

First Aid Conference 2022

Primary Survey

First aid for broken bones, sprains and strains



Primary survey following DRABC

Danger

Response

Alert

Voice

Pain

Unresponsive

Airway

Breathing

Circulation

SAMPLE history taking

Sign and symptoms

Allergies

Medication

Past medical history

Last meal/drink

Events leading up to injury/illness

Secondary survey

Top to toe examination

Head and face

Neck

Chest

Abdomen

Limbs

Back

Documenting and reporting

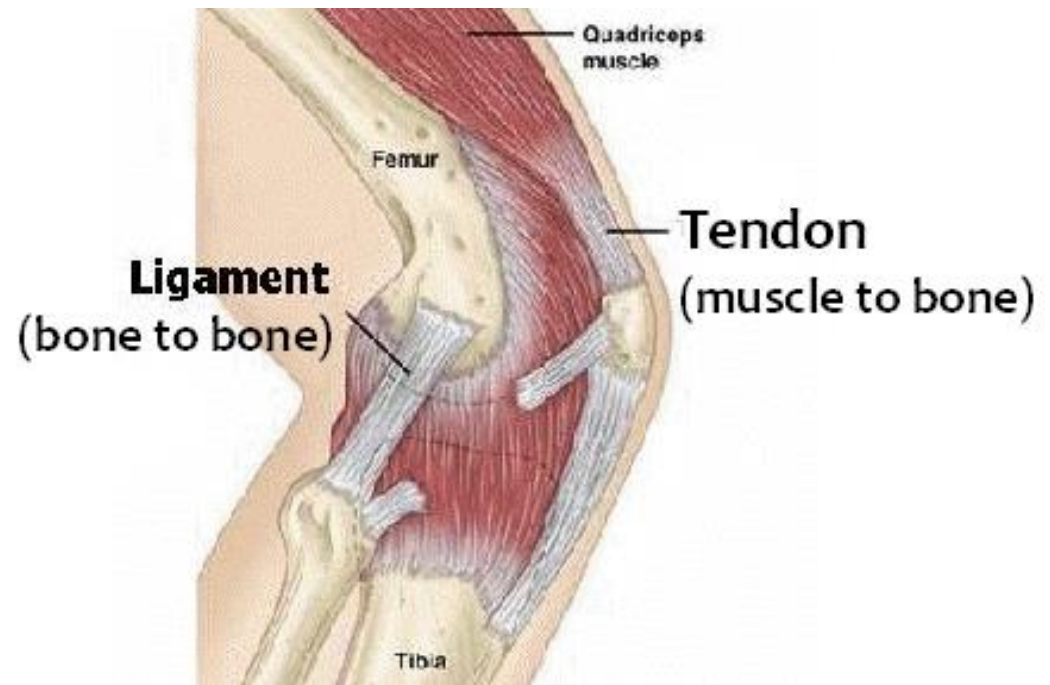
If possible write down information for the emergency services
(DRABC and SAMPLE as a guide)

Make a note of the event for yourself
(Date, time, brief description, what did you do)

If you attended in your role as University First Aider, report to the Safety Office
via the University Accident/Incident Online Reports using AssessNET

