



# COVID-19 INTRA-ACTION REVIEW REPORT MAURITIUS

September to December 2020



REPUBLIC OF MAURITIUS



World Health  
Organization

Country Office Mauritius

# Table of Contents

- 1. EXECUTIVE SUMMARY..... 3
- 2. INTRODUCTION ..... 8
- 3. SCOPE AND OBJECTIVES..... 10
  - 3.1. Scope..... 10
  - 3.2. Objective ..... 10
- 4. METHODOLOGY..... 10
- 5. FINDINGS ..... 11
  - 5.1. Country Planning and Coordination..... 11
  - 5.2. Risk communication and community engagement..... 17
  - 5.3. Surveillance, case investigation and contact tracing..... 19
  - 5.4. Points of entry..... 21
  - 5.5. National laboratory system..... 31
  - 5.6. Infection prevention and control..... 39
  - 5.7. Case management and knowledge sharing about innovations and the latest research ..... 42
  - 5.8. Operational support and logistics in the management of supply chains and the workforce ..... 46
  - 5.9. Maintaining essential health services during the COVID-19 outbreak..... 46
  - 5.10. Vaccines ..... 47
  - 5.11. Follow up of the recommended actions from first IAR ..... 49
- 6. THE WAY FORWARD ..... 52
- 7. ANNEX..... 53
  - List of participants ..... 53

# 1. EXECUTIVE SUMMARY

Following the first intra action review, this second intra action review documented the best practices, gaps and challenges and recommended actions of the national response to COVID-19 for the period of September to December 2020. A summary of the findings for the 10 strategic pillars of the response can be found below:

<b>1.1. Country-level coordination, planning and monitoring</b>
<b>Best practices</b>
<ul style="list-style-type: none"> <li>- A preparedness plan was devised to guide the sanitary response in case of a resurgence of Covid-19</li> <li>- High-Level Committee on COVID-19 maintained its regular meetings for a coordinated and multisectoral response</li> <li>- An inter-ministerial committee was set up to coordinate and monitor the partial opening of air travel</li> <li>- An inter-ministerial committee was set up to process requests for repatriation and expatriate workers</li> <li>- Mauritius continued to mobilise funding and resources to improve the COVID-19 response despite being COVID safe</li> <li>- Mauritius maintained the financial support measures to those impacted by the COVID-19 pandemic</li> <li>- World Health Organization (WHO) Country Office Mauritius provided its sustained and close support to Mauritius in its national response to COVID-19</li> <li>- United Nations Country Team continued its pivotal support in the COVID-19 response with the implementation of the <i>Socio-Economic Response Plan to the COVID-19 crisis (SERP)</i></li> </ul>
<b>Challenges</b>
<ul style="list-style-type: none"> <li>- Lack of information about designated role and responsibilities in the “National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius”</li> <li>- Inadequate preparedness of the sectors beyond health in case of COVID-19 resurgence</li> <li>- Limited resources for virtual communication and continuity of services in case of a sanitary curfew</li> <li>- Insufficient preparedness to overcome the overburdening of key focal points of the main institutions involved in the national response in case of a sanitary curfew</li> <li>- Organisational structure limit the efficiency of decision making during meetings/committees</li> <li>- Risk of losing institutional memory of the national response to COVID-19</li> </ul>
<b>Recommended actions</b>
<p><b>For immediate implementation:</b></p> <ul style="list-style-type: none"> <li>- Create an operational plan to clearly designate the bodies responsible for each response actions and the key steps to be taken for the “National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius”</li> <li>- An operational plan should be developed to clearly designate the bodies responsible for each response actions and the key steps to be taken. Prepare a multi-sectoral/whole-of government response for COVID-19 resurgence</li> <li>- Consolidate all standards of procedures, protocols and guidelines in one document</li> <li>- Accelerate efforts for the digitalisation of the public sector and include an annual budgetary line across public institutions for the improvement of information technology</li> <li>- Define an official list of rotating key focal points with a dedicated support team for each key institution of the national response to increase resilience in case of a sanitary curfew</li> <li>- High level representatives of ministries/institutions at important meetings/committees should have the authority to take decisions for more efficient response</li> </ul> <p><b>For mid to long-term implementation:</b></p> <ul style="list-style-type: none"> <li>- Develop a strategy to preserve and use the institutional memory of the COVID-19 response</li> </ul>

- Develop a resource mobilisation strategy and involve other key partners to fast track the socio-economic response and recovery
- Non-resident United Nation agencies could have an in-country focal person and more coordinated meetings
- Strengthen the SERP coordination meetings

## 1.2. Risk communication and community engagement

### Best practices

- Weekly press conference held by the National Communication Committee ensured a consistent and clear line of communication to the population
- The COVID-19 hotline acted as a direct line of communication to health authorities and feedback mechanism
- Ongoing sensitisation campaign via the national television channel

### Challenges

- Insufficient modes of communication on the SARS-CoV-2 virus and COVID-19 disease outside of the context of the national response
- Incidences of inconsistent and incomplete information led to confusion among public
- Key information about on COVID-19 in Mauritius were scattered across several websites some of which were not up to date.

### Recommended actions

- For immediate implementation:**
- Develop a communication strategy for the whole of government on COVID-19
  - Maintain only one central webpage to disseminate key comprehensive information on and daily updates of COVID-19 in Mauritius
- For mid to long-term implementation:**
- Strengthen the ongoing sensitisation campaign with interactive and community-based approaches

## 1.3. Surveillance, case investigation and contact tracing

### Best practices

- The cluster of two local cases was promptly contained following rigorous case investigation and contact tracing exercise
- Rapid reorganisation of the contact tracing team (CTT) and the team of swabbers at the airport to accelerate the contact tracing exercise
- COVID-19 testing centres acted as a surveillance system for of local cases
- Mechanisms for collection, analysis and dissemination of information for decision making are well established within the Ministry of Health and Wellness (MoHW)

### Challenges

- Understaffed Communicable Disease Control Unit (CDCU) limits its efficiency
- Overworked CTT and over reliance on a limited number of trained teams is risky
- Absence of scaling-up plan for the CDCU team during local transmission

### Recommended actions

- For immediate implementation:**
- Elaborate a scaling-up plan of the CDCU team including CTT upon the detection local cases of COVID-19
- For mid to long-term implementation:**
- Expand and restructure the technical team of CDCU

1.4.Points of entry
Best practices
<ul style="list-style-type: none"> <li>- A strategy was developed for partial reopening of air travel in October 2020 by considering the best practices and lessons learnt from the repatriation of stranded Mauritians</li> <li>- Detailed sanitary protocols were devised via multi-stakeholder participation for the implementation partial reopening of air travel</li> <li>- Quarantine centres (hotels) continued to be organised and managed by the Regional Public Health Superintendent and CDCU during the partial reopening of air travel to ensure compliance to the Public Health Act and the Quarantine Act</li> <li>- A centralised online booking system was created to facilitate the implementation of the sanitary measures for the reopening of air travel</li> <li>- The mandatory PCR testing done at the airport upon arrival eased the flow of passengers upon arrival in the country</li> <li>- Staff involved along the air passengers’ journey were thoroughly trained to implement the IPC measures according to the set protocols</li> <li>- The sanitary protocol for airline crew were strengthened and formalised</li> <li>- Rigid sanitary measures were put in place at SSR International Airport</li> <li>- Airport exits were optimised to increase surveillance and reduce overcrowding</li> <li>- Airport Terminal Operations Ltd leaned on the Aéroports de Paris Group network to share and learn best practices in preventing COVID-19</li> <li>- SSR International Airport received its Airport Health Accreditation for meeting international standards for sanitary measures in an airport</li> <li>- Protocol for the arrival of expatriate workers was revised and adapted to further reduce the number of imported cases of COVID-19</li> <li>- A special pathway was successfully implemented for the visits of diplomats and consultants</li> <li>- Strict adherence to the evolving protocols for port entry and close collaboration of the authorities at port prevented contaminations from shipping vessels’ crew</li> <li>- Mauritius Ports Authority developed and applied strict sanitary protocols within its institution</li> <li>- Mauritius Ports Authority addressed the doubts and fears of the personnel with clear and consistent communication</li> <li>- MoHW trained and sensitised staff at the Mauritius Ports Authority on IPC measures</li> <li>- Strict sanitary measures were established for the approval of shore leaves for fishing vessel crew</li> <li>- Safe transit corridor was created for crew change for shipping vessels and a protocol is being devised to institutionalise this effective ad-hoc practice</li> </ul>
Challenges
<ul style="list-style-type: none"> <li>- The time frame to do PCR test before embarkation created confusions among and challenges for some incoming passengers</li> <li>- The increased number of forms to be filled by the passengers is counterproductive to IPC measures taken</li> <li>- Travellers occasionally showed resistance to undergo the PCR tests upon arrival</li> <li>- Insufficient collaboration between the different stakeholders working at the airport</li> <li>- Low confidence of staff and hesitance to engage with travellers when needed</li> <li>- Differing sanitary measures among countries hinders international travel and tourism</li> <li>- The easing of air travel restrictions remains too strict to relaunch the tourism industry in Mauritius</li> <li>- Travel and tourism stakeholders often only had two weeks visibility on international air travels</li> <li>- Mauritius does not figure in the EU’s list of epidemiologically safe countries amid COVID-19</li> </ul>

- Need to address new challengers regarding drug trafficking the airport
- Travel restrictions and lack of protocols made it difficult for the change of crew for shipping vessels

**Recommended actions**

**For immediate implementation:**

- Strengthen communication for incoming air passengers on conditions and criteria of travel to Mauritius
- Continuous training and monitoring is needed for staff working along the passenger’s journey to build their confidence
- Set up of an intersectoral platform among authorities working at the airport to increase collaboration and coordination of the implementation of sanitary measures
- Elaborate a protocol for shipping crew needing healthcare

**For mid to long-term implementation:**

- Consider the harmonising of international travel and easing international travel through the guidance of Council’s Aviation Recovery Task Force (CART)
- Set up a working group to explore the possibility of bubble travel without quarantine for air travel for touristic purposes
- Develop a contingency plan for port activities in case of a sanitary curfew

**1.5. The national laboratory system**

**Best practices**

- A plan guiding the consolidation of laboratory services in the advent of a second wave was developed to increase preparedness
- Rapid COVID-19 IgM/IgG antibody combo test was introduced at Central Health Laboratory (CHL)
- CHL shared SARS-CoV-2 samples for genetic sequencing
- CHL started the preparations for the setting-up of genetic sequencing in Mauritius
- CHL and AHL have acquired new equipment to improve IPC at laboratory level
- The national COVID-19 testing capacity was expanded with Queen Elizabeth Hospital in Rodrigues and two additional private laboratories approved to perform COVID-19 PCR tests
- The four COVID-19 testing laboratories networked to harmonise their practices and standards
- Weekly meetings are conducted to coordinate the implementation of the Laboratory Information Management System (LIMS)
- The COVID-19 LIMS is being scaled up into a National LIMS
- A passenger COVID-19 LIMS is being included in the patient COVID-19 LIMS to collect testing data of incoming passengers
- Interlaboratory comparisons and assessments ensured the quality of COVID-19 PCR tests performed in the 4 laboratories
- Airport Health Laboratory (AHL) with international standards was set up for the testing of incoming passengers
- The transfer of specimen to AHL for Day 0 tests was simplified for an increased turnaround time
- Several control systems were put in place to ensure that all incoming passengers were swabbed at the airport for Day 0 testing
- Newly recruited staff at AHL underwent a thorough training in COVID-19 PCR testing
- The performance of AHL is monitored and evaluated on a regular basis to guarantee the quality of PCR tests done
- Strong and constantly improving biosafety measures were applied at AHL

