Swimming and water safety in the national curriculum

Water Safety
Introducing Water Safety

Water can be fun and enjoyable when care is taken, however drowning is still the third highest cause of accidental death in children in the UK.

Swimming is the only sport that saves lives, but having the swimming and water safety awareness to save yourself or others doesn’t come instinctively, it has to be taught. Sadly, many fatal drownings involve young people who misjudge their own swimming ability, or have little or no awareness of the dangers of water.

The mnemonic SAFE was used previously but this has now been replaced with updated messages, developed after extensive research with all age groups, from primary through to teens.

Our four key water safety messages specifically for swimming are:
• Always swim in safe place.
• Always swim with an adult.
• If you fall in, float, breathe, relax.
• If someone else is in trouble call 999/112.
Staying safe around water

In many of the drownings that occur around the UK the person involved never intended to be in the water. These safety messages developed by the RNLI are designed specifically with young people in mind:

**Stop and Think**
Water is always moving.
The water is colder than you think.
Edges can be dangerous.
There may be dangers under water.

**Stay Together**
Never swim alone - Stay close to a friend or family member.
Find a safe place to go - Only swim where there is a lifeguard.
Plan for your activity – check weather, tide times, get local advice and wear the right clothing.

**Float**
If you fall in, float until you feel calm.
Signal for help, raising one hand in the air and shouting for help.
If you can, swim to safety or hold on to something that floats.
Keep warm if you can’t swim to safety.

**Call 999/112**
If you see someone else in trouble in the water call 999 or 112.
Never enter the water to save others.
Look for something you can throw to help them float, a life ring or even a football could help.
Keep watch until help arrives.
Call 999/112.

**Outdoor activities**
These safety messages should be incorporated into general programmes of study and specifically applied to the outdoor environment where the risk of drowning is greater. Most drownings occur in open water such as rivers, canals, lakes, reservoirs and the sea.
Water safety and safe self-rescue in the national curriculum

By the time they leave primary school, all children should be able to perform safe self-rescue in different water-based situations.

So what does this mean?

By the time a child is ready to leave primary school they should be able to swim a minimum of 25 metres, know how to get out of trouble if they fall in to water, know the dangers of water and understand water safety messages.

All water safety and safe self-rescue skills should be performed and assessed without the use of goggles.

Key Stage 1

If delivering Key Stage 1, water safety and self-rescue should be included in the programme of study for swimming and in classroom-based activities. If swimming isn’t being delivered at Key Stage 1, the key safety messaging above can still be introduced in the general programme of study for related subjects, for example, Geography.

Key Stage 2

If swimming is delivered at Key Stage 2, then these safety messages should be taught, as part of a comprehensive water safety programme where pupils should practise and understand the principles and skills of personal survival and self-rescue.
Drowning prevention strategies

Water safety education should aim to prevent accidental drowning by teaching children an awareness of the dangers that they may encounter in their home, the swimming pool and at open water locations. Children should know that in open water, even strong swimmers can easily get into difficulties and should be taught to assess risk and apply the principles of water safety.

A sound knowledge of water safety can avoid triggering this sequence of events, potentially preventing fatalities.

Survival Chain

To teach water safety effectively, teachers should be familiar with the role of water safety in preventing accidental drowning. Death by accidental drowning can usually be accounted for through a sequential linking of factors often referred to as the ‘Survival Chain’.

Although each link in the ‘Survival Chain’ may contribute to a fatality, the major cause of accidental death by drowning can be attributed to ‘inattention or misjudgement of one’s own ability’.

The Survival Chain can be broken down by these seven crucial links:

Effective water safety education including lifesaving, survival and self-rescue skills is the best way to prevent accidental drowning.
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Safety in and around swimming pools

Public swimming pools are the safest places to swim. Lifeguards provide supervision and ensure the pool environment is well managed. Home and private pools however, pose a more significant risk as they are rarely supervised and may not have alarms to sound in an emergency.