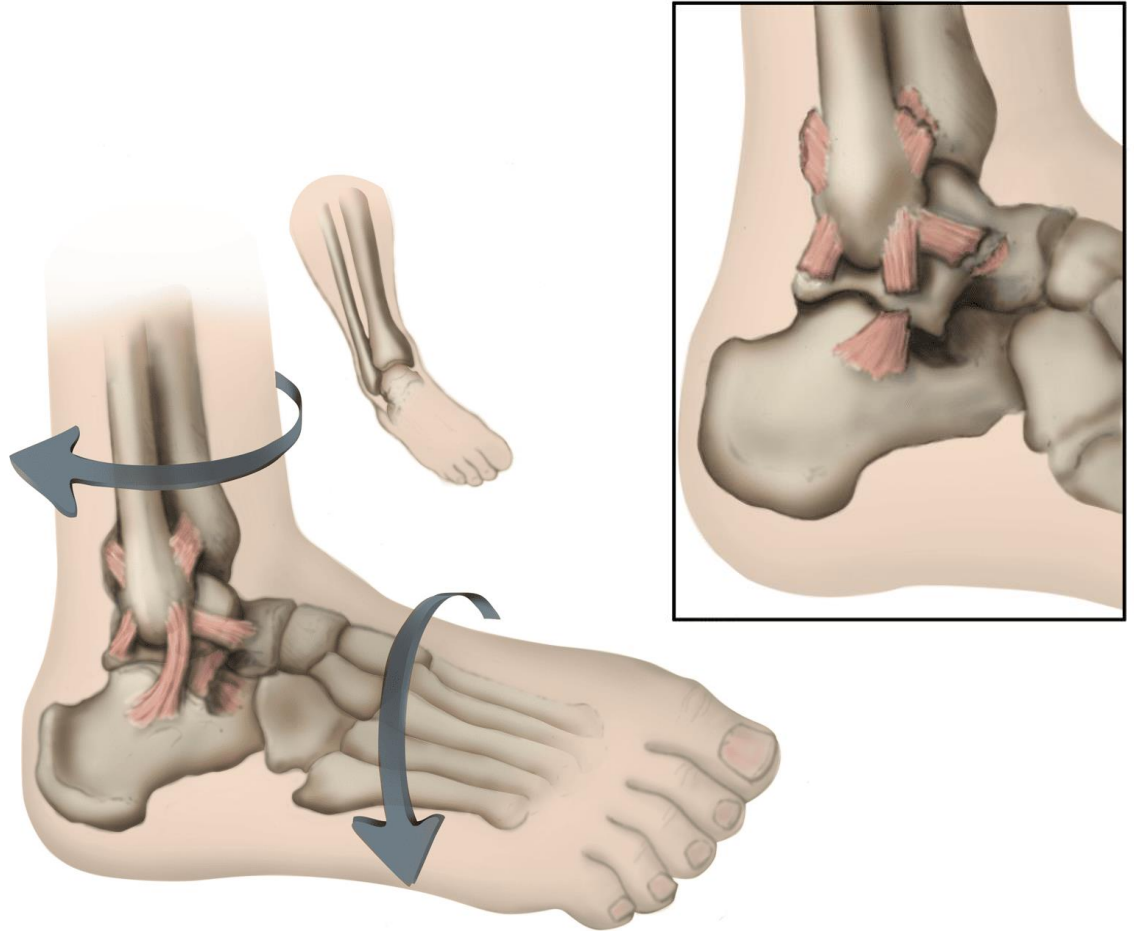
If you have any concern regarding the incident, talk to your colleagues, fellow First Aiders, family members or staff counselling service

First aid for broken bones, sprains and strains



Sprain

- Stretch and/or tear of a **ligament** caused by a sudden pull
- One or more ligaments can be injured at the same time



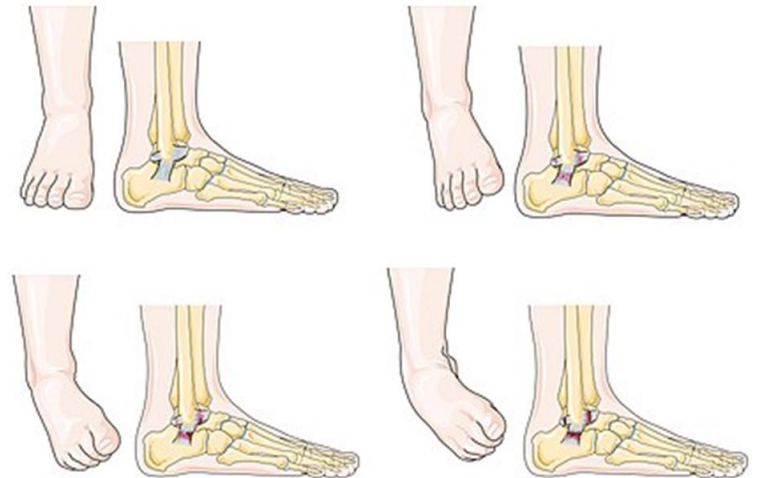
What causes a sprain?

- fall
- sudden twist
- blow to the body that forces a joint out of its normal position and stretches or tears the ligament supporting that joint



Where do they commonly occur?