<ul style="list-style-type: none"> <li>- AHL performed Day 7 and Day 14 testing during the detection of the cluster of local COVID-19 cases to help CHL manage the increasing number of tests done</li> <li>-</li> </ul>
<p><b>Challenges</b></p>
<ul style="list-style-type: none"> <li>- COVID-19 LIMS was not being used to its full potential</li> <li>- Slow implementation of the Passenger LIMS</li> </ul>
<p><b>Recommended actions</b></p>
<p><b>For immediate implementation:</b></p> <ul style="list-style-type: none"> <li>- Raise awareness of all stakeholders about COVID-19 LIMS and support them with continuous training and materials</li> <li>- Increase communication between the developers of Passenger LIMS and future users to accelerate its implementation</li> </ul> <p><b>For mid to long-term implementation:</b></p> <ul style="list-style-type: none"> <li>- Explore the possibilities for AHL to perform Day 7 and Day 14 tests for optimum use</li> <li>- Increase AHL's capacity to perform COVID-19 PCR test for outgoing passengers</li> <li>- Passenger LIMS should be programmed to include information on COVID-19 vaccination</li> </ul>

## 1.6. Infection prevention and control

<p><b>Best practices</b></p>
<ul style="list-style-type: none"> <li>- A training of trainers was conducted to strengthen the capacity of health professionals in IPC and case management post COVID-19 in Mauritius and Rodrigues island</li> <li>- IPC practices in schools were strengthened through School Health Clubs</li> <li>- Safer waste management measure was implemented in quarantine centres</li> <li>- Regular checks were done to ensure IPC measures are respected in workplaces</li> </ul>
<p><b>Challenges</b></p>
<ul style="list-style-type: none"> <li>- Hand hygiene in hospital settings remains weak</li> <li>- Lack of standardised IPC guidelines is causing a poor coordination of IPC activities at national level</li> </ul>
<p><b>Recommended actions</b></p>
<p><b>For immediate implementation:</b></p> <ul style="list-style-type: none"> <li>- Accelerate efforts to improve in IPC in hospital settings</li> <li>- Develop a national guideline for IPC in healthcare settings</li> </ul> <p><b>For mid to long-term implementation:</b></p> <ul style="list-style-type: none"> <li>- Acquire another incinerator for waste management</li> <li>- Establish an IPC Directorate at national level</li> <li>- Plan for sustainable medium to long term IPC training programme for clinical and non-clinical staff at health facility level</li> </ul>

## 1.7. Case management and knowledge sharing about innovations and the latest research

<p><b>Best practices</b></p>
<ul style="list-style-type: none"> <li>- The discharge protocol was promptly amended following a recovered and discharged COVID-19 patient falling ill again</li> <li>- Treatment protocols were regularly upgraded to meet international standards</li> </ul>

<ul style="list-style-type: none"> <li>- The ‘maximised and optimised’ strategy was maintained with the isolation of symptomatic and asymptomatic patients in separate treatment centres</li> <li>- IPC measures in treatment centres were reinforced by learning from the outbreak experience</li> <li>- Staff in treatment centres were isolated during duty and went into post-duty quarantine</li> <li>- MoHW increased the preparedness for case management in case of a resurgence of COVID-19 and for different medical case scenarios</li> <li>- A special pathway was designed for the safe transfer of COVID-19 patients from the wards to the scans</li> <li>- The Hospital Management Information System was fully implemented for more efficient case management at New Ear Nose Throat (ENT) Hospital</li> <li>- A multidisciplinary approach was adopted for the case management of COVID-19</li> <li>- A clinical immunology committee oversaw the case management of COVID-19 patients</li> <li>- A simplified system was devised to facilitate the payment of medical costs of foreigners</li> </ul>
<b>Challenges</b>
<ul style="list-style-type: none"> <li>- Recovered patients and previously infected persons are having positive COVID-19 test results</li> <li>- Temporary closure of internal lab at New ENT Hospital</li> <li>- Rotating staff at treatment centres often leave by the time they are full versed in the protocols</li> </ul>
<b>Recommended actions</b>
<p><b>For immediate implementation:</b></p> <ul style="list-style-type: none"> <li>- Review the staffing strategy at the treatment centres to capitalise knowledge acquired</li> <li>- Accelerate the upgrading and reopening of internal laboratory at the New ENT hospital</li> </ul>

## 1.8.Operational support and logistics in the management of supply chains and the workforce

<b>Best practices</b>
<ul style="list-style-type: none"> <li>- Medical and non-medical materials for COVID-19 response are close monitored and reported weekly</li> <li>- MoHW adhered to the COVID-19 Supply Chain System</li> <li>- Additional nursing staff were recruited to meet rising demands of the response</li> </ul>
<p>Challenges and Recommended actions identified were specific to the vaccines rollout and included in the section 1.10 on Pillar 10: Vaccines.</p>

## 1.9.Maintaining essential health services during the COVID-19 outbreak

<b>Best practices</b>
<ul style="list-style-type: none"> <li>- A phased reduction of non-COVID-19 health services was planned in case of a sanitary curfew</li> </ul>
<b>Challenges</b>
<p>No challenges were identified for Pillar 9, since Mauritius did not experience an outbreak of COVID-19 for the period under review, i.e from September to December 2020 and there was no disruption in health services.</p>
<b>Recommended actions</b>
<p><b>For mid to long-term implementation:</b></p> <ul style="list-style-type: none"> <li>- To prepare for teleconsultation in case of a second wave and a sanitary curfew</li> </ul>



1.10. Vaccines
Observations
<ul style="list-style-type: none"> <li>- Mauritius was proactive in securing COVID-19 vaccines by exploring all the sources available</li> <li>- A national deployment and vaccination plan for COVID-19 vaccines was devised under the guidance of 9 thematical working groups</li> <li>- Authorities took a scientific and observatory approach to ongoing development regarding the implementation vaccination campaigns in foreign countries</li> </ul>
Challenges
<ul style="list-style-type: none"> <li>- Limited resources for optimal storage of COVID-19 vaccines and monitoring the cold supply chains</li> <li>- Securing funding and donations to acquire COVID-19 vaccines is a challenge</li> </ul>
Recommended actions
<p><b>For immediate implementation:</b></p> <ul style="list-style-type: none"> <li>- Ramp up the cold storage and monitoring capacities across the COVID-19 vaccine supply chain</li> <li>- Maintain efforts to secure funding and donations obtain vaccines by exploring new funding avenues</li> <li>- Coordination structure/s for vaccination programme should include all concerned Ministries</li> </ul>

## 2. INTRODUCTION

On 18 March 2020, Mauritius registered the first three cases of COVID-19, all imported, and four additional cases with no travel history were confirmed through contract tracing on 19 March 2020. This led to the decision to close the border for international travel and institute a national lockdown as from 20 March 2020. A curfew order was subsequently enforced from 23 March to 2 April 2020 and extended twice till 31 May 2020. The local outbreak of COVID-19 progressed rapidly from sporadic cases to clusters of cases by 9 April 2020. On 21 April 2020, the outbreak almost reached the status of community transmission with an important sheer of confirmed cases linked to local chains of transmission.

Sentinel surveillance at the flu/fever clinics in the five regional hospitals detected positive COVID-19 cases. Through active contact tracing island-wide, isolation and testing of suspected cases and systematic isolation and treatment of all COVID-19 cases; the outbreak was contained. Mauritius registered no cases of local transmission of COVID-19 from 26 April to 12 November 2020. After over six months, two cases of local transmission were identified following contamination from a previously recovered case of imported COVID-19. The two isolated cases were rapidly contained by a rigorous contact tracing exercise and quarantining and testing of suspected cases. The country became COVID-19 safe again as from 26 November 2020.

As at 31 December 2020, the total number of COVID-19 cases amounted to 527 (215 locally transmitted and 312 imported cases). The incidence rate of COVID-19 is 4.4 per 10,000 population and case fatality rate is 1.9% (10 deaths). Infection among health care workers accounts for 6.8% of total cases. On 31 December 2020, the total recovery of COVID-19 was 94.1%, representing 496 patients. By the end of the 2020, Mauritius performed 159 894 PCR tests including 97 215 tests done due to quarantine and contact tracing and 160 315 rapid antigen tests.

A first interaction review of the national response to COVID-19, covering the period January to August 2020, was prepared by WHO Country Office in collaboration with the Prime Minister's Office and the Ministry of Health and Wellness to document the experience of Mauritius related to COVID-19 preparedness and response as well as best practices. The qualitative report provided concise learning opportunity to all national stakeholders.

## 3. SCOPE AND OBJECTIVES

---

### 3.1. Scope

Building on the first report referred to above which was inspired by WHO's After Action Review Guide, an Inter Action Review (IAR) of Mauritius' national response to the COVID-19 pandemic was carried out guided by WHO's latest tools<sup>1</sup>. This IAR provides a thorough and updated cross-cutting review of all the nine different pillars listed in the WHO's updated COVID-19 Strategic Preparedness and Response Plan. The nine pillars are as follows:

- Country-level coordination, planning and monitoring;
- Risk communication and community engagement;
- Surveillance, case investigation and contact tracing;
- Points of entry;
- National laboratory system;
- Infection prevention and control;
- Case management and knowledge sharing about innovation and the latest research;
- Operational support and logistics in the management of supply chains and the workforce;
- Maintaining essential health services during the COVID-19 outbreak

With the rapid evolution regarding vaccines rollout, a 10<sup>th</sup> pillar, Vaccines, was reviewed to cover the national response actions taken in this area.

### 3.2. Objective

This IAR covered the period of September to December 2020 and has the following objectives:

- gather, share experiences and collectively analyse the ongoing country response to COVID-19 by identifying challenges and best practices;
- compile lessons learned, after reaching consensus among various stakeholders, during the response to improve the current response by sustaining best practices that have demonstrated success and by mitigating risk of recurrent errors;
- document and apply lessons learned from the response efforts to date to enable health systems strengthening; and
- provide a basis to validate, update the second COVID-19 strategic preparedness and response plan for Mauritius and inform other strategic plans which may be developed accordingly.

## 4. METHODOLOGY

---

The IAR was conducted through interactive face to face discussions with key actors of the national response to COVID-19 and followed a structured approach as delineated in WHO's IAR guide, similar to the first IAR. Participants were identified across nine pillars and invited for an interview or focus group. An information sheet elaborating the purpose, aim, methodology and output of this exercise was sent in advance to each invitees. The nature of this exercise as an opportunity for responders to reflect on the work done and identify areas of improvement to further strengthen the response was emphasised.

