

FIELD HOCKEY STATISTICS

With the rapid growth of the sport of field hockey, it is important that the recording of the statistics of the game, which serve as a permanent record of the contest, be accurate and be meaningful to anyone who reads them. To this end, it is important to have a compilation of the terms used in statistics. The purpose of this work is to address this need of nomenclature for the statistics currently used. In addition, this work will help to establish some guidelines for consistency.

Consistency is a fundamental part of the taking of statistics. Consistency is important not only from game-to-game for an individual team but also from team to team so that statistics can be compared across teams. There are a number of situations in which players are compared on a statistical basis; it is crucial to a fair comparison that the statisticians that are with the various teams be of the same mindset.

In each of these explanations below, a number of examples are given as possible scenarios that a statistician might encounter. They are by no means exhaustive nor are they all-inclusive. They simply provide a means to demonstrate some situations and provide a guideline for the recording of the statistics. In each of the examples, members from team A all have names that begin with the letter "A" and players on the opposing team all have names that begin with the letter "B."

Following the description of each of the statistics, two special situations (penalty stroke competition and a substitute keeper) are described. Finally, a list of formulas is provided to acquaint the statisticians with the method of determining such statistics as scoring offense, scoring defense, save percentage and goals against average.

The statistics described below are as follows:

SHOT

GOAL

ASSIST

SAVE (GOALIE SAVE, DEFENSIVE SAVE)

The special situations are:

PENALTY STROKE COMPETITION

SUBSTITUTE KEEPER

SHOT: A shot is any attempt made by a player to score a goal.

The player, regardless of her playing position on the field, must be playing the ball in such a manner that her actions could result in her scoring on the opposing team's goal. Where she is on the field, the speed of the shot, and the placement of the other players, both on her team and the opposing team, are irrelevant--as long as she can LEGALLY score a goal from her spot on the field.

A shot--one that is deemed to be "legal"--can have four outcomes: a goal, a save (for the opposing goalie or a defender on the opposing team), it can go wide, or a foul can be assessed to the opposing team.

If a player takes a shot that is blocked by a player who is in front of the goalie, the shot still counts and is just considered wide. If the player is behind the goalie or the goalie is out of position, the player who stops the ball from going in the net shall be credited with a defensive save (see below).

It is important to note that a "shot" taken *outside* the circle should not be credited as a shot because if it goes in the cage untouched, it would not count as a goal.

Also, a shot that is deemed lifted (eg, on a direct corner) or not from a stopped ball (again, direct corner eg) is not a shot since it cannot score.

GOAL: A goal should only be recorded if the signal for such has been given by the umpire.

There are situations in which the ball might go into the cage but the goal is disallowed for various reasons, including a dangerous shot. Thus, it is crucial that a goal not be recorded until the umpire gives the signal.

The time of the goal should be recorded as time INTO the match.

ASSIST: An assist is a play made by an offensive player that directly results in a goal being scored by the attacking team.

The assist is usually a pass made by one teammate to another who in turn scores a goal; however, a few exceptions do exist. It is imperative that the statistician exercise consistent and clear judgment in awarding an assist. It should be noted that an assist does not detract from the player who scored a goal; that is, an unassisted goal is no better statistically than an assisted goal. However, not every goal needs to be assisted. Consistency remains the underlying principle with this statistic, as with all statistics.

The guidelines for the awarding of an assist include two parts: the action of the passer and the actions of the recipient. An assist shall be awarded a player following a pass that is converted to a goal provided that:

- a) the recipient does not take more than five steps or take longer than five seconds:

EXCEPTIONS TO a)

1) a breakaway situation: Amanda, a forward, is playing at the midfield stripe. Her teammate Abbie, a back, intercepts a pass and Amanda takes off downfield uncontested. Abbie slots the ball through to Amanda 30 yards from the goal and Amanda dribbles and scores without a defensive player marking her. Even though Amanda took more than three steps, Abbie set up the play that allowed her team to score. The yardstick is the defensive pressure that Amanda faces in her scoring run. If Amanda must outrace/performance excessive defensive pressure, she will record an unassisted goal.