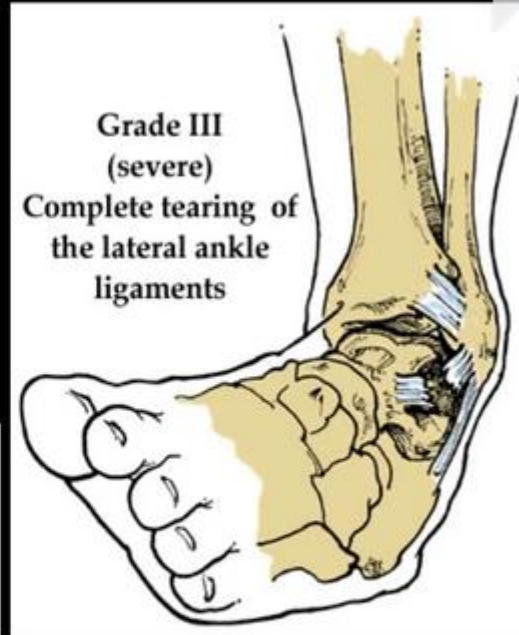
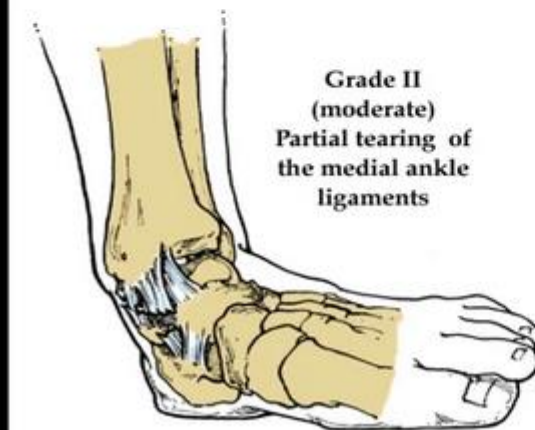
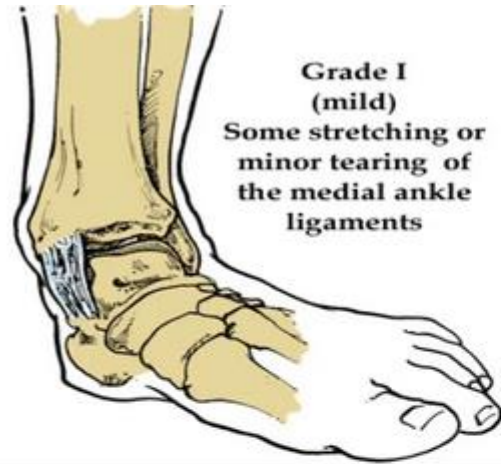
- most common: ankle
- frequently occur at the wrist
- sprain to the thumb common in skiing and other sports



What are the signs and symptoms of a sprain?

- pain
- swelling
- bruising
- loss of functional ability
- sometimes a pop or tear noise when it happens

Different grades of sprains



Strain

- injury to either a **muscle** or a **tendon** as a result of suddenly pulling them too far
- simple overstretch of muscle or tendon, or a result of a partial or complete tear



What causes a strain?

Twisting or pulling a muscle or a tendon

Acute or chronic

Recent trauma or result of overuse



Tendinitis (Elbow strain)



