



HEALTH SECTOR

Coronavirus disease 2019 (COVID-19) preparedness and response plan for Libya

(WHO, IOM, UNHCR, UNICEF, UNFPA, UN Habitat, IMC, HI, TDH, MSF-Holland, MSF-France, Emergenza Sorrisi-Naduk, IRC, PUI, UN Women)

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Libya - current situation and risk of COVID-19

As of 25 March 2020, 1 confirmed case of COVID-19 is reported in Libya. A total of 86 cases suspected, 61 cases have been tested for COVID-19 and 99 people have been placed into quarantine.

WHO has defined four transmission scenarios for COVID-19:

1. Countries with no cases (No cases);
2. Countries with 1 or more cases, imported or locally detected (Sporadic cases);
3. Countries experiencing cases clusters in time, geographic location and/or common exposure (Clusters of cases);
4. Countries experiencing larger outbreaks of local transmission (Community transmission).

Currently, Libya falls under the second scenario. This is a call for Libya to stop transmission and:

- Enhance emergency response mechanisms
- Educate and actively communicate with the public through risk communication and community engagement
- Enhance active case finding, contact tracing and monitoring; quarantine of contacts and isolation of cases
- Implement COVID-19 surveillance using existing respiratory disease surveillance systems and hospital-based surveillance
- Train staff in IPC and clinical management specifically for COVID-19
- Prepare for surge in health care facility needs, including respiratory support and PPE
- Test all individuals meeting the suspect case definition
- Considerations in the investigation of cases and clusters of COVID-19
- Clinical management of severe acute respiratory infections when novel coronavirus is suspected
- SARI/ILI surveillance for COVID-19 and reporting
- Screen and triage patients at all points of access to the health system
- Care for all suspected and confirmed patients according to disease severity and acute care needs
- Ready hospitals for surge
- Ready communities for surge, including by setting up community facilities for isolation of mild/moderate cases
- Test suspect COVID-19 cases according to diagnostic strategy
- Isolation/cohorting in: health facilities, if resources allow; community facilities (i.e. stadiums, gymnasiums, hotels) with access to rapid health advice (i.e. adjacent COVID-19 designated health post, telemedicine); self-isolation at home according to WHO guidance. For moderate cases with risk factors, and all severe/critical cases: Hospitalization (in-patient treatment), with appropriate isolation and cohorting.

Libya is at high risk of having imported cases from neighboring countries with ongoing transmission and the spread of Corona Virus Disease (COVID-19) due to low capacity given its growing levels of insecurity, political fragmentation, weak health system and high numbers of migrants, refugees and internal displacement of people (IDPs). The two Libyan governments are not well prepared to implement effective preparedness and response measure to mitigate the risk of the COVID-19, and support of WHO and other health partners is needed to fill the gaps in capacity both at a national and subnational level to support the national health authorities.

The risk of imported cases in Libya and further local transmission in the community has become very high for the following reasons:

- Libya is at high risk for COVID-19 given its political instability (fragmented state: two Ministries of Health), insecurity, weak health system. The preparedness and response capacity of the interim MoH in east Libya is reportedly very limited. Preparedness and response activities in south Libya are basically non-existent.
- The absence of governance (and resulting absence of law and order) will hamper efforts to contain and isolate geographic areas where there may be clusters of the disease. There has been a surge of cases in neighbouring countries, including those that share borders with Libya.
- The cross-border control points are not effective in the east of the country and absolutely absent in the south. The imposed shutdown of border crossing points is not being respected with thousands of people (6,000) sneaking into the country from all directions by road with no capabilities to test them all at PoEs, quarantine procedures, etc.
- There is large and frequent population movement between Libya and other affected countries.
- Early detection of the disease in Libya will be difficult. Fewer than half the country's functioning hospitals report regularly to EWARN.
- There is limited national capacity of contact tracing and case management due to the fragile health system with limited availability of medical equipment and health facilities, especially in rural and hard-to-reach areas.
- The needs of vulnerable groups – including the elderly, immuno-compromised, pregnant women (especially with respiratory illnesses) is at further increased risk of adverse outcomes.
- Vulnerable populations reside across the country, such as IDPs, migrants and refugees who may be more susceptible to disease due to limited access to health care and deteriorated living conditions. A need to find solutions to cover “formal” and “informal” detention centres and prisons. Also, armed conflicts across the country increase the vulnerability among the population to any infectious disease.
- Rumours and misperceptions about the disease are widespread. Both communities and health care workers have vociferously opposed proposals to use isolation units for COVID-19 patients, going as far as threatening to burn down hospitals if these are patients admitted. In the face of this hostility, private facilities with isolation units have refused to admit COVID-19 patients. Similarly various armed groups in control of different geographical locations have refused to allow hospitals in those areas to be assigned for COVID-19 preparedness and response.
- Delays in recognizing an imminent threat and its pandemic nature to mobilize required resources and attention among the high level authorities both in the east and west of the country (LNA and GNA accordingly).
- There are very limited funds for preparedness and response activities despite the announcements for support of earlier developed national preparedness and response plan for 10.5 million LYD and statement by the PM office to allocate 500 million LYD for COVID-19 response. In addition, it was estimated that 8 million USD would be required to establish and equip hospitals with isolation wards and ICU.
- Preparedness and response activities are left within the domain of municipality authorities (100) with little knowledge, expertise, competence, skills and funding to manage these actions.
- Until now, no clarity of assignment of hospitals with isolation wards and ICU capabilities in the west; two or three hospitals identified in the east (Quiafia hospital (8 ICU beds), Al Hawari (not ready) and Sirt (4 ICU beds available out of 12 announced) and none in the south. On 21 March it was informed that Tripoli University Hospital was assigned with this function (additional information is being collected). Of note, 2017 information indicated that 75 hospitals had ICU capacity with 482 ICU bed capacity.

Table 1 2017 data on availability of ICU departments and ICU beds in hospitals (see Annex 6)

- Number of rapid response teams managed by NCDC is very low (6) for 3 regions to the country.
- Overall lack of personal protective equipment across the country.

- Limited number of PCR test kits required for COVID-19 testing. An estimated minimum of 200 for the next 2 months.
- Refusals of health workers to engage in treatment and follow up of COVID-19 patients.
- Continuous delays in salary payments for health workers minimizing any motivation.
- Absence of fast track procedures to clear and release imported humanitarian assistance related health supplies.
- There are indications of negative impact of COVID-19 on other services such as immunization, suspension of prenatal check-ups, NCD treatment services (e.g. dialysis, physical therapy) and emergency care.

PREPAREDNESS ACTIVITIES

National

- High level inter-ministerial task force was formed after the declaration of the state of emergency on 14 March in Tripoli. High Level Task Force is led by the Prime Minister: six meetings were conducted since the declaration of the state of emergency on 14 March. The emphasis is to review, provide the required support with health supplies and equipment to hospitals to treat COVID-19 patients, including the needs of Emergency Department, address the difficulties of Libyans crossing the border with Algeria, opening up isolation room and surge increase, importation related procedures for health supplies for COVID-19 response. Three times a week there are video statements issued following High Level Task Force meeting in Tripoli.
- In the east of the country interim MoH assigned (end of January) 2 focal points for COVID-19. A scientific committee was established (end of February 2020). On 16 March it was announced that a Supreme Committee was established comprised of representatives of line ministries and Medical Advisory Committee.
- In the south WHO took the lead to coordinate the preparedness and response levels in close coordination with NCDC branch Sabha with engaged stakeholders including DG of NCDC Sabha, DG of NCDC Murzuk, Head of MSO Fezzan, DG of general and rural hospitals, head of health services, heads of municipalities. The response plan is being developed at present.
- Earlier the NCDC Tripoli has established an emergency response committee. Emergency Technical Group meetings led by the Minister of Health are held daily discussing all pending issues, including identification and preparation of isolation sites, compliance with curfew, support to health facilities with required supplies, monitor and follow on health conditions on Libyans outside the country, develop concrete plans to allocate and channel funds to municipalities.
- Rehabilitation activities continue to prepare isolation sites in Zwara, Ghadames, Zliten, and Tripoli. Further clarity is required on the nature (military related) of the areas of location of these isolation sites.
- The NCDC organized a one hour live radio program on COVID-19 in Tripoli.
- The NCDC continues to publish daily updates on testing results of all suspected cases.
- The DG NCDC issues daily media updates to the general public.
- Following the registration of the first confirmed case, the MoH sends out a circular to emphasize the safety and protection, prevention related actions to be followed up.
- Points of entry (PoEs) to screen travelers arriving from affected areas have been established at three airports (Mitiga, Misrata and Benina), four sea ports and border entry points at Ras Jdder, Wazen and Msaed. Each PoE is coordinating with the NCDC's International Health Control Office on the measures to be taken to detect suspected cases. Supervisory field visits take place on a regular basis.
- Libya's national focal point for the International Health Regulations (IHR) is following and remains in close contact with WHO's regional office for the Eastern Mediterranean (EMRO).
- The NCDC and MoH have begun training staff on a number of COVID-19 subjects.
- The national laboratory in Tripoli has been made ready to receive and test coronavirus samples. Similar arrangements were made for Benghazi. Plans to expand to 2 other cities (Zwara and Misrata).
- On 14 March Mr Sarraj, the Chairman of the Presidential Council of Libya and prime minister of the Government of National Accord (GNA) announced a state of emergency in Libya, including closure of all borders, public events, educational and other facilities, allocation of 500 million LYD.
- Country preparedness and response plan for COVID-19 was developed by the NCDC at estimated 10 million LYD but requiring a technical revision, further enhancement and additional financial support.