Hazards

Knowing and understanding the hazards around swimming pools can make sure everyone enjoys themselves whilst staying safe.

- Slippery walkways.
- Diving areas.
- Variable depths.
- Steps.

Pool rules

Always observe the signs around the pool; they give information about the pool environment, such as “Deep End” and “Shallow End” and pool rules such as:

- No running.
- No ducking.
- No pushing.
- No diving.

Open water

Although many children learn to swim the minimum 25 metres set out in the national curriculum through pool-based school swimming lessons, open water situations have their own set of dangers and challenges which can’t necessarily be recreated during lessons.

An ability to swim is often not enough to prevent drowning. Swimming in the relatively safe environment of a swimming pool is very different from being able to do so in open water, often against strong currents and tides, while clothed.

It is essential pupils are made aware of the dangers of playing near open water.

Almost 40 percent of child drownings are classified as “non-intentional immersion” where a child has entered the water unintentionally.

Conditions at open water can change very suddenly, and a lack of understanding of the hazards of open water is a contributing factor in the vast majority of drowning cases.

Pupils need to understand the hazards in their local environment, as well as those they may encounter elsewhere.

Understanding and learning to assess the hazards and risks around open water can increase enjoyment, both in and out of the water.
Safety in and around swimming pools

Hazards

<table>
<thead>
<tr>
<th>Sea and coastal areas</th>
<th>Inland water sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cliffs</td>
<td>Poor water quality</td>
</tr>
<tr>
<td>Wind</td>
<td>Water speed and force</td>
</tr>
<tr>
<td>Waves</td>
<td>Locks</td>
</tr>
<tr>
<td>Deep water</td>
<td>Banks and freeboards</td>
</tr>
<tr>
<td>Tides</td>
<td>Debris and pollutants</td>
</tr>
<tr>
<td>Cold water</td>
<td>Weirs, dams, canals and locks</td>
</tr>
<tr>
<td>Sandbars and sand banks</td>
<td>Deep and cold water</td>
</tr>
</tbody>
</table>

In addition to the key water safety messages at the beginning of this document, these are extra checks that can be made at open water sites:
- Always look for warning and guidance signs.
- Swim parallel with the shore line and in standing depth of water.
- Avoid drifting in the currents.
- Get out as soon as you start to feel cold.
- Wash hands and face in fresh clean water and if possible, take a shower after swimming in open water.

Beaches

When at the beach, children should adhere to the following water safety guidance:
- Only swim at lifeguarded beaches.
- Learn the meaning of different coloured beach flags.
- Read safety signs.
- Check tide times to avoid being cut off by incoming tides.

Beach flags

- The beach flags are displayed by the lifeguards in patrolled areas to provide guidance on the water and wind conditions. The flags also inform beach users where the swimming and water sports zones are. When travelling outside of the UK you should check the meaning of flags locally as there is no international standard.
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<table>
<thead>
<tr>
<th>Red and yellow flag</th>
<th>Swimming zone</th>
<th>Lifeguards patrol between these flags. It is the safest area to swim, body board and use inflatables.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black and white chequered flag</td>
<td>Hard craft zone</td>
<td>Area for water sports such as surfing only. No swimming.</td>
</tr>
<tr>
<td>Red flag</td>
<td>No swimming</td>
<td>Danger. Never go into the water when the red flag is flying.</td>
</tr>
<tr>
<td>Wind sock</td>
<td>Off shore winds</td>
<td>Shows the direction and force of the wind. Very strong winds can be hazardous for swimmers. Do not take inflatables into the water in strong wind.</td>
</tr>
</tbody>
</table>

**At home**
Drowning in the home is rare, however it is possible to drown in only a few centimetres of water and this does happen. Drowning at home is the most easily preventable.

- Always use self-locking gates around areas of water.
- Securely cover all water storage tanks, drains and water butts.
- Empty paddling pools and buckets as soon as they have been used and turn paddling pools upside down.
- Always supervise bath times.
- Never leave baths or sinks full of water.

