

### **IS ARCHERY SAFE?**

# 2013 TO 2017 SPORT INJURY RATES PER 1,000 PARTICIPANTS

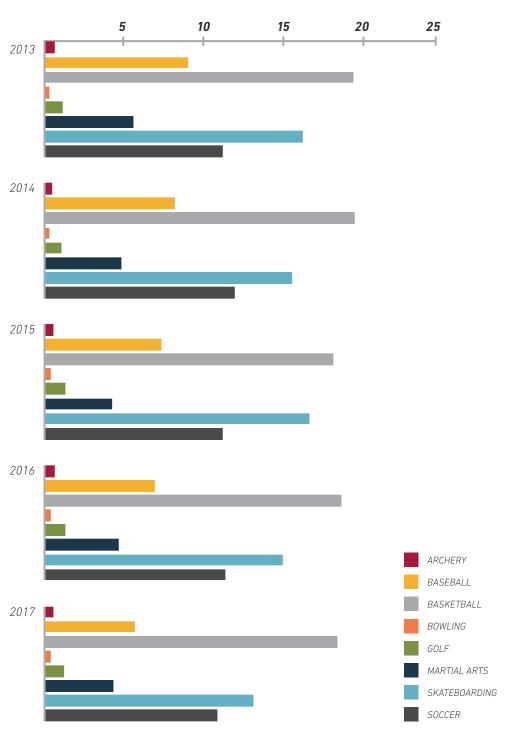


FIGURE 1. Data in Figure 1 were collected and calculated for each year in the same manner as data in Table 1.

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



TABLE 1. Data shows 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 rank it below golf, fishing and tennis, and just slightly above badminton, bowling and table tennis.

# 2017 SPORTS PARTICIPATION AND INJURY RATES PER 1K PARTICIPANTS

#### (AGES 6 AND OLDER) ADULT/SENIOR INJURY RATES

|                              | ACTUAL<br>NUMBER OF<br>CASES [A] | ESTIMATED<br>NUMBER OF<br>CASES [B] | ESTIMATED<br>NUMBER OF<br>PARTICIPANTS [C] | INJURY RATE<br>PER 1000<br>PARTICIPANTS [D] |
|------------------------------|----------------------------------|-------------------------------------|--|---|
| BASKETBALL                   | 15,631                           | 497,106                             | 23,401,000                                 | 21.24                                       |
| FOOTBALL<br>(all types)      | 10,847                           | 339,447                             | 17,404,000                                 | 19.50                                       |
| SOCCER<br>(all surfaces)     | 7,410                            | 216,189                             | 17,323,000                                 | 12.48                                       |
| CHEERLEADING                 | 1,068                            | 36,866                              | 3,816,000                                  | 9.66  |
| SOFTBALL<br>(all types)      | 2,063                            | 80,697                              | 9,592,000                                  | 8.41  |
| BASEBALL                     | 2,875                            | 101,311                             | 15,642,000                                 | 6.48  |
| GYMNASTICS                   | 1,180                            | 35,124                              | 4,805,000                                  | 7.31  |
| VOLLEYBALL<br>(all surfaces) | 1,530                            | 51,623                              | 14,718,000                                 | 3.51  |
| SKATEBOARDING                | 2,463                            | 96,447                              | 6,382,000                                  | 15.11                                       |
| MARTIAL ARTS                 | 775                              | 28,668                              | 5,838,000                                  | 4.91  |
| GOLF                         | 655                              | 32,887                              | 23,829,000                                 | 1.38  |
| FISHING                      | 1,205                            | 68,077                              | 58,199,000                                 | 1.17  |
| TENNIS                       | 540                              | 22,414                              | 17,683,000                                 | 1.27  |
| ARCHERY                      | 78                               | 4,398                               | 7,769,000 0                                | 0.57  |
| BOWLING                      | 348                              | 15,992                              | 45,491,000                                 | 0.35  |
| BADMINTON                    | 70                               | 2,556                               | 6,430,000                                  | 0.40  |
| TABLE TENNIS                 | 37                               | 1,409                               | 16,041,000                                 | 0.09  |

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, including detailed injury descriptions. **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.

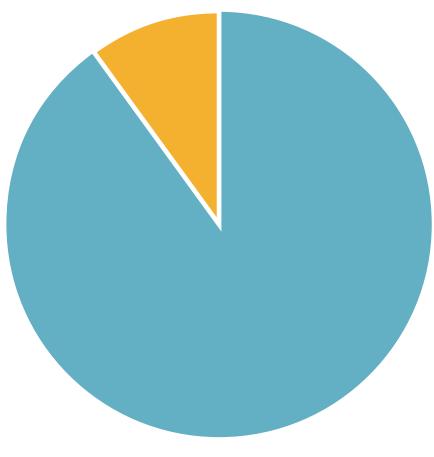
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### **ANNUAL INJURY RATE**

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, skateboarding and basketball having annual rates between 11 and 24 injuries per 1,000 participants from 2013-2017.

# AVERAGE INJURY OF PARTICIPANTS FROM 2007-2017



AVERAGE OF TOTAL PARTICIPANTS

AVERAGE NUMBER OF INJURIES

FIGURE 2. Majority of these injuries were bowhunting related. This includes but is not limited to, tripping over a bow base to cutting themselves with a broadhead.

\*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.

INSURANCI INDUSTRY ARCHERY RATINGS THE INSURANCE INDUSTRY RECOGNIZES ARCHERY'S SAFE RECORD. IN MANY CASES, THAT MEANS AN ORGANIZATION'S STANDARD GENERAL LIABILITY INSURANCE COVERAGE MAY BE DETERMINED EFFICIENT. Typically, archery is included in the same class as golf, badminton, bowling, swimming, tennis, track and cross-country running when calculating policy premiums. This class is one of the lowest premiums among the sports categories. Sports carrying higher premiums include football, gymnastics, hockey, lacrosse, soccer and wrestling. It is important that you talk with your insurance provider to discuss archery activity-based rates and coverage.