- 6 RRTs assigned for investigation, sample collection and response in 3 regions of the country (5 members per 1 RRT).
- The NCDC carries out sensitization workshops for other line ministries.
- The NCDC produces various types of national guidelines.
- Earlier made announcement to assign 5 hospitals for COVID-19 response (2 in Tripoli, 1 in Misrata, 1 in Nalut and 1 in Benghazi) was not operationalized.
- Received 1 PCR kit (100 tests) and procured 3 more PCR kits for testing.
- The NCDC communicate, regularly and transparently with the population regarding the 2019-nCoV. Timely disseminate information and messages targeting different audiences, using different communication channels (social media, TV channels, NCDC health media, and phone calls).
- The NCDC works to detect and rapidly address misinformation, misunderstandings, rumors, and frequently asked questions detected through the monitoring of media coverage, social media and community network.
- The NCDC designed and printed posters and leaflets to increase public awareness about the principles of infection prevention and control methods. The NCDC is also utilizing the Common Feedback Mechanism as a COVID-19 helpline
- Facebook pages (MoH and NCDC) are active and regularly updated:
 - <https://www.facebook.com/NCDC.LY/>;
 - <https://www.facebook.com/Ministry.of.Health.Ly/>;
 - <https://covid19.ly/>

International

- Regular briefings on COVID-19 to health sector partners and donors (a list of 260 recipients, including key donors: EU, ECHO, Italy, OFDA/USAID, DFID), outlining levels of national response, gaps, challenges and priorities for external assistance are prepared.
- Health sector UN agencies (WHO, UNICEF, UNFPA, IOM and UNHCR) and selected international NGOs and ICRC work jointly on potential areas of support to the national authorities (MoH/NCDC).
- Ad hoc health sector meetings are being conducted on a regular basis.
- Details of international support and available resources to assist with COVID-19 response in Libya (as of 25 March March) by IMC, MSF-Holland, MSF-France, IRC, CEFA, WFP, Emergency Telecom Sector, UNICEF, IOM, UNFPA, UNHCR, UN Women, PUI, UNODC, WHO were collected.
- Together with the NCDC/MoH the health sector coordinates the plans of international organizations with interests to support national efforts. Health partners have prioritized six technical areas for urgent support to enable the country to better detect and responds to the COVID-19 pandemic:
 - Enhance national surveillance and EWARN.
 - Strengthen rapid response teams across the country.
 - Support international health control offices at points of entry (PoEs).
 - Improve laboratory capacity.
 - Increase health information and communication.
 - Support the establishment of isolation wards/departments in selected hospitals and quarantine areas at PoEs.
- Developed key points for consideration for health sector:
 - To keep discussions within own organizations on the specific package of concrete assistance/support which can be proposed to the national authorities.
 - Possible response and assistance to the authorities should be considered based on the technical competency, mandated action, availability of funds, operational presence in certain geographical areas of Libya.
 - Any organization having capacity or interest to support is to inform first health sector accordingly to ensure that all plans are being cross-checked timely with other stakeholders in the health sector.
 - Any capacity building support should be based on approved training package endorsed by the MoH, NCDC and WHO experts.
 - Once details of possible available support from the health sector organizations are available, it will be further coordinated to request for bilateral or joint coordination meetings with NCDC and MoH.
 - Any interests to support, progress achieved, etc. should be communicated to the health sector to include into the disseminated regular updates.

Impact of humanitarian truce:

GNA and LNA authorities are expecting enhanced coordination on the international humanitarian/health support in line with the agreed truce. Agreements on the truce were reached in order to allow the international health support to reach all areas including the ones under LNA.

Advocacy:

Enabling provision of actual funding by the Libyan authorities to the developed national preparedness and response plan is essential.

- Through the support of both DSRSG Political and Humanitarian WHO brought the attention of all engaged high level national stakeholders to the requirement to advocate for the entire National Centre for Disease Control (NCDC) preparedness and response plan (costed at LYD 10.5) million to be funded, including the Central Bank taking immediate actions to pay Libyan health staff, who have not received their salaries since the beginning of the year. Promised financial incentives (USD 2000 per month) to take care of COVID-19 patients must also be made available. It is important that the payment of health workers be resolved immediately to avoid a potential catastrophe in the event that demoralized, overworked, unpaid and unprotected health workers decide they are not willing, on top of everything else, to take care of COVID-19 patients.

Health sector is ready and proposes its readiness to further support the national authorities to implement effectively and efficiently the operationalization of stated allocation of 500 million LYD by Libyan authorities. Best global and regional procurement and supply chain practices will be put in procure: hospital equipment (including ICU); laboratory equipment and consumables; supplies for health offices at PoEs; equipped pre-fab containers; equipped mobile medical clinics; equipped ambulances; PPE (personal protective equipment); deployable field hospitals (for isolation and treatment purposes).

Considering the pandemic nature of the situation, **donors are urged to support health sector interventions** which can be summarized as following: 1) to assess; 2) to procure; 3) to equip; 4) to train.

INGOs' common principles on humanitarian operations in the context of COVID-19 pandemic in Libya: A statement was issued on 15 March by INGOs members and observers of the Libya INGO Forum (LIF) agreeing on a set of principles to operate and communicate on the challenges and response to the Coronavirus pandemic. The principles explicate the INGOs' view with respect of the situation and the continuation of humanitarian operations, as well as extra support the INGOs can bring to the preparedness and response plan in Libya.

UNSMIL appeals for ceasefire to strengthen COVID-19 response – Health sector strongly endorsed UNSMIL's appeal for a ceasefire in Libya to allow national health authorities and health partners to respond to the potential spread of COVID-19 in the country. Health sector joined UNSMIL in calling on the warring factions to lay down their arms and allow health sector partners to work unimpeded, in all parts of the country, to halt the spread of COVID-19.

Continued advocacy for **ensuring access to diagnostic, treatment and follow for migrants, refugees, people detained in “formal” and “informal” detention centers and prisons:**

- **Access and Inclusion:** All populations must be included in surveillance, preparedness, response plans and activities. Emergency measures including restrictions on travel and movements should be equally applied, and not targeted at migrants, refugees or other vulnerable groups.
- **Release from Detention:** The current crisis requires reduction of crowding and decongestion everywhere in the country, including in detention centers. Detention centers and prisons pose particular risks when it comes to infectious diseases, particularly with the dire conditions prevalent in migrant and refugee detention centers in Libya. To reduce risks of transmission, and in line with human rights standards and opposition to arbitrary detention, arbitrarily detained migrants and refugees should be released in conditions that will allow them to undertake appropriate

preparedness and prevention steps. Where viable, assistance included in the interagency Response Plan for releases of migrants and refugees can assist in successful transition to urban life.

- **Release of Disembarked Migrants and Refugees:** Evidence shows that despite the current crisis, boats have continued to depart Libyan shores with migrants and refugees aboard. In order to reduce crowding and risks of COVID-19, disembarked individuals should not be confined in detention centers or investigation units but should be released in conditions that will allow them to undertake appropriate preparedness and prevention steps. Where viable, assistance included in the intersectoral Response Plan for releases of migrants and refugees can assist in a successful transition to urban life.

Health sector emphasizes on *the protection, dignity and promotion of the rights of Women and Girls*. The existing protection and gender inequalities could be further compounded and the risk of Gender based violence, sexual exploitation and domestic violence will increase due to house confinements. **Provision of sexual, reproductive health (SRH) care, family planning and other SRH commodities, including menstrual health items, are central to women's health, empowerment, and development** and is already impacted supply chain due to ongoing conflict could further undergo strains from COVID 19 pandemic response. Women represent the largest segment of beneficiaries and workforces of healthcare system in Libya and thus need special attention with regard to gendered work environment and their sexual and reproductive health and psychosocial needs must be treated at utmost priority during COVID19 pandemic.

Different response scenarios:

In its preparations and response plans health sector will address all key activities as aligned with 4 different scenarios (skipping first scenario of no cases):

2 scenario: Suspected case identified

- Immediate deployment of rapid response team to the area where a suspected case is discovered. Investigation, collection of samples, taking the necessary containment measures.
- A suspected case is to be transferred to the equipped isolation rooms in the hospital till the results of the laboratory analysis are available.
- Tracing of people in contact, related investigation and referral for 14 days quarantine.
- The level of preparedness is raised to a higher level for the RRT in the area where a suspected case is detected, including all neighboring areas.
- Working closely with media, production of daily bulletin, raising public awareness.

