

What to Watch in a Swim Meet

A Guide to the Strokes, Pool, Strategies and More...

The Racing Course

The length of a long course racing pool is 50 meters. World records may only be set in 50-meter (long course) or 25-meter pools. The competitive pool typically has a minimum of eight lanes, each lane anywhere from seven to nine feet wide. The racing course must be at least four feet deep and is frequently deeper. The top pools in the U.S. are six to nine feet deep. The water temperature must be between 78 and 80 degrees Fahrenheit. The front edge of the starting blocks are 30 inches above the surface of the water.



The Meet

There are 20 individual events and 4 relay events for men and women in a Long Course (50-meter pool) swim meet. Short Course meets (25-meter or yard pool) have 22 individual events and 6 relay events. In meets sanctioned by USA Swimming, not all age groups swim every possible event. Olympic Game competitions have only 14 individual events and 3 relays for men and women. In the Olympics, men do not swim an 800-meter freestyle and the women do not swim a 1500-meter freestyle.

For meets sanctioned by Missouri Valley Swimming, the events offered during a meet depend primarily on the course, or "season" in which the meet is held. During the winter season, meets are typically conducted in a "Short Course Yards" format; meets held during summer months most often use the "Long Course Meters" format. However, depending on the pool or swim club hosting the meet, other formats may be used such as a "Short Course Meters" format.

Events most commonly used for each season are:

Distance / Stroke	Freestyle	Backstroke	Breaststroke	Butterfly	Individual Medley	Free Relay	Medley Relay
25	S	S	S	S	-	-	-
50	L & S	L & S	L & S	L & S	-	-	-
100	L & S	L & S	L & S	L & S	S	S	S
200	L & S	L & S	L & S	L & S	L & S	L & S	L & S
400	-	-	-	-	L & S	L & S	L & S
500	S	-	-	-	-	-	-
800	L	-	-	-	-	L & S	-
1000	S	-	-	-	-	-	-
1500	L	-	-	-	-	-	-
1650	L & S	-	-	-	-	-	-

Key: L = Long Course Only S = Short Course Only L & S = Long and Short Course

Freestyle

In the freestyle, the competitor may swim any stroke he or she wishes. The usual stroke used is the Australian Crawl. This stroke is characterized by the alternate overhand motion of the arms and a flutter kick which can be either a six-beat-per-stroke or two-beat-per-stroke cycle rhythm. The slower two-beat kick is used in the distance races, while the faster, six-beat kick is used in the sprint events and at the very end of the distance races. In all U.S. Swimming competition, each swimmer's head must surface within 15 meters of the start of the race. This rule



was adopted in 1998. The freestyle is swum in 50-, 100-, 200-, 400-, 800- and 1500-meter or yard distances. During the Olympic Games, women's events do not include the 1500-meter freestyle, while the men's schedule of events does not include the 800-meter freestyle.

Backstroke

In the backstroke the swimmer must stay on his or her back, except during the turns. The stroke is an alternating motion of the arms, much like the crawl stroke, but with a flutter kick. Since April of 1991, a swimmer is no longer required to touch the wall with his or her hand before executing the turn maneuver. The key to proper interpretation of the backstroke rule is the phrase "continuous turning action" (i.e., a uniform, unbroken motion with no pauses). In a more technical interpretation, after the shoulder rotates beyond the vertical toward the breast, a continuous simultaneous double arm pull may be used to initiate the turn. There can be no kick, arm pull, or floatation that is independent of the turn. The position of the head is not relevant. In all U.S. Swimming competition, each swimmer's head must surface within 15 meters of the start of the race. This is a change from the 1988 rule which stated that a swimmer must surface within 10 meters of the start of a race. The rule was passed after America's David Berkoff set a world record in Seoul using a 35-meter underwater start, nicknamed the "Berkoff Blastoff" by NBC swimming commentator John Naber. Backstroke race distances are 50, 100 and 200 meters or yards.