**Cold water immersion and shock**
Most children's experience of immersion in water comes through baths, showers, play pools and swimming pools, where the water is relatively warm.

Immersion in cold water is a major factor in most drownings in British waters. This applies throughout the year as water temperatures rarely rise above 15 degrees, and in winter can fall to five degrees or below. In very cold water (around five degrees) even strong swimmers can struggle to keep afloat for more than a few minutes.

This is because sudden immersion in cold water will cause a cold shock response from the body.

The body's first reaction will be a gasp reflex, a sharp intake of breath, followed by rapid uncontrolled breathing. At the same time the heart rate and blood pressure will increase. These responses coupled with the panic of being in the water may lead to taking in water through the mouth or nose, resulting in drowning. It is important to be aware that this response will begin to pass in 60 to 90 seconds. Once calm they should exit the water – or if that isn’t possible shout for help and do their best to float and stay warm until rescue arrives.

The longer a person is in the water for the more the muscles in the arms and legs will start to cool, this results in a loss of power and coordination making it difficult to move the arms, legs, fingers and toes, making it more difficult to swim. This often ends in swim failure and drowning.
Safety advice for cold water immersion/shock
- Keep calm. Cold water shock may start to affect breathing and coordination, but it is possible that you will be able to regain control after a short time.
- Float on your back and try to regain control of your breathing.
- When you are calm, float, scull or tread water and signal for help, raising one hand in the air and shouting for help.
- If possible, swim to safety or something that floats.
- Holding the floating object, adopt the Heat Escape Lessening Position (H.E.L.P.) which will slow the loss of body heat.
- If there is more than one of you, adopt the Huddle position to retain body heat communally.
- Hold onto support and float facing away from any waves to prevent the water splashing on your face.
- Try and stay out of the water as much as possible, for example – on a floating object.
- Try and keep your head above water – intermittent submersion of the head will increase heat loss.
- To conserve body heat do not move more than is absolutely necessary.
- Do not attempt to exercise to keep warm.
- Do not remove clothing, except items that interfere with flotation. For example a heavy coat or boots. Lightweight everyday clothing can substantially reduce heat loss by preventing the continuous movement of cold water around the body.

Survival and safe self-rescue skills
If a child finds themselves unexpectedly falling into the water, they must try and protect their body from the impact. **Only teach in depth of 1.5 metres or deeper.**
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**Fall in entry**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Description</th>
<th>Teaching Points</th>
<th>Pupils should be able to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall in Entry</td>
<td>Curling the body into a ball to protect the head and body by drawing in the arms and legs. Once downward movement stops pupils should self-right and swim to surface, stay calm and float.</td>
<td>• Tuck your body into a ball. • Tuck the chin into your chest. • Tuck your knees into the body. • Place your arms over the head to protect it. • Tuck the elbows against the knees. • Use arms and legs to swim to surface.</td>
<td>• Tuck into a ball and hold. • Protect their head with the hands and forearms. • Use arms and legs to self-right once downward movement stops. • Swim to surface. • Stay calm and float.</td>
</tr>
</tbody>
</table>

**Floatation**

If a child unintentionally falls into the water or finds themselves in difficulty in the water, they should float on their back.