3 scenario: Confirmation of cases in a specific geographical area

- WHO is officially informed.
- The level of preparedness is raised to a higher level for the surveillance teams and rapid response teams in the affected area, not only including all neighboring areas but the rest of the country.
- Coordination with the relevant authorities, including the Ministries of Interior, Defense, Health and others, mobilization of ambulance and emergency departments to announce and ensure area containment for a quarantine.
- Declaration of a state of health emergency at a municipality level.
- Production of daily bulletin, raising public awareness, and refute all possible rumors.
- Isolation of infected cases in hospital isolation rooms.
- Imposing quarantine for people in contact with affected patients.
- Imposing curfews and messaging general population to follow personal hygiene and prevention measures and adhere to the SOPs on disease prevention.
- Full activation of the PHEOC (Public Health Emergency Operations Center) of the NCDC to serve as one channel of communication and response for all activities and operations.

4 scenario: Confirmation of cases in multiple geographical areas (more than one city or municipality)

- The state of public health emergency is declared for the country.
- Steps of the previous phase are applied completely to include all affected and neighboring areas.
- Coordination with all relevant stakeholders at the highest levels through PHEOC.
- Continuous engagement with media through transparent updates of epidemiological situation and response.

- All procedures are in place till end of the outbreak and formal announcements are made by the responsible official channels.

Health Sector Goals and Objectives

The overall goal is to prevent spread of COVID-19 and to reduce morbidity and mortality (interrupt human to human transmission including reducing secondary infection among close contact and health care workers) resulting from COVID-19 among the populations of Libya by scaling up country preparedness and response operations, including the following: strengthening readiness to rapidly identify, isolate, diagnose and treat cases early and optimize care for infected patients; identification and follow-up of contacts; infection prevention and control in healthcare settings; implementation of health measures for travelers; and awareness raising in the population through risk communication and community engagement (communicate critical risk and event information to all communities and counter misinformation).

1. Specific objectives

The proposed plan aims to achieve four interlinked objectives:

- Identify, isolate and care for patients early, including providing optimized care for infected patients;
- Limit human-to-human transmission, including reducing secondary infections among close contacts and health care workers, preventing transmission amplification events and preventing further spread in the country;
- Extensive awareness creation to prevent spread of COVID-19 including dispelling any misinformation/rumours

2. Expected outcomes

Expected outcomes of the plan include:

- 1) Establishment of intercountry coordination to deliver strategic, technical, and operational support through existing mechanisms and partnerships;
- 2) Awareness raised to prevent spread of COVID-19 in the population through risk communication and community engagement strategy;
- 3) Implementation of health measures for travellers to detect imported cases;
- 4) Enhanced epidemic intelligence through real-time surveillance systems for rapid detection of suspected cases and verification of COVID-19 and comprehensive and rapid contact tracing;
- 5) Strengthened national capacity of laboratory diagnosis of COVID-19 for timely confirmation and management of large-scale testing in the country;
- 6) Ensured infection prevention and control in healthcare facilities to protect health care workers from infection by COVID-19 and amplification of events in the healthcare facilities; (including improved WASH facilities, fumigation in health facilities)
- 7) Improved national capacity of case management for COVID-19 to mitigate the impact and prevent the spread of any outbreak across the country.

Response priorities

Despite all ongoing efforts, the national health authorities (both, NCDC and MoH) clearly express a need for more multi-dimensional support to better prepare Libya to respond.

The health sector aims to ensure packaged support and assistance to district and municipality levels targeting key hospitals and locations in all 22 districts and 100 municipalities.

Health partners have prioritized six technical areas for urgent support to enable the country to better detect and respond to the COVID-19 pandemic:

- Enhance national surveillance and EWARN

- Strengthen rapid response teams across the country
- Support international health control offices at points of entry (PoEs)
- Improve laboratory capacity
- Risk communication community engagement
- Support the establishment of isolation wards/departments in selected hospitals

Priority activities will include:

- Enforcement of RRTs and surveillance network
- Provision of lab supplies
- Supply and equipment for isolation units and ICU
- Infection control at isolation sites and hospitals
- Supply and equipment at PoEs
- Pharmaceuticals and medical devices supply and personal protective equipment
- Waste management and disposal
- Extensive awareness raising through Risk Communication and Community engagement
- Capacity building
- Incentives to field workers
- Operational costs support

Pillar 1: Country-level coordination

Step 1

- Activate national emergency response committee chaired by the Minister of Health
- Activate the multi-sectoral and multi-partner coordination mechanism to support preparedness and response
- Allocation and disbursement of internally and externally allocated funds for COVID-19
- Conduct initial capacity assessment and risk analysis including mapping of vulnerable populations as for preparedness-this is high for imported cases and capacity is level 2
- Establishing monitoring evaluation systems to assess the effectiveness and impact of planned interventions

Step 2

- Activate public health emergency operation centre (PHEOC), including rapid deployment of designated staff from national and partner organizations
- Update partners and UN agencies on the situation and operational update regularly through the PHEOC. Selected INGOs can be part of technical committee (TC) and head/chair of TC will attend the PHEOC coordination meeting
- Organize coordination meetings (MOH, government officials)
- Engage with local donors and existing programmes to mobilize/allocate resources and capacities to implement operational plan
- Review regulatory requirements and legal basis of all potential public health measures in the declared state of emergency
- Monitor implementation of the plan based on key performance indicators and produce regular situation report (tests conducted and results, how many quarantined, regulations, implemented, etc.)
- Consider needs for possible civil-military cooperation (with their engagement and being part of PHEOC)
- Conduct training workshops on IHR (all stakeholders meetings).

Step 3

- Conduct regular operational reviews to assess implementation success and epidemiological situation, and adjust operational plans as necessary
- Conduct after action reviews in accordance with IHR (2005) as required

- Use COVID 19 outbreak to test/learn from existing plans, systems and lesson-learning exercises to inform future preparedness and response activities

Pillar 2: Risk communication and community engagement

Step 1

- Develop and implement national risk-communication and community engagement (RCCE) plan for COVID-19, including details of anticipated public health measures based on national and local context
- Conduct rapid behaviour assessment to understand key target audience, perceptions, concerns, influencers and preferred communication channels
- Conduct coordination meetings with the authorities on risk communication strategy and activities including non-health partners as non-health actors are likely to engage in community engagement on COVID-19 and should be using the appropriate messaging coming from health.
- Prepare local messages and pre-test through a participatory process, specifically targeting key stakeholders and at-risk groups
- Conduct media briefing meeting with MOH. Communication must be a committee and be part of PHEOC-if MoH is part of PHEOC all the communication is centralized including TV and telephone network
- Identify trusted community groups (local influencers such as community leaders, religious leaders, health workers, community volunteers, migrants and refugees) and local networks (women's groups, youth groups, business groups, etc.)

Step 2

- Establish processes for timely dissemination of messages and materials in local language (including for migrant and refugee population) and adopt relevant communication channels
- Develop and disseminate IEC materials (development/printing) and produce of Audio Visual materials (radio spot/TV spot)
- Conduct training workshops on risk communication and community engagement
- Engage with existing public health and community-based networks, media, local NGOs, schools, local governments and other sectors such as healthcare service providers, education sector, business, travel and food/agriculture sectors using a consistent mechanism of communication
- Utilize two-way 'channels' for community and public information sharing such as hotlines (text and talk), responsive social media such as U-Report where available, and radio shows, with systems to detect and rapidly respond to and counter misinformation
- Establish large scale community engagement for social and behaviour change approaches to ensure prevent

Step 3

- Timely disseminate credible information and messages targeting different audiences in appropriate formats and languages using different communication channels (mass media, mobile applications and SMS, hotlines and so on) and ensure highest levels of government agreement with the strategy
- Systematically establish community information and feedback mechanisms including through: the Common Feedback Mechanism; social media monitoring; community perceptions, knowledge, attitude and practice surveys; and direct dialogues and consultations
- Ensure changes to community engagement approaches are based on evidence and needs, and ensure all engagement is culturally appropriate and empathetic.
- Document lessons learned to inform future preparedness and response activities
- Revise RCCE action plan according to the situation evolution