Archilles
Tendonitis

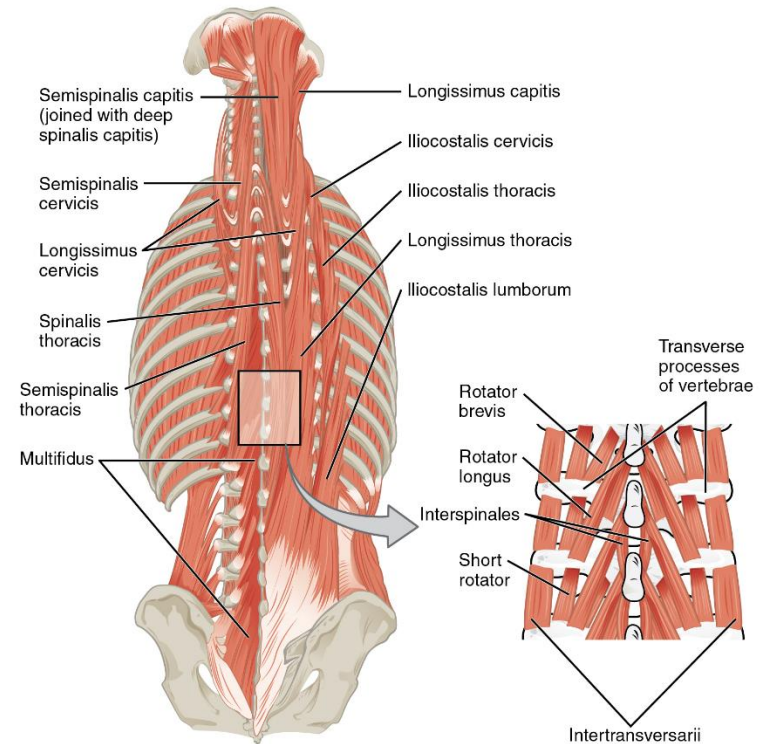
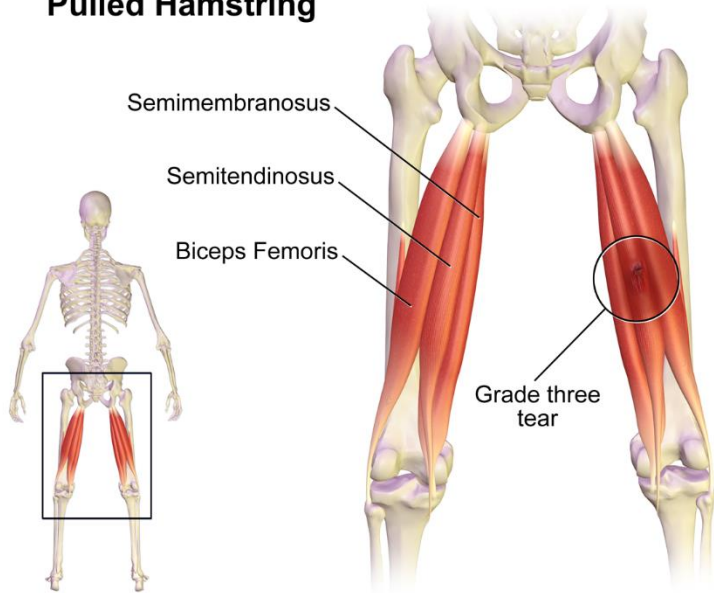


Where do strains usually occur?

Two common sites: the back and the hamstring muscle

but also hand and forearm, elbow

Pulled Hamstring



What are the signs and symptoms of a strain?



Pain, limited motion, muscle spasm, possibly muscle weakness

Localised swelling, cramping or inflammation

Loss of muscle function with minor or moderate strains



Assessment of injuries

SAMPLE

History:

Ask the patient what happened

- Violent blow or fall
- Snapping sound
- Sharp pain

Top to toe examination

- Difficulty moving limbs
- Pain made worse by movement
- Distortion
- Compare
 - One side of the body against another (shortening, bending or twisting)

Visualise:

- Try to imagine what happened

X-ray

- Injury may not be obvious

How are sprains and strains treated?



RICE therapy

Rest

Ice

Comfort

Elevation



“old” RICE

Rest



Ice



Compression



Elevation



Rest



Rest

Stop using injured part
Support injured part

Ice



Keep damp or dry cloth between skin and ice pack

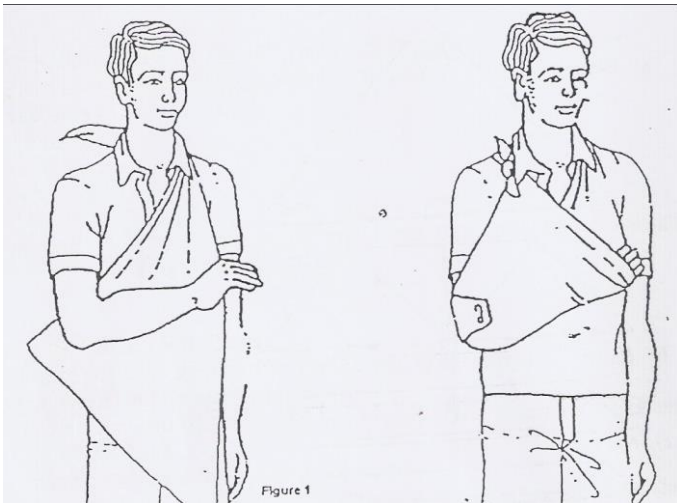
Do not apply ice for longer than 15 to 20 minutes at a time



