

**MEDICAL POLICY CONSIDERATIONS  
FOR RECREATIONAL  
AND  
PRIVATELY SPONSORED EXPEDITIONS**

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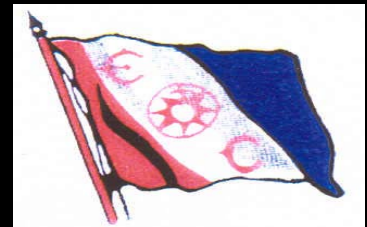
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## THE GEORGE WASHINGTON UNIVERSITY

- Professor of Urology
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## THE EXPLORERS CLUB

- Director
- Chairman, Science Advisory Board
- Chairman, Expeditions Committee



# ADVENTURE TRAVEL

\$ 40 billion business

Rapidly growing

Increased risk concerns

Few guidelines for medical care

# ADVENTURE TRAVEL

Guided sponsored tours

Private expeditions

Scientific expeditions

Competitive sporting events

# PUBLIC POLICY ISSUES

Travelers lack of knowledge

Resources for information

Insurance

- Personal travel insurance
  - Medical malpractice

Guidelines

# PUBLIC POLICY ISSUES

## TRAVELERS LACK OF KNOWLEDGE

- Reliance on local primary care for prep
  - Impact of stress on disorders
  - Personal insurance coverage
- Travel guide medical experience
  - Personal preparation

# PUBLIC POLICY ISSUES

## INFORMATION RESOURCES

- CDC
- Travel medical insurance companies
  - Local travel clinics

# PUBLIC POLICY ISSUES

## INFORMATION RESOURCES

- Int Assoc for Med Assist to Travelers (IAMAT)
    - Divers Alert Network (DAN)
    - Wilderness Medical Society (WMS)
  - Int Society of Travel Medicine (ISTM)
    - The Explorers Club
- Expedition Medicine Advisory Council



# PUBLIC POLICY ISSUES

## INSURANCE

Personal travel medical insurance

- Medical coverage in country
  - Evacuation
  - Kidnap and Ransom

Malpractice for physicians

# ADVENTURE RACING



# WHAT IS ADVENTURE RACING?

Organized endurance multisport race

Multiple non-motorized modes of travel  
combined with exploration of remote areas

Team effort

Male and female contestants

# WHAT IS ADVENTURE RACING?

Roots in New Zealand

First official race Raid Gauloises 1989

Eco-Challenge 1995

Dynamic and fast growing

# WHAT IS ADVENTURE RACING?

- Trekking
- Mountain biking
  - Paddling
- Mountaineering
- Marathon running
  - Navigation
  - Swimming
  - Rope skills
  - Horse riding
    - Caving
  - Inline skating

# WHAT IS ADVENTURE RACING?

- Sprint races  
2-8 hours
- Weekend race  
12-30 hours
- Expedition-style race  
3-10 days, 250-500 miles
- Stage races  
2-4 days, clock stops each day

GLOBAL  
EXTREMES  
LIFE CHALLENGE  
Presented by Adventure

# GLOBAL EXTREMES: MT. EVEREST-4RUNNERS OF ADVENTURE

# AN EPIC JOURNEY FOR ATHLETE AND MACHINE

*Imagine an adventure spanning four continents, eleven time zones and 15,875 kilometers. In January 2003, twelve amateur athletes start this epic journey. Each team will have a special teammate, the all-new Toyota 4Runner. This vehicle will be an indispensable part of the challenge, working as one with the athletes as they test their own limits.*

*Making their way to the final destination of Mt. Everest, the athletes and their 4Runners will be tested by the swelter of the Kalahari Desert, mountain biking in Costa Rica, and iceworld climbing in Iceland. Finally, five athletes will be chosen to attempt the summit of Mt. Everest in Tibet. Tune in to join their adventure.*

THE ALL-NEW  
2003 4RUNNER  
LARGER. MORE ADVENTURE.