2) an odd-woman rush: Amanda picks up a loose ball and races down field with Alix on her side. The only defensive pressure is Barbara, at goalie, who must cover both players. Barbara moves out to play the ball, leaving Alix free. Amanda passes Alix the ball and Alix takes 4 or 5 steps before shooting. If Alix scores, Amanda is awarded an assist.

b) the recipient does not maneuver around defensive pressure that is excessive: obviously, excessive is a relative term that is subject to subjective reasoning. For this reason, it is imperative that a statistician not only is consistent with his or her recording but also has a good understanding of the game and its play.

An assist is **NOT awarded** to a player that shoots and has her shot rebound off the post or the goalie and the ball is picked up by a teammate and shot in the goal.

Example: Agnes shoots and her shot caroms off the pads of the goalie. Amory collects the ball and scores on a scramble in front of the cage. Agnes is not awarded an assist; she is credited with a shot and Amory gets a shot and a goal.

DOUBLE ASSISTS. There is only **ONE** instance in which two people can be awarded an assist on a goal. If a player scored on a direct corner, then both the person who started the corner and the player who was the stick stop for the striker may be credited with an assist. If there is any other kind of play, then only the person with the final pass may be credited with an assist. Examples of single assists include, but are not limited to:

- a) a flip from either the striker or the stick stop to a player on either side of the battery
b) a tip in to the pusher or an on-rushing player

NOTE that if the striker's **DIRECT SHOT** is deflected into the cage by a defender, then both the pusher and the stick stop can be credited with assists.

SAVE: The save records each time a player stops a ball from going in her goal that if she did not stop, would result in a goal for the opponent.

Obviously, each time the ball passes the plane of the goal line a goal is scored assuming there is not a violation by the offense (dangerous shot, etc.). However, there are situations in which a ball which advances in a scoring manner and the goalie does not record a save. In looking at the definition of a goal, in which an offensive player has played the ball inside the scoring circle, one finds the basis for the definition of a save. A goalie should get credit for a save if an offensive player has touched the ball inside the circle and the goalie next plays the ball.

There cannot be more saves recorded than shots for the opponent; in fact, the number of saves is usually fairly less than the number of shots taken by the opponent, which reflects shots that sail wide. In addition, a shot that hits the crossbar or cage is not recorded as a save for the goalie. Examples:

a) Amanda takes a shot that would go in. Brittany, the goalie, blocks the shot. Brittany records a save; Amanda records a shot.

b) Agnes is the striker on a penalty corner. Her shot, which is ruled "safe," is saved by Brittany from going in the cage. Brittany's save, however, pops up and the umpire rules a lifted or dangerous ball and awards team A another corner. Brittany's save is still a save, as she prevented the ball from going into the goal.

c) Ammie is on a breakaway and dribbles into the circle. Brittany comes out to play her and blocks the ball after Ammie has taken it into the circle. Because an offensive player has touched the ball inside the circle, Brittany gets credit for the save

DEFENSIVE SAVE:

c) on a corner Amory shoots the ball in the corner away from the goalie. Barb, who is on the post, legally stops the ball from going in the cage. Amory gets credit for a shot, and Barb records a defensive save

NOTE that a defensive player who is playing in front of the goalie who blocks a shot IS NOT credited with a defensive save. The defensive save must be the FINAL ABSOLUTE last line of defense

Examples of situations in which the goalie plays the ball but there is NOT a save:

a) on a long hit coming across the mouth of the cage the goalie punches the ball out of the circle (or away from play)

b) the goalie blocks a crossing pass from outside the circle (long hit, eg) that is not directed towards the goal as a shot

The only judgment call that should be made in the recording of a save is whether the ball would have gone in the cage. It is rare for a team to have 100% accuracy in shot placement; thus, it would be unusual for a team to have as many saves (and goals against) as a the opponent has shots. Again, a crucial point is that a shot that hits the pipe is not considered a save.

It is important that a statistician keep careful account of all of the shots during a game; for this purpose a table has been provided for recording shots that hit crossbars and posts and go wide as well as far as totals for a team.

