

The logo for the Arizona Soccer Association. The word "ARIZONA" is in a large, bold, sans-serif font. The letter "I" is replaced by a stylized sunburst. The letter "Z" is replaced by a soccer ball. The letters "A", "R", "I", "N", and "A" are filled with a red, white, and blue horizontal stripe pattern. Below "ARIZONA" is the word "SOCCER ASSOCIATION" in a smaller, black, sans-serif font.

# ARIZONA

SOCCER ASSOCIATION



# CONCUSSION UPDATE 2020

Arizona Soccer Association Leadership Summit  
January 25, 2020

# INTRODUCTIONS

- **Briana Silvestri, PA-C**  
Banner Concussion and Sports Medicine - Phoenix, AZ
- **Bryce Nalepa, ATC/L**  
Banner Concussion and Sports Medicine - Phoenix, AZ
- **Jazmyn Ledford**  
Arizona Soccer Association
- **Stacey Drinon**  
Arizona Soccer Association



# OVERVIEW

- Concussion 101 – What, How, Evaluation, Treatment, RTP
- Intro to Banner Concussion and Sports Medicine
- Banner/ASA Partnership
- What's Happening in Soccer with Concussions
- Concussion Policy
- Concussion Process
- ASA statistics



# BANNER CONCUSSION & SPORTS MEDICINE CENTER

- Multidisciplinary center dedicated to the treatment of athletic related concussions
- Started in 2013
- MD, PA-C, PT, OT, OD, PhD, ATC
- Has worked with ASA (AYSA) since 2014
- Resource for Concussion and Sports Medicine Injuries



# GOALS FOR CENTER

- One stop medical care center for concussions
- Education – Community Outreach
- Resource for athletes, parents, coaches, teams, etc.
- Access to baseline testing
- Diminish the stigma and fear surrounding the injury

# PARTNERSHIP WITH ASA

- Have helped to be a medical resource for concussions and other topics utilizing our specialists plus the rest of the Banner system.
- Biggest project has been the development of current ASA concussion protocol which was modeled off of our work with a member club
- Evaluation and follow- up forms
- RTP



# CONCUSSION EDUCATION



# US YOUTH CONCUSSION POLICY

- Players who are suspected of having sustained a concussion shall be removed from play immediately and evaluated by team medical staff.
- The evaluation should consist of standardized acute concussion evaluation using the SCAT5.
- If the evaluated player is diagnosed with a concussion, he or she may not return to play that same day.
- The player is to be referred to a licensed healthcare professional. The healthcare professional is responsible for making the “return to play” decision.



