>	<b>8,435,000</b>	<b>0.45</b>
Bowling	345	14,727	46,642,000	0.32
Badminton	44	1,942	7,176,000	0.27
Table Tennis	36	1,640	16,385,000	0.10

Table 1. Sub-notes: All data are for the age range 6 and older.

a. These data are from the National Electronic Injury Surveillance System, which collects data from hospitals that record the information.

b. These data are from the National Electronic Injury Surveillance System, and are nationwide estimates for injuries based on samples for ages 6 and older.

c. These data are from the Sports & Fitness Industry Association (Formerly SGMA), and represent those who participated at least once per year.

d. This rate was calculated by dividing the estimated cases (b) by the number of participants (c), and multiplying by 1,000.

\*SFIA archery participation data have been found to be substantially underreported. Data are used here for comparison of archery to other sports using consistent methodology.

The graph in Figure 2 shows archery was consistently one of the safest sports from 2010 to 2014 when compared to the injury rates of other sports.

**Testimonial:** “Archery is one of the safest sports I’ve ever been involved with. The safety requirements in the NASP curriculum sold this sport to our principal and administrators. We have not had any safety issues on our ranges as students learn and respect the program’s rules. We follow the protocols so precisely that our school is able to run four ranges simultaneously during tournament season.” **Valerie Kirchoff**, 7th Grade Science Teacher Head Archery Coach Haughton Middle School, Louisiana

**Figure 2:** 2010 to 2014 Sport Injury Rates per 1,000 Participants

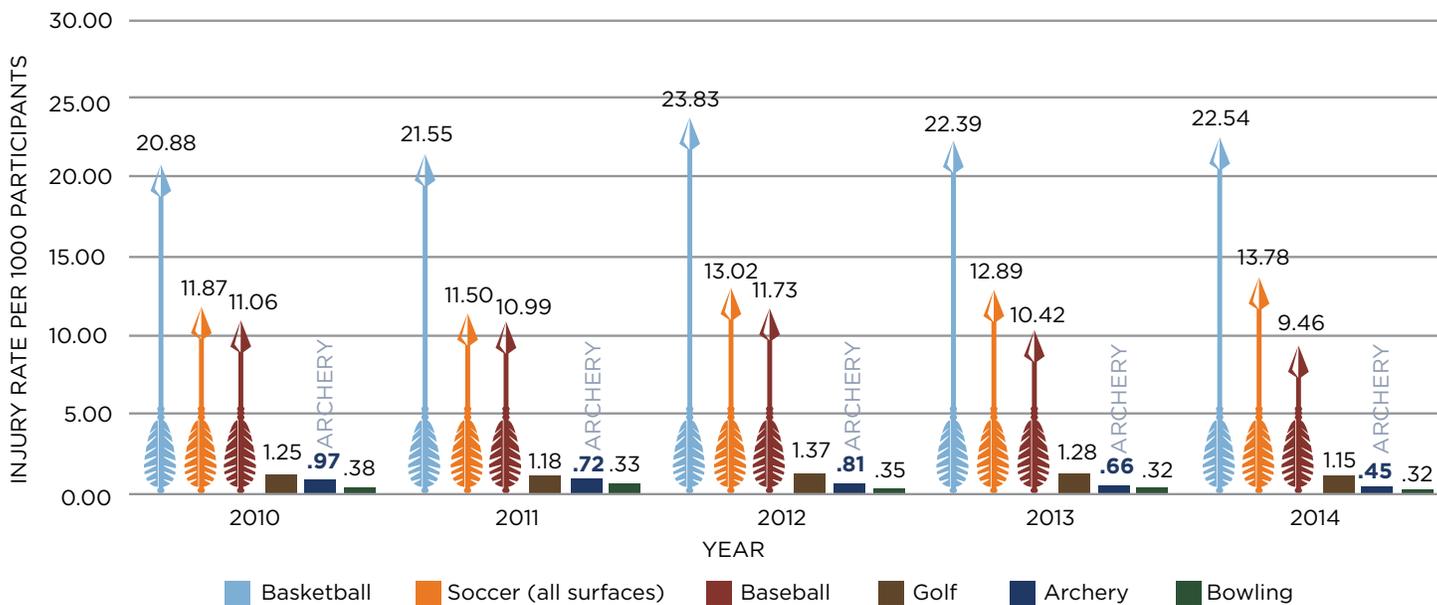


Figure 2. Sub-notes: Data in Figure 2 were collected and calculated for each year in the same manner as data in Table 1.

\*SFA archery participation data have been found to be substantially underreported. Data are used here for comparison of archery to other sports year to year using consistent methodology.