A total of 23 key actors were interviewed through 11 one to one interviews and 3 focus groups from 8 December 2020 to 21 January 2021. Limited availability of participants in December delayed the conduction of the interviews. A complete list of participants can be found in the Annex section.

---

<sup>1</sup> Guidance for conducting a country COVID-19 intra-action review (IAR). Geneva: World Health Organization;2020 [https://www.who.int/publications/i/item/WHO-2019-nCoV-Country\\_IAR-2020.1](https://www.who.int/publications/i/item/WHO-2019-nCoV-Country_IAR-2020.1)

Discussions were guided by semi-structured interview guidelines specifically designed for each interview. They were guided by the WHO's updated COVID-19 Strategic Preparedness and Response Plan and included the generic trigger questions from the WHO IAR tools which were relevant to the country context. Additionally, interview guidelines for repeating participants from the first IAR contained questions to follow-up on the recommended actions from the first round. On an overall, the discussions were guided by the following fundamental questions on the response activities:

- What went well in the response and what were the enablers?
- What went less well and what were the challenges?
- What can be done to improve the response in the immediate, mid or long-term?
- How can the recommended activities be implemented?

Background materials such as plans, protocols, guidelines, activity reports, communiques, media reports and grey literature were reviewed to complement and triangulate the data collected via the interviews. A root cause analysis was carried out to identify and eventually address the root cause, if necessary, in order to prevent a negative outcome. The purpose of this analysis was to focus the interventions on those that have a long-term impact rather than relying on quick fixes.

It is to be noted that no key actors were specifically interviewed for Pillar 8, 9 and 10. The findings presented in this report under these pillars came from insights collected across interviews and supported by the grey literature reviewed. The status of the recommended actions in the first IAR was also included in the finding.

## 5. FINDINGS

---

### 5.1. Country Planning and Coordination

#### Best practices

**A preparedness plan was devised to guide the sanitary response in case of a resurgence of Covid-19**

A “National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius” was prepared by the Ministry of Health and Wellness (MoHW) together with other relevant authorities in September 2020. This plan details the sanitary response across different aspects namely: governance; risk communication; infection, prevention and control (including at points of entry and quarantine centres); surveillance, contact tracing and rapid response teams, case investigation; biological response via CHL; organisation of the logistic response and organisation of the covid-19 therapeutic response while ensuring continuity of quality service for other pathologies. This plan considered international guidelines as well as the best practices and gaps identified during the first Inter Action Review covering the period of January to August 2020. With the partial opening of air travel, this tools provides all the concerned authorities the necessary tools to response to potential outbreaks of COVID-19 in the local community.<sup>2,3</sup>

**High-Level Committee on COVID-19 maintained its regular meetings for a coordinated and multisectoral response**

With no local outbreak of COVID-19, the High Level Committee on COVID-19 gradually changed their meetings from daily to weekly since June and have maintained it on a weekly basis with the flexibility for more frequent meetings depending on the local epidemiological situation and urgency of decisions to be taken. The committee continued to review the local and international situations regarding COVID-19

---

<sup>2</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Gradual-lifting-of-travel-restrictions-to-start-as-from-01-October-2020.aspx>

<sup>3</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Reopening of borders-Updates and measures announced by Dr Joomaye.aspx>

and shared the latest updates on different aspects of the pandemic across the globe including scientific and medical data from national and international experts.<sup>4</sup> This multisectoral, scientific and evidence-based approach led Mauritius to achieve its COVID-19 safe status.

### **An inter-ministerial committee was set up to coordinate and monitor the partial opening of borders**

Since 15 August 2020, the Vice Prime Minister and Minister of Tourism chaired an inter-ministerial consisting of high-level representatives from Prime Minister's Office; Ministry of Tourism itself; Mauritius Tourism Promotion Authority; MoHW; Ministry of Labour, Human Resource Development and Training; and Mauritius Police Force. Meetings were held about 2 to 3 times a week to review the outcomes the partial opening of borders (air travel) and provide feedback on the implementation of the sanitary measures put in place along the passengers' journey including airport, during transfer and quarantine. The different stakeholders ensured that the capacities and availabilities of flights and quarantine accommodations as well as medical human and material resources needed are aligned. This multisectoral coordinated approach was effective in tackling the challenges met during this new phase of partial opening of borders such as untrained and unauthorised transports doing the transfer of passengers in the first week of the partial reopening of borders.

### **An inter-ministerial committee was set up to process requests for repatriation and expatriate workers**

Following the partial reopening of air travel with paid quarantine, an inter-ministerial committee headed by the Ministry of Foreign Affairs, Regional Integration and International Trade was set up in October 2020 to study special cases of Mauritians who would be retained for free quarantine.<sup>5</sup> These would be any Mauritians who bought a ticket to Mauritius on or before 20 March 2020 (day of travel restrictions), Mauritians who were abroad for urgent medical care and their companions, Mauritians studying abroad and Mauritians who were in distressed financial situations. The requests were made directly to the Ministry of Foreign Affairs, Regional Integration and International Trade or by the intermediary of the embassies and consulates abroad. A dedicated team at the Ministry of Foreign Affairs, Regional Integration and International Trade investigated the cases and gathered the necessary justifying documents to be reviewed. The team was also responsible for the tedious organisation of the repatriation flights in cohorts to match the room availability in the Lady Sushil Ramgoolam Recreation Centre, government quarantine centre.

It is to be noted that the Ministry of Foreign Affairs, Regional Integration and International Trade was the main authority involved in organising the free repatriation of Mauritians before the partial reopening of air travel and built on this previous experience for this current mandate. The committee consisted of representatives from Prime Minister's Office; MoHW; Ministry of Foreign Affairs, Regional Integration and International Trade; Ministry of Tourism and Ministry of Labour, Human Resource Development and Training. Cases reviewed by this committee were referred to the Committee for 'Partial opening of air travel' before final approval by the High Level Committee on COVID-19. By end of December 2020, about 10 000 Mauritians were repatriated since the travel restrictions on 20 March 2020 from more than 100 countries.

### **Mauritius continued to mobilise funding and resources to improve the COVID-19 response despite being COVID Safe**

In December 2020, Mauritius received Rs 330 million from the European Union under the agreement "EU budget support in response to COVID-19 crisis: Reinforcing Health Systems in Mauritius

---

<sup>4</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Government-remains-fully-engaged-in-the-fight-against-COVID-19,-states-Prime-Minister.aspx>

<sup>5</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Hotel-fees-to-be-reimbursed-in-case-Covid-19-test-is-positive-upon-arrival,-says-Dr-Joomaye.aspx>

(REHSIMUS)".<sup>6</sup> Leaning on three main pillars: ‘detect, treat and reinforce’, this financial agreement aimed at increasing the screening capacities by 50% and the emergency bed capacity from 67 to 84 as well as strengthen protocols and build the personnel’s capacity to apply the improved protocols in public health institutions.

In August 2020, WHO Country Office Mauritius successfully mobilised funding from the Canada Fund for Local Initiatives and European Civil Protection and Humanitarian Aid Operations, European Commission; to support the strengthening of IPC measures to prevent COVID-19 across community based, primary health care and educational institutions and to strengthen access to COVID-19 testing. The two key collaborators for the implementation of this project were MoHW and the Ministry of Education, Tertiary Education, Science and Technology and its two main objectives were: (1) Strengthening the IPC at primary care systems and building laboratory capacity for quality management systems and (2) Improving hand hygiene knowledge and practices at schools. The specific activities implemented from September to December 2020 are detailed in the *Section 4.6: Infection Prevention and Control*.

### **Mauritius maintained the financial support measures to those impacted by the COVID-19 pandemic**

The Government adopted a three-fold strategy consisting of the preservation of employment, avoiding default on deferred payment and restricting the number of bankruptcies to mitigate the economic impacts.<sup>7</sup> Via the COVID-19 Solidarity Fund, 240 households impacted by the COVID-19 pandemic benefitted from special monthly grants of Rs 5 100.<sup>8</sup> For those working in the tourism and travel industry; the Minister of Finance, Economic Planning and Development maintained the COVID-19 Wage Assistance Scheme to help employers sustain the salary payment and retain employment and the Self Employment Scheme for the self-employed. Some 450 000 Mauritians benefitted from these two schemes.<sup>9</sup> The Bank of Mauritius continued its Special Relief Programme (Banking) for the commercial banks for various economic operators. The State Investment Corporation continued the Equity Participation Scheme to assist enterprises with annual turnover exceeding Rs 250 million while small medium enterprises continued to benefit from SME Equity Fund Ltd and the Investment Support Programme Limited (ISP).<sup>10</sup>

### **WHO Country Office Mauritius provided its sustained and close support to Mauritius in its national response to COVID-19**

Key actors of the national response commended the close working proximity of the technicians of the WHO Country office Mauritius and their dedicated involvement in the national response to COVID-19. For the period under review WHO Representative continued its vital role as part of the High-Level Committee, advising and sharing WHO Guidelines and documentation as well as acting as an intermediate between the Government and the United Nations Team and the Development Partner Group to relay information on needs and actions of the response. WHO Country Office Mauritius proactively responded to MoHW’s need for support on four main areas during September and December namely on the logistics, IPC, laboratory systems and COVID-19 vaccines. WHO Country office Mauritius also facilitated the linkage of MoHW to international experts.

### **United Nations Country Team continued its pivotal support in the COVID-19 response**

Senior Management Team meetings were held monthly for the representatives of the UN entities present in Mauritius to take stock of the epidemiologic situation, the new regulations and policies and the

---

<sup>6</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Mauritius-receives-Rs-330-million-from-the-EU-to-strengthen-its-capacities-in-the-fight-against-the-Covid-19.aspx>

<sup>7</sup> <https://www.platformafrica.com/2020/10/26/finance-minister-announces-measures-geared-towards-accelerating-economic-recovery/>

<sup>8</sup> <https://www.platformafrica.com/2020/09/17/government-redoubles-efforts-to-mitigate-negative-economic-impacts-states-finance-minister/>

<sup>9</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Government-intends-COVID-19-vaccine-rollout-at-the-soonest.aspx>

<sup>10</sup> <https://mof.govmu.org/Pages/Covid-19-Support.aspx>

resources needed for the continued response. The Senior Management Team meetings were opened to colleagues from the World Bank and the African Development Bank.

The Resident Coordinator held regular information and coordination meetings with the Development Partner Group consisting of the heads of diplomatic missions as well as of bilateral and multilateral organisations present in Mauritius. These meetings helped to keep all partners informed of the COVID-19 situation and gather questions for the WHO Representative to ask in the High Level Committee in addition to exploring possible joint response actions.