Pillar 3: Surveillance, rapid response teams and case investigation

Step 1

- Increase the current number of rapid response teams through mobilization and capacitating health workers at a district and municipality level with the overall objective to have dedicated rapid response covering each municipality (22 at a district level, 100 at a municipality level)
- Increase the current number of disease surveillance sites to cover all Libya from 125 to 250
- Procure and distribute PPE for RRT and surveillance officers
- Activate active case finding and event-based surveillance for influenza-like illness (ILI), and severe acute respiratory infection (SARI)
- Assess gaps in active case finding and event-based surveillance system and integrate it with DHIS-2
- Disseminate case definition in line with WHO guidance and investigation protocols to healthcare workers (public and private sectors)
- Systematically establish community information and feedback mechanisms including through: social media monitoring; community perceptions, knowledge, attitude and practice surveys; and direct dialogues and consultations
- Ensure a reporting mechanism (SMS, calls, emails, fax) is in place for the timely sharing of information across the different administrative levels
- Procure electronic tablets to support the event-based surveillance on timely collection and submission of health data, including the use of already disseminated tablets by different agencies
- Procure mobile medical clinics for RRTs or provide transportation to RRT member in conducting investigation
- Establish access for RRT and surveillance to informal and formal detention centers
- Identify modalities to cover the needs for testing, referral, hospitalization and follow up for prisoners and detainees

Step 2

- Enhance existing surveillance systems to enable monitoring of COVID-19 transmission and adapt tools and protocols for contact tracing and monitoring to COVID-19
- Collect daily information relevant to COVID-19 through social media, local newspapers, community (event-based surveillance)
- Ensure timely notification using the WHO Interim case reporting form for 2019 Novel Coronavirus (2019-nCoV) of confirmed and probable cases, and sharing of information with WHO, within 24 hours of identification
- Undertake case-based reporting to WHO within 24 hours under IHR (2005). National authorities need to report probable and confirmed cases of COVID-19 to WHO within 48 hours of identification by providing the minimum data set outlined in the “Revised case reporting form for 2019 Novel Coronavirus of confirmed and probable cases” through the National Focal Point and the Regional Contact Point for International Health Regulations at the appropriate WHO regional office
- Aggregate reporting providing the following minimum set of aggregate counts (9), once weekly. Note at this stage weekly number of persons tested for COVID-19 should be reported.
- Conduct meetings for surveillance officers in all the districts on surveillance and laboratory support using the DHIS-2
- Conduct training workshops on case detection/investigation (reporting form)/contact tracing (3 days) the module is short it can be done in one day
- Conduct training workshops on early detection for RRT (new staff members) on case investigation and sample collection- the module is short it can be done in one day
- Actively monitor and report disease trends, impacts, population perspective to global laboratory/epidemiology systems including anonymized clinical data, case fatality ratio, high-risk groups (pregnant women, immunocompromised), older persons and children
- Train and equip rapid-response teams to investigate cases and clusters early in the outbreak, and conduct contact tracing within 24 hours

Step 3

- Provide robust and timely epidemiological and social science data analysis to continuously inform risk assessment and support operational decision making for the response
- Test the existing system and plan through actual experience and/or table-top or simulation exercises, and document findings to inform future preparedness and response activities
- Produce weekly epidemiological and social science reports and disseminate to all levels and international partners

- Document lessons learned to inform future preparedness and response activities

Pillar 4: Point of entry

Step 1

- Develop the public health emergency contingency plan at points of entry and update and disseminate SOPs for the detection, investigation and management of passengers
- Disseminate latest disease information, standard operating procedures, equip and train staff in appropriate actions to manage ill passenger(s)
- Support health authorities to establish and implement entry measurement of travelers by temperature screening including quarantine and follow up of travelers entered the country from affected countries
- Conduct training workshops for officers at POE on entry measures
- Provide travellers from/to affected countries with IEC materials at POE
- Ensure coordination with airline and sea companies to raise awareness of crews and facilitate on the implementation of the procedures
- Stockpile PPEs at PoE for health workers, personnel of PoE.
- Equip health control offices (seaports, airports, road check points) with basic consumables, equipment and supplies, if and when necessary with prefab structures
- Mobilize and make available the required health personnel (if and when necessary, surge response)
- Identify and establish quarantine sites at PoE with equipping
- Identify referral health facilities for isolation of suspected cases at the PoE and ensure a mechanism for safe transportation of suspected cases to designated hospitals, including the availability of adequate ambulance services
- Procure ambulances for transport suspected cases to referral hospitals

Step 2

- Prepare rapid health assessment/isolation facilities to manage ill passenger(s) and to safely transport them to designated health facilities
- Disseminate IEC materials to travellers at POE
- Regularly collect information of travellers from the affected countries and monitor the health status

Step 3

- Regularly monitor and evaluate the effectiveness of readiness and response measures at points of entry, and adjust readiness and response plans as appropriate

Pillar 5: National laboratory

Step 1

- Identify the designated laboratories and corresponding needs assessment for COVID-19 testing
- Support MoH to develop standard operating procedure (SoP) of specimen collection, management, and transportation and biosafety
- Disseminate standard operating procedures for COVID-19 to all the districts
- Support operational cost of sample collection and shipping
- Support CPHL on surge staff (Incentives for laboratory technicians)
- Procure PCR machines (depends on assessment above)
- Procure PPE for laboratory personnel
- Conduct training workshops on sample collection referral
- Conduct training workshops for laboratory on laboratory diagnosis and IPC (3 days).
- Provide testing kits and laboratory equipment, including waste management

- Identify hazards and perform a biosafety risk assessment at participating laboratory ; use appropriate biosafety measures to mitigate risks (part of bullet 1)

Step 2

- Ensure specimen collection, management, and referral network and procedures are functional
- Develop and implement plans to link laboratory data with key epidemiological data for timely data analysis
- Develop and implement surge plans to manage increased demand for testing; consider conservation of lab resources in anticipation of potential widespread COVID-19 transmission

Step 3

- Monitor and evaluate diagnostics, data quality and staff performance, and incorporate findings into strategic review of national laboratory plan and share lessons learned
- Develop a quality assurance mechanism for point-of-care testing, including quality indicators

Pillar 6: Infection prevention and control

Step 1

- Undertake assessment of IPC capacity at all the levels of healthcare system (includes availability of triage and appropriately ventilated isolation rooms)
- Ensure compliance of IPC measurement at first point of care of patients: triage, early recognition, standard precautions, isolation capacity and referral procedures
- Assess IPC capacity in public places and community spaces where risk of community transmission is considered high
- Review and update existing national IPC guidance: health guidance should include defined patient-referral pathway including an IPC focal point, in collaboration with case management. Community guidance should include specific recommendations on IPC measures and referral systems for public places such as schools, markets and public transport as well as community, household, and family practices
- Develop and implement a plan for monitoring of healthcare personnel exposed to confirmed cases of COVID-19 for respiratory illness
- Supply with PPE (stockpile, distribution) and to identify IPC surge capacity (numbers and competence)
- Procure medical supplies (hygiene products, disinfection) and PPE, and provide MOH (and other engaged ministries), health partners
- Provide PPEs to health workers and laboratory technicians
- Assess availability of IPC materials locally and if resources are inadequate develop tailored production of IPC materials based on local materials using international WHO requirements
- Mapping and geo-localization of affected areas in conjunction with existing health facilities across Libya.

Step 2

- Conduct trainings on IPC and engage trained staff to implement IPC activities
- Record, report, and investigate all cases of healthcare-associated infections
- Disseminate IPC guidance for home and community care providers
- Implement triage, early detection, and infectious-source controls, administrative controls and engineering controls; implement visual alerts (educational material in appropriate language) for family members and patients to inform triage personnel of respiratory symptoms and to practice respiratory etiquette
- Support access to water and sanitation for health (WASH) services in public places and community spaces most at risk

Step 3

- Monitor IPC and WASH implementation in selected healthcare facilities and public spaces using the Infection Prevention and Control Assessment Framework, the Hand Hygiene Self-Assessment Framework, hand hygiene compliance observation tools, and the WASH Facilities Improvement Tool
- Provide prioritized tailored support to health facilities based on IPC risk assessment and local care-seeking patterns, including for supplies, human resources, training
- Carry out trainings to address any skills and performance deficits

Pillar 7: Case management

Step 1

- Map the availability of health care facilities with ICU and isolation rooms to be designated hospital for COVID 19 and conduct assessment of the required equipment, supplies, laboratories, medicines and staff
- Identify intensive care unit capacities across the country
- Provide and equip hospital isolation rooms with necessary supportive equipment and consumables (as per standard list)
- Provide and equip hospitals with selected ICU (intensive care unit) equipment and consumables (as per standard list).
- If and where necessary, procure and establish pre-fab containers and modules at a hospital site for triage purpose.
- Procure PPE for health staff of hospitals
- Coordinate with relevant stakeholders to provide safety and security to health personnel and health facilities
- Procure and provide support to hospital' laboratory capacity
- Ensure that guidance is made available for the self-care of patients with mild COVID-19 symptoms, including guidance on when referral to healthcare facilities is recommended
- Ensure that case management services are available to migrants and refugees

Step 2

- Disseminate regularly updated information, train, and refresh medical/ambulatory teams in the management of severe acute respiratory infections and COVID-1-19-specific protocols based on international standards and WHO clinical guidance; set up triage and screening areas at all healthcare facilities
- Establish dedicated and equipped teams and ambulances to transport suspected and confirmed cases, and referral mechanisms for severe cases with co morbidity
- Ensure comprehensive medical, nutritional, mental and psycho-social care for those with COVID-19

Step 3

- Carry out trainings to address any skills and performance deficits
- Evaluate implementation and effectiveness of case management procedures and protocols (including for pregnant women, children, immunocompromised), older persons, and adjust guidance and/or address implementation gaps as necessary

Pillar 8: Operational support and logistics

Step 1

- Map available resources and supply systems in health and other sectors; conduct in-country inventory review of supplies based on WHO's a) Disease Commodity Package (DCP) and develop a central stock reserve for COVID-19 case management
- Review procurement processes (including importation and customs) for medical and other essential supplies, and encourage local sourcing to ensure sustainability
- Enable fast track procedures for clearance and approvals of all imported supplies for COVID-19 response and other life-saving items.

