

Teaching Starts Using Backstroke Ledges

Beginning with the start of the 2025-26 school year, by state association adoption may permit the use of backstroke ledges during swimming competitions. Minimum water depth is 6 feet (1.84 meters) measured at the starting end extending out 16 feet, 5 inches (5 meters) from the starting end wall. Associations that adopt the use of backstroke starting ledges in competition must clearly articulate the importance of a teaching protocol implementation for their high school competitors to minimize risk. The implementation of backstroke ledges requires clear, structured education protocols, which are outlined below. Adequate training time must be provided to minimize risk and ensure performance readiness. By following these guidelines and maintaining a clear focus on skill progression, safety, and controlled environment practices, the use of backstroke ledges can be safely integrated into swimming training sessions and competitions.

General Instructions – before you teach backstroke starts, ensure:

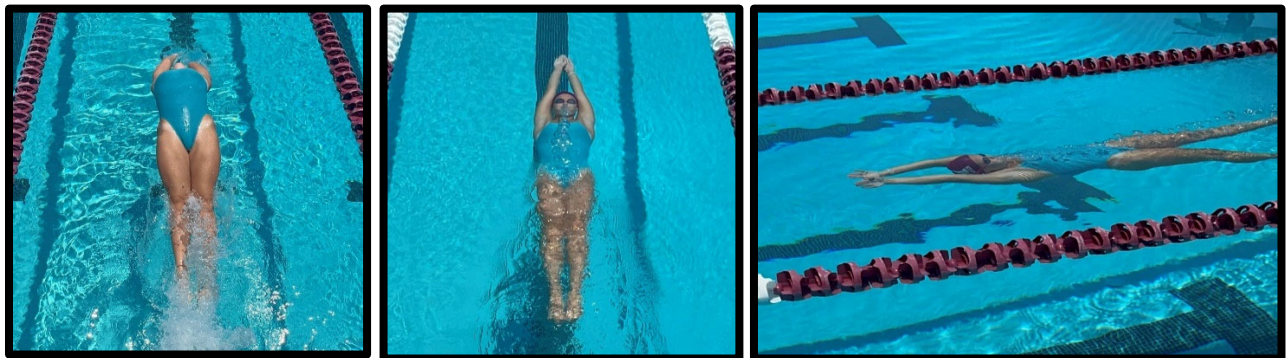
1. Swimmers can step in feet first into deep water, surface, turn around, level off and swim 10 feet.
2. Swimmers can demonstrate correct hand, arm, and head position. Practice a tight streamline on dry land.
3. Swimmers can maintain a tight streamline on a forceful push-off and glide underwater on their back.
4. The coach and the swimmers know the water depth (minimum 6 feet).
5. Starting blocks are tightly secured to the pool deck and are of size and height regulations.
6. Swimmers enter the water feet first.
7. The lane is clear of other nearby swimmers.
8. Starts utilizing backstroke ledges may take place as long as the water depth is at least 6 feet deep from the end wall and the depth is maintained 16 feet, 5 inches from the starting end wall.

Note: Confirm with your state association for any conflicting depth regulations.

Teaching Backstroke Starts Without the Ledge:

1. Instruct swimmers in the step-by-step progression BEFORE using the backstroke ledge.
 - **Prerequisite:** Swimmer can hold their arms in a tight streamline on a forceful push from the edge of the pool and glide underwater on their back before adjusting their hands to come to the surface at an angle.

