

Section
2

Enhancement of Medical Functions

For the SDF to perform its mission, SDF personnel must remain in good health through appropriate health management. Also, it is important for the SDF to make continued efforts to enhance and strengthen its capabilities in military medicine for protecting the lives of the personnel engaging in a variety of services as much as possible.

Under the circumstances where the SDF's missions are becoming more diverse and internationalized, it is important

to appropriately and accurately carry out various medical activities, such as medical support in disaster relief and international peace keeping activities, and capacity building in the medical field.

The MOD/SDF, therefore, is enhancing and strengthening its medical capabilities so that they can appropriately respond to various emergency events and carry out its various missions in Japan and abroad.

1 Enhancing Seamless Medical Care and Evacuation Posture

1 Enhancement of Medical Functions in Various Emergency Situations

In order to respond to various emergency situations, the MOD/SDF will enhance a seamless medical care and evacuation posture from the frontline to the final transport destination, while considering joint operation, in accordance with the MTDP.

Specifically, for the purpose of providing maximum protection for the lives of personnel injured on the frontline, the MOD/SDF will enhance medical functions for seamless implementation of a series of medical care and transportation starting from emergency life support by Frontline Medics¹ and damage control surgery (DCS)² at a medical base equipped with a field operation system³ to safe and speedy transportation to a SDF hospital that is the final destination for complete cure. Other measures necessary for the implementation of the above will be taken, including preparation of materials and equipment necessary for DCS,

patient management after surgery, the whole body control of patients during transportation, and equipment for blood preservation.

On this occasion, MOD/JSDF decides to strengthen the organization of the Joint Staff for control and coordination concerning SDF medical operation on a daily basis.

2 Enhancement of Medical Functions in the Southwestern Region

In the enhancement of seamless medical care and evacuation posture, in light of the geographical characteristics of Japan, with its vast sea area and large number of remote islands, the MTDP places a special focus on the enhancement of medical functions in the southwestern region. Specifically, the MOD/SDF will develop maintenance and evacuation guidelines for medical bases in the region and improve the medical equipment reserve system in main island of Okinawa and smaller islands.

2 SDF Hospitals Serving as Hub Hospitals with Enhanced Functions

The role of SDF hospitals is to admit and treat injured SDF personnel and other persons transported from their area of activity in various emergency situations, while in normal circumstances these hospitals provide medical care to SDF personnel and their families, etc. These hospitals also play the role of educational institutions that train medical personnel

to maintain and enhance their skills.

In accordance with the NDPG and the MTDP, the MOD will continue to concentrate human and medical resources on the consolidation of SDF hospitals with increased performance levels to establish an efficient and high-quality medical care regime by improving their capacity as transfer

- 1 "Frontline Medics" are, from among those who are certified as Licensed Practical Nurses (Refer to the Assistant Nurse stipulated in Article 6 of the Act on Public Health Nurses, Midwives, and Nurses [Act No. 203 of 1948]) and Emergency Life-Saving Technicians (refer to the Emergency Life-Saving Technician stipulated in Section 2, Article 2 of the Emergency Life-saving Technicians Act [Act No. 36 of 1991]), those who have completed the training curriculum approved by the council stipulated in Article 4 of the Directives Relating to Emergency Life-Saving Actions (MOD Directive No. 60 of 2016).
- 2 Hemostasis by pressing/placing gauze on damaged internal organs, suture, etc. and emergency operations to prevent contamination with intestinal tract contents. The purpose is to stabilize the patient's condition to the level where transfer is possible.
- 3 Mobile operating room sheltered in a large truck with one of the four functions necessary for operation (operation, operation preparation, sterilization and medical supply vehicles). Thoracotomy, laparotomy, craniotomy, and other operations to save life can be conducted.

hospitals with a certain level of medical care in response to infections, gunshot wounds, and other trauma and injury caused by NBC weapons in addition to general practice. SDF hospitals have been also advancing regional medical care. Some SDF hospitals are designated as secondary emergency medical institutions by local municipalities to accept emergency patients. SDF Central Hospital, in particular, responded to about 6,600 ambulances in 2019.