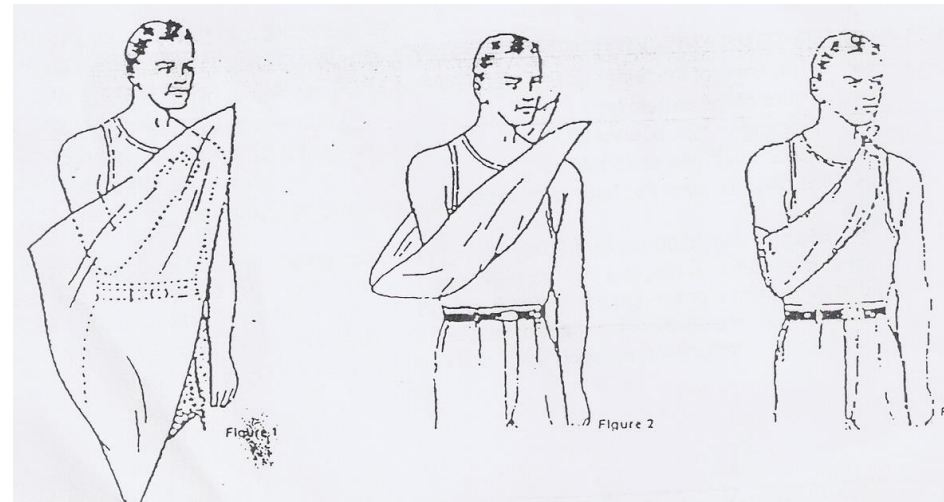
Comfort

Utility of a triangular bandage

Sling

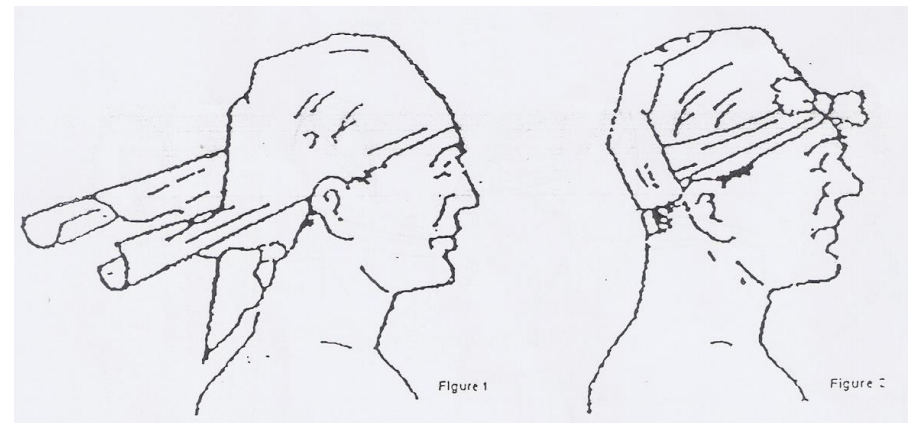
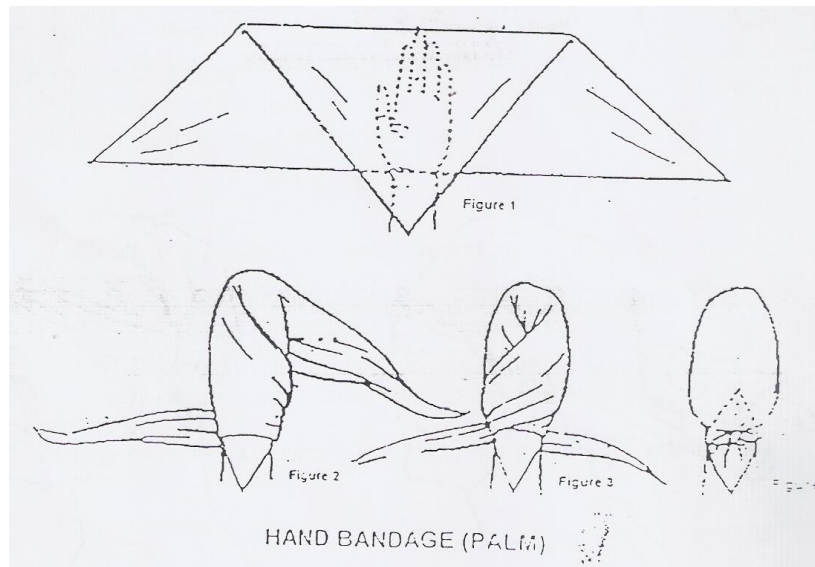


