



Canal &
River Trust

Basic Fire Water & Save a Life

Health & Safety

Canal & River Trust Safety Policy Statement:

"As the chair and chief executive of the Canal & River Trust we are committed to the highest standards of Health and Safety at work for all our employees, volunteers, contractors, partners, customers, visitors and neighbours. Specifically, our goal is to minimise accidents and injuries, and their impacts, aiming to reduce and eliminate them."

Tony Hales & Richard Parry September 2013

This translated to:

- Going home safe is a right
- To work safe is a responsibility:

"C & RT is never satisfied, for its people and customers, when it comes to safety performance"

Legal Duties

Health & Safety at Work Act 1974

- Provides a framework for Health & Safety in workplaces
- Sets **minimum** standards
- Makes safety everyone's responsibility
- Not intended to prevent work
- Intended to make people stop and think

Employers Duties:

- Provide safe working environments
- Ensure the health & safety of employees
- Ensure the health & safety of others
- Consult with employees
- Provide training, information & supervision
- Provide safe and proper equipment
- Provide welfare facilities

Employees Duties:

- Ensure your own safety
- Ensure safety of others
- Cooperate with your employer
- Don't interfere with safety equipment
- Use equipment in line with training
- Report health & safety issues



Penalties for getting it wrong



- **Magistrates Court**
 - Fine up to £20,000.00
 - And/or 6 months imprisonment
- **Crown Court**
 - Unlimited fines
 - And/or imprisonment

Hierarchy of Control

What is the best way of being safe?

- | | |
|------------------------------|-------------------------|
| • Discipline | 1. Eliminate the hazard |
| • Isolate the hazard | 2. Reduce the hazard |
| • PPE | 3. Isolate the hazard |
| • Eliminate hazard at source | 4. Control the hazard |
| • Control the hazard | 5. PPE |
| • Reduce hazard at source | 6. Discipline |

Most Effective



Least Effective

Controlling the Risk

1. Denial/Restriction of access
2. Provision of warnings (safety signs)
3. Training/Education
4. Provision of rescue equipment
5. Acquisition of rescue and survival skill

Water Safety

Life Jackets

Canal & River Trust guidelines for the use of life jackets when working near water



- Approved life jackets are to be worn where the risk of drowning cannot reasonably be controlled
- Risk assessments completed for each case, unless the assessment indicates that the wearing of a life jacket would be inappropriate, it is mandatory for the following activities:

Mandatory Wearing of Life Jackets

- All work conducted on or from a boat including steering other than from an enclosed cabin



- Working on or next to water during flood conditions

- Working next to deep or fast flowing water





- Lock keeping where work is carried out at the water's edge, other than from inside a control cabin

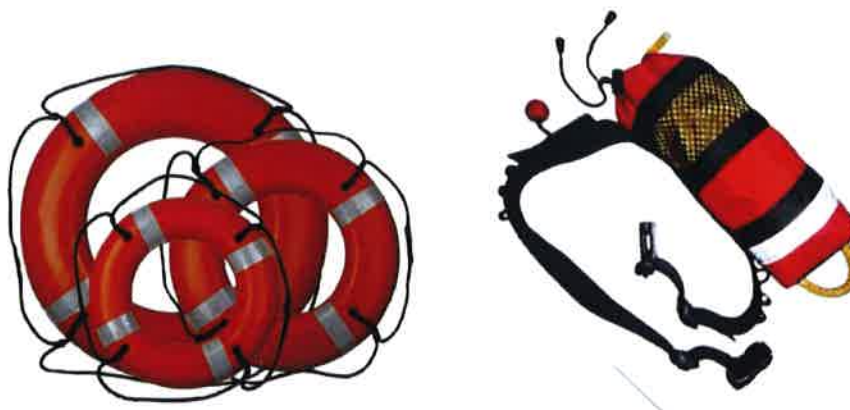
- Inspection activity within 2 metres of the water's edge
- Using ride on equipment without a cab within 2 metres of the water's edge
- Working near water during the hours of darkness



Using a Life Jacket

- Work it out first – practice on/off
- Check straps, hole, cover and toggle
- Check CO2 cylinder and ring
- Worn like a waist coat
- If unsure ask competent person for advice
- Keep clean, dry and in well-ventilated area
- Dry naturally
- Use correctly (it's not a pillow)
- Please don't 'dump' in the back of the car/van

Rescue Equipment



Canal & River Trust Policy for Emergency Rescue

- Rescue ought to have in place:
 - A set routine for raising the alarm
 - A set rescue drill
 - 1st Aid kit including foil wrap blanket
 - Set routine to get people to hospital
- Rescues to be conducted from boats, bank and by not entering the water

Can you enter the Water?