# WEST REGION CONCUSSION POLICY

## (BY STATES)

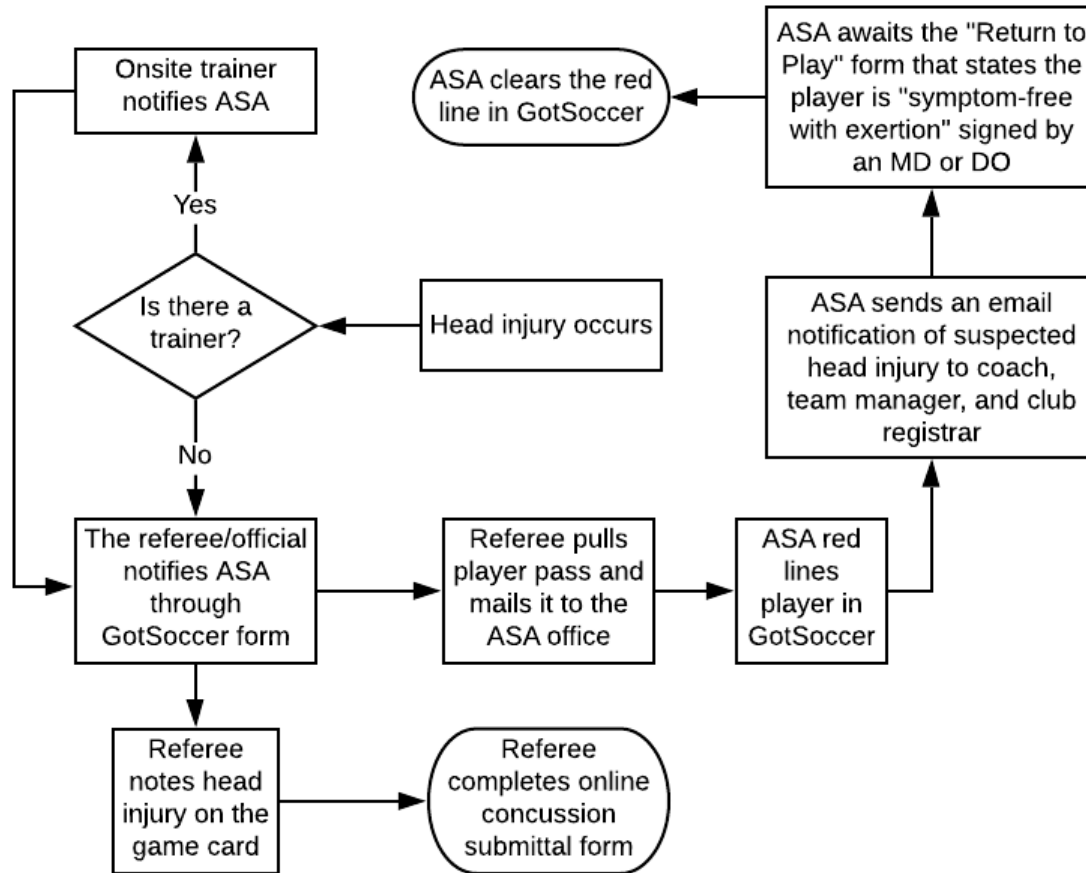
State	Policy
Alaska	The clubs develop their own policy regarding coaching education and concussion awareness. The individual clubs police all their own head injuries.
Arizona	<b>Coaching officials are to acknowledge the ASA concussion policy. An informed consent is signed annually by the player's legal guardian. An athlete who has a suspected concussion must be removed from play. The state office notifies the team and club of the suspected concussion. The ASA concussion "return to play" form must be signed by an MD or DO.</b>
Cal North	The individual team is responsible for notifying parents of suspected concussion. Player pass is surrendered to a league representative upon injury. The pass is returned to team after medical release is received.
Cal South	Parents are required to sign a concussion information fact sheet. Online training is available from CDC HEADS UP. Does not provide return to play information.
Colorado	In order to serve as a coach, assistant coach, team manager or work in any capacity with a club, they must complete the CDC HEADS UP. Does not provide return to play information.
Hawaii	The clubs & leagues notify the parent of a suspected concussion. The player must be evaluated and cleared by an MD or DO.
Idaho	All coaches must be educated on the concussion guideline (diagnosis, return to play). If comfortable, the coach may use sideline evaluation. Idaho recommends SCAT3. Return to play is just to follow Zurich II guidelines.

# WEST REGION CONCUSSION POLICY

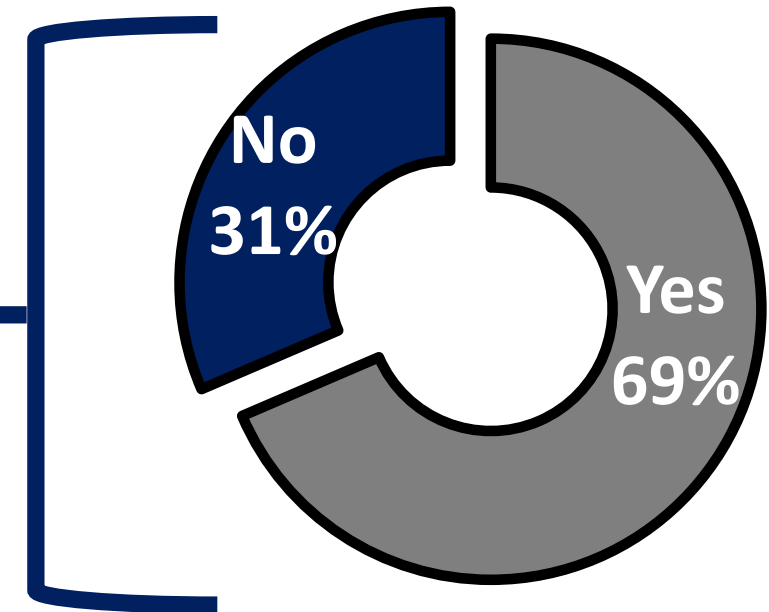
## (BY STATES)

State	Policy
Montana	CDC HEADS UP is required by coaches every season. Parent is to sign consent and concussion awareness information. Does not provide “return to play” information.
Nevada	Unable to find information on their website
New Mexico	Coaching staff required to take CDC HEADS UP. Players diagnosed with a concussion will be required to sit out for 240hrs (10days) and receive “return to play” signed by a licensed healthcare professional.
Oregon	A sideline toolkit is provided to coaching staff to assess on the sideline: a series of questions. Players must provide a “return to play” form.
Utah	Doctors must within 3 years have successfully completed a continuing education course in the evaluation and management of concussions. 24hrs symptom free between each stage to progression: 3 stages total. Must provide a “return to play” signed by a licensed healthcare professional.
Washington	Coach/assistant coach/team manager must complete an online concussion prevention program and submit a certificate showing completion of the program to the club/association.
Wyoming	Unable to find information on their website