A governance structure was set up for the United Nations Country Team's *Socio-Economic Response Plan to the COVID-19 crisis* (SERP) which is under the coordination of the Resident Coordinator and the technical leadership of the United Nations Development Programme. The structure included a steering committee, a monitoring committee, and three technical committees. The Resident Coordinators' Office also adapted the Results monitoring framework for the Strategic Partnership Framework 2019-2023 to include the activities implemented under SERP. The UN agencies continued to implement their respective activities within the SERP across the three pillars: (1) support to the Government of Mauritius to implement a public health response to prevent, contain and treat COVID-19 cases through health system strengthening; (2) support the implementation of social protection initiatives for vulnerable groups and (3) support socio-economic Impact Assessment and Early Recovery Planning. The SERP is aligned with the United Nations Strategic Partnership Framework 2019-2023 with the Government of Mauritius and the response is also in line with the Capacity for Disaster Reduction Initiative's recommendations on health disasters.

## Challenges

### **Lack of designated role and responsibilities in the “National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius”**

Although covering the key strategic pillars of the response, the plan does not identify the actors responsible for implementing the different response actions.

### **Inadequate preparedness of the sectors beyond health in case of COVID-19 resurgence**

The “National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius” prepared by MoHW and other relevant authorities in September 2020 will guide the sanitary response to contain COVID-19, however there is no multisectoral/whole-of-government response plan to activate response in other sectors such as education, social protection, food security etc, in a timely manner. This might result in delayed responses in these important areas which are rapidly impacted during a sanitary curfew.

### **Limited resources for virtual communication and continuity of services in case of a sanitary curfew**

With limited air travels and sanitary curfews worldwide, the COVID-19 pandemic shifted the main mode of communication with international partners to virtual communication. This required having the correct set-up and technological tools which the Ministry of Foreign Affairs, Regional Integration & International Trade had to quickly built as a core capacity following the lockdown. However, the digital capacities of the government as a whole are still limited and need to be improved. Similar challenges were met regarding communication between national stakeholders during the March to May sanitary curfew. Few public sector personnel had access to their working resources such as laptops, access to files, access to an online work platform etc which meant fewer human resources available to respond to the urgency of the situation during a sanitary curfew and those few equipped with the necessary working tools being overworked.

### **Insufficient preparedness to overcome the overburdening of key focal points of the main institutions involved in the national response**

During the past sanitary curfew, key focal points of the main institutions concerned in the national response to COVID-19 found themselves overburdened. With the distance working and limited resources for virtual team work, the focal points found themselves without the support of additional administrative staff and having to coordinate multiple phone requests and queries in addition to their tasks during the response. Little have been done to avoid a similar situation in case of a second sanitary curfew.

### **Organisational structure limit the efficiency of decision making during meetings/committees**

Multi-ministerial or multi-stakeholders meetings often resulted in limited decision making since the representatives of the relevant Ministries or institutions do not have the delegated authority to take a decisions on the spot and this hindered the rapidity of decision making in times when it was key to promptly guide the national response to COVID-19.

### **Risk of losing institutional memory of the national response to COVID-19**

With a lot of exchanges happening by emails and poor indexing and storage of these electronic records, there is a risk of losing institutional memory of how each governmental authority responded to COVID-19 pandemic. Moreover, key senior staff of public institutions who are the most involved in decision makings often have short career span left before retirement leaving behind little institutional memories to be passed on to the next generation of staff. Retaining institutional memory would be key to inform and activate timelier responses and decision-making across the whole of government in case of future health emergencies.

### **Coordinating with non-resident United Nation agencies can be challenging**

## **Recommended actions**

### **Create an operational plan to complement the “National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius”**

An operational plan should be developed to clearly designate the bodies responsible for each response actions and the key steps to be taken. This document will complement the National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius by providing more operational guidelines. Although covering the key strategic pillars of the response, the plan does not identify the actors responsible for implementing the different response actions.

### **Prepare a multi-sectoral/whole-of government response for COVID-19 resurgence**

The High-Level Committee for COVID-19 together with its key partners in the COVID-19 response across all sectors should devise a plan multi-sectoral/whole-of government response for COVID-19 resurgence beyond health. The plan could capitalise on the best practices and as well as address the gaps identified during the multisectoral response to the COVID-19 outbreak in March 2020 to guide immediate and structured actions in other sectors such as social protection, education, food security etc. Prompter response will limit the social and economic impacts of a second wave on the lives of the Mauritian population.

### **Consolidate all standards of procedures, protocols and guidelines in one document**

Various national authorities have devised and updated numerous standards of procedures (SOPs), protocols and guidelines to prevent or manage COVID-19 since the beginning of the response and it can be challenging to retrieve them when needed. Thus, there is a need to merge the latest version of these key documents into a well indexed one document or virtual platform to be shared with all stakeholders of the response for easier guided actions, tracking and referencing.

**Accelerate efforts for the digitalisation of the public sector and include an annual budgetary line across public institutions for the improvement of information technology**

The national response to COVID-19 has shown that being equipped with the latest technology for virtual communication and improving processes as well as having a digitally literate workforce is vital. Apart from the current ongoing digitalisation of the public sector services, there is a need for all key personnel of key public authorities to be equipped with a laptop and have access to necessary files via digital platforms to ensure the remote continuity of services and a more rapid response. Above all, the capacity building of the personnel in using the digital tools is essential. This will increase the number of functional workforce during any future sanitary curfew. Moreover, these efforts should be sustained with an annual budgetary item dedicated to improving the use of information technology and information technology support.

**Define an official list of rotating key focal points with a dedicated support team for each key institution of the national response to increase resilience in case of a sanitary curfew**

**High level representatives of ministries/institutions at important meetings/committees should have the authority to take decisions for more efficient response**

For more efficient decision making during important inter-ministerial or inter-stakeholders' meetings, the representatives of ministries/institutions should have the authority to speak and take decision on the spot on behalf of the concerned ministries.

**Develop a resource mobilisation strategy and involve other key partners to fast track the socio-economic response and recovery**

The post COVID-19 socio-economic recovery of the country could be fast tracked by developing a clearly defined strategy for resource mobilisation which will increase and encourage the involvement of development partners, the private sector as well as civil society organisations. Implicating these key partners would allow for a better coordinated and targeted actions to meaningfully find alternative financing.

**Develop a strategy to preserve and use the institutional memory of the COVID-19 response**

A strategy should be developed to preserve and use institutional memory of the national response to COVID-19 pandemic across each key public institution of the response, extending beyond health and including key stakeholders in the response such as Ministry of Tourism and Ministry of Foreign Affairs, Regional Integration & International Trade. This process can be led and supported by the High-Level Committee for coordination and implementation across the concerned institutions. In addition to indexing and storing institution information on a platform, the strategy should also include the methodologies for on-going systematic storage of institutional information in the institutions' processes as well as appropriate level of access to these files for future use. Those institutional memory would be vital to increase organisational readiness for any future health emergency and mitigate inconsistent approaches and potential risks.

**Non-resident United Nation agencies could have an in-country focal person and more coordinated meetings**

**Strengthen the SERP coordination meetings**

The committees overseeing the implementation of SERP should strengthen their coordination meetings to ensure the proper implementation and follow-up of SERP activities.



## 5.2. Risk communication and community engagement

### Best practices

#### **Weekly press conference held by the National Communication Committee ensured a consistent and clear line of communication to the population**

The National Communication Committee maintained its weekly press conference usually held after the meetings of the High-Level Committee on COVID-19. It was widely broadcasted by the national television channel as well as public and private radio channels and ensured a consistent and clear line of communication to population. The communication focused on sharing important decisions taken about the response by the High Level Committee on COVID-19. The National Communication Committee also reassured the population that the country is COVID-safe while reminding it to remain alert and maintain the recommended sanitary measures since the prevalence of COVID-19 is on the rise in foreign countries.

This regular and transparent communication has proven to be effective. A considerable decrease in rumours and fake news was observed among the population and on social media for this period under review. The population also reacted responsibly and in a disciplined way when the cluster of two locally transmitted cases of COVID-19 was identified. According to the reports from the COVID-19 testing centres, the Mauritius Police Force and media and social media; the population showed no behaviours expressing panic upon the announcement of the local cases. There was no indication of panic buying, people not wanting to go to their workplace or sending their children to school.

#### **The COVID-19 hotline acted as a direct line of communication to health authorities and feedback mechanism**

The free 24/7 hotline dedicated to COVID-19 was maintained and acted as a direct feedback mechanism for the population. A pool of 10 nursing officers working on a shift system attended the 3 active phone lines in the presence of a medical practitioner. The types of queries evolved from request for further information about COVID-19 at the beginning of the pandemic to queries about quarantines or treatment centres during the period under review. The nursing officers received additional training to better respond to these new types of queries.

CDCU received regular feedback from the community physician in charge of the hotline which helped to identify the gaps in the response and take guided remedial actions. Owing to the calls received via the hotline, MoHW observed a confusion about the timeframe within which the mandatory PCR testing for incoming passengers should be done and are currently under process of modifying the protocol for more clarity. Following the identification of the two local cases of COVID-19, the population reached out to MoHW via the hotline to help with the contact tracing exercise and the identification of suspected cases.

#### **Ongoing sensitisation campaign via the national television channel**

A one-minute sensitisation video was broadcasted daily on the national television channel during primetime, just before the main news bulletin. This video created by MoHW encouraged the population to maintain the sanitary measures as COVID-19 is still present in the rest of the world despite no local cases in Mauritius. Concise directions about the correct wearing of masks, regular handwashing, mouth covering when coughing and respecting physical distancing were conveyed and the population encouraged to contact a medical practitioner if they showed signs and symptoms of COVID-19.

### Challenges

#### **Insufficient communication on the SARS-CoV-2 virus and COVID-19 disease outside of the context of the national response**

A need for more information about the SARS-CoV-2 virus, its mode of transmission and COVID-19 disease was observed among the population during targeted trainings done for staff of the travel and tourism industry and the training of trainers to strengthen IPC in primary schools. The population showed their interest for these further information an interactive setting which will allow for their questions to be answered directly with less focus on the national response to the pandemic.

### **Incidences of inconsistent and incomplete information led to confusion among public**

There has been incidences where the information shared by the different Ministries were not coherent with each other. There was a time gap between the announcement of decisions and the updating of virtual platforms to convey these latest evolutions and this was attributed to limited technological resources. Some communications from the key stakeholders in the national response to COVID-19 were incomplete and not precise with the use of an overly complicated language. For example, the initial Notice to Airmen of 21 December 2020 restricting travellers from the UK did not specify as from which day the ‘within the last 15 days’ applied and the days within which the PCR tests needed to be done prior to travelling to Mauritius were not clearly worded. The relevant stakeholders received feedback through the queries from the affected public via phone calls or emails in response of these incidences of inconsistent and incomplete information sharing.

### **Key information about on COVID-19 in Mauritius were scattered across several websites some of which were not up to date**

Information such as statistics, communiques and decisions about the COVID-19 in Mauritius and the response is scattered across several internet websites such covid19.mu, beSafeMoris.mu, MoHW website and the Government Information Service website and the central website <http://covid19.mu/> was inactive at the time of this review.

