Maritime Telemedicine: Research Vessels

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Cases per year

- **2008**: 70
- **2009**: 250
- **2010**: 180 (Projected), 50 (Actual)
Nature of the Call

- Underway: 79%
- In port: 14%
- Travel Assistance: 6%
- Test: 1%
Medical Categories

- Dermato (12%)
- Trauma/Ortho (15%)
- Gastrointestinal (10%)
- ENT (ear, nose and throat) (8%)
- Ophthalmology (7%)
- Travel Advisory (7%)
- Urological (6%)
- Dental (6%)
- Cardiac (1%)
- Vascular (1%)
- Other (6%)
- Allergy (1%)
- Mental (1%)
- Pharmacological/Information (3%)
- Respiratory (4%)
- Environmental (2%)
- Communicable/Infectious Disease (5%)
Medical Categories
Vessel Underway
Diagnostic categories

- OB/GYN
- PSYCHIATRIC/PSYCHOLOGICAL
- ENDOCRINE
- ALLERGY/IMMUNOLOGY
- NEUROLOGICAL/NEUROSURGICAL
- CARDIOVASCULAR
- URO/RENAL
- COMMUNICABLE/INFECTIOUS DISEASE
- OPHTHALMOLOGICAL
- DENTAL
- RESPIRATORY
- ENT (ear, nose and throat)
- DERMATOLOGY
- GASTROINTESTINAL
- TRAUMA/ORTHO

- Bulkcarrier
- Cable
- Container
- Research
- Tanker
- TOTAL

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Telemedicine

• Telemedicine is the branch of medicine dealing with providing medical care to remote locations where traditional forms of delivery are unavailable or not fully available

• *Telemedicine seems is the best solution for maritime medical events*
Three components of Telemedicine

- Local resources
- Communication
  - Data
  - Voice
- Remote resources
Approaching Maritime Medical Situations

- **Cardiac Arrest**
- **Allergic Reaction**
- **Trauma**
- **Seizures**
- **Fainting**
- **Vomiting**

Frequency:
- Rare
- Frequent

Seriousness:
- Life-threatening
- Time-dependent

Medical Advice:
- Crew Action
- Medical Advice

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Remote Telemedicine Device

- Blood Pressure & Pulse
- Oximetry
- Temperature
- Respiration & End Tidal CO₂
- 12 Lead EKG
- Glucometry
- Real Time Voice & Data
- Camera With Stills & Real Time Video

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Training Solutions for UNOLS Survey Results

January 11, 2010
What is your position on a ship?

- Marine Technician: 29%
- Scientist: 13%
- IT Technician: 11%
- Chief Engineer: 5%
- Marine Superintendent: 4%
- Cook: 2%
- Seaman: 2%
- Deck officers: 34%
Additional medical certifications?

- No: 63%
- Medical Person in Charge: 12%
- First aid CPR: 15%
- EMT: 6%
- Diving First Aid: 2%
- Med Care Provider STCW: 2%
Completed 8-hr. Elementary First Aid Training Course?

- Have not taken the STCW’95 Elementary First Aid Training: 36%
- Over 5 years: 24%
- Within past 1-3 years: 18%
- Within past 3-5 years: 13%
- Within past year: 9%
- No Responses: 0%
- Within past 5 years or more: 36%
Completed 21-hr. STCW Medical Training Course?

- Within past 1-3 years: 13%
- Within past 3-5 years: 7%
- Over 5 years: 13%
- Within past year: 4%
- No Responses: 0%
- Have not taken either of the above courses: 63%
Completed 5-day/MPIC Medical Training Course?

- Within past 5 years: 5%
- Within past 3-5 years: 5%
- Within past 1-3 years: 9%
- Over 5 years: 11%
- Within past year: 4%
- No Responses: 0%
- Have not taken either of the above courses: 71%
8-hr. Training Course Participation - Valuation

- Not applicable: 20%
- Very Valuable: 33%
- Valuable: 22%
- Neutral: 11%
- Somewhat: 9%
- Not at all: 5%
21-hr. Training Course Participation - Valuation

- Very Valuable: 35%
- Valuable: 25%
- Not applicable: 31%
- Not at all: 0%
- Somewhat: 4%
- Neutral: 5%
40-hr./MPIC Course Participation - Valuation

- Very Valuable: 44%
- Valuable: 14%
- Neutral: 7%
- Somewhat: 4%
- Not at all: 0%
- Not applicable: 31%
Non-STCW review of common maritime medical incidents - Valuation
Review of medical equipment on-board vessel - Valuation

- Very Valuable: 36%
- Valuable: 38%
- Not applicable: 15%
- Not at all: 0%
- Somewhat: 4%
- Neutral: 7%
Simulated medical drills on-board vessel - Valuation

- Very Valuable: 42%
- Valuable: 38%
- Not applicable: 10%
- Not at all: 0%
- Neutral: 6%
- Somewhat: 4%
CPR/AED Training Participation and simulated drills - Valuation

- Very Valuable: 54%
- Valuable: 29%
- Not applicable: 13%
- Not at all: 0%
- Neutral: 2%
- Somewhat: 2%
Medical Training courses attended in the past year

- No responses: 0%
- Yes: 18%
- No: 82%
Best time to take a maritime medical course

- January - March: 46%
- October - December: 28%
- April - June: 14%
- July - September: 12%
Any Specific medical topics you would like to have covered

- No answer: 67%
- MPIC course topics: 20%
- 21-hr. course topics: 5%
- 8-hr. course topics: 4%
- Non-medical topics: 4%
UNOLS Institution affiliated with

- USG 15%
- LDEO 17%
- UoH 11%
- LUMC 9%
- UoM 9%
- SIO 6%
- UoW 6%
- WHOI 6%
- MLML 4%
- URI 2%
- DU/UNC 2%
- OSU 2%
- TX Uni 2%
- UoD 2%
- UoMN 2%
- HBOI 2%
- BIOS 2%
Why Train with MedAire

- Maritime Experts STCW
- Safety Top Priority
- Unique maritime curriculum
- Medical Professional
- ISO Certification
- Flexibility
- Global Presences
Questions?