# ASA PROCESS FOR ADDRESSING HEAD INJURIES

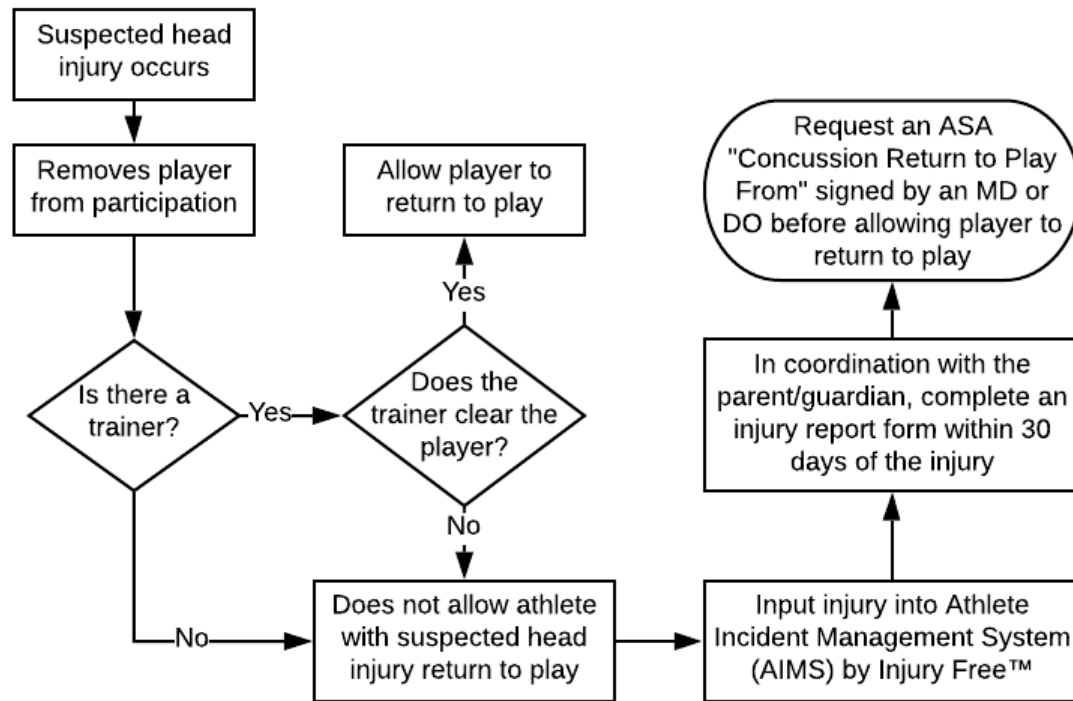


PERCENT OF EMAILS SENT BY ASA FOLLOWING A HEAD INJURY



**Reasons why follow-up emails were not sent:**  
Players turn in a return to play form, but ASA was never notified that they had a concussion

# TEAM OFFICIAL PROCESS FOR ADDRESSING HEAD INJURIES



## ASA CONCUSSION RETURN TO PLAY - PHYSICIAN FOLLOW-UP FORM

FOLLOW-UP PHYSICIAN EVALUATION(S) FORM (PLEASE PRINT):

STUDENT NAME:	
DATE OF BIRTH:	
DATE OF INJURY:	
DATE OF EVALUATION	
SOCCER CLUB/TEAM:	
SCHOOL/GRADE:	

I have evaluated the above named athlete and my medical opinion is that he/she:

\_\_\_\_\_ is **NOT** cleared to and will be seen in follow-up appointment on: \_\_\_\_/\_\_\_\_/\_\_\_\_

\_\_\_\_\_ may return to activity on \_\_\_\_/\_\_\_\_/\_\_\_\_ and should follow the Return to Play Progression and should remain symptom free through each step.

\_\_\_\_\_ may return to play on \_\_\_\_/\_\_\_\_/\_\_\_\_ is cleared to return to full activity due to the fact that they have had a complete neurological exam & neurocognitive testing\*\* which indicates complete recovery and has completed a gradual return to play progression.

(\*\*Neurocognitive testing is not mandatory at this time, but is strongly encouraged by ASA to indicate a complete recovery. Especially in cases where a baseline test has been completed.)