## **Recommended actions**

### **Strengthen the ongoing sensitisation campaign with interactive and community-based approaches**

The ongoing sensitisation campaign via the short video should be strengthened with the combination of interactive and community-based sensitisation activities to support long term adoption of preventive behaviours against COVID-19. The campaign could be extended to private radio stations and other forms of media along with a well-coordinated community-based sensitisation campaigns delivered by health professionals from MoHW. Activities should aim to educate the population on SARS-CoV-2 virus, its mode of transmission and COVID-19 disease independent of the national responses. Question & Answers sessions should also be included in these sessions for the community to have the opportunity to directly interact with the health professionals.

### **Maintain only one central webpage to disseminate key comprehensive information on and daily updates of COVID-19 in Mauritius**

A central webpage should be maintained to disseminate information about COVID-19 and provide comprehensive information regarding the COVID-19 situation in Mauritius instead of having different websites such as covid19.mu and beSafeMoris.mu. Key information such as statistics, communiques and decisions about the COVID-19 should be shared on the pages and updated daily even during periods of no local transmission.

### **Develop a communication strategy for the whole of government on COVID-19**

A whole of government communication strategy needs be developed for a unified and coherent governmental front and for clear, complete and precise dissemination of information in the COVID-19 response. This plans should include strategies for faster and coordinated communication of governmental decisions across all the websites and social media platforms of the relevant government authorities. Defining a multi-ministerial coordinating and validating mechanism for public communication of the response is instrumental to ensure coherent and clear communication.

Moreover, the capacity of the communication teams within each concerned Ministry in COVID-19 response should be increased to support the implementation of this plan and improve the quality of information disseminated for easier interpretation and comprehension.

## 5.3. Surveillance, case investigation and contact tracing

### Best practices

#### **The cluster of two local cases was promptly contained following rigorous case investigation and contact tracing exercises**

On 12 November 2020, CDCU rapidly activated case investigation and contact tracing exercises when a previously recovered imported case, detected in quarantine, became ill with COVID-19 again after reintegration in the community. Building on the experience of the COVID-19 outbreak in March 2020, the CDCU team took full history of contacts and places the person has been in contact with and went to, once the latter was isolated in the New ENT Hospital. CDCU benefitted from the help of two external medical practitioners to speed up this tedious task.

All contacts were called by the CDCU team to enquire about their state of health and their degree of contact with the infected person. The contact tracing team (CTT) rapidly intervened to test all the identified contacts and depending on the level of exposure, 30 contacts were taken to quarantine while 13 others were asked to self-isolate at home. A total of 800 PCR tests were performed for all contacts on Day 0, 7 and 14. Health inspectors conducted regular follow-up of the contacts in home isolation by calling on their landlines and doing random home visits. Two contacts of the person ill with COVID-19 were detected as COVID-19 positive and immediately isolated in a COVID-19 treatment centre.

#### **Rapid reorganisation of the contact tracing teams and the team of swabbers at the airport to accelerated the contact tracing exercise to contain the detected cluster**

The CTT usually work in their allocated geographical regions and are responsible for specimen collection for the Day 7 and Day 14 PCR tests at quarantine centres and the swabbing of airline crew. Upon the detection of the new case of COVID-19 in the community, all the CTT were redeployed to the affected regions to accelerate the contact tracing exercise and stop the chains of transmission in the community. An additional CTT, consisting a driver, a medical practitioner and a nursing officer was deployed to scale-up the rapid response capacity to a total of 5 teams. For the duration of the contact tracing exercise, the team of swabbers at the airport for Day 0 tests replaced the CTT in their tasks of specimen collection for Day 7 and Day 14 at quarantine centres following a rapid training.

#### **COVID-19 testing centres acted as a surveillance system for local cases**

Following the COVID-19 outbreak, each of the five regional hospitals was equipped with a separate structure, the COVID-19 testing centre, dedicated to patients coming with flu-like symptoms and acted as a main community surveillance system. Even patients with respiratory problems who go to the 'unsorted' category are subject to a COVID-19 PCR test. Since their opening till the end of the 2020, 46 618 COVID-19 PCR tests were done via the COVID-19 testing centres of the 5 regional hospitals. About 800 to 1000 COVID-19 PCR tests were done monthly via the COVID-19 testing centres during the period under review and no COVID-19 infection was detected among the local population.

#### **Well established mechanisms for collection, analysis and dissemination of information for decision making within MoHW**

CDCU collected and analysed all statistics from the hotline, COVID-19 testing centres, quarantine centres, laboratory tests and stock stores daily. The information reported to the Minister of Health and Wellness and the Director of Health Services on daily basis and to the Prime Minister's Office twice weekly. CDCU team intervened accordingly in response to the information and consulted a board of decision-makers

consisting of the Director of Health Services, the Minister's adviser and technical and administrative officers if issues need further intervention. Information is also regularly relayed to WHO Country Office to be compiled for the daily and weekly situational reports.

## Challenges

### Understaffed CDCU limits its efficiency

Since the creation of the CDCU in 2009, the unit has remained small with the number of technicians decreasing from 4 to 2 at the time of the review. To date, CDCU has been able to sustain an efficient response to COVID-19, however, under constrained conditions and with the voluntary help of co-workers from another department. Moreover, CDCU is also responsible for the both the surveillance and response of all communicable diseases and with the current focus on COVID-19 other long-term strategies and goals of MoHW regarding antimicrobial resistance, tuberculosis, measles elimination; amongst others which are as important to control and eliminate communicable diseases in Mauritius remain unmet.

### Overworked CTT and over reliance on a limited number of trained teams is risky

The CTT constituted of 4 teams of 3 staff each (driver, medical practitioner and nursing officer) at the time of the review and carried out a total of about 1500 to 1800 specimen collections weekly for incoming travellers in quarantine for their Day 7 and Day 14 PCR tests. The CTT are overworked and it is not efficient to rely on a limited number of teams trained in specimen collection and transport, especially as experienced during March to April 2020 and November 2020 during community transmission cases of COVID-19.

### Absence of a scaling-up plan for the CDCU team during local transmissions

As mentioned above, CDCU was understaffed at the time of review and it was challenging to conduct the case investigation and coordinate the contact tracing exercise upon the identification of an active cases of COVID-19 in the local community with limited staff while still having to coordinate and management quarantines, testing of incoming passengers and the transfer of positive cases of COVID-19 to treatment centres. On an ad-hoc basis, two medical practitioners from other departments voluntarily helped the CDCU to carry out an island-wide case investigation and the teams of swabbers were reshuffled to maintain all the testing activities. However, there is a clear need to institutionalise the ad-hoc scale up response into a formal plan.

## Recommended actions

### Expand and restructure the technical team of CDCU

There is an urgent need to expand the technical team of CDCU and restructure the surveillance and response activities into two separate axes with up to 5 team members each including a statistician. Recruitment can be done from the pool of medical practitioners at MoHW who already hold qualifications in Masters of Public Health. The new recruits could benefit from recent partnership agreement signed between Mauritius and the Indian Ocean Commission to strengthen public health responses via a training programme in field epidemiology in the context of the 'SEGA One Health' project supported by the Agence Française de Développement (AFD).<sup>11</sup> This expansion and restructuring will allow for a more efficient surveillance and response of COVID-19 and other outbreaks along with the accomplishment of long-term goals of Mauritius in its objective of eliminating communicable diseases.

---

<sup>11</sup> <https://www.commissionoceanindien.org/evenements/convention-de-partenariat-en-sante-publique-maurice/>

### **Elaborate a scaling-up plan of the CDCU team upon the detection local cases of COVID-19**

It is important to have a scaling-up plan of the CDCU team including CTT upon the detection of local cases of COVID-19 for immediate and efficient activation of the case investigation and contact tracing exercise. This should indicate clear procedures for the sourcing of additional staff including case investigators, contact tracers and drivers; and materials such as vehicles and testing materials without compromising other response activities.

## **5.4. Points of entry**

### **Best practices**

#### **A strategy was developed for partial reopening of air travel in October 2020 by considering the best practices and lessons learnt from the repatriation of stranded Mauritian**

By capitalising on the best practices and lessons learnt from the use of hotels as quarantine centres during the repatriation of Mauritians and a strong public and private sector relationship in the travel and tourism industry, a strategy was developed by the Government for the partial re-opening of air travel. With ensuring maximum precautions for zero local transmission of COVID-19 as its main objective, the Government decided for the opening of air travel to all passengers under strict conditions. Incoming traveller would need a certificate of a negative COVID-19 PCR test administered between 5 and 7 days prior to the date of boarding at the last point of embarkation, undergo a paid 14-day 'in room' quarantine in a government approved hotel of their choice and undergo 3 mandatory PCR tests on Day 0, 7 and 14 (free for Mauritian nationals and paid for foreign nationals). These measures have proven their effectiveness in preventing local contamination of COVID-19 during the repatriation of Mauritians.<sup>12</sup> With the strong engagement of the private sector, 31 hotels were successfully converted into quarantine centres as at mid-December 2020.

It is to be noted that Mauritians coming back to the country following medical treatment abroad as well as companions are eligible for free quarantine at Lady Sushil Ramgoolam Recreation Centre. This is also applied to Mauritians in difficult situations following approval from the Opening of Borders Committee and High Level Committee.

#### **Detailed sanitary protocols were devised via a multi-stakeholder participation for the partial reopening of air travel**

Following thorough consultations between MoHW, the Ministry of Tourism and other public and private stakeholders of the travel and tourism industry, detailed sanitary protocols were developed<sup>13</sup> to pave the way for a partial reopening of the borders. The document guides the passengers' journey from the point of embarkation and inflight, through arrival and transfer to and stay at the hotel used as quarantine centre to the departure from Mauritius. Detailed instructions are provided to inform the involved authorities of the sanitary measures to be taken at each of these points of contact with passengers and their belongings. It covered all the wider range of stakeholders involved including airline, airport and hotel staff as well as drivers and baggage handlers and MoHW staff.

#### **A centralised online booking system was created to facilitate the implementation of the sanitary measures for the reopening of air travel**

In order to implement these sanitary measures in a seamless way for the incoming travellers; Mauritius Tourism Promotion Authority with the collaboration of different stakeholders in the tourism and travel

---

<sup>12</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Gradual-lifting-of-travel-restrictions-to-start-as-from-01-October-2020.aspx>

<sup>13</sup> <https://www.mymauritius.travel/sites/default/files/covid19/Protocol-Stranded-Mauritians-30-09-20.pdf>

and health sectors, created a [centralised online booking platform](#), MyMauritius.<sup>14</sup> This platform allows the incoming traveller to purchase a travel package including hotel accommodation of their choice for quarantine (from a list of government approved hotels), medical insurance cover (if foreigner) and costs of the three PCR tests (if foreigner) all in one user-friendly booking system. This system is also advantageous for the authorities since it ensured that all incoming travellers have booked their quarantine centres, already paid for their tests and medical insurance online prior to their arrival in Mauritius. The main page of the platform also provides the prospective traveller with all the information on the sanitary requirements for travelling to Mauritius such as PCR testing, forms to be completed for MoHW, the protocol for the partial reopening of borders.

