

# 5.3 Water-borne Infectious Diseases

## Further information

The water we row upon is not always as clean as we would choose and certainly is not pure enough to be swallowed without giving more than a passing thought to the possible effects it will have upon our internal systems. The ARA Guide to Safe Practice in Rowing has, as its primary aim, the prevention of accidents involving physical injury, damage to equipment and, at worst, drowning. However, there are other risks to health associated with water-based activities which arise from the microbiological, or chemical, quality of the water itself and of its immediate environs. The use of inland waters can never be risk free and it is essential that, as users, we are aware of the risks present.

## Water-borne diseases most likely to be encountered

### Weil's Disease - Leptospirosis

The risk of contracting Leptospirosis from recreational water is very small, however the serious nature of the disease is such that we must be aware of the dangers and should take simple precautions to reduce the risk of infection. Leptospirosis is an infection caught through contact with infected animal urine (mainly from rodents, cattle or pigs). The causal organism can enter the body via cuts or abrasions of the skin or, the lining of the nose, mouth, throat or eyes. If flu-like symptoms develop shortly after contact with the water (1-3 weeks) then your doctor should be contacted and advised of the circumstances of exposure.

### Blue-Green Algae - Cyanobacteria

Cyanobacteria are commonly found in fresh and brackish water during mid to late summer. Algal blooms can form during extended periods of warm, settled weather. The blooms may be flocculent or have a jelly or paint-like appearance and are normally blue-green in colour though red, brown or black forms can occur. Algal scums accumulate downwind on the surface of lakes and slow moving water. The majority of blooms produce allergens and/or toxins and have caused the death of animals, including sheep and dogs. In humans they can cause eye irritation, dermatitis and joint/muscle pain or, more seriously, gastro-enteritis, pneumonia, liver damage and certain neurological conditions.

### Gastro-intestinal illness

The use of inland water will never be risk free and it is essential that users are aware of the risks involved in using a particular stretch of water. Assessing the risks posed by water quality is difficult as conditions can vary substantially in a very short space of time. In general, the health risk will depend on the number and proximity of sewage effluent discharges in any particular body of water. There are currently no microbiological standards for recreational water and, at present, only the powers

provided under the Public Health Act 1936 - Section 259, to deal with 'any pond, ditch, gutter or water course which is so foul or in such a state as to be prejudicial to health or a nuisance', provide us with protection. Many organisms causing gastro-intestinal illnesses (eg Salmonella) can be found in water contaminated with sewage and extra precautions should be taken when rowing on flood-water and water known, or suspected, to contain sewage.

### Hepatitis A

Hepatitis is caused by a virus present in faeces and is, therefore another condition that may be contracted from water contaminated with sewage. The onset of Hepatitis can be abrupt and symptoms include fever, jaundice and abdominal discomfort.

Other potential infections include Polio, Tetanus and Typhoid, though they are less likely to be found in British waters.

### Other

- HSE Guidance on Leptosporosis