In response to the spread of the novel coronavirus disease (COVID-19) infection, the MOD/SDF has been accepting COVID-19 patients at SDF hospitals and the National Defense Medical College Hospital (NDMC Hospital) since February 1, 2020. 430 COVID-19 patients in total (as of May 31) have been accepted by the SDF Central Hospital, SDF district hospitals in Sapporo, Yokosuka, Hanshin, Fukuoka and Kumamoto and the NDMC Hospital.

Q See Part III Chapter 1 Section 4-3 (Activities at the SDF Hospital, etc.)

The SDF Central Hospital and the NDMC Hospital are designated as medical institution for Category 1 Infectious Diseases⁴ and have been implementing training for response to infectious diseases. For example, the SDF Central Hospital implements training to accept infectious disease patients on a regular basis in preparation for the occurrence of Category 1 Infectious Diseases⁵ to establish cooperation with relevant institutions, which is necessary when such patients are identified. The training was useful in the activities to respond to the spread of the COVID-19 infection.

Using the lessons learned through the activities in response to the spread of the COVID-19 infection, the MOD/SDF will further strengthen its hygiene functions by implementing measures as follows in the first and second 2020 supplementary budgets: preparation of medical equipment including respirators and negative pressure equipment to accept infected patients, ambulances necessary for transportation of infected people, protective clothing



Cutting-edge defense medical research project(the field of war-related illness and injury study)

necessary for handling COVID-19 and CT diagnosis vehicles and medical equipment that can be deployed to the field for pneumonia diagnosis.

Q See Part II Chapter 4 Section 2-1 (Overview of Defense-Related Expenditures)

In May 2019, SDF Central Hospital, with the participation of GSDF Eastern Army, GSDF Medical School, Japanese Red Cross Society, Japanese DMAT, Setagaya Medical Association and others, implemented a drill to accept a large number of injured people based on a scenario of a Tokyo Inland Earthquake. Through such drills, SDF Central Hospital strengthens collaboration with related organizations and improves its ability as a medical institution equivalent to a disaster base hospital. When CT scanners and other equipment of private hospitals in Koriyama City were covered with water due to the 2019 East Japan Typhoon (Typhoon Hagibis), SDF Fuji Hospital dispatched a vehicle with CT scanner for disaster relief at the request of Fukushima Governor for the period from October 18 to November 5, 2019, and supported treatment of 230 patients.

As disaster relief concerning community acquired infection of COVID-19, from May 2 to 14 the SDF Fuji Hospital sent a CT diagnosis vehicle to the cruise ship Costa Atlantica (with approximately 620 crews) where a mass infection occurred while the ship was moored to a pier in Nagasaki Prefecture. CT scan was conducted for 6 people.

3 Strengthening the Function of the NDMC

As the only educational institution of the MOD/SDF for the training of SDF personnel who are physicians (medical officers), SDF personnel who are public health and registered nurses (nursing officers) and technical officers, the NDMC plays the role to train and produce the primary medical staff for medical activities of the SDF as well as to maintain and improve their skills.

In this context, the NDPG and the MTDP state that the MOD/SDF will improve operations of the NDMC and enhance its research functions, and endeavor to secure high-quality talents.

Specifically, the MOD/SDF will strengthen the system for training of excellent medical and nursing officers, and improve the conditions for providing high-quality medical

⁴ Designated medical institutions for Category 1 Infectious Diseases are designated by the governor as medical institutions to hospitalize patients of Category 1 and Category 2 Infectious disease and the COVID-19 infection (Article 6, Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases [Act No. 114 of 1998]).

⁵ Ebola hemorrhagic fever, Crimean-Congo hemorrhagic fever, smallpox, South American hemorrhagic fevers, plague, Marburg disease, and Lassa disease (Article 6, Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases [Act No.114 of 1998])

care either equaling or surpassing other university hospitals. The MOD/SDF will also enhance research functions of the NDMC Research Institute and collaboration with medical care departments of the GSDF, MSDF, and Air Self-Defense Force (ASDF). Through these initiatives, the MOD/SDF will further enhance the education/ research conditions at the

college.

The NDMC Research Institute started advanced research of defense medicine in FY2015 and has been conducting research contributing to SDF troop operation, which includes research on explosion trauma and damage caused by shock waves.