Archery’s annual injury rate of less than one per 1,000 participants consistently ranked between the low rates of golf and bowling. Those sports with the highest injury rates were soccer and basketball having annual rates between 11 and 24 injuries per 1,000 participants from 2010-2014.



# INSURANCE INDUSTRY ARCHERY SAFETY RATINGS

## SAFETY RATINGS

The insurance industry recognizes archery's safe record. In many cases, that means an organization's standard general liability insurance coverage is determined efficient. Additional policy amendments are likely deemed unnecessary.

Insurance broker Francis L. Dean & Associates rates archery in the same class as golf, badminton, bowling, swimming, tennis, track and cross-country running when calculating policy premiums. This class has the lowest premiums among the four sports categories. Sports carrying higher premiums include football, gymnastics, hockey, lacrosse, soccer and wrestling.

**Testimonial:** *"I've been teaching NASP as a small unit in an outdoor education curriculum for about eight years. Three years ago, my students began asking if we could start an archery club. Our club was such a huge success the first year that I pitched archery as an athletic program for our district. In Autumn 2015, our district opened archery as a full-blown athletic program. We gutted an old elementary school and developed a 20-lane indoor archery center. We serve 100 students from the six high schools across the district, and expect to double in size for the 2016-2017 school year."*

**Ricky Albus**, Head coach, AISD Archery - Martin High School Outdoor Adventures Instructor

## SPORTSCOVER INJURY CALCULATOR

Sportscover is an international insurance company that specializes in coverage for sporting activities. It's one of the world's leading insurance underwriters, and has been recognized multiple times by annual awards within that industry. Sportscover created an Injury Calculator to estimate the chance of injury for sports participants of different ages and fitness levels.

WHAT ARE THE CHANCES A YOUTH WILL GET INJURED WHILE PARTICIPATING IN ARCHERY? **VERY UNLIKELY.** When calculated for a participant with a fitness level rated "unfit," ages 0-20, and averaging the injury risk for both genders, the person has a 5.5 percent injury chance. Sportscover gives that same person a 16.5 percent chance of injury when participating in badminton and a 69 percent injury chance for football.

### **Archery is Safe.**

Table 2 breaks down the chance of youth injuries for various sports by age and gender. These data represent worst-case scenario probabilities because only participants with a fitness level rated "unfit" were selected. Unfit is the lowest fitness level. The values are represented as percentages.

For example, a 10-year-old unfit male has a 68 percent chance of injury when playing football, but only a 5.4 percent chance of injury when participating in archery.



**Table 2.** Chance of Injury for Youths

Sport	0-10 years old		11-16 years old		17-20 years old		Average across all ages
	Female	Male	Female	Male	Female	Male	Both Genders
Football	54.4%	68%	61.9%	76.5%	68%	85%	69%
Baseball	32.6%	40.8%	36.7%	45.9%	40.8%	51%	41.3%
Golf	28.3%	35.4%	31.8%	39.8%	35.4%	44.2%	35.8%
Soccer	21.8%	27.2%	24.5%	30.6%	27.2%	34%	27.5%
Tennis	19.6%	24.5%	22.%	27.5%	24.5%	30.6%	24.8%
Softball	18.5%	23.1%	20.8%	26.%	23.1%	28.9%	23.4%
Volleyball	17.4%	21.8%	19.6%	24.5%	21.8%	27.2%	22%
Basketball	16.3%	20.4%	18.7%	23%	20.4%	25.5%	20.7%
Badminton	13.1%	16.3%	14.7%	18.4%	16.3%	20.4%	16.5%
Archery	4.2%	5.4%	4.9%	6.1%	5.4%	6.8%	5.5%

**Testimonial:** *“Archery is a wonderful tool for empowering kids and young adults. Those who can’t excel in other sports can participate and succeed in archery. Because it’s safe, fun and flexible, it provides unique opportunities to enhance and expand our youth- and character-development programs beyond camps to our KROC and community centers.”*

**Major Monty Wandling**, Territorial Youth Secretary Central Territory,  
The Salvation Army - Hoffman Estates, Illinois

We also collected similar data for adults (ages 21 to 59) and seniors (ages 60+), shown in Table 3. Again, all participants represented were rated “unfit,” and values are percentages representing injury chances.