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.

### **INSURANCE SAFETY RATINGS**

|              | 0-10<br>YEARS ( | OLD<br>[M] | 11-16<br>YEARS | OLD<br>[M] | 17-20<br>YEARS | OLD<br>[M] | AVERAGE ACROSS<br>ALL AGES<br>[BOTH GENDERS] |
|--------------|-----------------|------------|----------------|------------|----------------|------------|--|
|              | LF1             | [IN]       | IF1            | [M]        | IF1            | [M]        | [BOTH GENDERS]                               |
| FOOTBALL     | 54.4            | 68.0       | 54.4           | 68.0       | 54.4           | 68.0       | 54.4   |
| BASEBALL     | 32.6            | 40.8       | 32.6           | 40.8       | 32.6           | 40.8       | 32.6   |
| GOLF         | 28.3            | 35.6       | 28.3           | 35.6       | 28.3           | 35.6       | 28.3   |
| SOCCER       | 21.8            | 27.2       | 21.8           | 27.2       | 21.8           | 27.2       | 21.8   |
| TENNIS       | 19.6            | 24.5       | 19.6           | 24.5       | 19.6           | 24.5       | 19.6   |
| SOFTBALL     | 18.5            | 23.1       | 18.5           | 23.1       | 18.5           | 23.1       | 18.5   |
| ANGLING      | 3.3             | 4.1        | 3.3            | 4.1        | 3.3            | 4.1        | 3.3  |
| BASKETBALL   | 16.3            | 20.4       | 16.3           | 20.4       | 16.3           | 20.4       | 16.3   |
| MARTIAL ARTS | 21.8            | 27.2       | 21.8           | 27.2       | 21.8           | 27.2       | 21.8   |
| ARCHERY      | 4.4             | 5.4        | 4.4            | 5.4        | 4.4            | 5.4        | 4.4  |

Table 2. AmPmInsure estimates on how likely you are to be injured within a 12 month period. Values shown are for unfit individuals. Youths rated as fit are injured half as often as unfit participants and that trend holds for all ages and sports. www.ampminsure.org/calculators/sports.html

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.

## CHANCE OF INJURY FOR ADULTS + SENIORS

|              | 21-59<br>ADULT AVERAGE<br>[BOTH GENDERS] | 60+<br>SENIOR AVERAGE<br>[BOTH GENDERS] |
|--------------|--|---|
| GOLF         | 67.5                                     | 99.0                                    |
| TENNIS       | 49.6                                     | 98.5                                    |
| MARTIAL ARTS | 54.8                                     | 99.0                                    |
| ARCHERY      | 11.0                                     | 24.5                                    |
| ANGLING      | 8.3                                      | 18.4                                    |

Table 3. AmPmInsure's Injury Calculator - All UNFIT participants Adults 21-59 and Seniors

# SPORTS INJURY CALCULATOR

AmPmInsure is an online insurance community that provides professional and expert connections within the insurance network to assist with coverage options, including sporting activities. AmPmInsure offers a Sports Injury Calculator to estimate the chance of injury for sport 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 participating in archery. AmPmInsure gives that same person a 16.52 percent chance of injury when participating in badminton and a 27.54 percent injury chance for soccer.

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 80PLUS HAVE LEARNED ARCHERY

FROM US. KIDS, PARENTS

AND GRANDPARENTS SHOOT

TOGETHER AND HAVE A

GREAT EXPERIENCE.

### JOHN CORRIVEAU

Director of Parks and Recreation, Level 3-NTS Coach Saginaw, Michigan



"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
WAS OBSERVING ONE OF MY
STUDENTS WITH AUTISM

## RACHEL CRUME

Archery Instructor, Level 2
Instructor
Louisville, Kentucky

IMPROVE EACH WEEK AND

SHOOT SAFELY. SHE LOVED IT!"

#### **CERTIFICATION COURSES**

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
- Safe range design and set-up
- 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:

- Running a safe range
- · Whistle commands
- Steps of shooting
- Teaching your first archery class

#### EQUIPMENT

Certification courses review equipment topics and allow time for participants to become familiar with the gear. This includes:

- Equipment inspection and basic repair
- Utilizing local archery retailers for all equipment needs
- Outfitting a class with equipment

#### **RESOURCES FOR ARCHERY PROGRAMS**

#### **GET CERTIFIED:**

Find instructor certification information: www.usarchery.org

#### FIND LOCAL RESOURCES:

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.

#### **DEVELOP AN ARCHERY RANGE:**

These guides help people build safe archery ranges. archerytrade.org/grow-archery/archery-guide/

#### **REFERENCES**

## THE SPORTS & FITNESS INDUSTRY ASSOCIATION (SFIA)

962 Wayne Avenue, Suite 300, Silver Spring, MD 20910 301-495-6321

301-495-632 www.sfia.org

# U.S. CONSUMER PRODUCT SAFETY COMMISSION (CPSC)

4330 East West Highway, Bethesda, MD 20814

800-638-2772 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

## AMPMINSURE SPORTS INJURY CALCULATOR

www.ampminsure.org/ calculators/sports.html

#### CRAFT AGENCY INC

2533 Spring Arbor Road, P.O. Box 1187, Jackson, MI 49204 517-787-0077 www.craftagency.com

#### **HOBSON INSURANCE**

104 Central Avenue, P.O. Box 251, Hobson, MT 59452 406-423-5428 www.businessquote.com

ATA ARCHERY PARTICIPATION REPORTS

www.archerytrade.org

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