



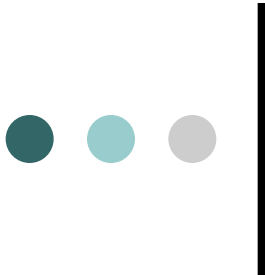
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FIRST AID - Essentials for Fieldwork June 2016





First Aid

Is about

- Provision of treatment for a person who has been injured or taken unwell
- Preserving life
- Preventing deterioration
- Promoting recovery by obtaining help
- *The “4P’s”*
- Call for an ambulance ?????



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If an accident happened would you

- Keep calm
- Be able to assess the situation
- Reassure the injured or ill person
- Be able to get help

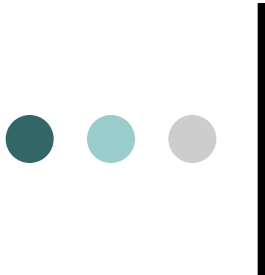


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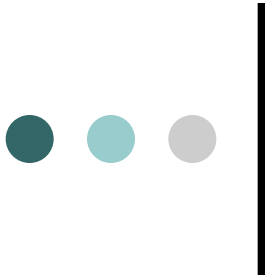
Calling for help in an emergency you must

- Keep calm
- Give life saving emergency treatment
- Have local emergency contact details when outside the UK
- Know your exact location and what resources are available



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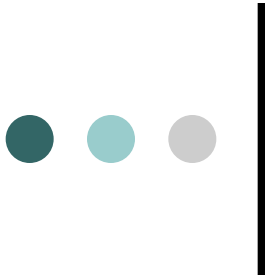
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Planning and Preparation..1

- Identify risks associated with the location, activities & the environment
- Known medical conditions
- Prepare effective communication
- Arrange suitable immunisations and anti-malarials
- Suitable first aid or medical kit
- FCO “ *Know before you go* ” campaign

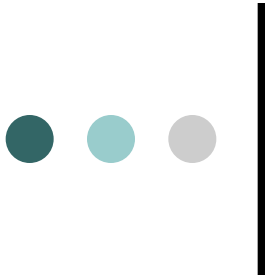




Planning and Preparation..2

- Visit your local or University dentist before you leave
- If taking medications make sure you take sufficient
- Ensure your group leader or supervisor know what you are doing
- Make contact with someone reliable locally
- Keep all your contact details up to date
- Make sure you have an evacuation strategy and an emergency plan in place





What is fieldwork ?

- SPRI glaciologist working on the Greenland icecap
- Geography post-graduate student collecting data in Pakistan
- Chemistry undergraduate student collecting water samples from the river Cam for analysis





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FIRST AID

Primary Survey ...1



Assessment – global overview and mechanism of injury

Danger - is the area safe for the casualty and rescuer

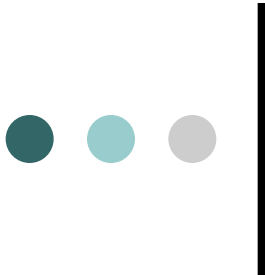
Response - responsive, unresponsive but breathing or unresponsive and not breathing

Shout for help if unresponsive



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FIRST AID

Primary Survey ...2

- Airway – is it clear ?
- Breathing – is the casualty breathing normally ? If not send for help
- Circulation, bleeding / Chest Compressions – intervene if required

A Doctor's ABC



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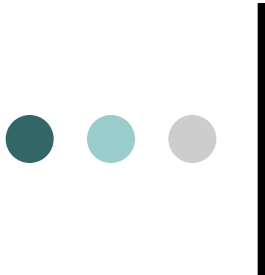
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Un-conscious but breathing casualty ...1



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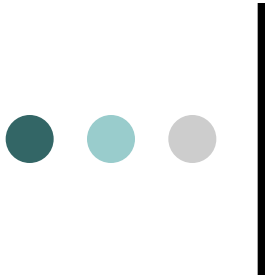
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Unconscious but breathing casualty...1

- Put the casualty in the recovery position
- Recheck the casualty's breathing
- Check that they cannot roll forward or backwards...use a rucksack or other field equipment to stop them rolling
- Keep the casualty warm