SPECIAL FIELD HOCKEY SITUATIONS:

The strokeoff competition:

In the case that Team A and Team B are tied following the mandatory, sudden-victory 15 minutes overtime periods, a penalty strokeoff competition is held to determine a winner of the contest. The team that wins the contest, either in the first, mandatory and complete series, or in the sudden-victory series that follow, will be awarded a "team goal" to be added to the score of that team. The result is recorded as such: Team A defeats Team B in penalty strokes OR "A, 2-1 PS" or something akin to this statement.

It is important to note that each team is only held accountable for the one goal scored in regulation. The final goal is a stroke goal--NOT given to anyone NOR is the goalie accountable for any of the strokes that went in. Record it as a GWG: PS (team) or something similar.

A substitute keeper

In the case that Team B pulls their goalie in favor of a field player, the question arises as to who is then "responsible" for the goal. Because the rules of field hockey state that each team MUST have a dressed keeper on the field, a team will have a field player don a different color jersey and protective headgear to serve as the keeper. Yet this person is designed to assist the team on attack more than they are in the game for their goalkeeping skills. As a result, should Team A score while this substitute keeper is on the field, it should be recorded as an "empty net" goal (en). The only change occurs in the statistical recording of the goal for Team B. Brittany, who was in goal for Team B, should not have the goal charged against her, and her minutes in the game should reflect ONLY her time actually on the field.

Should Betsy make a save, it needs to be recorded as a goalie save and not a defensive save. The save, though, should be credited to Betsy and not to Brittany.

For example: Team A leads 1-0 and Team B pulls their keeper with 4:00 to play. Brittany comes off the field while Betsy enters with the protective headgear and the different color jersey. Team A scores with 2:00 to play. Brittany is charged with only one goal against in 66 minutes of play, while Team B overall has two goals against in the course of the 70-minute game. Team A's goal should be listed as an (en) goal to reflect the actual situation, because to list the goal against what is basically a field player is a misleading statistic.

The shutout

For a goalkeeper to record a shutout, she must play the entire game in the cage. Should she split time with anyone else, then she cannot get credit for a shutout.

This is not to say that a team cannot record a shutout with more than one keeper playing in the game. For example, a team can platoon its goalies and have each player in the cage for 35 minutes each, during which time the team allows no goals. The team goals-against average would be 0.00, and the GAA for the individual goalies would be 0.00, but neither would have any shutouts to their credit. Furthermore, if a goalie plays for 65 minutes and her teammate comes in the last five minutes and the team records a shutout, again, neither goalie records a shutout. A shutout is only to be awarded for a complete game.

By no means are any of these examples given in the game scenarios perfect nor are they exhaustive. They only represent some of the more common situations and give an idea of how a statistician should record the play. In any situation where a question arises; it is crucial that the statisticians of both teams discuss the situation so that both teams' statistics are identical.

STATISTICAL FORMULAS

SCORING AVERAGE: $\frac{\text{Number of goals} \times 70}{\text{Number of minutes played}}$
(Scoring offense)

Team A has played 15 games (one overtime of 5 minutes)
and scored 60 goals.

$$60 \times 70 = 4200$$

$$15 \times 70 + 5 = 1055$$

$$4200 / 1055 = 3.98 \text{ gpg}$$

Team A has a scoring offense of 3.98 gpg

SCORING DEFENSE: $\frac{\text{Number of goals allowed} \times 70}{\text{Number of minutes played}}$

Team A's opponents have scored 25 goals.

$$25 \times 70 = 1750$$

$$1750 / 1055 = 1.66$$

Team A has a scoring defense of 1.66

SCORING MARGIN: Scoring Average - Scoring Defense = Scoring Margin

SAVE PERCENTAGE: $\frac{\text{Number of saves}}{\text{Number of saves} + \text{Number of goals}}$

Anna has made 180 saves and has allowed 75 goals.

$$180 + 75 = 255$$

$$180 / 255 = .706$$

Anna's save percentage is .706

GOALS AGAINST AVERAGE: $\frac{\text{Number of goals allowed} \times 70}{\text{Total minutes played}}$

Anna has allowed 20 goals while playing in 985 minutes.

$$20 \times 70 = 1400$$

$$1400 / 985 = 1.42$$

Anna has a GAA of 1.42.

Notice that the team has played 1055 minutes; she has played 93.4% of the team's minutes. Her GAA is very close to the scoring defense.