Step 2

- Review supply chain control and management system (stockpiling, storage, security, transportation and distribution arrangements) for medical and other essential supplies, including COVID-19 DCP and patient kit reserve in-country
- Assess the capacity of local market to meet increased demand for medical and other essential supplies, and coordinate international request of supplies through regional and global procurement mechanisms

Step 3

- Identify and support critical functions that must continue during a widespread outbreak of COVID-19 (e.g. water and sanitation; fuel and energy; food; telecommunications/internet; finance; law and order; education; and transportation), necessary resources, and essential workforce

Annex 1. Estimated budget requirements, 1 year

| Pillar | Funding requirement (USD) | Organizations |
|--|---------------------------|---------------|
| <i>Country-level coordination</i> | 155,000 | WHO |
| | 70,000 | UNFPA |
| | 50,000 | UNICEF |
| | 180,000 | IOM |
| | 30,000 | TdH Italy |
| | 25,000 | IRC |
| | | UNHCR |
| <i>Sub-total:</i> | <i>510,000</i> | |
| <i>Risk communication and community engagement</i> | 111,250 | WHO |
| | 35,800 | UNFPA |
| | 540,000 | UNICEF |
| | 80,000 | IOM |
| | 60,000 | UN-HABITAT |
| | 25,000 | TdH Italy |
| | 20,000 | IMC |
| | 10,000 | IRC |
| | 10,000 | PUI |
| | N/A | Cesvi |
| | | UNHCR |
| | 60,000 | UN Women |
| <i>Sub-total:</i> | <i>952,050</i> | |
| <i>Surveillance, rapid response teams and case investigation</i> | 330,000 | WHO |
| | 210,000 | UNFPA |
| | 250,000 | IOM |
| | 50,000 | TdH Italy |
| | 159,700 | IMC |
| | 75,000 | IRC |
| | 10,000 | PUI |
| <i>Sub-total:</i> | <i>1,084,700</i> | |
| <i>Point of entry</i> | 611,850 | WHO |
| | 300,000 | UNFPA |

| | | |
|--|-------------------|-------------------------|
| | 50,000 | UNICEF |
| | 300,000 | UNHCR |
| | 1,300,000 | IOM |
| | 40,000 | Emergenza Sorrisi/Naduk |
| | 125,000 | TdH Italy |
| Sub-total: | 2,726,850 | |
| <i>National laboratory</i> | 398,900 | WHO |
| | 150,000 | UNICEF |
| | 100,000 | IOM |
| | 430,000 | Emergenza Sorrisi/Naduk |
| | 10,000 | PUI |
| Sub-total: | 1,088,900 | |
| <i>Infection prevention and control</i> | 220,000 | WHO |
| | 45,000 | UNFPA |
| | 837,000 | UNICEF |
| | 95,000 | Emergenza Sorrisi/Naduk |
| | 200,000 | UN-Habitat |
| | 50,000 | TdH Italy |
| | 100,000 | IRC |
| | 300,000 | PUI |
| | | UNHCR |
| | 122,300 | IMC |
| Sub-total: | 1,969,300 | |
| <i>Case management</i> | 1,238,000 | WHO |
| | 320,000 | UNFPA |
| | 200,000 | UNICEF |
| | 150,000 | UNHCR |
| | 250,000 | IOM |
| | 132,000 | Emergenza Sorrisi/Naduk |
| | 150,000 | TdH Italy |
| | 112,000 | IMC |
| | 350,000 | HI |
| | 240,000 | IRC |
| | 100,000 | PUI |
| Sub-total: | 3,242,000 | |
| <i>Operational support and logistics</i> | 200,000 | WHO |
| | 235,000 | UNFPA |
| | 150,000 | UNHCR |
| | 280,000 | IOM |
| | 125,000 | TdH Italy |
| Sub-total: | 990,000 | |
| TOTAL | 12,563,800 | |

Note: MSF-H and MSF-F rely on internal funds and resource mobilization mechanisms as per common practice. IFRC/LRC has developed a separate COVID-19 contingency and response plan.

| Estimated funding requirements (by organizations) | TOTAL (USD) | Funding Available (USD) | Funding Gap (USD) |
|---|-------------------|-------------------------|-------------------|
| WHO | 4,265,000 | 565,000 | 3,700,000 |
| UNFPA | 1,215,800 | 0 | 1,215,800 |
| UNICEF | 1,827,000 | 0 | 1,827,000 |
| UNHCR | 600,000 | 600,000 | 0 |
| IOM | 2,440,000 | 376,300 | 2,063,700 |
| UN Habitat | 260,000 | 0 | 260,000 |
| TDH | 555,000 | 0 | 555,000 |
| IMC | 414,000 | 279,000 | 135,000 |
| Emergenza Sorrisi/Naduk | 697,000 | 45,000 | 652,000 |
| HI | 350,000 | 350,000 | 0 |
| IRC | 450,000 | 450,000 | 0 |
| PUI | 430,000 | 430,000 | 0 |
| UN Women | 60,000 | 60,000 | 0 |
| TOTAL: | 13,563,800 | 3,155,300 | 10,408,500 |

Annex 2: Key Performance indicators

| | Indicator | Baseline | Target |
|---|---|----------|--------------|
| 1. Country-level coordination | | | |
| Develop a public health preparedness and response plan for COVID-19 | # of preparedness and response plan for COVID-19 | 0 | 1 |
| Activate national emergency response committee | # of national emergency response committee | 0 | 1 |
| Activate high level inter-ministerial task force | # of high level task force | 0 | 1 |
| Fund developed national preparedness plan (NCDC) | % of funding allocated for the implementation of the plan | 0 | 100% |
| Fund developed health sector preparedness plan | % of funding allocated for the implementation of the plan | 0 | 100% |
| Activate PHEOC and conduct meetings on a daily base | # of activate PHEOC system | 0 | 1 |
| Conduct ad-hoc HCC meeting on COVID-19 preparedness and response | # of ad-hoc HCC meeting for COVID-19 | 0 | 12 |
| Conduct national risk assessment and update | # of rapid risk assessment conducted | 0 | 3 |
| Update partners and UN agencies on the situation and operational update on daily bases | # of daily (weekly) update disseminated | 0 | Daily/weekly |
| Organize coordination meeting (MOH, government officials) | # of coordination meeting with MOH | 0 | 12 |
| Organize coordination meeting (UN agencies, partners) | # of coordination meeting with partners | 0 | 12 |
| Conduct training workshops on IHR (all stakeholders meeting) | # of trained MoH staff on IHR | 0 | 220 |
| Strengthen multisector coordination (health, WASH, Education and protection) for effective response | # of multisector coordination meetings | 0 | 12 |
| 2. Risk communication | | | |
| Develop national risk communication and community engagement plan for COVID-19 | # of national risk communication and community engagement plan for COVID-19 | 0 | 1 |
| Conduct KAP study | # of KAP study | 0 | 1 |
| Conduct coordination meetings with the authorities on risk communication strategy and activities | # of coordination meetings with the authorities on risk communication strategy and activities | 0 | 24 |
| Conduct training workshop on risk communication | # of training workshops for MoH and other staff on risk communication | 0 | 22 |
| Conduct awareness campaigns on COVID-19 | # of awareness campaigns conducted for targeted groups on COVID-19 | 0 | 100 |
| Develop and disseminate Risk Communication and Community Engagement materials (development/printing) and produce of Audio-Visual materials (radio spot/TV spot) | # of IEC materials disseminated through MoH and partners | 0 | 5,000,000 |
| 3. Surveillance | | | |
| Establish RRTs in each district and municipality | # of established RRT | 6 | 100 |
| Increase number of surveillance sentinel sites | # of EWARN sentinel sites | 125 | 250 |
| Procure PPE for RRT and surveillance officers | # of PPE distributed to RRT and surveillance officers | 0 | 1000 |
| Disseminate standard case definitions, case investigation and follow up for active surveillance with sub-offices | # of districts received guidance documents on case definition and case investigation | 0 | 22 |