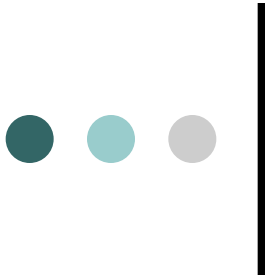




Unconscious but breathing casualty...2

- You may need to go and get help
- If on your own leave a note on the casualty saying what you are doing with your contact details
- If with others send the fittest person with the best local knowledge and continually monitor the casualty

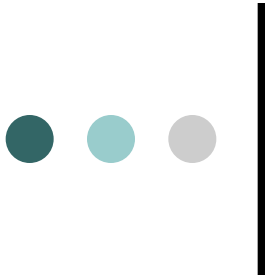




Unconscious, not breathing casualty...1

- Start CPR immediately
- Call for help
- Get a Defibrillator if one available
- Give the casualty 30 chest compressions at a rate of 100-120 per minute
- Then 2 rescue breaths





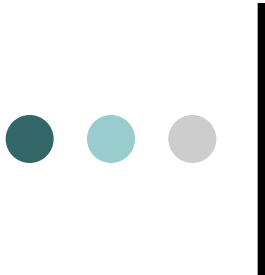
Unconscious, not breathing casualty...

- Continue until the casualty comes round or help arrives or you become exhausted
- If you cannot give rescue breaths
JUST DO CHEST COMPRESSIONS



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Bondi Beach

- <http://www.youtube.com/watch?v=88uCTEmuuGI>



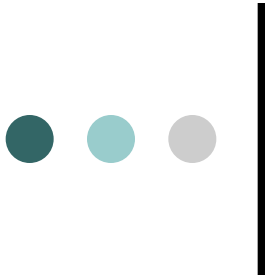
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Bleeding

- Danger
- Wear protective gloves
- If bleeding severe or no protruding object apply direct pressure on the wound with a clean dressing or Celox
- If bleeding from a limb – elevate
- Elevate legs as for shock



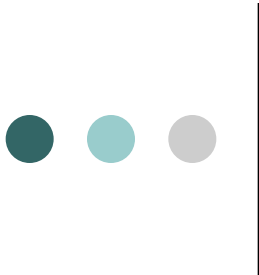


Burns and Scalds...1

However large or small should be

- Flushed with copious amounts of cold water for 10 minutes – is this possible ?
- Repeat if necessary for a further 10 minutes – is this possible
- After cooling under running cold water the affected area should be covered with a loosely applied dressing





Scalds and Burns ...2

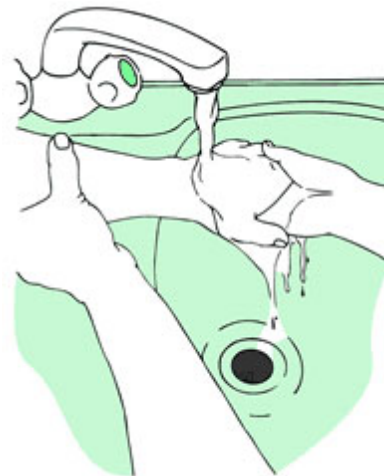
Assessment

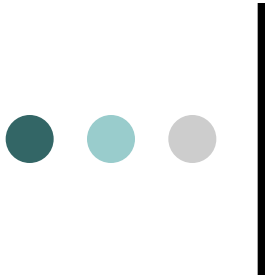
- Depth – superficial, partial thickness, full thickness
- Area – 1% size of casualty's palm and fingers
- Type – dry, wet(scald), electrical, cold, chemical & radiation



Burns and Scalds...3

- Never apply any lotions or ointments
- Do not burst blisters
- Seek medical attention for the injured person ?





Burns and Scalds ...4

Seek medical attention

- All full thickness burns
- All burns affecting face, hands, feet and genitals
- All burns encircling a limb
- All partial thickness burns > 1%
- All superficial burns > 5%



Eyes ...1



Eye protection
must be worn

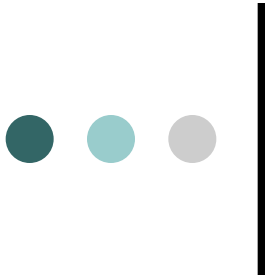
Prevention is better than cure

- Always wear eye protection when appropriate
- Foreign bodies including chemicals in the eye should be flushed out using clean cool water for at least 10-15 minutes – is this possible ?