At this time, the student is:

☐ Symptom-free at rest

☐ **NOT** symptom-free at rest

☐ Symptom-free with exertion

☐ **NOT** symptom-free with exertion

Physician Name (Print) \_\_\_\_\_

Physician Signature \_\_\_\_\_

Degree/Specialty \_\_\_\_\_

Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Physician Office Phone Number \_\_\_\_\_

Physician Office Fax Number \_\_\_\_\_



# ASA CONCUSSION FORMS

- These are other resources available through the ASA website for concussion clearance.
- The first form is the initial physician evaluation form (to be completed by an MD or DO)
- The second form is the return-to-play progression guidelines.



Return completed form to ASA – [medical@azyouthsoccer.org](mailto:medical@azyouthsoccer.org)

## ASA CONCUSSION RETURN TO PLAY - PHYSICIAN FORM

INITIAL PHYSICIAN EVALUATION FORM (PLEASE PRINT):

STUDENT NAME:	
DATE OF BIRTH:	
DATE OF INJURY:	
DATE OF EVALUATION	
SOCCER CLUB/TEAM:	
SCHOOL/GRADE:	

Through my evaluation, I have found that the athlete named above HAS NOT suffered a concussion and is medically returned to play on: \_\_\_\_/\_\_\_\_/\_\_\_\_.

Through my evaluation, I have found that the athlete named above HAS suffered a concussion and is not able to return to activity until cleared by a physician.

Follow-up Appointment Date: \_\_\_\_\_ Physician's Name (Please Print): \_\_\_\_\_

The ASA "Return to Play" form must be completed and signed by a licensed Medical Doctor (MD) or Doctor of Osteopathy (DO) per ASA Head Injury/Concussion Policy

At this time, the student is:

☐ Symptom-free at rest

☐ NOT symptom-free at rest

☐ Symptom-free with exertion

☐ NOT symptom-free with exertion

Physician Name (Print)

Physician Signature

Degree/Specialty

Date

Physician Office Phone Number

Physician Office Fax Number

## CONCUSSION RETURN TO PLAY PROGRESSION

B-R-A-I-N GUIDELINES

### B – Bike

- Light Aerobic Activity Phase - Goal is to increase your heartrate - 10-20 minutes in duration

### R – Run

- Moderate Aerobic Activity Phase - Goal is to return to a base level of fitness - Running or jogging for 20-30 minutes

### A – AGILITY

- Sport Specific Activity - Goal is to return to soccer skills - Work on passing, shooting, footwork with a ball on a soccer field - Max 60 minutes of activity

### I - In Another Color

- Non-Contact Return to Practice - Goal is to return to a team setting without entering contact activity - Allow for re-acclimation to being around others - Can be done in practice setting or with other athletes that understand restrictions - Important for the all members of the team understand players limitations|

### N– No Restrictions

- Goal is full return to practice with a medical clearance from a physician - Full return should be first done in a practice not a game

*Note: This form is to be used as a general guideline for return to soccer. There should be a 24 hour period between each stage in which the athlete does not have an increase in symptoms. If symptoms reoccur or increase, there should not be advancement to the next stage. This progression should be monitored by a medical professional, coach or parent.*



# CONCUSSION CONSENSUS STATEMENT

Consensus statement on concussion in sport—the 5<sup>th</sup> international conference on concussion in sport held in Berlin, October 2016

Paul McCrory,<sup>1</sup> Willem Meeuwisse,<sup>2</sup> Jiří Dvorak,<sup>3,4</sup> Mark Aubry,<sup>5</sup> Julian Bailes,<sup>6</sup> Steven Broglio,<sup>7</sup> Robert C Cantu,<sup>8</sup> David Cassidy,<sup>9</sup> Ruben J Echemendia,<sup>10,11</sup> Rudy J Castellani,<sup>12</sup> Gavin A Davis,<sup>13,14</sup> Richard Ellenbogen,<sup>15</sup> Carolyn Emery,<sup>16</sup> Lars Engebretsen,<sup>17</sup> Nina Feddermann-Demont,<sup>18,19</sup> Christopher C Giza,<sup>20,21</sup> Kevin M Guskiewicz,<sup>22</sup> Stanley Herring,<sup>23</sup> Grant L Iverson,<sup>24</sup> Karen M Johnston,<sup>25</sup> James Kissick,<sup>26</sup> Jeffrey Kutcher,<sup>27</sup> John J Leddy,<sup>28</sup> David Maddocks,<sup>29</sup> Michael Makdissi,<sup>30,31</sup> Geoff Manley,<sup>32</sup> Michael McCrea,<sup>33</sup> William P Meehan,<sup>34,35</sup> Sinji Nagahiro,<sup>36</sup> Jon Patricios,<sup>37,38</sup> Margot Putukian,<sup>39</sup> Kathryn J Schneider,<sup>40</sup> Allen Sills,<sup>41,42</sup> Charles H Tator,<sup>43,44</sup> Michael Turner,<sup>45</sup> Pieter E Vos<sup>46</sup>

