



Backstroke

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Backstroke Technique

- Clear understanding on what to look for; where to look
- Technique priorities
 - Fastest, most efficient
 - Minimize injury risk
 - Makes sense to move the body forward
 - Makes sense for the “average” person to do



Technique Theory

- Move body forward in the water
- Push water back
- The arm pull is PARAMOUNT
- Kick is secondary propulsive
- Rotation, body/head position (and kick to a degree) is built around the ideal pull
- Developing athletes must be taught with ultimate end-goal technique in mind



Backstroke Priorities

1. The Catch
2. The rest of the pull/finish
 - a) Rotation – how much and timing
 - b) Hand entry
 - c) Kick
 - d) Head/Body position



Backstroke Pull

- Push water back
 - Palm ALWAYS faces back
 - Fingertips point to the side (away from the body)
 - Palms shouldn't angle down/up
 - Bend the elbow to get the whole arm into it
- Hand stays shallow; pushes straight back
- Arm stays to the side of the body
- No up-and-down motion; No “deep” water



Arm Stroke: The Catch

- The most common element of the best backstrokers in the world
- Hand/arm enter water (moving downward)
- Immediately after entry, the hand changes direction completely and moves to the side
- Distinct, visible elbow bend to make:
 - Fingertips point to the side
 - Palms face back
 - Forearm face back
 - Thumb just needs to be a few inches under surface



Backstroke Catch





Arm Stroke: Bad Catch

- NOT:
 - Straight arm
 - Push down with the arm
 - Palm faces downward (for part or all)
- Not hitting the catch can be the result of:
 - Intentionally trying to pull deep
 - Late rotation (so the arm pushes down or to the side while body continues to rotate)
 - No rotation



Arm Stroke: Pull & Finish

- After the catch:
 - Hand/arm continue to push straight back
 - Arm stays to the side of the body (connected)
 - No up/down movement
 - The palm and forearm stay flat against the water
- The Finish
 - Just a follow-through or extension of the pull
 - Hold water all the way through
 - Hand moves downward to help body rotate to other side
 - Hand finishes below hips and facing inward



Arm Stroke: Entry

- Shoulder-width or slightly wider
- Pinky first

If entry is too narrow or the back of the hand enters first, that very likely means late rotation

- Body needs to be flat (halfway through rotation) upon hand entry
- Late rotation also means that the body will complete rotation during the catch
 - Arm will push down to finish the rotation



Rotation

- Rotation is SO important!!!
- Need to rotate to:
 - Hit the catch
 - Have the strongest pull
- Need to rotate **on time** to:
 - Have the best entry
 - ...so you can hit the catch



