

## ADVENTURE ACCIDENTS

#### GO PREPARED FOR WHAT MIGHT HAPPEN IN DIFFERENT WILDERNESS LOCATIONS

PROF GRAEME ADDISON

2021





## WHO, WHAT, WHERE, WHEN, HOW, WHY?

- WHO the victim/s, ages, fitness, injuries (TRIAGE)
- WHAT type of accident, type of activity (MOST LIKELY SCENARIOS)
- WHERE location, terrain, difficulty of transport
- WHEN how long since, time to safety, access for EMS (ETHANE)
- HOW how to get out of here and get to safety (CASEVAC)
- WHY analyse it, how to avoid in future
  - "Safety" is when you deliver the patient/s to EMS
  - **Precautions and preparation** are what you do in advance
  - **Reaction** should be improvised around expected scenarios

## NOT ALL THE SAME

- RAFTING minor scrapes, infections, or **DROWNING**
- HIKING twisted ankles, sprains, broken bones, or FATAL FALLS
- MOUNTAIN BIKING collarbones, concussion, or **BIKEJACKING**
- ABSEILING rope burns, whiplash, or FATAL FALLS
- ZIPLINING rope burns, whiplash, bruises, or FATAL FALLS
- QUAD BIKING minor falls, leg injuries, concussion, or KILLED BY BIKE
- THINK ABOUT HORSE RIDING, CAMPING, MOUNTAIN CLIMBING, CANOEING AND KAYAKING, and many more activities
- GENERIC gastroenteritis, shock, dehydration, hypothermia, heat exhaustion/heatstroke, lightning, insect stings and snakebite... ALL OF WHICH ARE POTENTIALLY FATAL

# Injuries in commercial whitewater rafting

<sup>I</sup>Most injuries occurred in the raft (51.3%) as a result of collisions among passengers, being struck by a paddle or other equipment, or entanglement of extremities in parts of the raft; 40.3% of injuries occurred in the water after falling from the raft. [But in SA, on Croc inflatables, collisions among paddlers is less likely]
Participants: Customers of commercial rafting outfitters who sustained injuries in the 1995-1997 whitewater seasons on the New, Gauley, Cheat, and Shenandoah Rivers and for whom injury reports were submitted as required by the West Virginia Legislative Rules.

**Results:** A total of 200 rafting injuries were reported from 1995 through 1997, with a resulting overall injury incidence rate of 0.263 per 1,000 rafters. Incidence rates ranged from 0. 145 per 1,000 on the Shenandoah to 0.381 per 1,000 on the Gauley River. The average age of injured persons was 33.14 years, 53.3% were male, and 59.8% had previous rafting experience. The body part most frequently injured was the face (33.3%), including the eye (12.1%), mouth (6.6%), other facial parts (5.1%), nose (4.5%), and teeth (4.0%), followed by the knee (15.3%), arm/wrist/hand (11.6%), other parts of the leg, hip, or foot (10.5%), ankle (7.4%), torso (6.8%), shoulder (6.3%), and head/neck (5.3%). Predominant injury types included lacerations (32.5%), sprains/strains (23.2%), fractures (14.9%), contusions/bruises (9.8%), dislocations (8.2%), and two deaths. On-site administration of first aid included bandages (29%), ice (26.9%), splinting/immobilization (17.7%), antiseptic (11.3%), direct pressure (4.2%), elevation (2.1%), cardiopulmonary resuscitation (1%), and





## **RISK SITES**

- A risk site is a place where accidents are likely to happen or have already happened
- Know the risks, be prepared and take extra precautions
- Analyse the site on the day: weather, any changes
- Judge the people with you: are they capable or vulnerable?
- Brief guides and participants



A risk site on a mountain bike trail could be where Bikejackers lurk with knives or guns to threaten you

#### **14. EMERGENCY RESPONSE FLOW CHART**

In the event of a hiker or hikers being injured in a fall or lightning strike or security incident (all of which have happened in the Dome Bergland) the following Emergency Response steps may be applied.

Remember these mnemonics:

#### **ACTION!**

Assess the situation

Communicate with the team

Team plan – work out what to do

Incident commander takes charge

Onlookers must be taken care of Notice hazards to rescuers

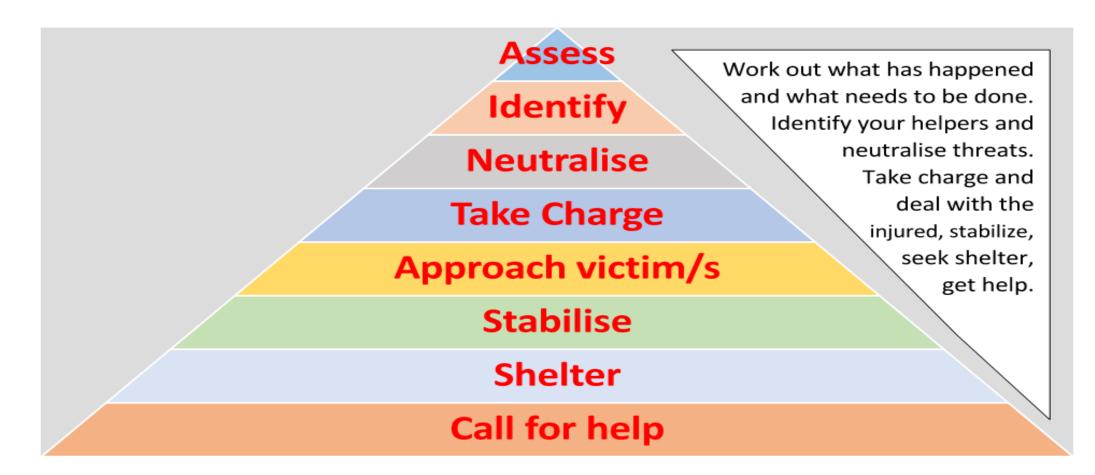
Appoint someone to keep an

USE TO CO-ORDINATE YOUR RESPONSE

#### ETHANE

Exact location Type of incident Hazards, present and potential Access to the place Number of casualties Emergency workers already on the scene

USE WHEN CALLING FOR OUTSIDE HELP



All events that interrupt the smooth running of a trip are INCIDENTS.

Some events involve injuries or damage to equipment, these are ACCIDENTS

When immediate action is vital to save lives, we are dealing with EMERGENCIES.

An incident of any kind needs to be recorded, especially if the trip is stopped or there are likely to be consequences.

## CASEVAC

 Don't shock the patient or worsen the iniury

definite goal!

efficiently.

#### • Have a

• Work

### DISCUSSION

- Wilderness first aid in context
- What experiences you've had
- Think about how to APPLY your knowledge
- Assessment for GASG will include scenarios
- Presence of mind and preparedness are tested