► Additional material is published online only. To view please visit the journal online (<http://dx.doi.org/10.1136/bjsports-2017-097699>)

For numbered affiliations see end of article.

**Correspondence to**  
Dr Paul McCrory, The Florey Institute of Neuroscience and Mental Health, Heidelberg 3084, Victoria, Australia; paulmccrory@cloud.com

Accepted 6 March 2017

## PREAMBLE

The 2017 Concussion in Sport Group (CISG) consensus statement is designed to build on the principles outlined in the previous statements<sup>1–4</sup> and to develop further conceptual understanding of sport-related concussion (SRC) using an expert consensus-based approach. This document is developed for physicians and healthcare providers who are involved in athlete care, whether at a recreational, elite or professional level. While agreement exists on the principal messages conveyed by this document, the authors acknowledge that the science of SRC is evolving and therefore individual management and return-to-play decisions remain in the realm of clinical judgement.

This consensus document reflects the current state of knowledge and will need to be modified as new knowledge develops. It provides an overview of issues that may be of importance to healthcare providers involved in the management of SRC. This paper should be read in conjunction with the systematic reviews and methodology paper that accompany it. First and foremost, this document is intended to guide clinical practice; however, the authors feel that it can also help form the agenda for future research relevant to SRC by identifying knowledge gaps.

A series of specific clinical questions were developed as part of the consensus process for the Berlin 2016 meeting. Each consensus question was the subject of a specific formal systematic review, which is published concurrently with this summary statement. Readers are directed to these background papers in conjunction with this summary statement as they provide the context for the issues and include the scope of published research, search strategy and citations reviewed for each question. This 2017 consensus statement also summarises each topic and recommendations in the context of all five

articles were screened by the expert panels for the Berlin meeting. The details of the search strategies and findings are included in each of the systematic reviews.

The details of the conference organisation, methodology of the consensus process, question development and selection on expert panellists and observers is covered in detail in an accompanying paper in this issue.<sup>1</sup> A full list of scientific committee members, expert panellists, authors, observers and those who were invited but could not attend are detailed in the end of the summary document. The International Committee of Medical Journal Editors conflict of interest declaration for all authors is provided in Appendix 1.

Readers are encouraged to copy and freely distribute this Berlin Consensus Statement on Concussion in Sport, the Concussion Recognition Tool version 5 (CRT5), the Sports Concussion Assessment Tool version 5 (SCAT5) and/or the Child SCAT5. None of these are subject to copyright restriction, provided they are used in their complete format, are not altered in any way, not sold for commercial gain or rebranded, not converted into a digital format without permission, and are cited correctly.

## Medical legal considerations

The consensus statement is not intended as a clinical practice guideline or legal standard of care, and should not be interpreted as such. This document is only a guide, and is of a general nature, consistent with the reasonable practice of a healthcare professional. Individual treatment will depend on the facts and circumstances specific to each individual case. It is intended that this document will be formally reviewed and updated before 31 December 2020.