Floating uses the natural buoyancy of the body to hold a stationary position, whilst maintaining a clear airway and minimising energy loss. Floating positions can be used by pupils of all abilities as a self-rescue skill. Pupils should take up a floating position on their back if they find themselves in an emergency situation, whilst calling and signalling for help. Pupils should be taught to seek out and use buoyant objects as a preference to unsupported floating in a survival situation.
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Horizontal Float</td>
<td>Floating on the back with face out of water and the whole body at the water’s surface.</td>
<td>• Most visible float for a rescuer to see from land or air.</td>
<td>• Lie on their backs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Legs can be held together to increase heat retention.</td>
<td>• Push stomach towards the surface.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Legs can be held together to increase heat retention.</td>
<td>• Hold their arms out to the side of the body or above the head.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Adopt a star shape for the float to be effective.</td>
<td>• Keep a controlled breathing pattern.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lie on their backs.</td>
<td>• Regularly check, call and signal for help.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Push stomach towards the surface.</td>
<td></td>
</tr>
<tr>
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<td>• Hold their arms out to the side of the body or above the head.</td>
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<td></td>
<td>• Regularly check, call and signal for help.</td>
<td></td>
</tr>
<tr>
<td>Angled Float</td>
<td>Floating on back with legs slightly angled down towards floor, face out of water. Less buoyant casualties will find this float easier to maintain.</td>
<td>• Lie on back.</td>
<td>• Float on their back.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Hold legs in a relaxed V shape with slightly bent knees.</td>
<td>• Explain why their legs may sink (head lifting, body composition etc.).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Position arms out to side.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Control breathing in a regular pattern.</td>
<td></td>
</tr>
<tr>
<td>Floating whilst signalling for help</td>
<td>Floating on the back, sculling with one arm, whilst holding one arm out of the water and shouting for help.</td>
<td>• Keep sculling arm under water.</td>
<td>• Use a sculling action to stabilize the float.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Raise their arm above the head to signal for help.</td>
<td>• Do not wave the arm that is signalling for help.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Regularly check, call and signal for help.</td>
<td>• Control their breathing.</td>
</tr>
</tbody>
</table>
**Treading water**

Treading water is used in both survival and self-rescue situations to maintain a clear airway, stay at the water’s surface (particularly when conditions do not support floating), keep the head clear of the water to reduce heat loss and aid communication.

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<th>Pupils should be able to:</th>
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</thead>
</table>
| Treading Water   | Using downward propulsion from the arms and legs whilst positioned vertically at the water’s surface to maintain a clear airway. | • Keep body in an upright position.  
• Scull with hands shoulder width apart in front of the body.  
• Keep their head clear of the water.  
• Use a variety of leg kicks eggbeater, breaststroke, scissor, cycling. | • Tread water confidently using a variety of leg kicks.  
• Identify the different types of kicking actions.  
• Understand which leg kick works best for them.  
• Remain upright and on the spot. |
Signalling for help

If a person is in trouble in the water, once they have calmed down and assessed the situation they should consider signalling for help. To do this they should raise one hand in the air while treading water and shout “HELP!” It is important only one hand is raised in the air as it uses a large amount of energy to do so especially if clothed. In wavy conditions, care should be taken not to inhale water while shouting. The arm should be lowered if it makes it difficult to maintain an airway, and priority given to remaining at the surface of the water.
Personal survival stroke

Personal survival stroke is an important skill in order to preserve energy and body heat while moving efficiently either to safety or a buoyant object. It is important the arms remain underneath the water, especially if clothed, as an over the water recovery will use an increased amount of energy.

<table>
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<th>Teaching Points</th>
<th>Pupils should be able to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survival</td>
<td>Arms should stretch out in front of the body in an alternating action, at full</td>
<td>• Keep arms under the water.</td>
<td>• Perform this stroke with head out of the water.</td>
</tr>
<tr>
<td>stroke</td>
<td>stretch catch the water and pull underneath the chest. Leg kick should be</td>
<td>• Stretch arms out in front of the body.</td>
<td>• Look and spot for dangers or assistance.</td>
</tr>
<tr>
<td></td>
<td>alternating, but without splashing and the head should be up and looking</td>
<td>• No splashing when kicking.</td>
<td>• Maintain body heat.</td>
</tr>
<tr>
<td></td>
<td>forwards.</td>
<td>• Keep head and face out of the water.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Look forwards.</td>
<td></td>
</tr>
</tbody>
</table>

Heat Escape Lessening Position (HELP)

If a person is unable to exit the water and decides to wait for help, the heat escape lessening position (HELP) reduces heat loss in very cold water.