**Table 3.** Chance of Injury for Adults and Seniors

Sport	Adult Average (21-59)	Senior Average (60+)
	Both Genders	Both Genders
Golf	67.5%	99%
Tennis	49.6%	98.5%
Aerobics	33.%	73.4%
Badminton	33.%	73.4%
Archery	11.%	24.5%
Angling	8.4%	18.4%

**Testimonial:** *“We had over 3,600 participants in leagues, special events, open shooting and beginner-intermediate classes during the first six months of opening our community archery range. This proved to us that archery is a safe activity for all ages and abilities. Each participant was taught safety, and they respected the rules, equipment and the sport itself.”*

**Bryan Farmer**, Deputy Director, City of Farmington Hills Department of Special Services (Parks & Recreation) Archery Program and Range Supervisor, USA Archery Level 2 Instructor Farmington Hills, Michigan

# WHAT MAKES ARCHERY SO SAFE?

## INSTRUCTOR CERTIFICATION

Instructor certification takes center stage for maintaining archery's safe track record. Archery instructors and coaches build the foundation of safe programs. Certification courses provide instructors valuable safety knowledge and hands-on experience, and make archery programs more marketable.

**Testimonial:** *"Archery instruction certifications have high value. You can learn things from each certification that helps you deliver the best instruction and classes. The certification process also teaches you how to accommodate all shooters regardless of age, size or disability. My greatest accomplishment is seeing one of my students with autism improve each week and shoot safely. She loves it!"*

**Rachel Crume**, Archery Instructor, Kings Archery Outfitters - Louisville, Kentucky

When pursuing instructor certification, expect to cover numerous topics to help keep programs safe and successful. Certification courses are tested and utilized to maximize safety for participants and spectators in group and individual settings. Certification courses cover several topics that address archery safety:

- **RANGE SETUP & SAFETY:** Safe ranges feature many lengths and widths, and are found in various venues indoors and outdoors. Key features of certification courses include:
  - Range rules and safety signage;
  - Marked safety lines - waiting line, shooting line, target line;
  - Backstop and safety curtains.
- **TEACHING A CLASS:** Certification focuses on multiple areas to help instructors develop a safe process for running their classes. The subjects include:
  - Whistle commands,
  - Steps of shooting,
  - Teaching your first archery class.
- **EQUIPMENT:** Certification courses review equipment topics and allow time to become familiar with the gear. This includes:
  - Equipment inspection and repair,
  - Outfitting a class with equipment.

**Testimonial:** *"I teach over 600 kids a year. We have not had any injuries or safety concerns. Having the kids (and adults) review the rules makes everyone take ownership in class safety. Archery is the one sport that's truly open to the broadest age bracket. People from age 5 to 80-plus have learned archery from us. Kids, parents and grandparents shoot together and have a great experience."*

**John Corriveau**, Director of Parks and Recreation, Level 2 Instructor 30 years in archery, 6 years as an instructor - Saginaw Michigan



## RESOURCES FOR SAFE ARCHERY PROGRAMS

- Get Certified: Find an instructor certification course near you with the USA Archery course locator: [www.teamusa.org/usa-archery/events/certification-clinics](http://www.teamusa.org/usa-archery/events/certification-clinics)
- Find Local Resources: [www.Archery360.com](http://www.Archery360.com). Use the locator tool to find archery retailers, clubs and ranges near you while also enjoying articles, videos and other archery-related information.
- Use the Archery Park Guide: This guide helps people build safe community archery ranges. [www.archerytrade.org/grow-archery/archery-park-guide](http://www.archerytrade.org/grow-archery/archery-park-guide)

## REFERENCES:

- **The Sports & Fitness Industry Association (SFIA, formerly SGMA)**  
8505 Fenton St., Suite 211, Silver Spring, MD 20910  
(301) 495-6321, [www.sfia.org](http://www.sfia.org)
- **U.S. Consumer Product Safety Commission (CPSC)**  
4330 East West Highway, Bethesda, MD 20814  
(301) 504-7923, [www.cpsc.gov](http://www.cpsc.gov)
- **National Electronic Injury Surveillance System (NEISS)**  
U.S. Consumer Product Safety Commission; 4330 East West Highway, Bethesda, MD 20814  
(301) 504-7923, [www.cpsc.gov/cgibin/NEISSQuery/home.aspx](http://www.cpsc.gov/cgibin/NEISSQuery/home.aspx)
- **Sportscover Injury Calculator:**  
271-273 Wellington Road, Mulgrave, 3170 Melbourne, Australia  
+(61 3) 8562 9100, [www.sportscover.com/calculator.asp](http://www.sportscover.com/calculator.asp)
- **Francis L. Dean & Associates:**  
1776 S. Naperville Road, Bldg-B, P.O. Box 4200, Wheaton, IL. 60189  
(800) 745-2409, [www.fdean.com/other-sports-leagues.aspx](http://www.fdean.com/other-sports-leagues.aspx)
- **ATA 2013 & 2015 Archery Participation Reports**  
[www.archerytrade.org](http://www.archerytrade.org)