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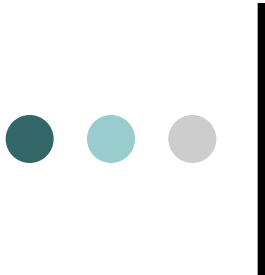
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Eyes ...2

- If an impaled object use a build up dressing and place the patient on their back and told to keep eyes still as possible
- Try a vision check before and after treatment e.g. read a notice
- Medical attention should always be sort for a person with an eye injury

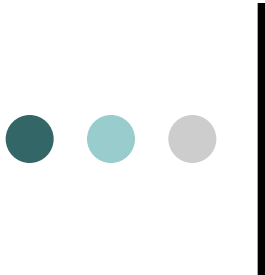




Heart Attack Recognition 1

- *Angina* – chest pain brought on by exertion and eased with rest and own medication
- *Heart attack* – sudden persistent central chest pain, possible radiating to jaws and arms

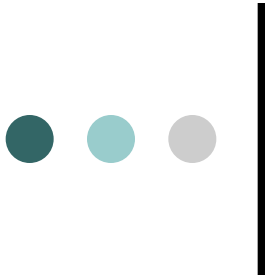




Heart Attack Recognition...2

- Vice-like chest pain
- Breathlessness e.g. “air hunger”
- Discomfort, dizziness or faintness
- Sudden collapse
- Rapid weak or irregular pulse
- Gasping for air
- Clammy pale/blue complexion

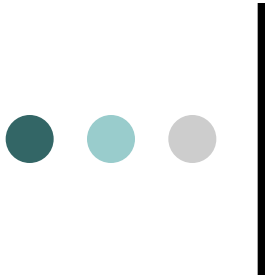




Heart Attack...3

- Make the casualty comfortable
- Be prepared for collapse and CPR
- Lazy “W” position
- Seek medical assistance
- Give one Aspirin if not allergic
- Monitor





Stroke or Brain Attack...1

Sudden weakness of the face, arm, leg on one or both sides of the body

There will usually be speech problems

Majority of Strokes are caused by a clot in a blood vessel that blocks the flow of blood to the brain

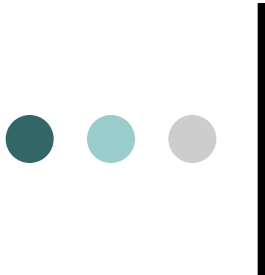
THE EARLIER THE CASUALTY RECEIVES
CARE IN HOSPITAL THE BETTER

FAST and FASTER



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Stroke or Brain Attack...2

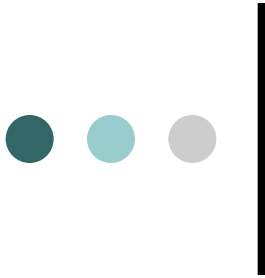
- FACIAL weakness – casualty unable to smile, mouth or eye may be droopy
- ARM weakness – casualty only able to raise one of their arms
- SPEECH problems – casualty unable to speak clearly or may not understand the spoken word
- TIME to seek medical attention if a Stroke is suspected



Choking

- Ask the injured person “are you choking?”
- Encourage the person to cough
- Give up to 5 back blows between the shoulder blades with the heel of your hand
- Check mouth
- Give up to 5 abdominal thrusts
- Repeat the above sequence twice more if unsuccessful get help





Shock

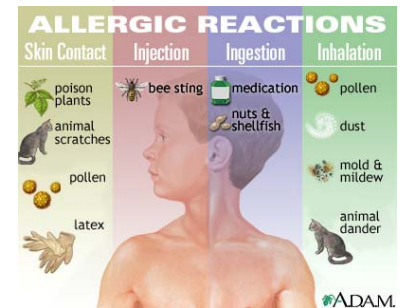
- Recognition – rapid pulse, cold clammy skin, sweating, weakness and nausea
- Help lie the injured person down
- Raise and support legs
- Loosen tight clothing
- Call for emergency help ?