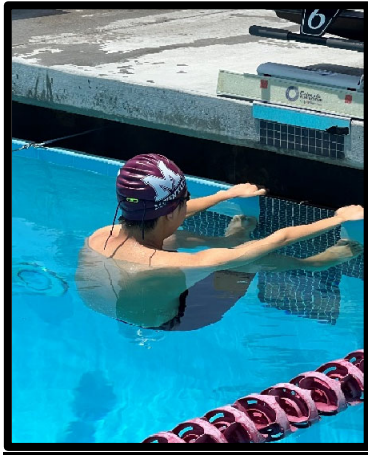
Tight Streamline Push To Shallow Angle



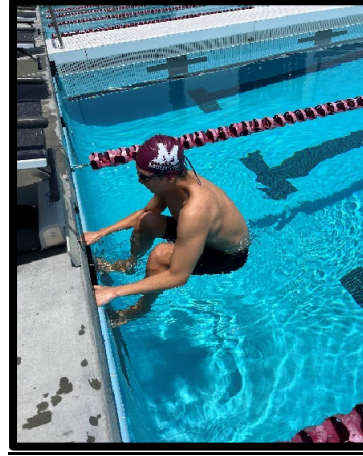
- **Progression Recommendations:** Swimmer gets into position with the hands grasping either the gutter or the lower bar on the blocks, whichever is closest to the water surface. For foot position, at least one toe of each foot must be in contact with the end wall or face of the touchpad. The swimmer performs a shallow backstroke racing start following the steps listed in the Teaching Backstroke Starts (Detailed Protocol). Once mastered, coach may teach swimmer to use the lower bar on the block, if in the coach's opinion the athlete is tall and strong enough to handle this skill safely.

2. Always ensure arms are fully extended overhead during entry in a tight streamline.
3. Do not perform entries over stationary object like poles, lanes lines or kickboards.

Ready Position Without Ledge



Take Your Marks Position Without Ledge



Teaching Backstroke Starts with the Ledge:

1. Instruct swimmers in the step-by-step progression above BEFORE using the backstroke ledge and the starting blocks.
 - **Prerequisite:** Swimmer has mastered backstroke starts without the ledge.
 - **Progression Recommendations:** The swimmer gets into position with the hands grasping either the gutter, the lowest bar or hand grips on the block, whichever is closest to the water surface. For foot position, the front balls of the feet are on the ledge with at least one toe of each foot in contact with the end wall or face of the touchpad. The swimmer performs a shallow backstroke racing start following the steps listed in Teaching Backstroke Starts (Detailed Protocol) below. Once mastered, the coach may teach swimmer to use the lowest bar or hand grips on the blocks, if in the coach's opinion the athlete is tall and strong enough to handle this skill safely.
- Note:** Research has shown that older, larger and stronger swimmers can generate more height. Consequently, the risk of reaching greater depths with the ledge is more pronounced with these athletes.
2. Always have swimmers hold arms fully extended overhead during entry in a tight streamline.
 3. Always have swimmers hold arms fully extended overhead during entry. Do not perform entries with arms at sides.

Ready Position With Ledge



Take Your Marks Position With Ledge



Teaching Backstroke Starts (Detailed Protocol):

1. Have the swimmer grasp the pool edge at water level with both hands and place their feet on the wall, either parallel or slightly staggered. Arms should be straight and relaxed, eyes looking forward at the wall. Swimmers who are older, larger or stronger, and are comfortable reaching a bar on the starting block, can do so. Have the athlete keep their feet placed near the surface of the water.
2. On the command "Take your marks," the swimmer should bend their arms and legs to pull their body up and closer to the wall. Swimmers learning the start should pull up slightly to a level their strength can handle. Swimmers who are comfortable and strong enough to grip the bar can pull up more, with the hips at the surface of the water or just above. The swimmer should adjust the angle of their back, so their body is ideally positioned to jump off the wall while not slipping. With their back perpendicular to the water, they may be less likely to slip but their legs may be too tightly bent to get the best jump. To get into this position, have the swimmer bend their legs more to bring the hips closer to the wall or bend their arms less. Alternatively, with their back leaning towards the wall, they may be more likely to slip, but it may be easier to extend their legs to push away from the wall. To do this, have the swimmer bend their legs less so their hips are further from the wall or have them bend their arms more. This position may be better suited with a ledge.