Elevated sling

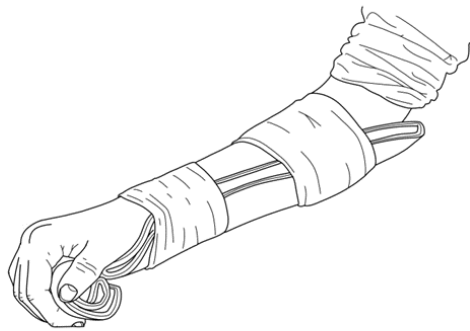
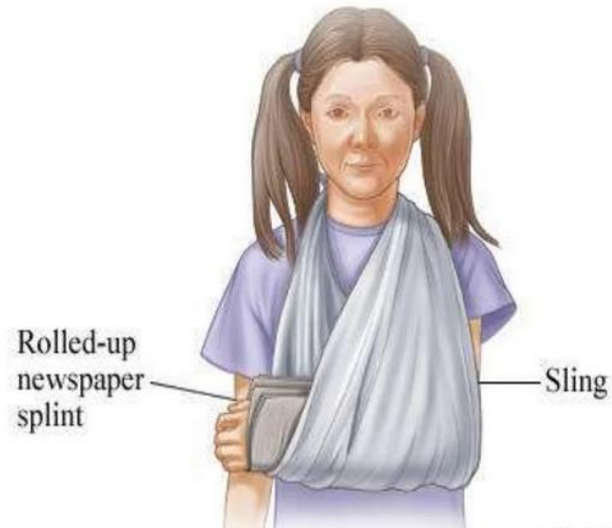


Comfort

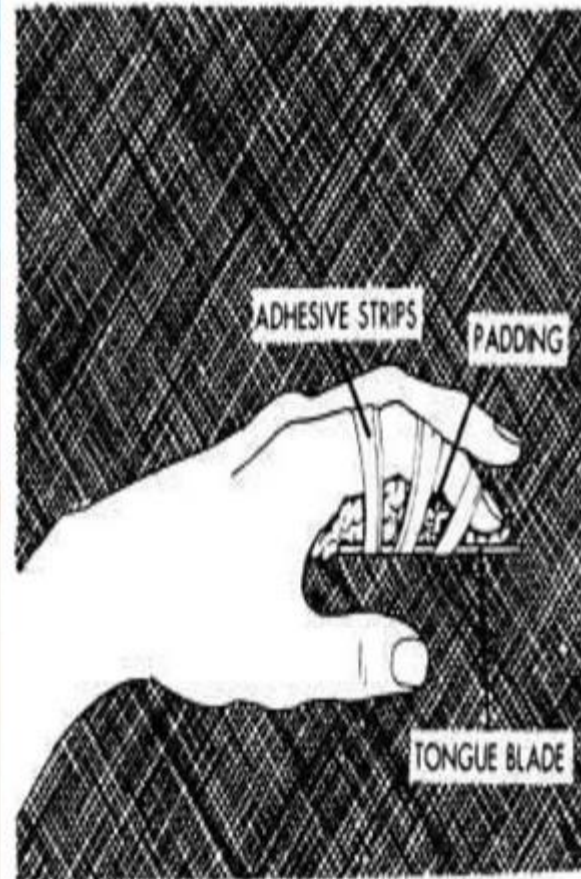
Triangular bandage (continued)



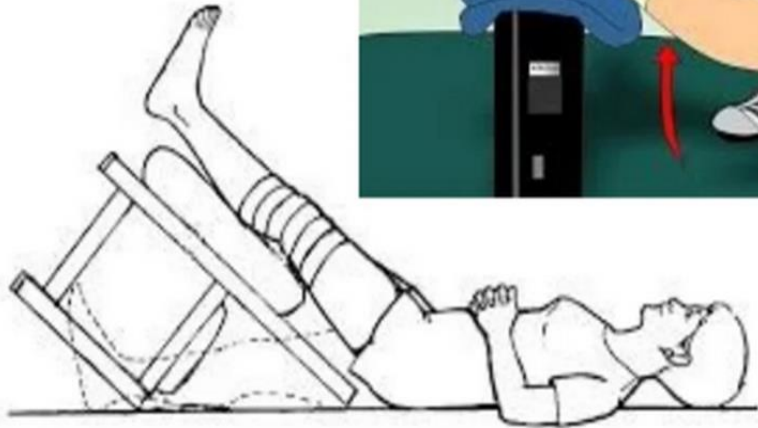
Comfort



Comfort



Elevation



Elevate injured part above the level of patient's heart

Decreases swelling and pain

Use objects and pillows for props



As part of secondary survey and after applying bandages, slings, etc

Check:

Movement

Can the injured part move (with potential limits)

Sensation

Can you feel me touching the area distal from injury

Circulation

Is there capillary refill?