| | | | |
|---|---|---|--------|
| Ensure a reporting mechanism (SMS, calls, emails, fax) is in place for the timely sharing of information across the different administrative levels | % of alerts verified within 24 hours | 0 | 90 |
| Collect daily information relevant to COVID-19 through social media, local newspapers, community (event-based surveillance) | # of media summary shared | 0 | Weekly |
| Ensure timely notification using the WHO Interim case reporting form for COVID-19 of confirmed and probable cases, and sharing of information with WHO, within 24 hours of identification | % of confirmed case reported to WHO system within 24 hours | 0 | 100 |
| Conduct meetings for surveillance officers of MOH and partners on case detection, investigation, and reporting | # of meetings for surveillance officers of MoH and partners | 0 | 24 |
| Training on case detection/investigation (reporting form)/contact tracing in MOH | # of surveillance officers trained from MOH and partners | 0 | 1200 |
| Training on early detection for RRT (new staff members) | # of new staff members for active surveillance | 0 | 125 |
| Procure mobile medical clinics for RRTs | # of procured mobile clinics | 0 | 22 |
| Cover detention centers by RRTs | % of covered detention centers | 0 | 100 |
| ICT/communication cost (tablets, SIM card, increase the thresholds of call) for MoH | % of alerts verified within 24 hours | 0 | 90 |
| 4. Point of Entry | | | |
| Review the public health emergency contingency plan at points of entry and update and disseminate SOPs for the detection, investigation and management of passengers | # of emergency contingency plan reviewed and updated | 0 | 1 |
| Support MoH to establish and implement entry measurement of travelers by temperature screening including quarantine and follow up of travelers entered the country from affected countries | # of PoE implement entry measurement | 0 | 10 |
| Conduct training workshops for officers at POE on entry measures | # of officers at PoE training on entry measurement and IHR | 0 | 500 |
| Provide travelers from/to affected countries with IEC materials at POE | # of PoE received IEC materials | 0 | 10 |
| Identify referral health facilities for isolation of suspected cases at the PoE and ensure a mechanism for safe transportation of suspected cases to designated hospitals, including the availability of adequate ambulance services | # of PoE identified referral hospitals | 0 | 22 |
| Procure PPE for personnel of PoE | # of PPE procured for PoE personnel | 0 | 20 |
| Equip health control offices at PoE | # of established and equipped health control offices at PoE | 0 | 10 |
| Establish quarantine sites at PoE | # of established quarantine sites at PoE | 0 | 10 |
| Procure ambulances for transport suspected cases to referral hospitals | # of POE with ambulance | 0 | 10 |
| 5. National laboratory | | | |
| Support MoH to standard operating procedure (SoP) of specimen collection, management, transportation and biosafety | # of SoP of specimen for COVID-19 developed and finalized | 0 | 1 |
| Support sample collection and shipping | # of districts shipping samples of suspected cases of COVID-19 | 1 | 22 |
| Support CPHL on surge staff (Incentives for laboratory technicians) | # of staff deployed to CPHL for surge capacity | 0 | 30 |
| Procure PPU for laboratory personnel | # of PPE procured | 0 | 15 |
| Procure PCR machines (depending on the assessment above) | # of PRC machines procured | 0 | TBC |
| Conduct training workshops on sample collection referral | # of MoH experts and partners trained on sample collection and referral of COVID-19 | 0 | 200 |
| Conduct training workshops for laboratory on laboratory diagnosis and IPC | # of trained laboratory technicians on laboratory detection of COVID-19 | 0 | 40 |
| Provide testing kits (depending on the situation) | # of provided test kits | 1 | 15-50 |
| Procure laboratory sample collection swabs and medium | # of swabs and medium provided to MOH | 0 | 50000 |
| Establish the laboratory for coronavirus (rehabilitation, fixing laboratory devices and equipment, procurement) | # of laboratory established to test COVID-19 | 1 | 5 |
| Ensure proper waste management system | # of installed waste management units | 0 | 2 |
| 6. Infection control and prevention | | | |
| Undertake assessment of IPC capacity at all the levels of healthcare system (includes availability of triage and appropriately ventilated isolation rooms); based on this, define referral pathway in collaboration with case management capacity | # of assessment conducted for IPC measurement at health facility | 0 | 1 |
| Ensure compliance of IPC measurement at first point of care of patients (usually primary care or outpatient clinics in hospitals): | # of districts received IPC protocol and triage | 0 | 22 |

| | | | |
|--|--|---|-----|
| triage, early recognition, standard precautions, isolation capacity and referral procedures | | | |
| Review and disseminate IPC protocols, including for triage and early detection of suspected cases of COVID-19. | # of districts received IPC protocol and triage | 0 | 22 |
| Ensure protocol in place for assessing and managing HCWs with risk of exposure to COVID-19 | # of districts received IPC protocol and triage | 0 | 22 |
| Procure medical supplies (hygiene products, disinfection) and PPE | # of districts received PPE | 0 | 22 |
| Conduct training workshops on IPC | # of trained health care worker | 0 | 500 |
| WASH in health facilities (coordination Health and WASH sector) | # of health facilities supported | 0 | 24 |
| Fumigation in Health facilities and communities | # of health facilities & communities reached | 0 | 24 |
| Mapping and geo-localization of affected areas in conjunction with existing health facilities across Libya | # of city GIS maps with COVID-related data | 0 | 30 |
| 7. Case management | | | |
| Map the availability of health care facilities with ICU and isolation | # of mapping exercise conducted on availability of ICU and isolation rooms | 0 | 1 |
| Equip isolation wards of selected hospitals | # of hospitals with isolation wards equipped with necessary supplies and equipment | 0 | 25 |
| Procure medical equipment and consumables for ICU of selected hospitals | # of hospitals with ICU equipped with necessary supplies and equipment | 0 | 25 |
| Procure and establish pre-fab modules/containers for triage purposes | # of hospitals with established additional bed and testing capacity | 0 | 12 |
| Procure medical equipment /supplies for hospital laboratories | # of hospital labs with readiness of COVID-19 cases | 0 | 25 |
| Procure PPE for hospital staff | # of hospitals supported with PPE | 0 | 25 |

Annex 3. Contact information of health sector partners on COVID-19

| | |
|---|---|
| IMC Claudio Colantoni ccolantoni@internationalmedicalcorps.org Mohamed Eltom Hamid mehamid@internationalmedicalcorps.org | CEFA Silvia Cappelli CEFA s.cappelli@cefaonlus.it joanne.alhimyary@cefaonlus.it |
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| | |
|--|--|
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| PUI Matthieu Le Grand : lby.hom@premiere-urgence.org Emilie Rivier : lby.dhom.prog@premiere-urgence.org | UN Women Saskia Binet Programme Analyst – Libya, saskia.binet@unwomen.org |

Annex 4. List of essential supplies for prevention and control and case management (as per WHO guidance)

Please refer to the attached document.

Annex 5. Mapping of proposed response coverage by international organizations

| District/Mantika | Present health sector organizations |
|--------------------|---|
| Al Jabal Al Akhdar | WHO, UNICEF |
| Al Jabal Al Gharbi | WHO, UNICEF, TDH |
| Aljfara | WHO, UNICEF, IMC |
| Aljufra | WHO, |
| Alkufra | WHO, UNICEF, IOM, PUI |
| Almargeb | WHO, UNICEF |
| Almarj | WHO, |
| Azzawya | WHO, UNICEF, IOM, Emergenza Sorrisi/Naduk, TDH, IMC |
| Benghazi | WHO, UNFPA, UNICEF, IOM, IMC, HI, PUI, UNHCR |
| Derna | WHO, |
| Ejdabia | WHO, UNICEF |
| Ghat | WHO, UNFPA, UNICEF, IRC |
| Misrata | WHO, UNFPA, UNICEF, IOM, Emergenza Sorrisi/Naduk, TDH, IMC, MSF-France, HI, IRC, Cesvi, UNHCR |
| Murzuq | WHO, UNICEF, |
| Nalut | WHO, TDH, IMC |
| Sebha | WHO, UNFPA, UNICEF, IOM, TDH, IMC |
| Sirt | WHO, TDH |
| Tobruk | WHO, UNICEF |
| Tripoli | WHO, MSF-Holland, UNFPA, IOM, Emergenza Sorrisi/Naduk, TDH, IMC, HI, IRC, UNHCR, UN Women |
| Ubari | WHO, UNICEF, TDH, IRC |
| Wadi Ashshati | WHO, UNICEF |
| Zwara | WHO, UNICEF, IOM, TDH, MSF-France |