**END AND ITS MANAGEMENT**



CrossMark

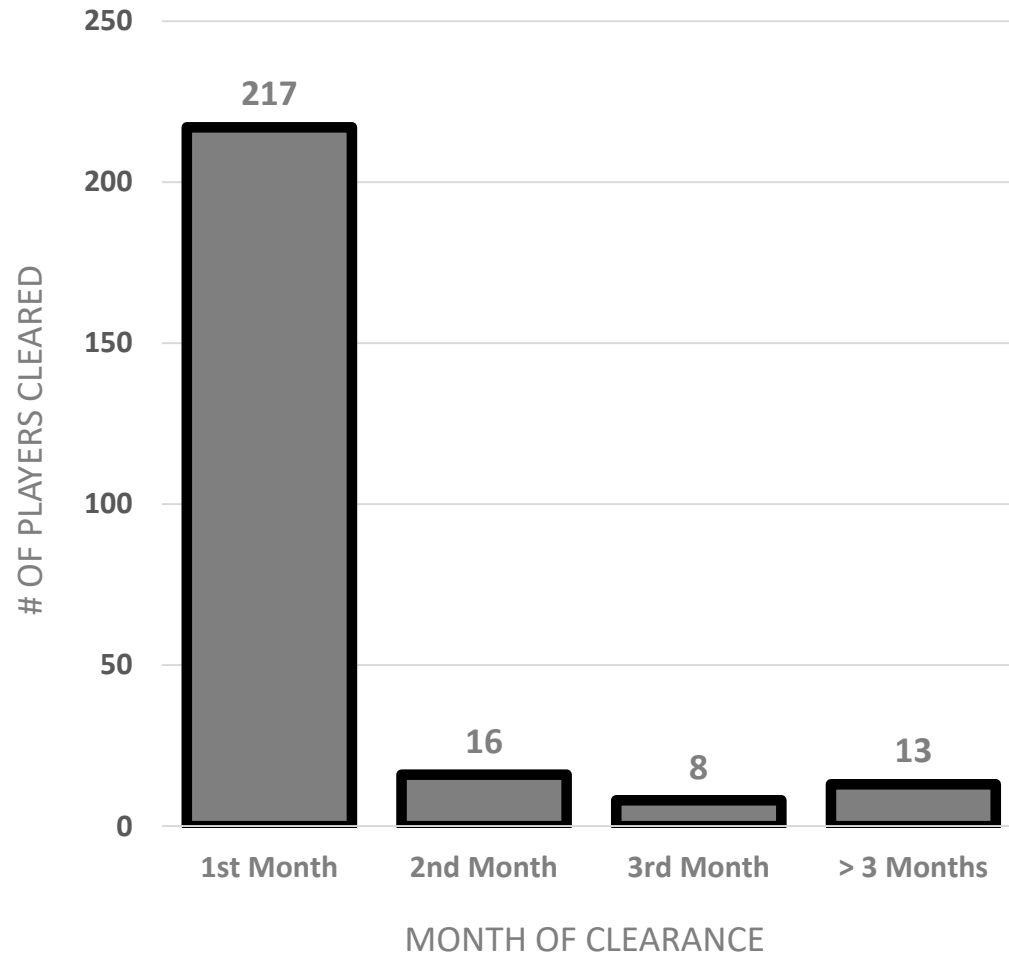
**To cite:** McCrory P, Meeuwisse W, Dvorak J, et al. *Br J Sports Med* Published Online First: February 2018



# FIELD STATISTICS

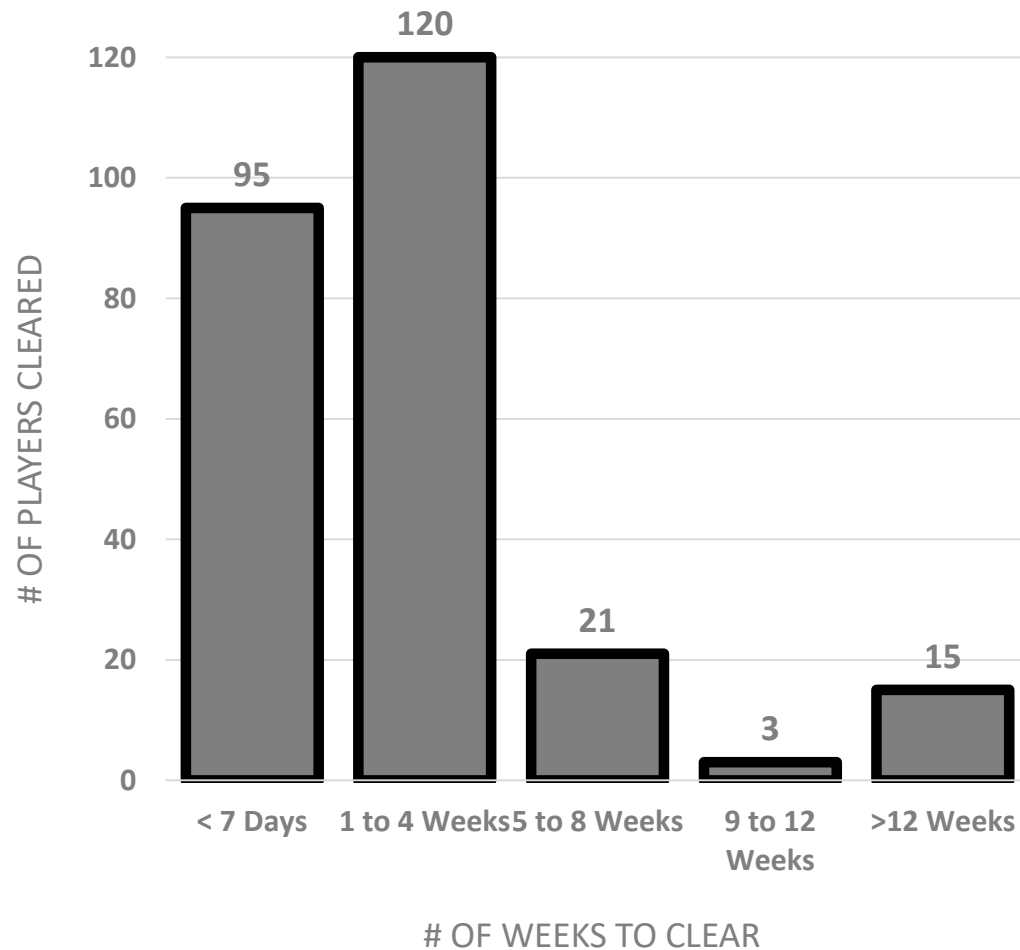
Average time to clear:	21.55 days
Average time to clear (top three thrown out [387, 371, 309], bottom three thrown out [0, 0, 0]):	17.67 days
Maximum # of Days to Clear	387
Minimum # of Days to Clear	0
Total # of Concussions Reported	287
Total # of Players Cleared	254
<i>Of note: Possible reasons for the lack of clearance include: still working through the return to play protocol; did not return to the following season of soccer; aged out of Arizona Soccer Association's youth program.</i>	
<i>Of the players who are not cleared, five aged out; six sustained head injuries in 2018; and 22 sustained injuries in 2019.</i>	