Any of these checks compromised at secondary survey, refer patient to hospital

Any of these checks compromised after applying a bandage, loosen the bandage



Rest

Ice

Comfort

Elevation

Referral



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Princess Alexandra Hospital A&E patients warned of 13-hour wait

🕒 8 June

NHS England already under as much pressure as in winter, says boss

15th June 2022

Local people are being asked 'is it an emergency' before attending A&E

Written on 29 March 2022.

NHS

Norfolk and Waveney
Clinical Commissioning Group

When should you call 999



If you or the person you are with are not in life-threatening danger, use the following:

Pharmacy

Look online for your nearest pharmacy and their opening times

Walk-in centres

Find your nearest one on the NHS Choices website

NHS 111

For medical help but when it's not an emergency

GP Out of Hours

Need a GP in the evening or at the weekend?
Call NHS 111

If it is life-threatening, you **MUST** call 999

CARDIAC ARREST COLLAPSE UNCONSCIOUSNESS

- Unconscious and not breathing
- No pulse
- Unresponsive

HEART ATTACK CHEST PAIN

- Pains through arm
- Shortness of breath
- Clammy

CONVULSIONS / FITTING

STROKE SYMPTOMS

- Paralysis
- Weakness in arms
- Dizziness and confusion
- Muddled speech

TRAUMATIC/ SERIOUS INJURY

- Major blood loss
- Bone fracture

SEVERE BURNS/ SCALDS

- Red or peeling skin
- Blisters
- Swelling

CHOKING

- Airway suddenly blocked, either fully or partly
- Unable to breathe

DROWNING

- Blocked airways
- Exposure to cold

SEVERE ALLERGIC REACTIONS

- Swelling of the throat and mouth
- Difficulty swallowing or speaking
- Difficulty breathing



What happens when you call 999?

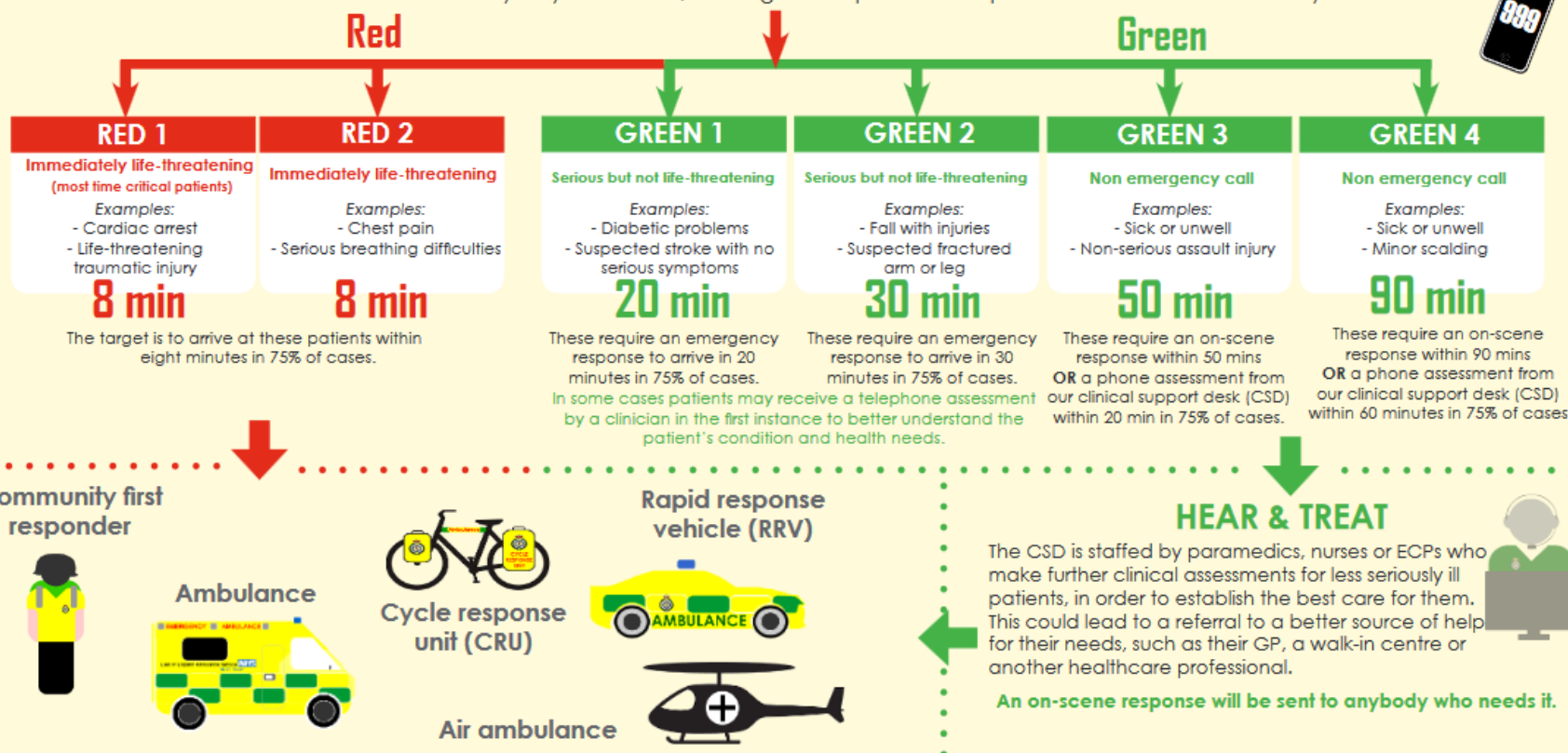
East of England Ambulance Service **NHS**
NHS Trust