The trust recognises that there may be situations where there is overwhelming temptation for a person to enter the water say to rescue a child when say the water is sheltered and shallow. The trust will accept that a person is acting in a reasonable manner by entering the water providing that the individual has knowledge of the dangers associated with the waters concerned, that they are confident that they are acting within their capabilities and that; rescue from the bank is not appropriate under the circumstances.

The trust expects of course that a member of staff will act within the training given to do all they can to rescue a person. However, there is no expectation from the Trust and there should be no expectation from colleagues, that a member of staff will enter the water under any circumstances to rescue a person

H&S Mandatory Standard for Working on or Near Water

What to do in the Event of an Emergency

- **Get help:** Ring 999/112 or get someone else to.
- **Think:** Of your own safety first.
- **Reach:** A stick, scarf or clothes tied together can help you reach the person. Crouch or lie down to avoid being pulled into the water.
- **Throw:** A rope is best – you can pull the person to dry land.
- **Keep warm:** once rescued, keep the casualty warm and ensure they get medical help as soon as possible.

Water Borne Diseases



Leptospirosis (Weil's Disease)

- Spread usually from rat urine but also spread from cattle
- Found in water & soil
- Can survive for months in stagnant water
- Enters the body through broken/grazed skin
- Sometimes through lining of mouth, nose & eyes

Symptoms:

- Fever (39+), sudden onset severe headache, chills
- Pin prick rash, photophobia, neck stiffness
- Severe muscle pain in calves and lower back
- Vomiting, diarrhoea and bloodshot eyes
- Cardiac complications (AF)
- Psychological conditions!

Incubation period is usually 10 days but can be 4 – 19 days
Liver + kidney failure in very severe cases

Prevention:

- Rigid hygiene policy
- Cover all cuts, scratches and abrasions
- PPE
- No consumption of food in the workplace

Blue Green Algae (Cynobacteria)

- Found in fresh and brackish water
- Blooms may form on surface of lakes and slow moving water
- Caused death in sheep and dogs, disorders in humans

Symptoms:

- Dermatitis, eye irritation, gastro-enteritis
- Joint and muscle pain, pneumonia
- Liver damage
- Human deaths are rare!

**Prevention:**

- Rigid hygiene policy
- Cover all cuts, scratches and abrasions
- PPE
- No consumption of food in the workplace

Cryptosporidiosis

- Symptoms generally begin 2 to 10 days (average 7 days) after becoming infected and include:
 - Watery diarrhoea
 - Stomach cramps or pain
 - Dehydration
 - Nausea
 - Vomiting
 - Fever
 - Weight loss
- Symptoms usually last about 1 to 2 weeks (with a range of a few days to 4 or more weeks) in persons with healthy immune systems.
- Symptoms can come and go for up to 30 days.

Giant Hogweed

- Can reach 5 metres in height
- Produced 50,000 seeds
- Contains poisonous sap
 - Causes painful blistering
 - Causes skin irritation that can last for 6 years

Control measures:

- Avoid strimming
- Correct use of PPE:
 - Long Trousers
 - Long Sleeves
 - Thick Gloves



E Coli

Caused by contaminated food or water

- Symptoms include:
 - Diarrhoea
 - Abdominal Pain
 - Fever
 - Bloody Diarrhoea
 - Dehydration
- Symptoms generally resolve within a few days to a week

Hepatitis A

- Initial symptoms of Hepatitis A are similar to flu and include:
 - Low grade fever – usually no higher than 39.5C (103.1F)
 - Joint pain
 - Feeling and being sick
- This may then be followed by symptoms related to the liver becoming infected, such as:
 - Yellowing of the skin and eyes (Jaundice)
 - Passing very dark coloured urine
 - Pale faeces (stools or 'poo')
 - Abdominal pain
 - Itchy Skin

Symptoms usually clear up within two months, although occasionally last up to six months. Older adults tend to have more severe symptoms.

In most cases the liver will make a full recovery

Toxoplasmosis

- Symptoms are flu like and may include:
 - High temperature (fever) of 38°C (100.4°F) or over
 - Aching muscles
 - Tiredness
 - Feeling sick
 - Sore Throat
- People who are otherwise healthy rarely experience any serious symptoms of toxoplasmosis.