Holding a buoyant object such as a float or plastic bottle firmly, pupils should draw the knees up to the chest, keeping the legs pressed together to retain body heat. The head should stay clear of the water and arms should be held close to the upper body, retaining body heat. Pupils should keep their body straight and lean slightly backwards.

**Teaching hacks!**

- Hold something that floats against their chest (for example a ball, plastic container or float) and keep as still as possible.
- Keep their head out of the water.
Huddle Position

If a group of people are in the water together, they can huddle together to conserve body heat, offer moral support and provide a larger target for rescuers. Using noodles or other flotation equipment, four or more swimmers should link together and hold-on firmly to each other’s float to make a tight circle. Heads must be clear of the water and one swimmer should raise their arm and shout for help.

Teacher hacks!

Working in groups, teach your pupils to:
• Hold an item that will support their combined body weight, such as a life ring, and huddle as close together as possible.
• Keep their heads clear of the water.
• Keep their legs straight and pressed together to retain body heat.
• Keep as close to each other as they can.
• Keep hold of flotation equipment.

Ask your pupils:
• Why would this position prevent heat loss?
• How long can you hold this position?
• What might you do to keep your spirits up if you are in the water for a long time?

Your pupils should be able to:
• Explain why the huddle position is a good self-rescue skill to use when there is more than one person in the water.
• Explain when the huddle position might be useful.
• Hold the huddle position for a sustained period, keeping heat loss to a minimum.
Exiting the water

During lessons, children should be encouraged to climb out of the pool without using steps or a ladder. Competent swimmers should practice climbing out from deep water.

<table>
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</thead>
</table>
| Climbing out| A method of self-rescue at a river bank side (open water). | • Call for help.  
• Place both hands on the ‘bank’, shoulder width apart.  
• Push down with your arms and kick your legs.  
• Lift yourself up and lean forward.  
• Put a knee or foot on the edge and use it to climb out, or put your stomach/chest on the side and wiggle out.  
• Stay low and crawl away from the edge to avoid falling back in. | • Lock their arms simultaneously.  
• Keep their balance as they come out of the water.  
• Use their knee to make themselves stable on the side of the pool.  
• Crawl away from the side. |
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Rescues

Rescuing a drowning person by entering the water should not be encouraged. Children should learn that they should do everything possible to avoid getting into a dangerous situation in the first place.

Although children should be taught to seek the assistance of an adult. Children should be taught to think of their own safety first and never put themselves in danger. If the rescue is too dangerous they should wait until the emergency services arrive and never enter the water themselves.

Get help

The first action for any emergency situation is to get help. Shout out, send someone to find an adult, or ring 999/112. If it is a coastal emergency ask for the coastguard.

Shout and signal

The shout and signal rescue relies on the use of voice and hand signals to instruct and encourage the casualty to make their way to safety:

- Attract the attention of the casualty by shouting and signalling.
- Give clear instruction e.g. ‘kick your legs’ ‘swim towards me’.
- Use hand signals and your voice to instruct the casualty to the side.
- Instruct and assist the casualty to a position of safety.

However, if the casualty is near to the edge and floatation equipment is available then this can be thrown to the casualty to help their survival chances.

Self-rescue skills

Many of the skills children acquire in swimming lessons are transferable to an emergency situation.
Further information:

There are a number of dedicated water safety organisations, charities and national campaigns for water safety awareness. They also provide useful resources and information for schools. Find out more details from the websites below.

**Swim Safe**
swim.safe.org.uk

**The National Water Safety Forum**
nationalwatersafety.org.uk

**RoSPA**
rospa.com/leisuresafety/resources/water safety youth.html

**The Royal Life Saving Society UK**
lifesavers.org.uk

**The Royal National Lifeboat Institution**
rnli.org.uk