# # OF PLAYERS CLEARED PER MONTH

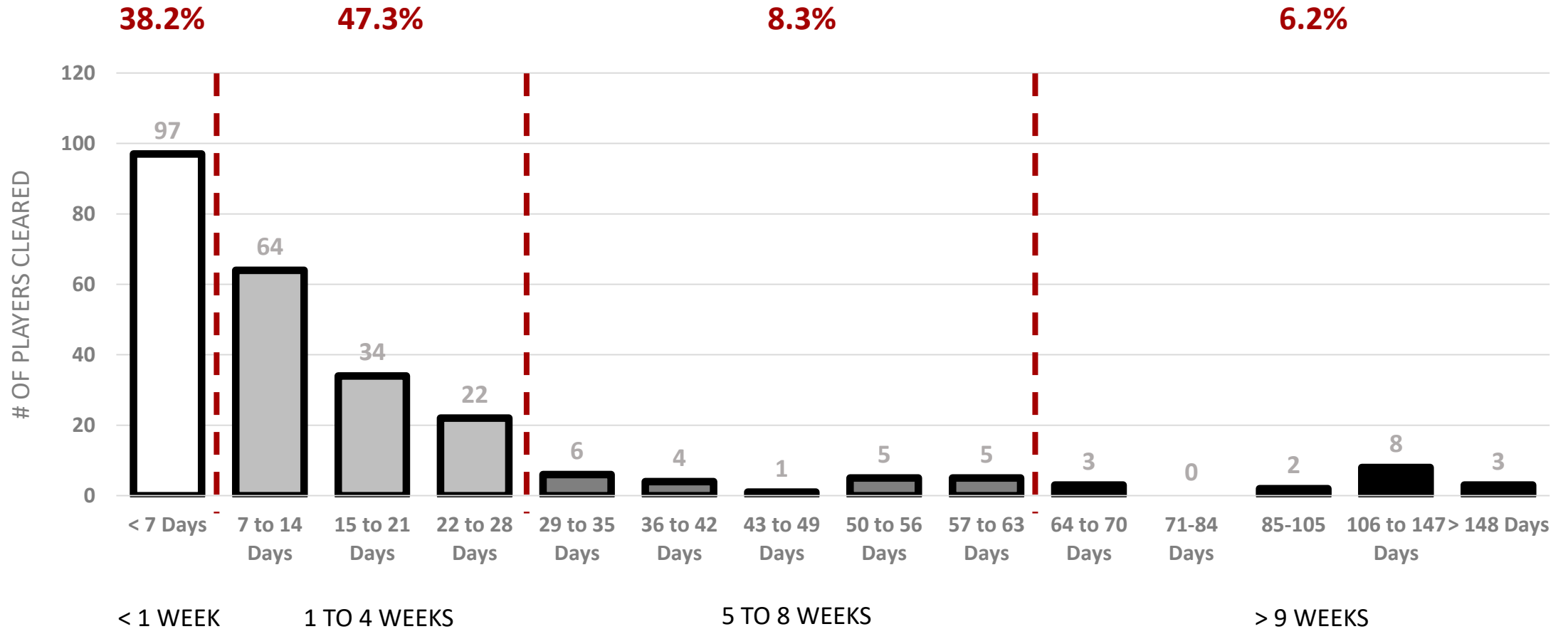




# # OF PLAYERS CLEARED PER WEEK



# # OF PLAYERS CLEARED BY DAYS

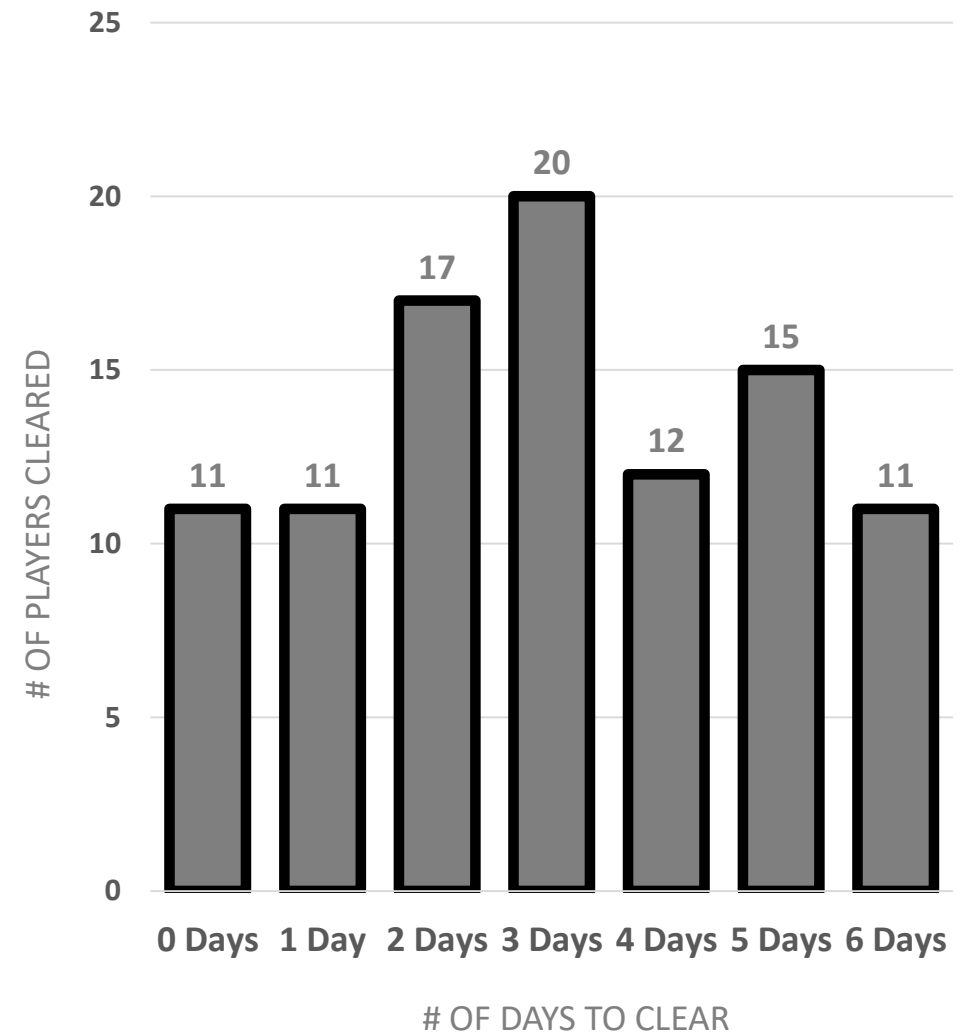


# # OF PLAYERS CLEARED IN THE FIRST WEEK

This is a further breakdown of the number of players that get cleared within the first seven days of a diagnosed concussion.

## Variables to Consider:

1. Players cleared in zero days could have been pulled for a potential concussion and saw an MD or DO that same day for clearance (meaning they did not have a concussion).
2. Players cleared in one day were usually kids that got their pass pulled and then went to the doctor the following day for clearance (meaning they did not have a concussion).
3. Could some of these players have gone to the doctor and reported no symptoms? Does this then mean they are diagnosed as never having had a concussion?
4. Return to play protocol is a minimum of five days symptom free. Players cleared between two and five days could only be cleared if they never had a concussion at all.



# QUESTIONS?