A call handler answers and checks the reason for calling, the caller's telephone number, and address of the incident.
As these details are being taken, the information appears on screens in front of our dispatchers, who assign the response to that call.

Depending on the nature of the call, the call handler will either provide immediate help to the caller or ask a set of questions to get further information.

These questions will not delay help being arranged and will help us to make sure you get the correct help.

At the end of the telephone assessment, the call is given a category based on the information given by the caller. The call handler may stay on the line, offering further practical help and advice where necessary.

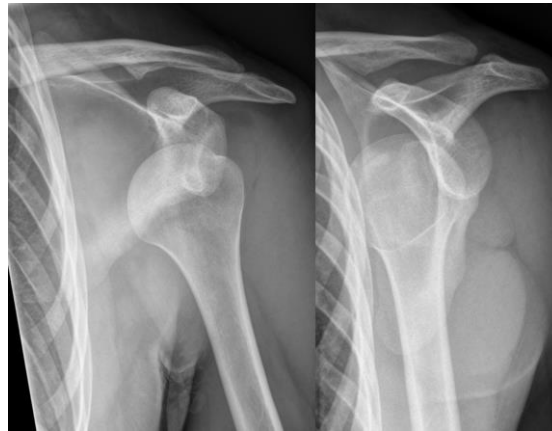


Bone and joint injuries - dislocation



Displacement of the joint/ bone

Frequently accompanied by a tearing or stretching of ligaments, muscles or other soft tissue



Bone and joint injuries - dislocation

Signs and symptoms



- deformity of joint or limb
- limited or abnormal movement
- swelling and discoloration
- pain and tenderness
- shortening or lengthening of affected limb
- signs of shock

First Aid treatment of dislocation

Immobilise the affected part in the position in which it is found by using splints and/or slings

Avoid any movement of injured part to prevent additional injury to nerves, blood vessels and other tissues in the area

Treat for shock if necessary

Arrange to send or take patient to hospital



Fractures



A break or a crack in a bone is called a fracture

Many types of fractures are difficult to determine

If a fracture is suspected, refer to hospital

Fracture categories



All fractures are one of two types:

Closed – skin over fracture is not broken

Open/ Compound – where the skin over the fracture is broken. The bone(s) may be visible

Further fracture categories

Types of Fractures

Simple



Compound



Greenstick



Comminuted



Impacted



Signs and symptoms of fractures

- pain
- swelling
- bruising
- tenderness
- loss of functional ability
- deformity of joint or limb
- limited or abnormal movement
- swelling and discoloration
- shortening or lengthening of affected limb
- coarse grating (crepitus) of the bone ends that can be heard
- signs of shock (particular with femur and/or pelvic injury)
- wound, possibly with bone ends protruding

First Aid treatment of fractures

Immobilise the affected part in the position in which it is found by using splints and/or slings

Avoid any movement of injured part to prevent additional injury to nerves, blood vessels and other tissues in the area

Treat for shock if necessary

Do not allow to eat or drink

Arrange to send or take patient to hospital

Open fracture:

Cover wound with sterile dressing

Build up pads around protruding bones without pressing on injury



Conclusion

DRABC with AVPU

SAMPLE

RICE(R)

MSC



Thank you for your attention