

## HOBART MASTERS SWIMMING CLUB SKILLS AND DRILLS NOTES

### BACKSTROKE

Backstroke is a challenging stroke. Here's why:

- You are on your back and not able to see where you are going.
- You need to kick more vigorously than when on your front because the downward part of the kick is done with the back of your leg and foot, which is not as flat as the front of your foot, making it more difficult to keep your feet and hips high in the water.
- You need to be strong through your core (front and back) to stop your hips sagging and compromising your posture.
- For part of the stroke one arm is entirely out of the water extended straight up, potentially compromising your posture, stability and centre of gravity.
- The catch part of the stroke occurs over your head, out of sight, and requires a forced rotation through your shoulders to get your hand below the surface of the water.

#### Technical points

- **Posture.** Your head position is key to your posture. Your head needs to be steady and in a neutral position in relation to your spine. Your lower back will need to be arched to keep your hips high in the water, which means your core will need to be strong to support your lower back and allow you to breathe without collapsing through your abdomen.
- **Head position 1.** You need to keep your **head still** to maintain the stability of your long axis (think of it as a line from the top of your head down through your spine and through the centre of your legs).
- **Head position 2.** You **must not** look towards your feet. As soon as you do this your middle will collapse, your hips will drop and you will lose buoyancy. Look straight above you, using your peripheral vision to check where you are in relation to the lane ropes, but resist the temptation to turn your head.
- **Catch positions.** Catch the water at the **1 o'clock (right hand) and 11 o'clock (left hand)** positions, not behind your head. This means your arms must be straight as they reach above your head, with no bend in your elbow.
- **Catch hand depth.** Bury your hand in the water at the catch position before starting the sweep out. A shallow catch will set you up for a shallow and therefore weak stroke.
- **Shoulder rotation.** You must **force your shoulders to rotate** to get a deep catch. Most swimmers will need to point their opposite shoulder to the ceiling to achieve sufficient rotation. For most swimmers this will not come naturally.

- **Kick.** Your kick needs to be energetic (a **six beat kick**, which is three beats per stroke), constant and consistent on both sides. Your kick needs to be focussed at your feet and not at your knees. If your knees are coming out of the water there is too much bend at that joint. The muscles in your hips and ankles have to work hard on the up-beat of the kick. Bent knees only weaken your kick and work like a break.
- **Breathing.** You need to adopt a **regular breathing pattern** that is synchronised with your stroke, just like freestyle. Do not breathe haphazardly just because you can, as this will upset your buoyancy and stability.
- **Arm recovery** (out of the water phase of the stroke). Your arms should remain **straight** with thumb leading and fingers pointed to the ceiling as they recover in a reverse karate chop position. Your hand should rotate outwards slightly as it approaches the water so that your small finger enters the water first and slices deep. Your arm should **brush your ear** as it rotates.
- **Stroke catch and push.** The in-water part of the stroke has two basic movements once your hand has entered the water: an **outward sweep** with a straight arm to about 2 o'clock or 10 o'clock (a bit like doing the first part of a breaststroke stroke but on your back), followed by a **push** towards your feet with a bent elbow until the arm straightens again by your hip. This part of the stroke is like doing a dip.
- **Stroke tempo.** Backstroke stroke is **continuous** with both hands constantly moving and hands always in opposite positions, like a windmill with two blades. There is no catch up or delay in the stroke.

## Drills

- **Deep hand entry.** Delay your stroke at the catch position until you have rotated sufficiently to get your hand deep, then complete the stroke (both arms moving) and repeat the delay on the other side. Do this drill for about 8 strokes per arm, then do 8 strokes per arm without a delay whilst maintaining the same degree of rotation. Repeat the sequence. Try it with fins first if needed.
- **Straight arm.** Practice one arm recovery (just the recovery phase) with the other arm by your side. Do 8 arm movements on one arm (forward then in reverse) then the other arm. Focus on straight and vertical arm, with thumb leading during the first quadrant, then rotating your hand so that your little finger strikes the water first. Try it with fins first if needed.
- **Head position.** Kick on your back with both arms extended forward for a slow count to eight. Focus on correct head position. Then take 8 strokes on each arm with correct head position. Repeat the sequence.