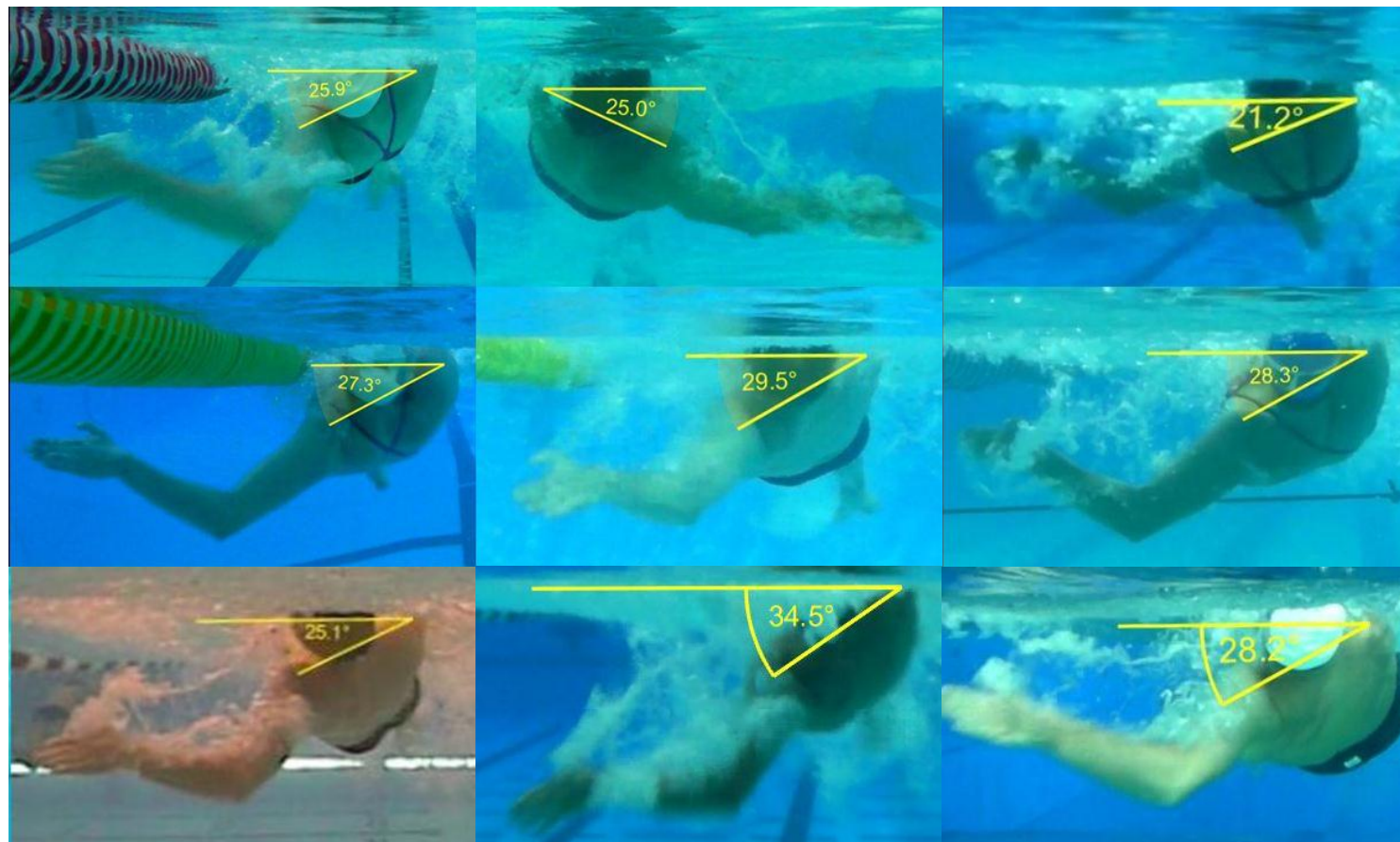
Rotation: Backstroke

- Rotation is driven by the finish and entry
- Hips and shoulders rotate together
- Shallow pull + 20-30 degree rotation =
Arm/Shoulder in line and connected



Rotation: How Much?

- The best backstrokers rotate under 30 degrees to each side





Rotation: How Much?

- Not necessary to rotate more
 - The best pull is with the arms to the side, fingertips pointing to the side and just under the surface
 - Rotating more...
 1. takes more time (slows tempo)
 2. doesn't help (not necessary to reach deeper)
- Arm just needs to be connected to body



Head/Body Position

- Head should be tilted slightly forward (like resting on a thin pillow) ... relaxed
 - Not pressed back ... that will arch the back and sink hips
- The rest of the body will be just under the surface
- When rotated, will still be under the surface
- Shoulders should stay to the side of the body
 - Don't lift out of the water



Kicking

- 6-beat kick
- Bend knees to set up kick
- Not as strong as freestyle/dolphin kick because legs will stay underwater
(legs can't follow through and kick in front of the body)
- The down kick will be outside of body line ...
it's ok!!!



Injury-Free Backstroke

- Shoulder pain
 - Not from repetitive motion
 - From repetitive motion of poor technique
 - Most likely from being too deep at the catch
 - Arm being too far behind the body
 - Hyperextension
 - Keep arm more shallow!
- Ask swimmer at when they're feeling pain



Rotation & Shoulder

