

AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

CRUISE SHIP MEDICINE SECTION (CSMS)

CRUISE SHIP HEALTHCARE GUIDELINES

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INTRODUCTION:

The specific medical needs of a cruise ship are dependent on variables such as: ship size, itinerary, anticipated patient mix, anticipated number of patients' visits, etc. These factors may modify the applicability of these guidelines especially with regards to staffing, medications, equipment and supplies. Quality medical care on board cruise ships is enhanced by the following guidelines:

GUIDELINE 1: MEDICAL FACILITY

- 1.1 Contains adequate space for diagnosis and treatment of patients with 360° patient accessibility around all beds and stretchers
- 1.2 Has hand wash sinks with hot/cold mixing tap, liquid antibacterial soap, paper towels and waste bin in or adjacent to all clinical exam rooms. For exam rooms without sinks, alcohol hand sanitizers should be available.
- 1.3 Has adequate space for storage
- 1.4 Has an examination, treatment and inpatient area adequate for the size of the ship.
- 1.5 Has one examination / stabilization room
- 1.6 Has one ICU room
- 1.7 Maintains a minimum number inpatient beds of one bed per 1000 passengers and crew
- 1.8 Maintains an isolation room or the capability to provide isolation of patients
- 1.9 Is accessible by wheelchairs and stretchers
- 1.10 Has a wheelchair accessible toilet on all new builds delivered after January 1, 1997

GUIDELINE 2: STAFF

- 2.1 Has medical staff (both physicians and registered nurses) who are on call 24 hours per day while at sea.
- 2.2 Maintains qualified and experienced medical staff that have undergone a credentialing process to verify the following:
 - 2.2.1 Physicians and nurses hold current full registration and valid licensure
 - 2.2.2 Three years of post-graduate / post-registration experience in general and emergency medicine OR
 - 2.2.3 Board certification in:
 - 2.2.3.1 Emergency Medicine or
 - 2.2.3.2 Family Medicine or
 - 2.2.3.3 Internal Medicine
- 2.3 Certifications
 - 2.3.1 All medical staff certified in advanced life support such as ACLS, ALS or an equivalent

2.3.2 Ships carrying children ≤ 12 years old should have at least one physician certified in PALS, APLS or an equivalent certification or training e.g. emergency medicine or pediatric training.
(Effective January 1, 2014)

2.4 Skills:

2.4.1 All Medical staff with a competent skill level in Emergency Cardiovascular Care

2.4.2 Physicians with minor surgical, orthopedic and procedural skills including suturing, and fracture/dislocation management

2.4.3 Physicians with procedural sedation skills.

2.5 Language: Medical staff that is fluent in the official working language of the ship.

GUIDELINE 3: CLINICAL PRACTICE

3.1 Medical facility shall have established medical policy and procedures which have been reviewed by a senior clinician.

3.2 Structured medical staff orientation to the medical facility

3.3 Designated rapid medical response team which is trained and exercised at least monthly.

3.4 Ready access to both telephone and confidential email in order to communicate directly with shipboard and shoreside healthcare providers.

3.5 Internal and external audits

GUIDELINE 4: DOCUMENTATION

4.1 A medical record system that provides:

4.1.1 Well organized, legible and consistent documentation of all medical care

4.1.2 Patient confidentiality. All patient medical records should be regarded as strictly confidential medical information and should not be accessible to non-medical personnel without the express written consent of the patient except as necessary to maintain safety on board or ashore, or to comply with any legal requirements to review, report or log the information.

GUIDELINE 5: EQUIPMENT

- 5.1 Vital signs equipment: Sphygmomanometers, stethoscopes, thermometers (including core/rectal temperature capabilities) and pulse oximeter (SaO₂)
- 5.2 Airway equipment - bag valve mask, LMA/supraglottic airway, laryngoscopes, endo tracheal tubes, stylet/bougie, lubricant, portable suction equipment, surgical airway capability.
- 5.3 At least two cardiac monitors
- 5.4 At least two defibrillators, one of which should be a portable automated external defibrillator (AED)
- 5.5 External cardiac pacing capability
- 5.6 Electrocardiograph (EKG) capability
- 5.7 Electronic infusion capability
- 5.8 Nebulizer capability
- 5.9 Automatic medical ventilator
- 5.10 Oxygen (including portable oxygen) and flow regulators
- 5.11 Wheelchairs
- 5.12 Stair chair and stretcher
- 5.13 Refrigerator and Freezer for the safe storage of medicines and supplies
- 5.14 Long and short back boards with cervical spine immobilization capabilities
- 5.15 Trauma supplies
- 5.16 Laboratory capabilities:
 - 5.16.1 Hemoglobin, Hematocrit, Urinalysis, pregnancy test, blood glucose, Electrolytes, Renal Function, cardiac enzymes and Legionella urine antigen.
- 5.17 All medical equipment is maintained in accordance with quality control programs as recommended by the manufacturer.

