PADDLE UK

WATER QUALITY – DON'T GET SICK DOING WHAT YOU LOVE

Introduction

Paddling is great for our health, enjoyment and wellbeing. However, there can be a risk of infection caused by microorganisms in the natural environment.

Bacteria and viruses can be picked up through cuts or through ingestion.

The presence of bacteria indicates that human or animal faeces may be present in the water.

This is something we need to be aware of to protect our health as sewage discharges remain high, agricultural run-off presents challenges and algal blooms continue to occur.

This guidance aims to give you an overview of water quality issues and precautions you can take, to make informed decisions on where, and when to paddle to protect your health and enjoy paddling.

What are waterborne diseases?

Waterborne diseases are illnesses which can be picked up by humans, in the form of bacteria or viruses.

They're usually picked up while you're on the water – through cuts or through ingestion.

Some paddlers will be more immersed in the water such as freestyle paddlers or those carrying out capsize drills.

Levels of contact with water should be considered and mitigation adapted as necessary.

There are many waterborne diseases, but below are the most common.

Which do I need to be aware of?

Bacteria

Bacteria are found almost everywhere including the human body. Most are harmless, some are helpful, but a small number are bad for our health.

The presence of bacteria indicates that human or animal faeces may be present in the water and could contain other potentially harmful organisms that could cause illness.

Bacteria and viruses including Hepatitis A can cause illnesses such as gastroenteritis, ear, nose, throat, skin and urinary tract infections. They often enter the body through open cuts.

One cause of their presence is from raw sewage which is discharged from combined sewer overflows (CSO's) into our inland and coastal waters.

Some discharges are permitted during high rainfall events, as CSOs act as a release valve to prevent sewage backing up into people's homes.

However, evidence suggests discharges are happening much more frequently and in times of dry weather.

In 2023, raw sewage was discharged into UK Rivers and seas 477,972 times.

Farming techniques also contribute because both human and animal waste is used as fertiliser and spread on fields, during heavy rain this can be washed off into our watercourses, presenting a challenge.

Waste from industrial scale chicken farms also presents challenges.

What measures can I take to avoid harmful bacteria?

With a basic understanding of the environment and some location specific research, it is possible to reduce the risks and introduce precautions to help protect paddlers.

- Has there been heavy rainfall or extended dry periods in recent days?

  Heavy rainfall can carry pollution off the land and CSOs are more likely to have discharged raw sewage, similarly dry weather increases the chances of stagnant water which can harbour bacteria and viruses. Check the latest river levels.

- Are there any obvious signs of pollution?

  A milky or grey colour could indicate pollution, a strong odour could signal decomposing fish or sewage. Look out for sanitary products or wipes.

- Is there any farmland or farm animals close to the venue?

  Run off following recent 'muck spread spreading' or faeces from livestock and flocks of birds (look out for geese) particularly after heavy rain can increase the presence of faeces matter, in the water.

- Are there any CSOs upstream of your paddling location?

  CSOs discharge sewage into inland and coastal waters. Check with the Rivers Trust for your nearest CSO and discharge history and for real-time discharge data the Surfers Against Sewage Safer Seas and Rivers App. The app is being developed to include more inland waters. Each water company is now legally required to display real time CSO discharge information, companies are beginning to update their websites:

Links to each of the maps can be found below:

Thames Water

Dwr Cymru (Welsh Water)

Yorkshire Water

Severn Trent

Northumbrian Water

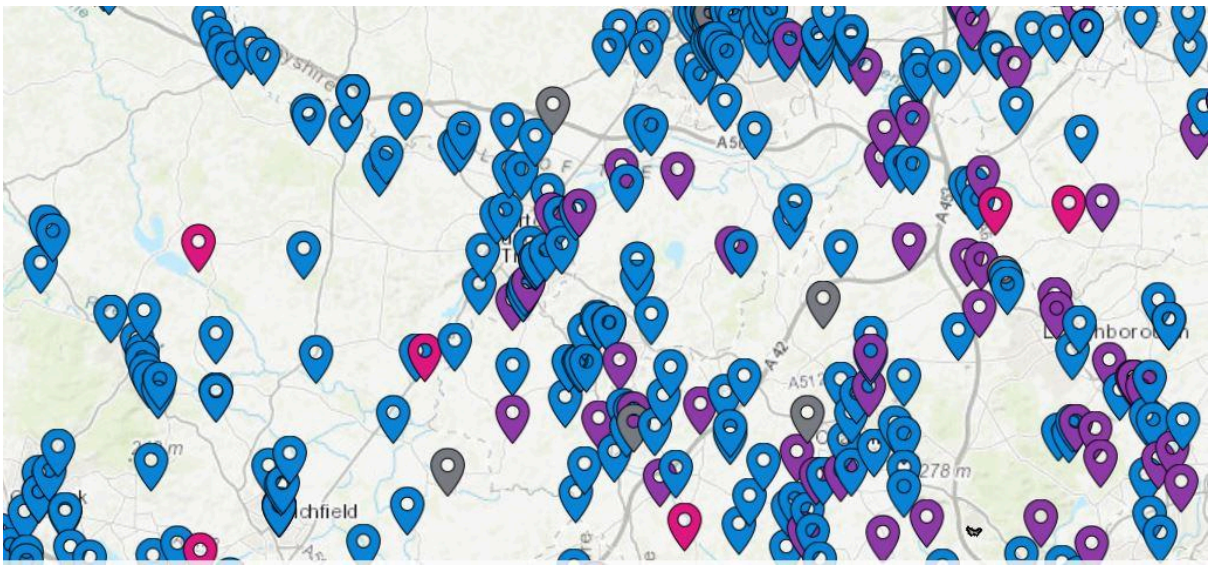
Anglian Water

Wessex Water

United Utilities

South West Water

Southern Water



- Is the location a designated bathing water?