Annex 6. Availability of ICU departments and ICU beds in hospitals (2017)

| District | Municipality | Region | Hospital name | Hospital name | Functionality | Facility type | Total number of established inpatient beds | Number Intensive care unit (other than neonatal ICU) | Number beds in Intensive care unit (other than neonatal ICU) |
|--------------------|--------------------|----------|---------------------------------------|---------------------------------|---------------|--------------------------------------|--|--|--|
| Benghazi | Benghazi | Benghazi | ENT and Urology Hospital Al Hawari | مستشفى الهواري لجراحة المسالك | Closed | Specialized Hospital | 160 | | |
| Zwara | An Niquat Al Khums | West | Zwara Albahree Hospital | مستشفى زوارة البحري | Functioning | General Hospital or Medical Hospital | 60 | 1 | 7 |
| Benghazi | Benghazi | Benghazi | 7th October hospital, Benghazi | مستشفى 7 أكتوبر - بنغازي | Closed | General Hospital or Medical Hospital | 200 | | |
| AL Shate Al sharge | Ash Shati | South | Adri hospital | مستشفى أدري | Functioning | Rural Hospital | 60 | 0 | 0 |
| Azzahra | Al Jifarah | Tripoli | Al -Zaharra hospital | مستشفى الزهراء | Closed | General Hospital or Medical Hospital | 201 | | |
| Alabyar | Al Marj | East | Al Abyar Hospital | مستشفى الأبيار | Functioning | Rural Hospital | 60 | 0 | 0 |
| Alasabaa | Al Jabal Al Gharbi | West | Al Asaabaa hospital | مستشفى الاصابعه | Functioning | General Hospital or Medical Hospital | 120 | 0 | 0 |
| Yefren | Al Jabal Al Gharbi | West | Al Awinia hospital | مستشفى العوينية | Closed | Rural Hospital | 60 | | |
| Tobruk | Tubrag | East | Al Bardi Hospital | مستشفى البردي | Functioning | Rural Hospital | 60 | 0 | 0 |
| Albrayga | Al wahat/Ajdabia | Benghazi | Al Brega Hospital | مستشفى البريقة | Closed | General Hospital or Medical Hospital | 60 | | |
| Benghazi | Benghazi | Benghazi | Al Hawari General hospital , Benghazi | مستشفى الهواري العام / بنغازي | Closed | General Hospital or Medical Hospital | 500 | | |
| Benghazi | Benghazi | Benghazi | Al Jumhuria hospital | مستشفى الجمهورية | Closed | General Hospital or Medical Hospital | 515 | | |
| Garabolli | Al Margab | Tripoli | Al Qarabouli hospital | مستشفى القره بولي | Functioning | Rural Hospital | 60 | 0 | 0 |
| Alqubba | Darnah | East | Al Quba Hospital | مستشفى القبة | Functioning | General Hospital or Medical Hospital | 60 | 1 | 5 |
| Assahel | Darnah | East | Al Temimi Hospital | مستشفى التميمي | Functioning | Rural Hospital | 60 | 1 | 4 |
| Benghazi | Benghazi | Benghazi | Benghazi Ophthalmology hospital | مستشفى العيون / بنغازي | Closed | Specialized Hospital | 120 | | |
| Benghazi | Benghazi | Benghazi | Benghazi Psychiatric hospital | مستشفى الأمراض النفسية - بنغازي | Closed | Specialized Hospital | 450 | | |
| AL Shate Al sharge | Ash Shati | South | Bergan hospital | مستشفى برغن | Functioning | Rural Hospital | 60 | 0 | 0 |
| Sirte | Surt | Central | Bin Sinaa hospital | مستشفى بن سينا - سرت | Closed | General Hospital or Medical Hospital | 223 | | |
| AL Shate Al sharge | Ash Shati | South | Brak hospital | مستشفى براك | Functioning | General Hospital or Medical Hospital | 120 | 0 | 0 |
| Benghazi | Benghazi | Benghazi | Cardiology center- Benghazi | مركز القلب - بنغازي | Closed | Specialized Hospital | 60 | | |
| Ghat | Ghat | South | Ghatt hospital | مستشفى غات | Closed | General Hospital or Medical Hospital | 120 | | |
| Gemienis | Benghazi | Benghazi | Gmenis hospital | مستشفى قمينس | Functioning | Rural Hospital | 60 | 0 | 0 |
| Jalu | Al wahat/Ajdabia | Benghazi | Jalou hospital | مستشفى جالو | Functioning | General Hospital or Medical Hospital | 60 | 1 | 3 |
| Benghazi | Benghazi | Benghazi | Kidney center Benghazi. | مركز خدمات الكلي - بنغازي | Closed | Specialized Hospital | 100 | | |

| | | | | | | | | | |
|---------------|--------------------|----------|--|--|-------------|--------------------------------------|------|---|----|
| Ain Zara | Tripoli | Tripoli | Salah uddin hospital (closed) | مستشفى صلاح الدين | Closed | General Hospital or Medical Hospital | 500 | | |
| Sebha | Sabha | South | Semno Hospital | مستشفى سمنو | Functioning | Rural Hospital. | 20 | 0 | 0 |
| Suloug | Benghazi | Benghazi | Slouq hospital | مستشفى سلوق | Functioning | Rural Hospital | 60 | 0 | 0 |
| Misrata | Misratah | Central | Tawergha hospital | مستشفى تاورغاء | Closed | Rural Hospital | 60 | | |
| Ubari | Wadi Al Haya | South | Ubari hospital | مستشفى اوباري | Closed | General Hospital or Medical Hospital | 120 | | |
| Zwara | An Niquat Al Khums | West | Zwara Hospital (closed for maintenance) | مستشفى زوارة | Closed | General Hospital or Medical Hospital | 282 | | |
| Aljufra | Al Jufrah | Central | Al Afia hospital - Houn | مستشفى العافية - هون | Functioning | General Hospital or Medical Hospital | 136 | 1 | 6 |
| Al Jaghboub | Tubrag | East | Al Jaghbub hospital | مستشفى الجغبوب | Functioning | Rural Hospital. | 60 | 1 | 4 |
| Abusliem | Tripoli | Tripoli | Al Khadra hospital | مستشفى الهضبة الخضراء | Functioning | General Hospital or Medical Hospital | 600 | 2 | 19 |
| Alkhums | Al Margab | Tripoli | Al khums hospital | مستشفى الخمس | Functioning | General Hospital or Medical Hospital | 282 | 2 | 12 |
| Nesma | Al Jabal Al Gharbi | West | Al Kuriaat hospital | مستشفى القريات | Functioning | Rural Hospital | 60 | 0 | 0 |
| Derna | Darnah | East | Al Wehda Hospital | مستشفى الوحدة - درنه | Functioning | General Hospital or Medical Hospital | 512 | 3 | 10 |
| Espeaa | Al Jifarah | Tripoli | Ali Omar Askar hospital-Sbeia | مستشفى علي عمر عسكر - اسبيعه | Functioning | General Hospital or Medical Hospital | 201 | 3 | 25 |
| Tripoli | Tripoli | Tripoli | Burns & plastic surgery hospital - Tripoli | مستشفى الحروق والتجميل | Functioning | Specialized Hospital | 236 | 2 | 16 |
| Misrata | Misratah | Central | Chest diseases hospital, Misuratha | مستشفى الأمراض الصدرية- مصراته | Functioning | Specialized Hospital | 120 | 0 | 0 |
| Ghadamis | Nalut | West | Ghadames hospital | مستشفى غدامس | Functioning | General Hospital or Medical Hospital | 136 | 1 | 5 |
| Assahel | Al Marj | East | Jardas Al Abeed Hospital | مستشفى جردس العبيد | Functioning | Rural Hospital. | 60 | 0 | 0 |
| Kabaw | Nalut | West | Kabaw hospital | مستشفى كاباو | Functioning | Rural Hospital. | 60 | 0 | 0 |
| Sug Aljumaa | Tripoli | Tripoli | Mitiga hospital | مستشفى امعيتقة | Functioning | General Hospital or Medical Hospital | 200 | 1 | 5 |
| Mizda | Al Jabal Al Gharbi | West | Mizda hospital | مستشفى مزدة | Functioning | General Hospital or Medical Hospital | 120 | 1 | 5 |
| Sabratha | An Niquat Al Khums | West | National Institute for Oncology - Subrata | المعهد القومي للأورام - صبراتة | Functioning | Specialized Hospital | 120 | 2 | 10 |
| Albayda | Al Jabal Al Akhdar | East | Omar Al Mokhtar Hospital | مستشفى عمر المختار | Functioning | General Hospital or Medical Hospital | 60 | 0 | 0 |
| Misrata | Misratah | Central | Oncology Center Misuratha | مركز علاج الأورام مصراتة | Functioning | Specialized Hospital | 100 | 2 | 10 |
| Hai Alandalus | Tripoli | Tripoli | Psychiatric Diseases Hospital -Tripoli | مستشفى الرازي للأمراض النفسية - طرابلس | Functioning | Specialized Hospital | 400 | 0 | 0 |
| Sabratha | An Niquat Al Khums | West | Subrata Hospital | مستشفى صبراتة | Functioning | General Hospital or Medical Hospital | 201 | 1 | 11 |
| Derna | Al Jabal Al Akhdar | East | Sussa Hospital | مستشفى سوسة | Functioning | Rural Hospital | 60 | 1 | 4 |
| Tajoura | Tripoli | Tripoli | Tajurra hospital | مستشفى تاجوراء | Functioning | General Hospital or Medical Hospital | 282 | 3 | 6 |
| Baten Aljabal | Nalut | West | Tegi hospital | مستشفى تيجي | Functioning | Rural Hospital. | 60 | 1 | 3 |
| Tripoli | Tripoli | Tripoli | Tripoli medical center | مركز طرابلس الطبي | Functioning | General Hospital or Medical Hospital | 1438 | 4 | 10 |
| Tobruk | Tubrag | East | Tubruq Medical Center | مركز طبرق الطبي | Functioning | General Hospital or Medical Hospital | 420 | 3 | 10 |

