MCA Maritime Health Seminar

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Maritime Environment

Approximately 360,000 lives are lost at sea every year

• WHO 2014 figures – likely to be conservative



- My background
 - Offshore Engineering
 - Round-the-the world yacht race Global Challenge
 - Intensive care medicine
 - Chief medic Volvo Ocean Race
 - Author:
 - Skippers Medical Emergency Handbook Adlard Coles
 - Outdoor Medical Emergency Handbook
 - Wilderness Medicine Oxford University Press





- Environment
 - Attritional
 - Skin
 - Eyes
 - Motion
 - Motion illness
 - Exhaustion
 - Hot climates, cold climates, humidity
 - Heat illnesses
 - Cold injury
 - Infections



- Trauma
 - Type of sailing
 - Age of crew
 - Fitness
 - Route of voyage
- Illnesses
 - Pre-existing
 - Acquired
 - Specifics Diabetes, Epilepsy, Immune suppressed



Observational records:



Leg Complaint Treatment

Leg 4 Sydney – Cape Town

Seasickness Domperidone & Cinnarizine Seasickness Domperidone & Cinnarizine

Bruised Hand Ibuprofen
Flu Ibuprofen
Constipation Lactulose

Sore Shoulders Ibuprofen, Massage ?Fractured Coccyx Lactulose, Ibuprofen Fractured Ribs Ibuprofen, Rest

Crush Fract Tibia & Tramadol, Stemetil, Ibuprofen, Rest

Severe Bruising Thigh

Fractured Ribs Codydramol Chipped Olecranon Ibuprofen

Toothache Metronidazole, Codydramol

Constipation Lactulose

Bruised Hand Ibuprofen, Strapping

Sprained Elbow Ibuprofen, Rest Flu Ibuprofen

Headache Codydramol

Skin Infection Amoxycillin, Flucloxacillin Stye Chloramphenicol Eye Oint.

Elbow Abscess Drainage, Amoxycillin & Flucloxacillin, Ibuprofen, Rest

Sprained Back Tramadol, Stemetil, Ibuprofen, Rest

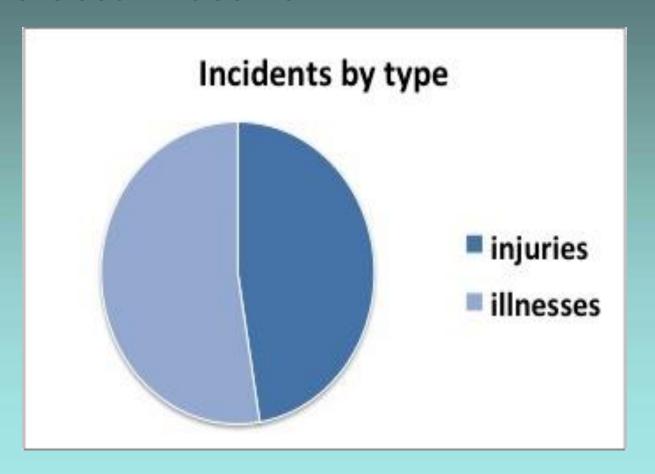
Joint Aches Ibuprofen

Crushed Finger Ibuprofen, Drainage

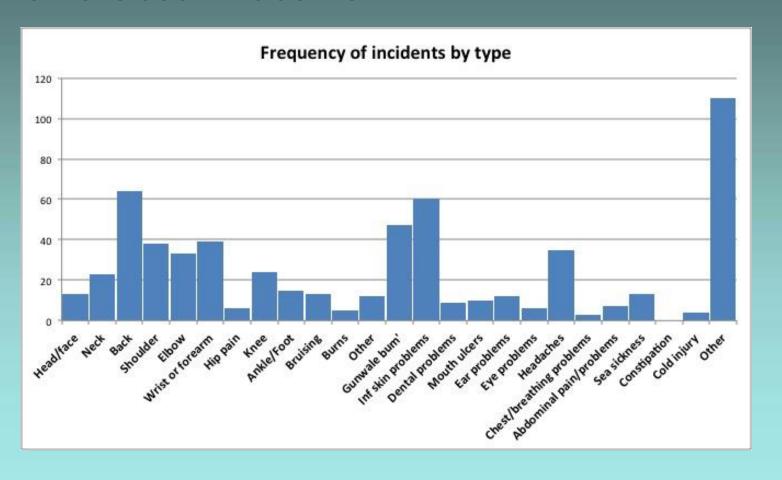


- Medical incidents in yacht races:
 - Volvo Ocean Race 2011-12
 - Global Ocean Race 1992 2004