### **Quarantine centres (hotels) continued to be organised and managed by the Regional Public Health Superintendents and CDCU during the partial re-opening of air travel to ensure compliance to the Public Health Act and the Quarantine Act**

With the partial re-opening of air travel in October 2020, the Regional Public Health Superintendents (RPHS) and CDCU, under the supervision of the Director Health Services (Public Health), remained the responsible authorities for the quarantine centres. They ensured the compliance to the Public Health Act and the Quarantine Act and took appropriate actions in case of any breach. The transfer of passengers from the airport to the quarantine centres were overseen by the operation support service section of MoHW. The staffing strategy of the health personnel at the quarantine centre during the repatriation Mauritians proved to be efficient and were maintained: teams comprising of doctors, nursing officers and attendants were assigned by the respective RPHS to the quarantine centre for the whole period of quarantine and were subjected to an exit PCR test. The CTT were responsible for the specimen collection for the Day 7 and Day 14 PCR tests. CDCU maintained a good record of the number of quarantined people and their personal details as well as the test PCR results and dates of discharge for a close monitoring and surveillance.

It is to be noted that the meal preparation and linen change were under the responsibility of the hotels instead of the attached regional hospitals as it was during the repatriation of Mauritians.

### **The mandatory PCR testing done at the airport upon arrival eased the flow of passengers**

Since 15 October 2020, all incoming travellers were subject to a mandatory PCR testing upon their arrival at the airport. The testing station was specially set up after the immigration and public health desks for a fluid movement of passengers. The specimen collection for the PCR test was done by a team of swabbers from the Health Promotion Department of MoHW and the testing was done by the newly set up Airport Health Laboratory (AHL) (more details available in chapter 4.5). Having the testing station and the laboratory both in the airport terminals allowed for a quick turnaround time for test results and an earlier isolation and treatment of any passengers with COVID-19. Before the implementation of this strategy, the first tests were done at the quarantine centres where the bottleneck of travellers and long waiting time carried higher risks of COVID-19 contamination. This new strategy favoured a more fluid and safe experience for the incoming traveller.

### **Staff involved along the passengers' journey were thoroughly trained to implement the IPC measures according to the set protocols**

As at 4 December 2020, more than 5 000 personnel of MoHW, Airports of Mauritius Co Ltd, Air Mauritius Ltd and the hotels used as quarantine centres were trained to implement the protocols devised to prevent local contamination of COVID-19 during the partial opening of borders. Trainings, comprised of standardised and customised components, were carried out in different regions of the island by CDCU and the respective Regional Public Health Superintendent of MoHW. The customised part of the trainings included very detailed and specific directives for sanitary measures to be taken for each position of duty, role plays and measures to be taken in case of risk exposure. This rigorous training was particularly important since many roles previously done by MoHW staff were shifted to the hotel staff or other staff in travel and tourism industry. As at 31 December 2020, there was no COVID-19 cases among the

---

<sup>14</sup> <https://www.mymauritius.travel/>

personnel along the passenger journey despite the 128 imported cases detected since the arrival of the first commercial flight on 3 October 2020. Additionally, Air Mauritius crew and airport staff received ongoing in house training since April 2020.



*Training of the airport staff on the new protocols for respecting IPC measures*

### **The sanitary protocol for airline crew was strengthened and formalised**

To avoid any risk of community transmission in case they were COVID-19 positive, all local airline crew are subject to 7 days of self-isolation at home since the beginning of the pandemic and have a different pathway from passengers at the airport where they underwent the immigration and public health checks, including body temperature checks. However, following rumours of cabin crew not respecting the self-isolation measures, the protocol for airline crew was strengthened and formalised. Since the beginning of November 2020, each local airline crew received a copy of the protocol and a checklist of how to interact with family members during home self-isolation by health inspectors at the public health desks and signed an undertaking, committing to abide to the instructions. The public health inspectors carried out regular checks by calling them on their landline or by random home visits. The crew was tested on Day 7 and was also allowed to resume duty before the 7 days on international flights only, if needed.

A separate protocol for foreign airline crew was developed. The crew stayed on the aircrafts during short layover while for longer or overnight layovers, crew were isolated in individual rooms in a nearby airport hotel monitored by a team comprising of a public health inspector, a medical practitioner and a nursing officer of MoHW. These measures proved to be effective with no recorded COVID-19 infection among airline crew as at 31 December 2020.

### **Rigid sanitary measures were put in place at SSR International Airport**

Since the beginning of the pandemic, the Airports of Mauritius Co. Ltd established stringent Airport Sanitary Protocol at the SSR International Airport and this contributed in preventing the spread of COVID-19 among passengers and staff. Guided by this protocol, numerous strict sanitary measures are implemented both on arrival and departure at the SSR International Airport.

Strategically positioned banners and posters and screens displayed information on the sanitary measures to be followed across the airport. Thermal scanners were placed at the entrances of the airport for detection of fever. The number of entrances and exits to the SSR International Airport was reduced to

ensure that all persons (staff and passengers) coming and leaving the airport pass through the thermal scanners. Previously staff were controlled for temperature upon taking up duty and with the installation of the thermal scanners they are controlled at the entrance of the building itself. Moreover, a double body temperature checks for staff and passengers were also done with infrared hand-held thermometers. Floor labels and signage were placed across the terminals including at the baggage claim and sitting areas to ensure the respect of the 1 m physical distancing. All counters at the Passport and Immigration counters, public health desks, check-in counters and shops and restaurants tills were equipped with protective screens for safe interaction.

More than 40 touchless hand sanitizer dispensers were placed in key locations across the airport. Premises, trolleys, touch screens and hand rails and other commonly used surfaces are cleaned and disinfected more frequently. Moreover, a specialised company ensured the disinfection of the whole terminal in between flights. Contactless processing of boarding passes is in place. All personnel working at the airport were provided with masks, hand sanitisers and gowns, where needed. Since the partial reopening of air travel, all incoming passengers were also given a token comprising a face mask and small sanitiser bottle to both encourage them to abide to the sanitary measures and reassure them that the airport authorities are committed to respecting sanitary measures.



From left to right: Informative banner, hand sanitiser dispenser and thermal camera at the entrance of the airport terminal



Regular disinfection of surfaces.



Fully protected team of baggage handlers





Floor labels indicate the 1m physical distance



Professional disinfection of the airport terminal



Markings on seats in the waiting area



Protective screens at the immigration counters



Double temperature checks with the hand held infra-red thermometer and the thermal camera

### Airport exits were optimised to increase surveillance and avoid overcrowding

Additional exits were opened at the airport for more fluid movements passengers out the airport to their respective special transport while avoiding any crowding. Previously arriving at a different lounge, passengers of private charters flights went through the same path as commercial flight passengers for better control of passenger's pathway and increased surveillance.

### **Airport Terminal Operations Ltd leaned on the Aéroports de Paris Group network to share and learn best practices in preventing COVID-19**

Born out of a partnership between the Government of Mauritius via Airports of Mauritius Co. Ltd and Groupe ADP (Groupe Aéroports de Paris), Airport Terminal Operations Ltd (ATOL) leaned on the large network of airports of the Groupe ADP to inform the sanitary measures to be taken within the SSR International Airport in response to the COVID-19 pandemic. ATOL shared and learnt from the best practices across the Groupe ADP's network of airports during the regular exchanges on important subjects pertaining to protecting passengers and personnel from COVID-19. It was noted that being a small group ATOL was more agile in its responses compared to bigger airport groups and being able to implement the needful changes faster.

### **SSR International Airport received its Airport Health Accreditation for meeting international standards for sanitary measures in an airport**

SSR International airport's efforts to implement sanitary measures for passengers and staff's safety was recognised by the Airports Council International (ACI). On the 6 October 2020, SSR International airport became the first airport in the African region to receive the Airport Health Accreditation.<sup>15</sup> The Airport Health Accreditation programme was created in July 2020 by Airports Council International in collaboration with International Civil Aviation Organisation to assess and ensure that sanitary protocols for COVID-19 in airports are in line with international standards such as the ACI Aviation Business Restart and Recovery guidelines and the International Civil Aviation Organisation's Council Aviation Restart Task Force recommendations. Areas of assessment included cleaning and disinfection, physical distancing, staff protection, physical layout, passenger communications and passenger facilities. This accreditation shows that the SSR International airport's Airport Sanitary Protocol complied to international standards and provided reassurance to passengers, personnel and stakeholders. It also demonstrated Airports of Mauritius Co. Ltd's commitment to prioritise health and safety of the country in the current COVID-19 pandemic.

### **Protocol for the arrival of expatriate workers was revised and adapted to further reduce the number of imported cases of COVID-19**

With the Government relying on the construction sector as the main relaunch of the local economy, efforts were invested on the advancement of several major construction projects in the public sector. Requiring skilled foreign labour mainly from India, recruiting companies' request are discussed and approved by both the Opening of Borders Committee and the High-Level Committee. At the start of this recruitment exercise, all incoming expatriate workers abided to the general protocol for incoming passengers. However, with the high rates of COVID-19 cases detected upon arrival or during quarantine; the Ministry of Labour, Human Resource Development and Training; MoHW and Opening of Borders Committee jointly devised a stricter protocol for the expatriate workers.

This specific protocol required the expatriate workers to do an additional COVID-19 test 24 hour before their flight and to remain in a 5-day quarantine once they reached the city from which they take their flight to avoid mingling with the local population. These stricter measures dropped the number of COVID-19 cases on arrival to Mauritius from about 20 to one or two per flight. Their implementation required the strong collaboration of the employers who accepted to incur the additional costs of the extra PCR test 48 hours prior flight and 5-day quarantine in India, in addition to the 4 PCR tests (5-7days prior to embarkation and Day 0,7,14 in Mauritius), the quarantine in Mauritius and flight costs. The Embassy of Mauritius in India ensured the respect of and coordination these additional measures in India together with the employers while the MoHW; Ministry of Tourism and the Ministry of Foreign Affairs, Regional Integration & International Trade played a crucial role in coordinating the flights and local quarantine centres.

---

<sup>15</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Covid-19--Airport-laboratory-operational-as-from-15-October.aspx>

Moreover, to further reduce the risk of inaccurate or falsified PCR test results, WHO Country Office Mauritius helped to provide a list of accredited laboratories for COVID-19 PCR test in India to MoHW and Ministry of Foreign Affairs, Regional Integration and International Trade. Consequently, expatriate workers were required to produce negative COVID-19 PCR test results from solely these accredited laboratories as a prerequisite to travel to Mauritius for work.

### **A special pathway was successfully implemented for the visits of diplomats and consultants**

Health authorities and other concerned authorities rapidly devised special sanitary measures and precautions to allow foreign experts to come to Mauritius for urgent intervention following the oil spillage due to the MV Wakashio ship wreck on the south-eastern coast of Mauritius. Consequently, visits of foreign diplomats to Mauritius also used the same strategy. All these diplomats and experts were tested for COVID-19 at Day 0, 7 and 14, depending on the length of their visits. Special pathways were designed to avoid that the foreign delegations have contact to the local population. Health inspectors were highly mobilised during these occasions to ensure that all preventive measures such as physical distancing, wearing of masks, proper ventilation of rooms if meetings are held indoor; are respected. This strategy was defined as successful since no local transmission of COVID-19 due to contamination via these foreign delegations were registered.