 TOYOTA

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# EXPEDITION MEDICINE

Multidisciplinary approach  
to health and safety in the field

Elements of travel medicine, public health,  
tropical medicine, infectious disease,  
military, and environmental medicine





## WHAT DOES THE ADVENTURE RACER SEE?

Expedition

Adventure

Challenge

Competition



## WHAT DOES THE DOCTOR SEE?

Trauma

Hypothermia

Rescue need

Evacuation

# ADVENTURE RACING

## COMMON MEDICAL PROBLEMS

Dehydration

Foot problems

Hypothermia

Trauma

# ADVENTURE RACING

## COMMON MEDICAL PROBLEMS

Ophthalmic injuries

Insect bites

Gastroenteritis

Fatigue

Trauma

ARE YOU READY?



# WHITBREAD VOLVO RACE



# IDITAROD RACE



# EXPEDITION MEDICINE

## MEDICAL ISSUES

- PREPARATION
  - Location, duration, personnel
  - Immunization and prophylaxis
    - Medical supplies
- Travel medical and evacuation insurance



# EXPEDITION MEDICINE

## MEDICAL RESPONSIBILITIES

- Medical information about participants
  - Medical supplies
  - Communication
  - Case management and evacuation strategy

# EXPEDITION MEDICINE

## LOCATION

- Climate, terrain, season
- Regional medical resources
  - Evacuation routes
- Geopolitical considerations

# EXPEDITION MEDICINE

## EXPLORERS CLUB FLAG EXPEDITIONS 2003

- Annamite Mts in Laos
- Underwater cave system Yucatan
  - Elephant seal migration Mexico
- Deep Flight Aviator submersible tests
  - Papua New Guinea jungles
  - Active volcano Tanzania

# EXPEDITION MEDICINE

## EXPLORERS CLUB FLAG EXPEDITIONS 2003

- Reed boat exped Chile to Australia
  - 50<sup>th</sup> anniversary Everest
- Pre-Columbian tomb excavation Mexico
  - New Inca sites Peruvian Andes
- Northernmost point of land on earth
  - Ethnographic rescue of Java tribe



# EXPEDITION MEDICINE

## LOCATION

- Immunizations, prophylaxis

- Specialized medical needs

Hyperbaric facilities, antivenom, rabies IG

- Resupply resources

# SAFE WATER SUPPLY



# EXPEDITION MEDICINE

## PERSONNEL

Medical history of each person

- Medical problems
  - Medications
  - Allergies
  - Insurance
- Emergency contact



# EXPEDITION MEDICINE

## EXPEDITION PERSONNEL

Establish rapport with expedition leader

- Chain of command
- Algorithms for adverse medical event

Psychological assessment

## ANTICIPATE PROBLEMS

# EXPEDITION MEDICINE

## DOCUMENTS

### Passport and Visa

- Spare photocopies in separate location
- Anticipate alternate emergency route
- Photocopies of expedition personnel

Permits or documents  
for controlled substances

# EXPEDITION MEDICINE INSURANCE

Most standard medical insurance  
is **inadequate** for remote travel

Tour groups and credit cards have, at best,  
modest evacuation and medical benefits

**READ THE FINE PRINT**



# EXPEDITION MEDICINE

## EVACUATION INSURANCE

- Most travelers do not carry this insurance
  - Tens of thousands \$ to evacuate without coverage

Medical coverage in country

- Family visits, return of companion
  - Repatriation of remains

# EXPEDITION MEDICINE

## EVACUATION INSURANCE

Most credit cards **do not** have adequate evacuation insurance

Many insurance companies

- **Worldwide Assistance**
  - EuroAssistance
  - SOS

# EXPEDITION MEDICINE

## CONCLUSIONS

Need for guidelines

Information resources

- Standardization
  - Access

Proper risk assessment and coverage

An underwater photograph of a shipwreck, likely the Titanic, showing the rusted metal hull and structural beams. The scene is dimly lit with a blue-green tint. The text "THE END" is overlaid in white, bold, sans-serif font in the center of the image.

THE END