GUIDELINE 6: PHARMACY

- 6.1 Emergency medications for management of common medical emergencies, which include:
 - 6.1.1 Gastro-intestinal system medications
 - 6.1.2 Cardiovascular system medications

6.1.3.1 Sufficient quantities of advanced cardiac life support medications, in accordance with current international ACLS guidelines, for the management of two complex cardiopulmonary arrests

6.1.3.2 Thrombolytic medications sufficient for two patients

6.1.3 Respiratory system medications

6.1.4 Central nervous system medications

6.1.5 Infectious disease medications

6.1.6 Endocrine system medications

6.1.7 Obstetrics, gynecology and urinary tract disorder medications

6.1.8 Musculoskeletal and joint disease medications

6.1.9 Eye medications

6.1.10 Ear, nose and oropharynx medications

6.1.11 Skin disease medications

6.1.12 Vaccines

6.1.13 Anesthesia medications

GUIDELINE 7: INFECTION CONTROL

7.1 A TB screening program every two years for all medical staff

7.2 Hepatitis B Immunity: All healthcare staff who have a reasonable expectation of being exposed to blood must provide documented serological proof of Hepatitis B immunity (anti-HBs \geq 10 mIU/mL or have documented proof of Hepatitis B vaccination) prior to any clinical work.

7.3 Medical Staff participation in a seasonal influenza vaccination program

7.4 Medical staff with immediate access to personal protective equipment (PPE) including gloves, gowns and N95 masks.

GUIDELINE 8: IMAGING

- 8.1 X-ray imaging capabilities.
- 8.2 Radiation protection equipment

GUIDELINE 9: MEDICO-LEGAL PRACTICE

- 9.1 Each ship should carry a minimum of two sexual assault evidence collection kits
- 9.2 Ships that fall under the jurisdiction of the Cruise Vessel Security and Safety Act (CVSSA) of 2010 includes all vessels with 250 or more passengers on an international voyage that embarks or debarks in a U.S. port. The CVSSA mandates that ships must:
 - 9.2.1 Have a physician or nurse meet the guidelines established by the American College of Emergency Physicians relating to the treatment and care of victims of sexual assault including the use of sexual assault evidence collection kits.
 - 9.2.2 Carry sufficient stock of post exposure prophylaxis (PEP) anti-retroviral and antibacterial medications to prevent the transmission of HIV and other sexually transmitted diseases.
 - 9.2.3 Prepare, provide to the patient, and maintain written documentation of the findings of such examination that is signed by the patient.
 - 9.2.4 Provide the patient free and immediate access to a telephone, internet accessible computer and contact information for law enforcement, National Sexual Assault Hotline, the nearest consulate or embassy, and the Coast Guard. This information must be maintained within the Medical Facility or elsewhere on the ship.
- 9.3 Pregnancy: Pregnant passengers and crew who have entered the 24th week of estimated fetal gestational age at any time during the cruise should not be eligible to sail with the ship.

GUIDELINE 10: PATIENT FEEDBACK

- 10.1 A process whereby passengers are able to provide pertinent information regarding special medical needs prior to embarkation.
- 10.2 A policy and procedure for receiving, evaluating and responding (if necessary) to patient feedback, including complaints.

GUIDELINE 11: CONTINGENCY MEDICAL PLAN

- 11.1 Comprehensive written medical contingency plan which is subject to regular review, not to exceed three years. The plan incorporates mass casualty incidents (MCIs) and the procedure to be followed should the primary medical facility become non-operational.
- 11.2 Mass casualty incident drills which are conducted on a regular basis.
- 11.3 A contingency medical plan defining one (1) or more locations on the ship that should:
 - 11.3.1 be in a different fire zone from the primary medical facility
 - 11.3.2 be easily accessible to crew and passengers
 - 11.3.3 have lighting and power supply on the emergency system
- 11.4 Portable medical equipment and supplies including:
 - 11.4.1 Mass casualty triage documentation
 - 11.4.2 Airway equipment, oxygen and supplies
 - 11.4.3 IV Fluids and supplies
 - 11.4.4 Immobilization equipment and supplies
 - 11.4.5 Diagnostic and laboratory supplies
 - 11.4.6 Dressings
 - 11.4.7 Treatment – medications and supplies
 - 11.4.8 Defibrillator and supplies
 - 11.4.9 Medical waste and personal protective equipment
- 11.5 Portable two-way communication equipment for each member of the medical staff
- 11.6 Designated non-medical crew assigned to assist the medical staff