Man Made Pollution

- Industrial/Agricultural
- Needles/glass

Lyme Disease

- Caused by a spiral shaped bacterium called *Borrelia Burgdorferi*
- Transmitted by the bite of an infected tick
- Woodland, moorland and other grassy areas

Symptoms:

- 3 to 30 days, reddish-pink rash, fever

Prevention:

- Wear long trousers, preferably tucked into your socks or boots
- Long-sleeved shirts with cuffs fastened if walking in grassy, bushy or woodland areas
- Sensible to inspect skin and clothing for ticks every three to four hours



Fire Safety



Employees (All) Responsibilities

- Make safe all equipment and materials before leaving workplace – hot works to cease at least 30 min's before leaving
- Follow procedures in case of discovering fire
- Evacuate without delay should the fire alarm sound
- Do not move or tamper with any firefighting equipment
- Ensure fire doors are kept closed and all escape routes kept clear at all times

Fire Prevention & Control

The different ways of fighting, preventing & controlling fire within CRT:

- Fire doors
- Fire detectors
- Alarms
- Training
- Maintenance
- Emergency Lighting
- Fire Extinguishers
- Sprinkler Systems
- Fire Drills
- Housekeeping
- Signage

Fire Hazards

Four hazards produced by fire:

- Smoke
- Fumes
- Flame/heat/burning
- Structural failure of buildings

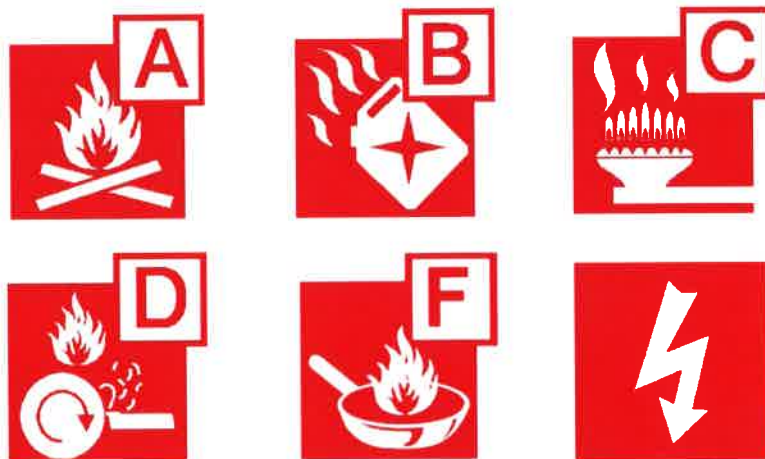
The Fire Triangle



Sources of Ignition in the Workplace

- Hot work and grinding
- Cooking and heating
- Electrical equipment
 - overheating/overloading
 - damaged cables/wiring
 - arcing/sparking
 - explosive atmospheres
- Smoking
- Arson
- Vehicles/machinery
- Bonfires
- Boilers
- Lamps
- Friction/impact/hot surfaces/static electricity
- Flammable products (paints/Varnishes/Thinners/Petrol/Spirit/Paraffin)
- Wood
- Paper/cardboard
- Plastics/rubber/foam
- LPG/acetylene
- Furniture and textiles
- Loose packing materials
- Waste (sawdust/paper etc...)
- The building/boat
- Wooden walls/ceilings/floors
- Synthetic coverings (e.g. polystyrene tiles)

Fire Classification



Fire Fighting

Means of fighting fire:

- Fire blankets
- Hose reels
- Fire buckets
- Dry sand
- Beaters
- Suppression systems
- Fire extinguishers

Extinguishers

Extinguisher Media - (Panel Colour coding - Max 5% extinguisher surface area)

Class	WATER (RED)	FOAM (CREAM)	DRY POWDER (BLUE)	CO2 (BLACK)	WET CHEMICAL (YELLOW)
A	YES	YES	YES	NO	YES
B	NO	YES	YES	YES	NO
C	NO	NO	YES	NO	NO
D	NO	NO	NO	NO	NO
E	NO	NO	YES	YES	NO
F	NO	NO	NO	NO	YES

Class	Description of the fire type
A	Flammable solids like paper, wood, soft furnishings, fabric and textiles
B	Flammable liquids like petrol, oil or paints
C	Flammable gases
D	Metals
E	Electrical equipment
F	Kitchen fires e.g. Cooking oil and deep fat fryers

Do Not Fight Fires If:

You don't know what's burning

It's spreading rapidly

You don't have the correct equipment

Inhaling smoke

Instincts are saying NO

Reducing the Risks of Fire

- Strict control of ignition sources
- Correct storage of flammable materials
- Reduce amount of chemicals in work place
- Good house keeping
- Strict no smoking policy
- Regular disposal of waste and rubbish
- Intrinsically safe tools
- End of shift checks
- Hot work permits
- Training
- Reporting incidents and near misses
- Routine inspections

