

## PERSONAL HEALTH

### Introduction:

All workers in and around inland waterways, including emergency services personnel can be exposed to water containing harmful micro-organisms, including bacteria and viruses.

The majority of illnesses are relatively mild cases of gastro-enteritis, but potentially fatal diseases such as Leptospirosis. Hepatitis A can also occur.

Consideration should also be given to industrial / agricultural pollutants and to the presence of contaminants such as needles and glass.

Polluted water can contain some of the following diseases:-

- Salmonella
- Amoebic Dysentery
- Tetanus, Typhoid
- Polio
- Hepatitis A
- Leptospirosis – Weils Disease

**All of which can cause illness.**

**Leptospirosis – Weils Disease.**

What is Leptospirosis?

The infection is caused when Leptospire enter the human host through a skin abrasion or through the lining of the mouth, throat, or eyes, after contact with an infected animal's urine or contaminated water.

There are many different types of this organism each associated with different animals. The most commonly found strains in this country are:-

- Leptospira Hardjo, which is associated with cattle.
- Leptospira Icterohaemorrhagiae, associated with rats.

### Signs and Symptoms

- The first signs of Weils Disease, associated with a particular form of leptospirosis, are flu like illness within about 3-4 days of the infection.
- After 6-7 days a severe headache and conjunctivitis

with the possibility of meningitis follows.

- At 8-10 days, kidney failure and the beginnings of jaundice will become obvious. If no treatment is given then severe kidney failure and the spreading of the organism to other major organs such as liver, pancreas and intestines can occur resulting in heart failure.

### **Hepatitis A**

- A virus present in faeces, which therefore are present in water contaminated by sewage.

### **Signs and Symptoms**

- Has an incubation period of 15-50 days.
- Onset is usually abrupt.
- Fever.
- Abdominal discomfort.
- Jaundice.
- Many cases are relatively mild.

### **Gastrointestinal**

- Another significant risk is the ingestion of bacteria that cause gastrointestinal infection.

### **Signs and Symptoms**

- Cramping stomach pains

- Diarrhoea
- Vomiting

### **Blue Green Algae – Cyanobacteria**

- A Blue Green algae frequently found in fresh water.
- During extended periods of warm settled weather they multiply and form a bloom on the surface of the water.
- The blooms may be flocculent or look like jelly or paint and are normally blue green in colour, though other colorants, red, brown, black can occur.
- The blooms can appear and disappear with changing weather and the majority of blooms produce allergens and or toxins.

### **Signs and Symptoms**

- Dermatitis
- Eye irritation
- Gastro-enteritis
- Joint and muscle pain
- Pneumonia
- Liver damage
- Neurological conditions

The types and potency of toxins produced varies considerably, although ingestion of small

quantities of concentrated bloom could be fatal, human deaths are extremely rare. There have been numerous cases of animal deaths.

Personal hygiene is important where crews have been in contact with open water, sewage, and mud or similar.

### **What can you do to protect yourself?**

- Cover all cuts and broken skin with waterproof plasters before and during work.
- Wear protective clothing.
- Wash hands after handling any animal or any contaminated clothing or other materials and always wash before eating, drinking or smoking.
- Avoid contact with stagnant or slow moving water.
- All Lifeguards and members, who have had direct contact with the water, should wash their face and hands with clean water and soap solution at the earliest opportunity following the termination of the incident.

- Seek the advice of your GP as to whether you are suitable for immunisation from the following viruses: Hepatitis A, Hepatitis B Polio, Tetanus, Typhoid, and Dysentery.
- Lifeguards or members that have been immersed in water should shower as soon as is practically possible after the incident.
- **If following Water Rescue, training or attendance at a water related incident, lifeguards, patrol members subsequently become unwell (experiencing for example headaches, nausea, flu-like symptoms, skin/eye irritation, gastroenteritis), the following action must be taken:-**
  - Seek medical advice giving relevant details of contamination i.e. River Water, amount ingested, etc.
  - Inform the Patrol officer of your illness. This will be logged on his/her patrol log.

- Inform GP if you suspect the illness is related to the training at/on river XXX.