Anaphylactic Shock

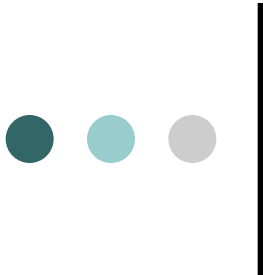
A severe allergic reaction affecting the whole body

- Recognition – red itchy rash, watery eyes, swelling of hands, feet or face, abdominal pain, difficulty breathing
- Seek emergency help if anaphylaxis is suspected
- Check whether the casualty is carrying medication and help them use it
- Help casualty to sit up
- Monitor



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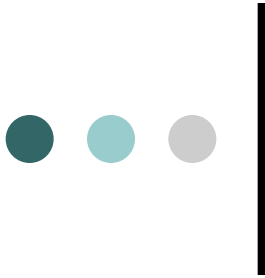
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Asthma

- Recognition - difficulty in breathing out
- There may be wheezing, difficulty in speaking and grey-blue skin
- Distress and anxiety
- Keep calm and reassure
- Get them to use their inhaler
- Ask to breathe slowly and deeply
- Sit down NOT lie
- Monitor
- Use inhaler again

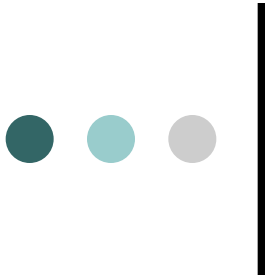




Hypothermia

- Recognition – shivering and cold dry skin
- Apathy, irrational behaviour, lethargy and impaired consciousness
- Slow weakening pulse
- Re-warm slowly
- Survival shelter
- Sleeping bag or blanket
- Warm with another body
- High energy foods such as chocolate
- Monitor





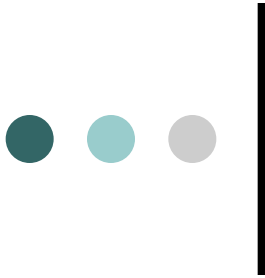
Sunburn

- Recognition
- Reddened skin
- Pain in the area of the burn
- Blistering of affected skin
- Prevention better than cure
- Slip, slop and slap
- Cover the casualty's skin with light clothing
- Remove out of the sun
- Frequent sips of cold water
- Calamine or after sun lotion



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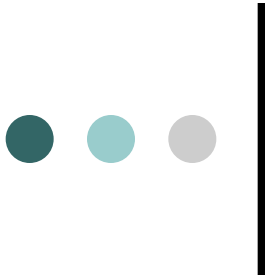
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Heat exhaustion

- Headache, nausea, dizziness, sweating with pale clammy skin and confusion
- Cramps in arms, legs or abdomen
- Rapid weakening pulse & breathing
- Help the casualty to a cool shady place
- Lie the casualty down and support legs to improve blood flow to brain
- Plenty of water
- Monitor





Stings

- Pain at the sight of the sting
- Redness and swelling around the site of the sting
- Multiple stings can produce a serious reaction
- If sting is visible scrape off sideways – do not use tweezers
- Raise the affected part of the body if possible and apply a cold compress
- Monitor and place the casualty at rest

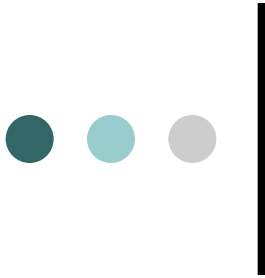


Bites



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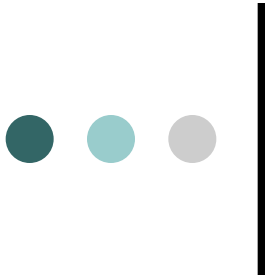
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Bites

- Any bite that breaks the skin needs prompt first aid because of the risk of infection
- Bites from sharp pointed teeth can damage tissue and introduce germs
- Clean the bite wound – use anti-septic wipes
- Raise and support the wound, cover with a sterile wound dressing
- Monitor and place the casualty at rest

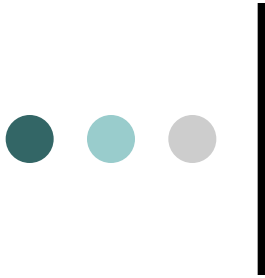




Ticks-Lyme's disease

- Caused by infection from a tick bite
- Difficult to diagnose
- Symptoms mimic other diseases
- Fever muscle ache fatigue joint pain rash
- Cover up
- Wear light coloured clothing
- Tuck trousers into socks
- Use insect repellent
- Use a tick remover

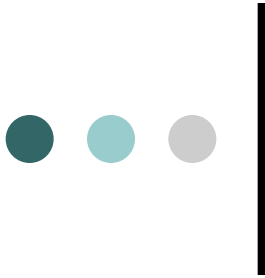




Poisoning

- Can be swallowed, inhaled, absorbed through the skin , injected
- Can be manmade – alcohol medicine recreational drugs everyday chemicals such as bleach
- Can be fumes from primus stoves or generators-carbon monoxide kills
- Can occur in nature plants, venom from some insects and animals
- Food contamination