Breaststroke

Perhaps one of the most difficult strokes to master, the breaststroke requires simultaneous movements of the arms on the same horizontal plane. The hands are pushed forward from the breast on or under the surface of the water and brought backward in the propulsive stage of the stroke simultaneously. The kick is a simultaneous thrust of the legs called a "frog" or breaststroke kick. No flutter or dolphin kicking is allowed. Swimmers must touch the wall with both hands at the same time before executing their turn. Breaststroke race distances are 50, 100 and 200 meters or yards.



Butterfly

The most physically demanding stroke, the butterfly features the simultaneous overhead stroke of the arms combined with the dolphin kick. The dolphin kick features both legs moving up and down together. No flutter kicking is allowed. As in the breaststroke, swimmers must touch the wall with both hands before turning. The butterfly was "born" in the early 1950's as a loophole in the breaststroke rules and in 1956 became an Olympic event. In all U.S. Swimming competition, each swimmer's head must surface within 15 meters of the start of the race. This rule was passed in 1998. During Olympic competition, USA's Misty Hyman, among other swimmers, had utilized an extended underwater start prior to this restriction. Butterfly races are swum in 50, 100 and 200 meter or yard distances.



Individual Medley

The individual medley, commonly referred to as the "I.M.," features all four competitive strokes. In the I.M. a swimmer begins with the butterfly, changes to the backstroke after one-fourth of the race, then the breaststroke for another quarter and finally finishes with the freestyle. The "no-touch" backstroke rule comes into play in the individual medley events in that the new turn may be used in the 400-meter or yard I.M. (100 of each stroke) only in the middle of the backstroke leg. The new turn may not be used in the backstroke to breaststroke turn, however, and is therefore not allowed in a Long Course 200-meter or yard individual medley race. The I.M. is swum in 100-, 200- and 400- meter and yard distances.



Medley Relay

In the medley relay, all four strokes are swum by four different swimmers. No swimmer may swim more than one leg of the relay, which



is swum in backstroke, breaststroke, butterfly and freestyle order. Additionally it is possible to see a world record in the 100-meter backstroke (the first leg) in this race. Jeff Rouse, the current men's world record holder in the 100-meter backstroke, set that mark swimming the lead-off leg for the 1991 U.S. team at the Pan Pacific Championships and again on the '92 Olympic team. The medley relay is 100, 200 or 400 meters or yards.



Freestyle Relay

There are four freestyle relays -- 100, 200, 400 and 800 meters or yards. Olympic competition only uses the 400 and 800 meter events. In the freestyle relays, four swimmers each swim one fourth of the total distance. As in the medley relay, no individual may swim more than one leg of the relay.

Starts and Turns

Many races are lost in poor starts and turns. In the start, the swimmer is called to starting position by the starter who visually checks that all swimmers are in the down positions and still. Then, once the starter is satisfied, the race is started by either a gun or electronic tone. If the starter feels that one of the swimmers has jumped early, the race will be recalled and the offending swimmer disqualified. Quick turns are essential to a good race. In all events the swimmer must touch the wall, but in the freestyle and the backstroke, the swimmer may "somersault" as he or she reaches the wall, touching only with the feet. In the other two competitive strokes, the swimmer must touch the wall with one or both hands before executing the turn.



Strategies

The sprint races (25, 50 and 100 meters or yards) are an all-out scramble from start to finish. The slightest mistake can cost precious hundredths of seconds -- and the race. The longer events require the swimmer to have a sense of pace as well as the ability to swim a controlled sprint. This distance is considered by many swimmers to be the most difficult to master. The 400, 800 and 1500-meter freestyles require the swimmer to constantly be aware of where they are in the water and the fatigue of their muscles. Swimming the first portion of the race too fast can sap a swimmer's strength and cause a poor finish. Swimming the first portion of the race too slowly can separate the swimmer from the pack and make catching up impossible. Swimmers may elect to swim the race evenly (holding the same pace throughout the race) or they may use a "negative split" strategy for the race. A negative split occurs when the swimmer covers the second half of a race faster than the first half. In the late 1970s and early '80s "negative splitting" was considered the way to win a distance race. World records have been set by Janet Evans and Jorg Hoffman using "even pace" strategies as well.

