

## Medical Operations Staffing

Recommendations in this section of the VMM are based on best medical practice.

Staffing the medical operations onboard as well as shoreside will need to be updated. Increased screening procedures at the time of embarkation will require additional medical personnel to perform the screens appropriately and thoroughly. Additionally, in the event of an outbreak or isolation which may require more invasive care and treatment, additional medical personnel will be necessary to maintain equipment I.e. ventilators.

The transition through the pandemic era to a novel standard of maritime medical practice will be dynamic, requiring adaptation to the following:

- Meeting the needs of essential crew during standby/layup
- The reintroduction of crew to ready the vessel for the return of the full crew complement
- The return of full crew complements to ready the vessel for the return of guests
- The return of guests
- Medical team prepared to rapidly expand clinical capacity to deal with any public health threats to the souls on board

The staffing priorities must anticipate the needs of the phase to follow, in A) number of medical team staff members and B) address necessary skill sets.

All clinical medical staff on board cruise ships are to have the following credentials:

- Hold current full registration. Physician (medical diploma), Nurse (Registered Nurse)
- Three years of post-graduate /post-registration experience or training in emergency care or critical care
- All clinical staff certified in advanced life support such as ACLS, ALS or an equivalent certification or physician specialist training (e.g. emergency medicine, anesthesiology or critical care)
- Advanced airway courses are advantageous
- Ships carrying children  $\leq 12$  years old should have at least one physician certified in PALS, APLS or an equivalent certification or specialist training (e.g. emergency medicine or pediatric medicine)

- Physicians to have a competent skill level in emergency cardiovascular care, minor surgical, orthopedic and procedural skills including suturing, procedural sedation and fracture/dislocation management
- 10 CME’s to be completed by all staff in a calendar year.

### Anticipated start up stages

| STAGE 1                                                                                                                                                                                                                     | STAGE 2                                                                                                                                                                                                                                                                                                                                              | STAGE 3                                                                                                                                                                                                                                                                                                                                  | STAGE 4                                                                                                                                    | STAGE 5                                                                                                          |
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| <b>Essential Layup crew</b>                                                                                                                                                                                                 | <b>Preparation Team for crew arrival</b>                                                                                                                                                                                                                                                                                                             | <b>Full Crew manning</b>                                                                                                                                                                                                                                                                                                                 | <b>Arrival of guests</b>                                                                                                                   | <b>Outbreak</b>                                                                                                  |
| Medical problems can develop among few as well as many; injuries; ongoing preventive practices and readiness to address impact of small outbreak in small essential crew team – <b>Only one medical member at this time</b> | Crew changes and inherent introduction of infectious disease risks; increased processing of crew members health certificates and other standard admin; new admin functions linked to verification of immunity status, health assessments prior to joining and then reassessments upon joining. – <b>Half medical team to assist with adjustments</b> | Full crew arrival; additional training of joining team; Quarantine/ Temperature observations? Monitoring of public health and additional input needed from sanitation and medical combined with assistance from crew admins – <b>Full Medical Team, with additional Medical Management staff on board to help should it be necessary</b> | Role of onboard teams (if any) in guest health screening or health problem declaration procedure after boarding – <b>Full Medical Team</b> | Triggers for early readiness of “surge team”; triggers for mobilization – <b>See response team consideration</b> |

### Medical team peripheral considerations

- New updated medical induction training
- Public health training (including but not limited to contact tracing)
- Immunizations (MMR, FLU Vaccine, Varicella, Tetanus, Covid 19 –when available)
- OPRP updates (including updated acute respiratory disease management protocol)
- Quarantine protocols (Temp, Oxygen saturation checks, Quarantine)

## Standard Operations Consideration

Staffing can depend on itinerary, guest demographic, equipment and medical center capabilities. Only one medical staff onboard a vessel carrying guests is no longer considered a safe practice and should not be permitted.

Clients with majority of guests over the age of 65 years old should have an additional nurse or Doctor in addition to the recommendations in the table below.

| <b>TOTAL: Guest and Crew count</b> | <b>Doctor</b> | <b>Nurse</b> | <b>Admin/Dual position</b> |
|------------------------------------|---------------|--------------|----------------------------|
| Less than 800                      | 1             | 1            | 0                          |
| More than 800                      | 1             | 2            | 0                          |
| More than 1200                     | 1             | 2            | 1                          |
| More than 2000                     | 2             | 2            | 1                          |
| More than 3000                     | 2             | 3            | 1                          |
| <b>Team Pool/Mobilizing Team</b>   |               |              |                            |
| Team 1 (Level 1)                   | 1             | 2            | 0                          |
| Team 2 (Level 2)                   | 1             | 2            | 0                          |

## Response Team consideration

Team pool/mobilizing teams: 1 Doctor / 2 Nurses per team, ideally to have two teams on outbreak standby, ideally to replace the full medical team on board should this be necessary. Development of a threshold to mobilize the team. The response Team can be initiated at any stage of re-entry or layup process.

Response team would be paid a “on standby” fee that would need to be covered by the client.

## Dual Position

The dual position will be indicated to assist between sanitation/Public health and Medical Center admin duties

This position would be a great addition to the outbreak management process, a detailed job description would need to be evolved, however the advantages of this position are as follows:

- Dual Position (workload and cost shared between departments)
- Main admin personnel for an outbreak (logs, paperwork, close contact tracing, follow ups)
- Management of admin for both departments when not in an outbreak
- Public health experience and training

## Embarkation Port Consideration

Additional local staffing arrangement would be strongly recommended with cruise lines of over 200 guests embarking on one day, this additional staffing arrangement can be made through the port agents to assist in prescreening protocols to assist with the large numbers to be screened at the same time, given the port can accommodate this

PCR testing procedure set up with local agencies and or laboratories where vessel requires testing prior to boarding of crew and contractors.

## Special Considerations

Based on best practices and patient's ultimate safety any ventilators/ ICU set up require specialized staffing e.g.: 1 x ventilated patient will require 1x Doctor and 2x Nurses

Any additions to the equipment status of cruise ships would need to consider additional staffing to accommodate the needs of a ventilated patient.

## Salaries

As our new world with COVID today requires an increased level of medical expertise both from a clinical management as well as administrative management perspective, quality doctors and registered nurses with high-level qualifications are not only necessary but critical for managing the health and wellbeing of the ship. There will be an industry increase in demand for these high-quality health care professionals. Therefore, attracting them in a competitive market, salary and benefits will need to be competitive and may need to increase.

## Reference

L.N. 145 of 2013 MERCHANT SHIPPING ACT (CAP. 234) Merchant Shipping (Maritime Labour Convention) Rules, 2013

“(6) Every permanent hospital shall be provided with at least one berth for every fifty, or fraction of fifty, members of the crew”

AMERICAN COLLEGE OF EMERGENCY PHYSICIANS CRUISE SHIP MEDICINE SECTION  
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