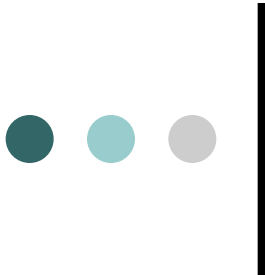




Poisoning

- Depending on the cause there may be vomiting, cramping abdominal pain and impaired consciousness
- Aim to identify the poison
- Maintain the airway open
- Reassure the casualty
- Monitor
- Do not induce vomiting
- Sips of water

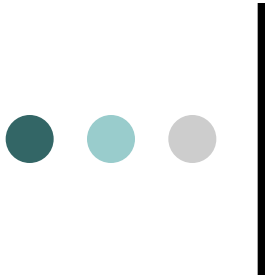




Head injuries

- All head injuries are potentially serious as they can result in impaired consciousness
- Could be drowsiness, headache, confusion, visual problems etc
- Apply direct pressure to any wound and cover with a sterile dressing
- Secure the dressing with a bandage
- Help the casualty to lie down
- Monitor

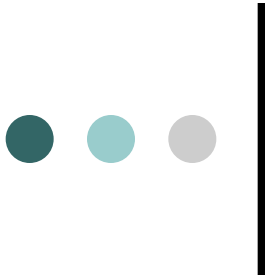




Broken Bones

- Distortion, bruising and swelling at the injury site
- Pain and difficulty moving the injured part
- May be bending and twisting of the limb with possibly the bone protruding
- Support the injured part at the joints above and below the injury
- Protect the injury with padding such as a towel or spare clothing
- Support with slings or bandages
- Comfortable position
- Treat for shock and monitor





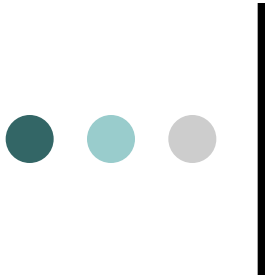
Spinal injury

- Can occur after a fall from height onto the head back or feet
- May be a pain in the neck or back
- Loss of sensation
- Weakness or loss of movement in limbs
- Steady and support the head
- Place extra support around the head and shoulders such as a towel or spare clothing
- Monitor
- Do not move the casualty unless there is immediate danger



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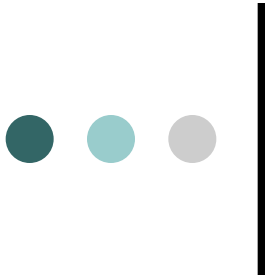


Sprains-torn ligament

- Tenderness & loss of limb function
- Pain, swelling & bruising
- Most common injury is a sprained ankle
- If severe treat as a fracture and splint
- Rest
- Apply a cold pack/ compress e.g. towel soaked in water
- Apply a stretchy bandage well above and below the injured area
- Not too tight and take off over night







First Aid kit

- Appropriate for where you are going and what you are doing
- Suitable Outdoor First Aid kit such as Marlin's Outdoor/Fieldwork Kit
- St John Ambulance
- Red Cross



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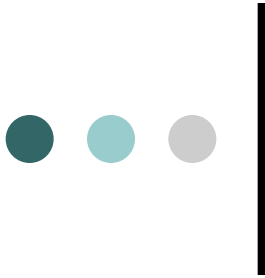
After the Accident/Incident

- Fill in the accident/incident report form on your return to your department
- Reviewing the risk assessment for the fieldwork



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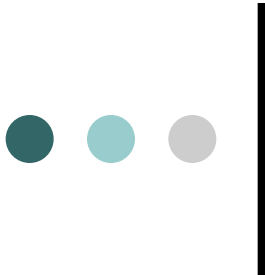
Further information

- First Aid and Wilderness Medicine published by *Cicerone*
- FCO website www.fco.gov.uk
- Masta Travel Clinic-Cambridge www.masta-travel-health.com
- NHS health care abroad www.nhs.uk



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Summary



First Aid in Field work is about

- Not putting yourself at risk
- Being prepared
- Saving life
- Not letting the injured person get worse
- Calling or going for emergency help if possible ?



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