4 Enhancement of Education of Medical and Nursing Officers

While greater abilities are required of personnel engaged in medical care, such as medical officers, due to the diversification of missions, less than 90% of medical officer positions have been filled, although the rate has been improving year by year. Such low sufficiency is caused by medical officers leaving the SDF, one of the major reasons of which is the lack of opportunity to engage in medical training and practice. The MOD/SDF continues to implement various measures with various career options to prevent medical officers from leaving the SDF by enhancing clinical education after graduation from the NDMC and other institutions, promoting various initiatives for ensuring more opportunities for medical officers to engage in medical practice, helping them acquire and improve specialized knowledge and skills in areas such as infectious diseases and emergency medicine, as well as increasing their motivation for work. Through these measures, the MOD/SDF is working to improve

the sufficiency of medical officers and maintain and improve their medical skills. In the MTDP, the MOD/SDF will continue efforts to improve the sufficiency of medical officers and further promote the appointment of SDF Reserve Personnel who are physicians to handle missions that are expected to increase.

Similar measures are taken for nursing officers to maintain and improve their knowledge/skills through practice at external hospitals, etc.

Moreover, medical personnel and medical staff, such as radiological technologists, clinical technologists, and emergency life-saving technicians, are educated and trained at SDF hospitals, schools and other relevant institutions so that the SDF can perform diverse missions and missions under special circumstances, including international peace cooperation activities and large-scale disasters.

5 Enhancement of Capabilities to Treat War Injury

In order to improve first aid capabilities on the frontline, and damage control surgeries and treatment while transferring the injured, the MOD/SDF has conducted research on relevant initiatives taken by the U.S. Forces and others, carried out reviews for appropriate and accurate life-saving activities, and enhancing education, training and research, including improvement of capabilities to treat combat injuries.

For the improvement of first aid capabilities on the frontline, since FY2017 the MOD has been providing specific education and training for SDF personnel who are certified as both Licensed Practical Nurses and Emergency Life-Saving Technicians to acquire necessary knowledge and skills, so that the SDF personnel with these qualifications will be able to provide specialized relief treatments⁶ on the spot to SDF personnel who are injured on the frontline, prior to their transfer to SDF hospitals and other medical facilities. SDF

personnel who have completed this education and training curriculum have been designated as “Frontline Medics” and allocated to units. In FY2019 the SDF started education and training for Frontline Medics to maintain their knowledge and skills necessary for relief treatment.

In addition to medical care on the frontline, based on the MTDP, the SDF will enhance education and training tailored to the characteristics of the units and equipment of the GSDF, MSDF, and ASDF, which include medical care on board ships or aircraft, while promoting development of a training system for medical care on aircraft and teaching materials for improvement of first aid capability. The SDF will also promote development of medical training infrastructure necessary for combat injury education and common to all SDFs.



Video : Life of NDMC Students
URL : https://youtu.be/dgZ8FQo_jq0

⁶ First aid treatment for those with symptoms such as airway obstruction and tension pneumothorax caused by injuries, and other treatments such as administration of analgesic for pain relief.

6 Developing Conditions Necessary for International Cooperation.....

In light of the response to the Ebola virus disease outbreak in West Africa in 2014, the MOD/SDF is accelerating training of human resources with expertise to contribute to overseas activities against infectious diseases that could be a global threat and to the development of a framework including the NDMC, while at the same time making various efforts to improve the capabilities to respond to infectious diseases. Specifically, the MOD/SDF is currently improving the necessary facility equipment at units, the NDMC Hospital and the SDF Central Hospital. The aims of this improvement are to provide personnel training for the enhancement of capabilities to deal with infectious diseases, improve equipment to transport infectious disease patients and develop readiness for offering medical treatment to patients affected by Category I infectious diseases which are classified as the most dangerous category among known infectious diseases. The SDF Central Hospital and the NDMC Hospital were designated as a medical institution for Category I infectious

diseases in April 2017 and March 2019 respectively and have been working to improve capabilities to deal with infectious diseases.

SDF medical units engage in international cooperation including international disaster relief operations and capacity building assistance for foreign military forces. They have provided medical care in overseas disaster-struck areas and are actively assisting mostly the Asia-Pacific region with capacity building in such medical fields as underwater medicine, aeromedicine and disaster medicine, and conducting joint training.

For the future, the MOD/SDF will develop systems necessary for various international cooperation initiatives, which include the updating of mobile medical systems that are effective for overseas medical activities and dispatch of SDF personnel to the medical departments of international organizations, the U.S. Forces and others.