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|---------------|--------------------|----------|--|-------------------------------------|-------------|--------------------------------------|-----|---|----|
| Aljufra | Al Jufrah | Central | Weddan hospital | مستشفى الودان | Functioning | Rural Hospital | 60 | 0 | 0 |
| Alharaba | Nalut | West | Al hraba hospital | مستشفى الحرابية | Functioning | Rural Hospital | 60 | 0 | 0 |
| Ashshwayrif | Al Jabal Al Gharbi | West | Al Shewarif hospital | مستشفى الشويرف | Functioning | Rural Hospital | 60 | 0 | 0 |
| Hrawa | Surt | Central | Bin jawad hospital | مستشفى بن جواد – سرت | Functioning | Rural Hospital | 60 | 0 | 0 |
| Misrata | Misratah | Central | Misuratha hospital | مستشفى مصراته | Functioning | General Hospital or Medical Hospital | 480 | 3 | 30 |
| Alkufra | Al Kufrah | Benghazi | Atiya Al Kaseh- Al Kuffra hospital | مستشفى عطية الكاسح- الكفرة | Functioning | General Hospital or Medical Hospital | 120 | 1 | 5 |
| Tripoli | Tripoli | Tripoli | Tripoli pediatric hospital | مستشفى الأطفال – طرابلس | Functioning | Specialized Hospital | 200 | 1 | 8 |
| Abusliem | Tripoli | Tripoli | Abi Sleem trauma hospital | مستشفى الحوادث ابي سليم | Functioning | Specialized Hospital | 480 | 1 | 8 |
| Azzawya | Az Zawiyah | West | Al –Zawia Hospital | مستشفى الزاوية | Functioning | General Hospital or Medical Hospital | 480 | 3 | 24 |
| Al Ajaylat | An Niquat Al Khums | West | Al Aujilat Hospital | مستشفى العجيلات | Functioning | General Hospital or Medical Hospital | 120 | 1 | 10 |
| Tripoli | Tripoli | Tripoli | Al Jalaa gynecology hospital - Tripoli | مستشفى الجلاء للولادة – طرابلس | Functioning | Specialized Hospital | 480 | 1 | 8 |
| Benghazi | Benghazi | Benghazi | Al Jalaa hospital – Benghazi | مستشفى الجلاء للحوادث | Functioning | Specialized Hospital | 480 | 2 | 18 |
| Aljmail | An Niquat Al Khums | West | Al Jameel Hospital | مستشفى الجميل | Functioning | General Hospital or Medical Hospital | 120 | 1 | 4 |
| Benghazi | Benghazi | Benghazi | Al Kewefia chest diseases hospital | مستشفى الكوفية للأمراض الصدرية | Functioning | Specialized Hospital | 150 | 0 | 0 |
| Almarj | Al Marj | East | Al Marj Hospital | مستشفى المرج | Functioning | General Hospital or Medical Hospital | 435 | 2 | 8 |
| Azzintan | Al Jabal Al Gharbi | West | Al Zintan hospital | مستشفى الزنتان | Functioning | General Hospital or Medical Hospital | 120 | 1 | 4 |
| Bani Waleed | Misratah | Central | Bani waleed hospital | مستشفى بني وليد | Functioning | General Hospital or Medical Hospital | 120 | 1 | 10 |
| Tajoura | Tripoli | Tripoli | Be'ar Al Austa Milad hospital | مستشفى بنز الأسطى ميلاد | Functioning | General Hospital or Medical Hospital | 120 | 0 | 0 |
| Benghazi | Benghazi | Benghazi | Benghazi hospital for pediatrics and surgery | مستشفى طب وجراحة الأطفال- بنغازي | Functioning | Specialized Hospital | 350 | 2 | 26 |
| Benghazi | Benghazi | Benghazi | Benghazi medical center | مركز بنغازي الطبي | Functioning | General Hospital or Medical Hospital | 400 | 3 | 30 |
| Ain Zara | Tripoli | Tripoli | Diabetes and endocrine hospital - Tripoli | مستشفى السكر والغدد الصماء - طرابلس | Functioning | Specialized Hospital | 100 | 1 | 7 |
| Ghiryan | Al Jabal Al Gharbi | West | Gharyan hospital | مستشفى غريان | Functioning | General Hospital or Medical Hospital | 480 | 1 | 7 |
| Jadu | Al Jabal Al Gharbi | West | Jado Hospital | مستشفى جادو | Functioning | Rural Hospital. | 60 | 1 | 5 |
| Msallata | Al Margab | Tripoli | Misslata hospital | مستشفى مسلاته | Functioning | General Hospital or Medical Hospital | 201 | 2 | 6 |
| Murzuq | Murzuq | South | Murziq hospital | مستشفى مرزق | Functioning | General Hospital or Medical Hospital | 120 | 1 | 9 |
| Nalut | Nalut | West | Nalout hospital | مستشفى نالوت | Functioning | General Hospital or Medical Hospital | 236 | 1 | 10 |
| Tripoli | Tripoli | Tripoli | Ophthalmology hospital - Tripoli | مستشفى العيون – طرابلس | Functioning | Specialized Hospital | 317 | 0 | 0 |
| Sebha | Sabha | South | Sebha Medical Center | مركز سبها الطبي | Functioning | General Hospital or Medical Hospital | 480 | 1 | 12 |
| Shahhat | Al Jabal Al Akhdar | East | Shehat Chest Hospital | مستشفى شحات | Functioning | General Hospital or Medical Hospital | 170 | 0 | 0 |
| Sug Alkhamees | Al Margab | Tripoli | Sooq Al Khamees hospital - Al khums | مستشفى سوق الخميس- الخمس | Functioning | Rural Hospital | 60 | 0 | 0 |

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| Surman | Az Zawiyah | West | Surmann Hospital | مستشفى صرمان | Functioning | General Hospital or Medical Hospital | 136 | 0 | 0 |
| Tarhuna | Al Margab | Tripoli | Tarhuna hospital | مستشفى ترهونة | Functioning | General Hospital or Medical Hospital | 201 | 1 | 9 |
| Tazirbu | Al Kufrah | Benghazi | Tazarbu hospital | مستشفى تازربو | Functioning | Rural Hospital | 60 | 1 | 2 |
| Taraghin | Murzuq | South | Traghen hospital | مستشفى تراغن | Functioning | Rural Hospital | 60 | 0 | 0 |
| Tripoli | Tripoli | Tripoli | Tripoli central hospital | مستشفى طرابلس المركزي | Functioning | General Hospital or Medical Hospital | 925 | 3 | 21 |
| Assahel | Al Marj | East | Tukaraa Hospital | مستشفى توكره | Functioning | Rural Hospital | 60 | 0 | 0 |
| Yefren | Al Jabal Al Gharbi | West | Yaffren Hospital | مستشفى يفرن | Functioning | General Hospital or Medical Hospital | 150 | 1 | 5 |
| Zliten | Misratah | Central | Zlitan hospital | مستشفى زليتن | Functioning | General Hospital or Medical Hospital | 480 | 1 | 8 |
| Sug Aljumaa | Tripoli | Tripoli | Abi Sitta chest diseases hospital | مستشفى ابي ستة للأمراض الصدرية | Functioning | Specialized Hospital | 219 | 0 | 0 |
| Alhawamid | Al Margab | Tripoli | Dawoon hospital | مستشفى داوون | Functioning | Rural Hospital | 60 | 0 | 0 |
| Ejdabia | Al wahat/Ajdabia | Benghazi | Emhamd Al Meqrif Hospital Ejdabiya | مستشفى الشهيد امحمد المقريف – اجدابيا | Functioning | General Hospital or Medical Hospital | 282 | 1 | 6 |
| Albayda | Al Jabal Al Akhdar | East | Thuarra hospital | مستشفى الثورة | Functioning | General Hospital or Medical Hospital | 462 | 2 | 8 |
| TOTAL: | | | | | | | | 79 | 498 |