### **Strict adherence to the evolving protocols for port entry and close collaboration of the authorities at port prevented any contaminations from shipping vessels' crew**

Since the beginning of the COVID-19 pandemic, Port Louis Harbour remained the only point of entry of Mauritius with uninterrupted services. MoHW together with the Mauritius Ports Authority and other relevant authorities in the port's activities created several protocols to ensure that the sanitary protocols established to prevent COVID-19 transmission while maintaining commercial activities. Owing to the dynamic nature of the pandemic, the protocols were constantly evolving to adapt to new situations. Since the 19 March 2020, no passenger cruise were allowed to dock at the Port Louis Harbour. The Port Master only allowed entry to cargo and shipping vessels having spent at least 14 days at sea; under the clearance of the Port Health Office and Passport and Immigration Office. Shipping agents have strictly adhered to the Mauritius Ports Authority and MoHW directive and also played an important role in providing the relevant authorities with all the documents needed for clearance. All the above-mentioned entities together with the Cargo Handling Corporation Limited and the National Coast Guard closed coordinated and actively cooperated to implement sanitary protocols. No port workers were infected by COVID-19 due to contamination from crew of shipping vessels for the period under review.

### **Mauritius Ports Authority developed and applied strict sanitary protocols within its institution**

Apart from the sanitary protocols developed with MoHW for the entry of shipping vessels, Mauritius Ports Authority developed internal protocols and guidelines under the guidance of MoHW and WHO guidelines to prevent any COVID-19 transmission within its institution. All personnel of the Mauritius Ports Authority were provided with gloves and masks and hand sanitiser dispenser have been installed at all worksites. Personnel were encouraged to practice cough and handwashing etiquette, maintaining physical distancing and closely monitor any COVID-19 symptoms. Supervising staff ensured that these protocols were adhered to at all times.

Frequently touched surfaces like door knobs and handrails were disinfected on a regular basis. The entrances of the two main buildings housing the Mauritius Ports Authority were also equipped with thermal camera to monitor the body temperature of all personnel and visitors upon entry. Moreover, the Mauritius Ports Authority provided hand held infra-red thermometers to other specific worksites for temperature checks by the thermal cameras when reporting for duty. Mauritius Ports Authority played a key role in helping Port Health Office to disembark infected crew members by transporting them ashore in tugs. MoHW strongly supported the Mauritius Ports Authority to set up specific protocols for the tug crew involved in these operations. They are equipped in full PPE and the tugs are disinfected by health authorities after use.

### **Mauritius Ports Authority addressed the doubts and fears of the personnel with clear and consistent communication**

During the local outbreak of COVID-19 and the sanitary curfew, some personnel of the Mauritius Ports Authority were scared of being exposed to COVID-19 due to potential contact with crew from sea vessels and were resistant to attend duty. Trade Unions also expressed their concerns. Mauritius Ports Authority addressed these fears and concerns by organising meetings with the trade unions and also within their different departments to clearly communicate about the sanitary measures. Communication materials in form of posters were created and shared with all departments. Information on how to practice various sanitary measures were sent by email too.

### **MoHW trained and sensitised staff at the Mauritius Ports Authority on IPC measures**

Training and briefing sessions were conducted by MoHW personnel to sensitise the staff at Mauritius Ports Authority and Cargo Handling Corporation Limited about the sanitary measures to be taken.

### **Strict sanitary measures were respected for the approval of shore leaves for fishing vessel crew**

Strict sanitary requirement had to be met by the shipping vessel crew and their agents before they are allowed for shore leave. The shipping agent had to organise a COVID-19 PCR test for the crew member from a private health laboratory and communicate the reasons and length of the shore leave and the test result to MoHW, Passport and Immigration office and the Mauritius Ports Authority for clearance. Shipping agent signed an undertaking taking the responsibility for the return of the crew to the ship. Crew members movement were also controlled at the point access quay for both entry and exit. These measures limited the risk of COVID-19 spread into the local population via shipping vessel crew.

### **Safe transit corridor was created for crew change and a protocol is being devised to institutionalise this ad-hoc practice**

All requests for allowing crew change for fishing vessel were approved by the High Level Committee and a protocol has been done on an ad-hoc basis to guide this process. Similar to all incoming airway passengers, the crew members had to produce negative PCR test done between 5 to 7 days before the flight to Mauritius and are immediately transfer from the airport to the ship via a specially organised transport. A formal protocol was being devised by MoHW in concert with the authorities at the port to guide crew change at the time of the review. This protocol will allow crew change especially to those stranded onboard vessels/tankers bring back business at the port while respecting COVID-19 preventive measures.

## **Challenges**

### **The time frame to do PCR test before embarkation created confusions among and challenges for some incoming passengers**

The original wording of ‘a certificate of a negative test within 5 to 7 days before prior to the date of boarding at the last point of embarkation’ was source of confusion and challenge among potential travellers due to the small window of possible days for testing. This issue was identified through the queries via the COVID-19 hotline and via feedback of potential travellers to the Mauritius Tourism Promotion Authority. In December 2020, it was under review to be amended by MoHW.

### **Increased number of forms to be filled by the passengers is counterproductive to IPC measures taken**

In addition to the public health declaration form and the disembarkation form which are collected by the public health officers at the Public Health Desks and the police officers at the Passport and Immigration desks respectively, incoming passengers at the time of the review had to fill in two additional forms: a COVID-19 request form and a form for the pilot Passenger Laboratory Information Management System (LIMS). These two forms defeat the purpose of having a COVID-19 and passenger LIMS whose aim was

to computerize all passenger information in a central information system in order to reduce document handling to minimising contact in this time of COVID-19 pandemic. Moreover, the different forms capture several repeating information and showed a lack of coordination regarding passenger data collection between the different authorities present at the airport.

#### **Travellers occasionally showed resistance to undergo the PCR tests upon arrival**

MoHW often face resistance to test the PCR tests from incoming traveller despite clear communication upon travel bookings and the signing of an undertaking agreeing to be subjected to 3 PCR tests upon arrival in Mauritius.

#### **Insufficient collaboration between the different stakeholders working at the airport**

It has been occasionally noticed that the different authorities responsible for the implementation of the sanitary measures at the airport worked in isolation instead of working collaboratively in this direction.

#### **Low confidence of staff and hesitance to engage with travellers when needed**

Low confidence and hesitance to engage with travellers linked to fears of contracting the virus has been observed from some staff at the airport. These consequently affected the quality of service offered to the travellers.

#### **Differing sanitary measures among countries hinders international travel and tourism**

Sanitary measures for travel and travel restrictions differ from country to country across the world making it complicated for travellers with stopovers to be able to meet the different criteria and conditions of each country. For example, the time frame to have PCR test prior to travel to Mauritius might be in conflict with the required testing time frame of another country where the traveller is stopping over.

#### **The easing of air travel restrictions remains too strict to relaunch the tourism industry in Mauritius**

The authorities from the travel and tourism industry estimate that only about 20% of the incoming travellers were in Mauritius for tourism with the rest of the majority of traveller being Mauritians or resident permit holders. This low level of tourist arrivals is associated with the strict travel restrictions and remained insufficient to relaunch the tourism industry.

#### **Travel and tourism stakeholders often only had two weeks visibility on international air travels**

Since the travel restrictions, travel and tourism stakeholders only have visibility on the following next 15 days regarding air travels with the Notice to Airmen. It is difficult for travel and tourism stakeholders to manage their teams and clients as well as plan sanitary measures to be taken with this limited/ short term foresight regarding air travel.

#### **Mauritius does not figure in the EU's list of epidemiologically safe countries amid COVID-19**

Mauritius not figuring on the EU's list of epidemiologically safe countries amid COVID-19 may be a discouraging factor for European tourists considering to travel for tourism.

#### **Need to address new challenges regarding drug trafficking the airport**

With a considerable decrease in the volume of incoming passengers, there are less possibility of drug smuggling via drug mules and the airport authorities are therefore needing to take different approaches for drug traffic control. The Mauritius Revenue Authority and the Anti-Drug and Smuggling Unit are calling for specific demands on the airport authorities to reinforce their surveillance and ATOL is having to adapt to this situation as well.

### **Travel restrictions and lack of protocols made it difficult for the change of crew for shipping vessels**

The limited number of flights and the 14 day quarantine upon arrival by air travel is challenging for the change of crew for shipping vessels, especially for incoming crew. The ship cannot wait that long for the change and Mauritius has lost a lot of business to the other ports in the region because of this. MoHW together with the authorities working at the port were working on the elaboration of a protocol for the change of crew for shipping vessel at the time of the review.

## **Recommended actions**

### **Strengthen communication for incoming air passengers on conditions and criteria of travel to Mauritius**

The communication to incoming air passengers on the testing criteria required upon arrival in Mauritius needs to be strengthened to reduce resistance of travellers to undergo a PCR tests upon arrival. Communication tools explaining these requirements can be developed by MoHW together with the relevant travel authorities and disseminated prior to flight, inflight or upon arrival by the travel authorities. Less resistance will also allow for a smoother and more rapid flow of passengers through the public health desks for testing and lower the risk of crowding.

### **Continuous training and monitoring is needed for staff working along the passenger's journey to build their confidence**

Staff working along the passenger's journey need to undergo continuous training in sanitary measures to be taken to build their confidence interacting with travellers and of a good quality of service. Consistent communication about the preventive measures can be shared during briefings by team leaders before their duty shift. Table-top exercises and regular monitoring during duty by supervisors can be done to reduce fear, build confidence and result in better service and implementation of the sanitary precautions.

### **Set up of an intersectoral platform among authorities working at the airport to increase collaboration and coordination of the implementation of sanitary measures**

Despite the existence of several multi-stakeholders' platform and fora, there is a need to consolidate communication and collaboration between key technicians involved in the implementation of sanitary measures at the airport. Regular meetings can be held to harmonise actions on the ground and encourage informal lines of communication to facilitate implementation of measures towards the common goal of zero local transmission.

### **Consider the harmonising of international travel and easing international travel through the guidance of Council's Aviation Recovery Task Force (CART)**

Mauritius should consider and advocate for the alignment of the current sanitary measures for international travel with the guidance of CART to harmonise the sanitary measures put in place internationally and ease international travels. International Civil Aviation Organization's CART is aimed at providing practical, aligned guidance to governments and industry operators in order to safely restart the international air transport sector globally in a coordinated manner.

### **Set up a working group to explore the possibility of bubble travel without quarantine for air travel for touristic purposes**

With success of the special pathways with strict sanitary measures for foreign diplomats and experts and for 'special cases', a working group composing of with the health authorities and tourism and travel authorities can be created to explore and discuss the possibilities of this strategy of 'bubble travel' without quarantine to boost the tourism industry.

### **Elaborate a protocol for shipping crew needing healthcare**

Since the closure of borders, the shipping vessel crew who needed healthcare were transferred to the nearby hospital by respecting the COVID-19 preventive measures and this was done on an ad-hoc basis following consultations among the health and port authorities. However, a proper protocol needs to be elaborated by the health and port authorities to clearly guide this operation.