Starting Position

Perpendicular



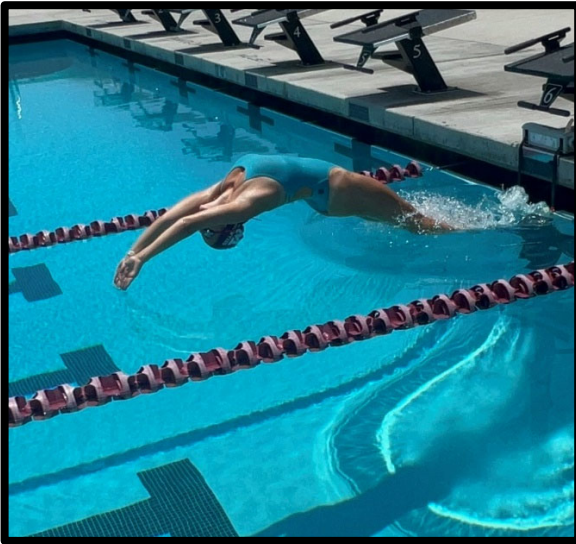
Leaning Forward



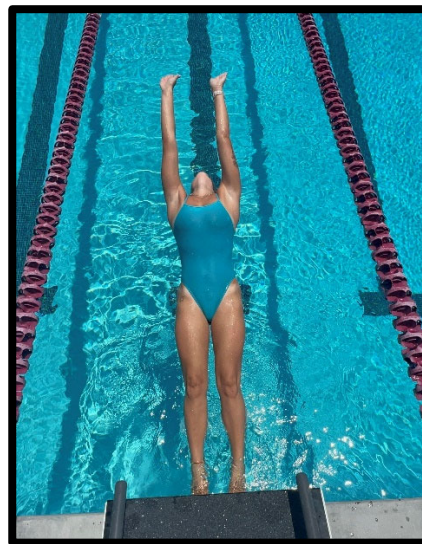
The backstroke start position should be individual to each athlete, their strengths and comfort. Try experimenting with different combinations of knee bend, arm bend and back angle to find the best position for them.

3. On the starting signal, the swimmer should throw their head back to a neutral position, which is generally in line with the spine. Simultaneously, they should throw their hands from the edge or starting block straight back over their head. They should push forcefully with their legs to jump upward and away from the wall while arching their back and driving their body, hands first, up over the water. The swimmer should kick their feet up to ensure they get over the water and into full streamline.

Head in Neutral Position



Hands Straight Back



4. The athlete should tip their head back and get into a streamlined position. The goal is to have a clean entry and maximize forward speed by not going too deep. Their hands should enter before their back, and their back should enter before their legs. To improve their entry position and depth, athletes should adjust how high and away they jump off the wall while also working on kicking their feet up. A higher jump may lead to a cleaner entry but may also be deeper, which is not preferred.
5. Once in the water, athletes should adjust the angle of their hands and/or head for a horizontal streamlined glide. They should straighten their back to avoid going excessively deep.

Teach Your Swimmers the “Do’s” and “Do Not’s” for Starts:

Do:

1. Use starting blocks and backstroke ledges only during controlled swim practice, instruction, supervised warm-up or competition.
2. Know the water depth and location of pool floor slopes. Use feet first entry.
3. Use feet first entry in warm-up and always enter at the starting end of the pool.
4. Look to make sure the lane is clear of other nearby swimmers before entering the pool.
5. Enter the water only with permission of the coach or meet official.
6. Use a shallow angle entry and hold arms fully extended overhead.
7. For backstroke start practice, have the swimmers step into the water feet first.

Do Not:

1. Start a water entry until the preceding swimmer has come to the surface and moved away from the entry area.
2. Make a headfirst entry into cloudy water.
3. Play around in the area that contains the starting blocks or the pool edge.
4. Attempt to abort a poor start or a false start by somersaulting, pulling up quickly or rolling to the side.
5. Attempt a somersault or flip entry into a competition pool.
6. Enter headfirst with the arms at the side.
7. Grasp the backstroke start bar or starting block while entering the pool for backstroke start practice.