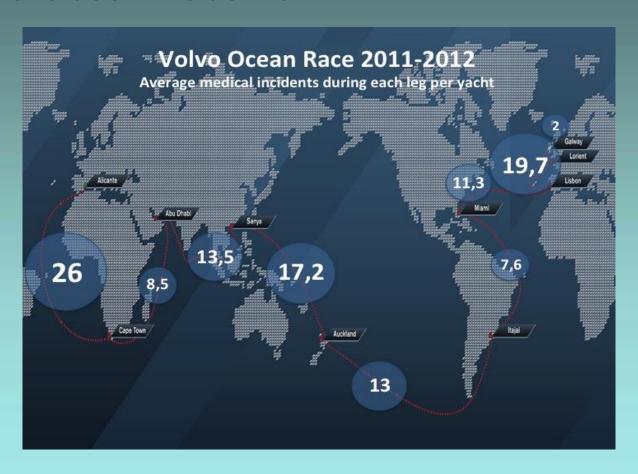




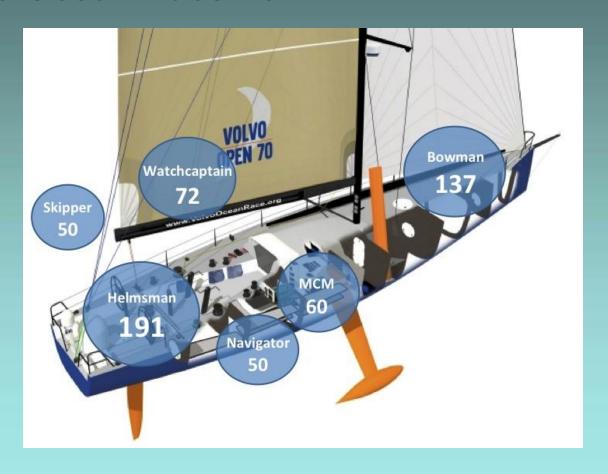














Global Challenge 1992 - 2004

Number of crew at risk	365 (283 male & 82 female)	
Age range	21–60 years	
Time at sea	170 days average	
Total reported incidents	685	
Number of illnesses	386 (56%)	
Number of injuries	299 (44%)	
Number of cases per yacht	8–106	



• Global Challenge 1992 - 2004

Illnesses (Number)	386	Injuries (Number)	299
	56%		44%
GI/GU	22	Abrasions & contusions	36
Skin	21	Burns	16
Respiratory	19	Fractures	11
Seasickness/	16	Lacerations	11
hypothermia			
CNS	4	Musculo-skeletal	10
Dental	4	Head injuries	7
Eyes	4	Miscellaneous	9
Miscellaneous	10		



- Medical incidents offshore:
 - Depends upon boat activity and crew type
 - Requiring treatment: Probably about 1:10,000 crew miles
 - Requiring external advice: Probably about 1:100,000 crew miles
 - Evacuation: Probably about 1:1,000,000 crew miles
 - Life-threatening injury: Probably about 1:10,000,000 crew miles



Maritime Medical Cases



Retention - catheter inserted Persistent diarrhoea UTI/STD Resolving pneumonia **Dental Pain** Allergic rash Abdominal rash Vaccination query Chemical burn to airway Viral illness? (Dengue?) Great toe paronychia Morning after pill Swollen knees after knee replacements Irregular heart rhythm Sore eyes - solar keratitis Middle ear inf after diving Scorpion sting with systemic symptoms Eye infection (stye) Leg abscess Diabetic emergency Ear infection Diarrhoea and vomiting **Insect stings** Swollen elbow

Menorrhagia UTI Moray Eel bite Morning after pill Seasickness UTI? Bike accident - shoulder soft tissue Persistent headaches Soft tissue brusing after fall (alc) Minor head injury - warfarin ?Food poisoning **Abdominal Pain** UTI Test call **Tonsilitis** Knee cartilage problem Abdo pain Blocked ear Oral fibroma **Fungal** infection Sunburnt, swollen face Gastric upset Worsening skin rash UTI Facial surgical emphysema after diving foreign body in eye

skin irritation Skin rash on face and neck - infective Tonsillitis URTI - pregnant Whole body rash Broken molar Food poisoning Stomach upset Appendicitis (in port in Holland) **Sinusitis** UTI Lymphadenopathy in child Chect infection Convulsions (non-crew) Broken ribs Chest infection **Anxious Stewardess** Infected feet Chest infection (new) Dislocated toe Renal stones Ear infection Chest infection Ear ache Several crew - D&V Infected skin lesion on knee Jelly fish sting to face **Dermatitis**

Insect sting on finger Infected little toe Haemorrhoids ?Sub-arachnoid haemorrhage Severe abdo pain Sea sickness and PMR Skin rash Rash on feet, hands, knees Globus Pain relief Dental infection Jelly fish sting Stye D&V Nausea (DM) Sciatica Rope burn to fingers Chest infection Infected knee laceration Left chest pain - ?musculoskeletal Arm skin rash Body rash Lower back pain Lower back pain

Bilateral hand parathesia



Left chest pain - ?musculoskeletal Arm skin rash Body rash

Lower back pain
Lower back pain
Bilateral hand parathesia
Ruptured finger tendon
Olecranon bursitis
Suspected brain thrombosis

Lower back pain

GI upset

Ear infection/TMJ dysfunction

Cystitis

Sore eye - ?foreign body

Exacerbation of asthma

Carbon fibres in eye

Olecranon bursitis in immunosuppressed

Toothache

Jelly fish sting

Jib sheet around leg - crush injury

Partial thickness arm burn 2%TBA

Body rash

Dog bite

Epigastric pain

Medication enquiry

Infected arm wound

Colitis





Questions?