  These sites are the only locations where the water quality is officially monitored for harmful bacteria. The information is publicly displayed according to bacteria levels as Excellent/Good/Sufficient/Poor. Find out more here

  In 2024, England has less than 20 designated bathing water sites on rivers, the remainder are on the coast, and other blue spaces. Paddle UK are campaigning for more inland waters to be designated.

- Is the location Blue Flag Accredited?

  Many beaches and marinas have Blue Flag accreditation, one of the requirements is meeting excellent bathing waters in the previous year. Check your paddle spot here.

- Follow our generic advice at the end of the document, to keep you and others safer when paddling.

Blue Green Algae - *Cyanobacteria*

There are many species of blue green algae, another form of bacteria, some of which can cause eye irritation, dermatitis and joint/muscle pain or, more seriously, gastro-enteritis, pneumonia, liver damage and certain neurological conditions.

Blue green algae thrive in warm and nutrient rich waters and can develop very quickly – sometimes in a matter of hours.

They are most likely to be present in slow moving or still water, like lakes, canals or very slow flowing rivers.

Blue green algae usually looks like an iridescent bluey-green colour, hence the name! Though it can come in a range of different colours. You'll usually find it after extensive periods of warm, settled weather – so look out for it in mid to late summer.

What mitigation measures can I take to avoid blue green algae?

With a basic understanding of the environment and some location specific research, it is possible to reduce the risks and introduce precautions to help protect paddlers.

- Are there any obvious signs of blue green algae?

Look out for the iridescent blue-green colour, which can look like paint. It may be acceptable to rely on a visual check, if not carefully insert a stick into the water and remove, if it comes out covered in what looks like green paint it is likely blue green algae. If you remain unsure and clarity is required, a citizen science lab test can be carried out to confirm the presence of blue green algae.

- Is there any signage warning of blue green algae?

Signs may be erected if the relevant authorities are aware of the presence of blue green algae. If you suspect blue green algae is present, but there are no notices, assume your observation is correct and report it to the Environment Agency's 24hr hotline:0800 80 70 60.

- Has the water temperature increased?

If you are using the same water regularly this can help identify the most likely time for algal blooms to appear and therefore the best time to paddle, to minimise risk.

- Is there an annual cycle to the blooms?

The frequency, duration and magnitude of any algal blooms may tend to follow an annual cycle, which can be avoided.

- Has any previous water quality testing taken place?

Visual checks are usually adequate to undertake before paddling, however there may be a history of testing if/when blooms are present in the water body, which will help inform your planning.

- Follow our generic advice to keep you and others safer when paddling.

<u>Weils Disease (Leptospirosis)</u>

Weil's disease is a form of bacterial infection also known as *Leptospirosis* that is carried by animals, often rats.

Although rare in the UK, you can catch Weil's disease anywhere where you're likely to come into contact with infected animal urine, but most likely on the water's edge as you get in and out of your boat/SUP.

The infection enters the body via cuts or abrasions of the skin or the lining of the nose, mouth, throat or eyes. The symptoms are very similar to flu, and can occur anytime up to three weeks after paddling.

What mitigation measures can I take to avoid Weil's disease?

It is not possible to assess if weil's disease is present in any waters through observation, therefore our advice should always be followed to keep you and others safer when paddling.

Testing is more likely to be considered when a paddler has a confirmed case and is able to highlight where and when they have been paddling.

How can I keep myself and others safe when paddling?

It's important to remember these risks have been around for hundreds of years.

With an increase in awareness of poor water quality over recent years, coupled with more people paddling, it has led to more of a need to understand waterborne diseases and preventative measures you can take to avoid sickness.

Advice:

1. Never drink water from a river or lake
2. If you swallow contaminated water, refer to your doctor with full details of the incident
3. Only drink from your own water bottle
4. Always shower after contact with the water
5. Wash hands thoroughly and shower if necessary before eating or drinking
6. Cover cuts and abrasions (including blisters) with waterproof dressings
7. Wear suitable footwear, particularly when launching or landing, and particularly if it is necessary to wade into the water, to prevent direct contact with the water and protect the feet from cuts and abrasions.
8. Avoid immersion in, or contact with water, if you have concerns about water quality.
9. Do not splash river or lake water onto your face or body in order to cool down (take a bottle of tap water with you for this).
10. Use clean water to wash down all equipment after outings to remove any potential contamination.
11. Wash, and thoroughly dry, any contaminated clothing before re-use.
12. Maintain your immunisation regime against Tetanus, also Hepatitis A, Hepatitis B, Polio, Typhoid and Dysentery when training abroad.

Report any pollution incidents to the Environment Agency's 24hr hotline: 0800 80 70 60

If you have any of the symptoms mentioned and suspect you have come into contact with infected waters, contact your doctor and let them know you have been paddling.

What more can I do?

- Speak to your MP and water company CEO to explain how poor water quality impacts your paddling and health. Request the water company goes further faster to end to sewage pollution.

- Get involved with Citizen Science Water Quality testing, find out how your local waters may be affected and hold those responsible to account.

- Consider applying for bathing waters status. Our friends at Surfers Against Sewage are providing support for communities to apply for bathing water status, find out if a group is active in your area here

- We can all play our part by flushing only the 3 Ps (pee, poo and paper) to avoid blockages.

- Keep up to date on the Clear Access Clear Waters campaign by signing up to our e-newsletter here

Clear Access
Clear Waters

The Clear Access, Clear Waters team are campaigning to end sewage pollution; increase the number of designated inland bathing waters and have greater transparency of combined sewer overflows including real time load, duration and testing for chemicals. This work is being amplified through our actions in the Clean Water Sports Alliance. Find out more, here.