Save a Life



Aims of First Aid

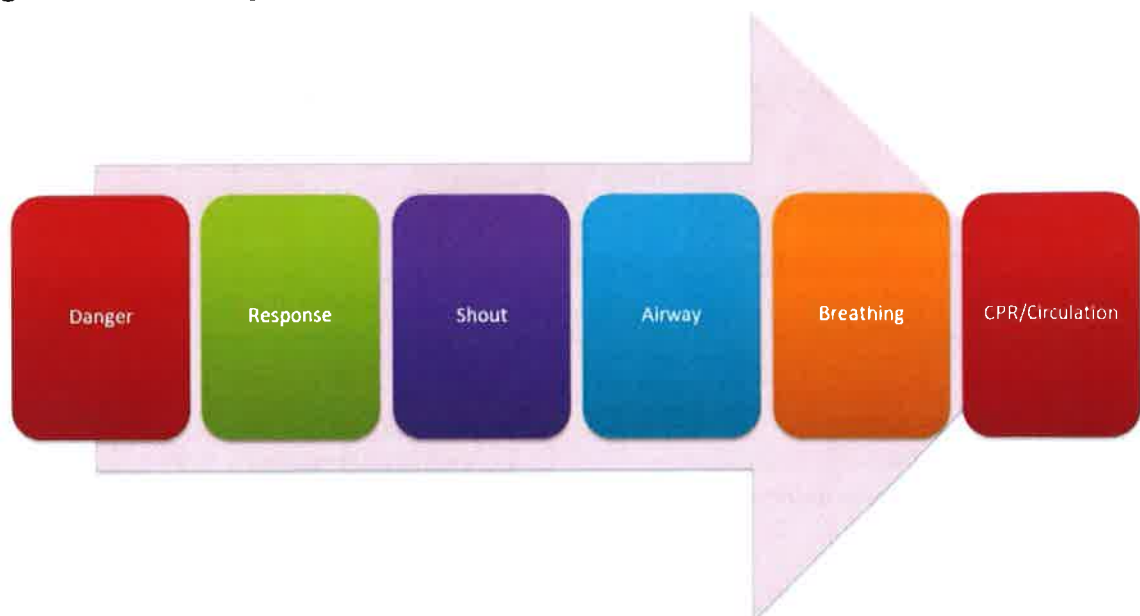
3 P's

- Preserve Life
- Prevent Further Harm
- Promote Recovery

Dealing with an Emergency

- Stay calm and take control of the situation
- Assess the situation
 - Safety
 - Scene
 - Situation

Dealing with a Casualty



Response



Open Air way



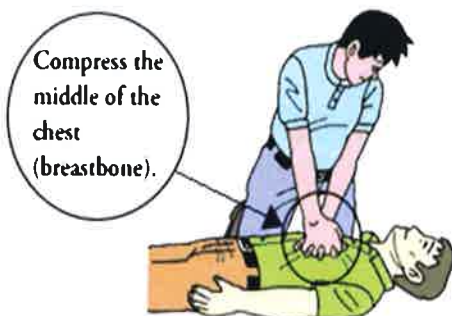
Check for Breathing



Call for Help



Start Chest Compressions:



- 30 Compressions
- Depress chest 5 – 6cm
- 100 / 120 per minute

2 Rescue Breaths:



Continue 30 compressions to 2 Rescue Breaths Until:

- Qualified help arrives
- Casualty shows signs of regaining consciousness
- You become exhausted

Unconscious Casualty

Not breathing

- Carry out CPR/Hands only CPR

Breathing non-responsive

- Place in the recovery positions



The Recovery Position

- Kneel beside the casualty
- Ensure both legs are straight
- Place arm closest to you at right angle, elbow bent, palm facing upwards



- Bring the arm farthest from you across the chest, hold back of hand against cheek
- Bring the far leg up keeping the foot flat

- Keep casualty's hand against cheek
- Pull casualty towards you, onto their side



- Adjust the upper leg
- Tilt the head and chin back to maintain open airway
- Monitor and record vital signs



Shock

Recognition:

- Initially
- Rapid pulse
- Pale, cold, clammy skin
- Sweating

As it develops:

- Rapid shallow breathing
- Weak thready pulse
- Grey blue skin (cyanosis)
- Weakness and dizziness
- Nausea/possible vomiting
- Thirst

Treatment:

- Treat any possible cause
- Reassure
- Help casualty to lay down
 - Raise legs
- Loosen tight clothing
- Keep casualty warm
- Monitor and record vital signs

Hypothermia**Symptoms:**

- Uncontrollable shivering (although, at extremely low body temperatures, shivering may stop)
- Weakness and loss of coordination
- Confusion
- Pale and cold skin
- Drowsiness – especially in more severe stages
- Slowed breathing or heart rate

Symptoms (Observed by others):

- Slowing of pace, drowsiness, fatigue
- Stumbling
- Thickness of Speech
- Amnesia
- Irrationality, poor judgment
- Hallucinations
- Loss of perceptual contact with environment
- Blueness of skin
- Dilation of pupils
- Decreased heart and respiration
- Stupor

Treatment:

- Take to sheltered place
- Remove/replace wet clothing
- Protect from the ground
- Call emergency services
- Help re-warm, give warm drinks and high energy foods
- Re-warm gradually