### **Develop a contingency plan for port activities in case of a sanitary curfew**

The relevant authorities for port activities together with MoHW should develop a contingency plan for port activities in case of a sanitary curfew based on the best practices learnt and core capacities gained during the March to May sanitary curfew. Scenario planning could also be included in the plan as well as table top exercises. This will enable a faster and more fluid response in case of a second sanitary curfew.

## **5.5. National laboratory system**

### **Best practices**

**A plan guiding the consolidation of laboratory services in the advent of a second wave was developed to increase preparedness**

Aiming to fully align with the WHO recommendations for Pillar 5: National Laboratories, the laboratory services of MoHW planned to increase its capacities. Based on the previous achievements and lessons learnt from the COVID-19 outbreak in Mauritius, a plan guiding the consolidation of laboratory services in the advent of a second wave of COVID-19 was devised in October 2020. Twelve main areas were covered, namely: access to international reference laboratories; SOPs for specimen collection, management and transport; biosafety risk assessment; improving specimen collection, monitoring and referral networks, sharing of genetic sequence data and viral materials; strengthening the LIMS; develop surge plan to conserve laboratory resources; monitor and evaluate diagnostics, data quality and staff performance; develop quality assurance for point of care testing; implement blood collection program during outbreak time such as lockdown period; and set up a convalescent plasma therapy program.

### **Rapid COVID-19 IgM/IgG antibody combo test was introduced at CHL**

CHL introduced rapid COVID-19 IgM/IgG antibody combo test and the tests were done in combination with PCR tests at the request of the clinical immunology committee which oversees the case management of COVID-19 patients. The COVID-19 Antibody tests conducted have assisted in complex COVID-19 PCR test result interpretation as well as the monitoring and discharge of COVID-19 patients from the treatment centres.

### **CHL shared SARS-CoV-2 samples for genetic sequencing**

In December 2020, CHL sent 20 SARS-CoV-2 samples from infected persons detected in quarantines for genetic sequencing and other characterisation at the Francis Crick Institute in United Kingdom, which is a WHO reference centre with whom CHL has been collaborating for more than a decade as National Influenza Centre. The aim was to identify whether the patients were infected by any of the latest variants of COVID-19 from South African, United Kingdom or Brazil. This was facilitated by the WHO Country Office.

### CHL is preparing for the setting-up of genetic sequencing in Mauritius

Arrangements were made to set-up a genetic sequencing service for SARS-CoV-2 at CHL to carry out tests locally for better variant surveillance at national level. Letter of award for acquiring a Next Generation Sequencing (NGS) sophisticated equipment was issued on 31 December 2020 and specifications for reagents and consumables were to be subsequently finalised.

### CHL and AHL have acquired new equipment to improve IPC at laboratory level

CHL has acquired two safety cabinets. CHL and AHL have also received an autoclave machine for the sterilisation of equipment from the United States Embassy which will help to prevent infection of COVID-19 at laboratory level.



Left: Representatives of CHL and AHL receiving the autoclave machine  
Right: David Dale Reimer, United States Ambassador to Mauritius, with Dr the Hon Kailesh Kumar Singh Jagutpal, Minister of Health and Wellness

### The national COVID-19 testing capacity was expanded

Two new private laboratories, the AHL and the NovaLAB opened in October and November 2020 respectively. They successfully met the requirements of MoHW to perform COVID-19 PCR tests following assessment and inspection done by a team of key personnel from CHL. NovaLAB was open to anyone wanting to do a COVID-19 test in the private sector while AHL conducted the testing of the incoming passengers at the airport upon their arrival. These two laboratories considerably increased the testing capacity of Mauritius while decreasing the pressure on the CHL and the C-Lab at Welkin Hospital (private). Mauritius experienced no backlog regarding COVID-19 PCR testing at the time of review. Between September and December 2020, 87 019 PCR tests were done by all four laboratories which is more than the number done for the period of February to August 2020 (69 177 PCR tests). More details about the achievement for COVID-19 PCR testing can be found in the table below:



Table 1: Total number of COVID-19 PCR tests done by the four laboratories from September to December 2020

Month	Central Health Laboratory	Airport Health Laboratory	Welkin Hospital	NovaLab	All laboratories
September	19311	N/A	1031	118	20460
October	18870	1915	685	1363	22833
November	16926	4226	495	2382	24029
December	15114	2907	1100	576	19697
<b>Total number of PCR tests</b>	70221	9048	3311	4439	87019
<b>Highest number of PCR tests done daily</b>	1283	611	226	222	

Moreover, the health laboratory of the Queen Elizabeth Hospital in Rodrigues also started to performed COVID-19 PCR tests.

**The four COVID-19 testing laboratories have come together in a network to harmonise their practices and standards**

The four COVID-19 testing laboratories in Mauritius, CHL, AHL, C-lab, NovaLAB have formed a network of laboratory to ensure harmonise their practices and quality and safety standards with each other and alignment them with international standards such as WHO and ISO. Meeting are held on an ad-hoc basis to review the progress made in this direction and share their experiences and needs.



*Representatives of CHL, AHL, C-lab, NovaLAB during an interlaboratory meeting*

**All four COVID-19 testing laboratories participate in interlaboratory comparisons and assessments to ensure the national quality of COVID-19 PCR tests**

To ensure the quality of COVID-19 PCR tests performed in Mauritius, CHL extended its interlaboratory comparison to AHL and NovaLAB, the two new private laboratories as well. The four laboratories have the same testing platform making it an advantageous factor for these exercises. CHL participates in External Quality Assurance scheme organised by WHO in collaboration with National Institute for

Communicable Diseases, Johannesburg and has received excellent feedback. On the other hand; AHL, C-Lab and NovaLAB are in the process of External Quality Assurance with a foreign international laboratory. In preparation to obtain accreditation according to WHO standards, the three private laboratories submitted their complete questionnaire for the WHO COVID-19 Laboratory Assessment Tool in December 2020.

### **The COVID-19 LIMS is been scaled up into a National LIMS**

CHL has been implementing the scaling up of the COVID-19 LIMS into the National LIMS for all laboratory tests covering all health facilities. This project was catered for in the National Budget 2020-2021 and a cost-sharing agreement was signed between MoHW and United Nations Development Programme (UNDP) to cover for implementation of the project over an 18 months period. University of Washington, Department of Global Health was selected by UNDP for the development of the software development.

### **A passenger COVID-19 LIMS is being included in the patient COVID-19 LIMS to collect testing data of incoming passengers**

With the partial opening of borders and the testing strategy at Day 0, 7 and 14 for all incoming passengers, the patient COVID-19 LIMS has evolved to include a passenger COVID-19 LIMS which captures the data on the three mandatory tests. Data for the Day 0 tests are entered by AHL while the data entry for Day 7 and 14 tests are done by CHL, following the clearance of the system by the Data Protection Office. As at 31 December 2020, more than 120 000 computer files for PCR COVID-19 tests have been created in the system. A Passenger Locator Form has been designed and awaiting approval by relevant authorities.

### **Weekly meetings are conducted to coordinate the implementation of the Laboratory Information Management System (LIMS)**

CHL; Central Information Bureau, from the Ministry of Information Technology, Communication and Innovation; and the University of Washington meet virtually once or twice a week to coordinate the implementation of the LIMS via the OpenELIS software. Progress made, challenges and the requirements for the LIMS are discussed to refine the system.

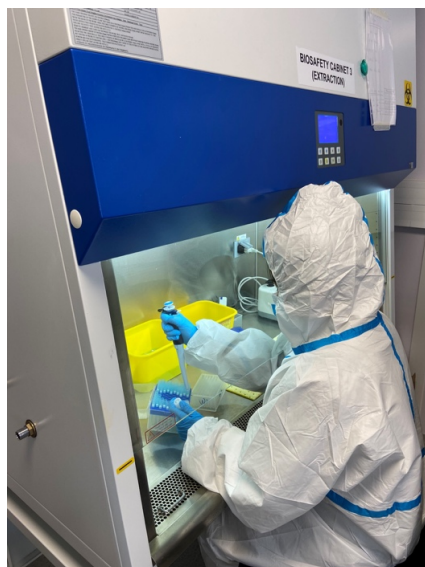


*Representatives of CHL and the Central Information Bureau during a virtual meeting with the University of Washington*

**Airport Health Laboratory with international standards was set up for the testing of incoming passengers with the support of CHL**

Operational as from 15 October 2020, AHL owned by ATOL performed the COVID-19 PCR test for all incoming passengers within the airport terminals upon their arrival in the context of the partial opening of borders. A memorandum of agreement was signed between ATOL and MoHW for the set-up of AHL including the key support of CHL in this endeavour. CHL assisted ATOL in the design and infrastructural workers of the laboratory, staff recruitment and procurement of equipment and consumables as well as the elaboration of a legal and regulatory framework (LRF) for the proper functioning of the AHL. AHL has a team consisting of a technical laboratory manager, 4 technicians, 3 laboratory assistants and 3 attendants and is equipped with 3 automatic nucleic acid extractors, 4 QuantStudio 5 PCR machines and 2 magnetic induction cyclers for PCR testing.

Interlaboratory comparisons indicated a 100% concordance in the PCR test results between AHL and CHL. AHL has an estimated maximum daily testing capacity of 2000, however, with the limited number of incoming flights, the average number of tests done per day at the time of the review is about 300 tests with a turnaround time of 6 hours from the time of specimen collection to test results. Located in airport terminals itself, swab samples were quickly transported to the laboratory for testing, avoiding rigid storage and transport conditions. In addition, results were obtained quicker allowing for the earlier detection of any COVID-19 cases and less waiting time for results for the passengers themselves. This fluid testing process was facilitated by close collaboration and active communication with the team of swabbers and the public health inspectors. From its opening on 15 October 2020 to 31 December 2020, 9097 tests were done with 69 positive tests recorded.



*The recently set-up AHL at SSR International Airport terminal*

### **The transfer of specimen to AHL for Day 0 tests was simplified for an increased turnaround time**

The processes for sorting and transporting of the specimens collected in the airport terminal for Day 0 PCR testing to AHL were optimised. Despite the swabbing area and AHL being within a short distance, these processes previously took about 2 hours. The swabbers were labelling, sorting all the specimens in order before transporting the specimens under police escorts by car from the terminal to the AHL. Following successful discussions between AHL, the team of swabbers and CHL, the processes were simplified. Thereafter, the swabbers informed AHL when batches of 94 specimens (quantity of specimen that fit in the QuantStudio 5 PCR machine) were ready and AHL staff walked within the terminal premises to collect the specimens which were kept biohazard bags in secured cool box container with their respective requests forms for PCR testing. Turnaround times was significantly reduced with these new processes.

### **Several control systems were put in place to ensure that all incoming passengers were swabbed at the airport for Day 0 testing**

Three control systems were put in place to verify that all incoming passengers were swabbed and tested. AHL technical laboratory manager reconciliated the number of specimens received with number of incoming passengers received from the Passport and Immigration Office and the number of specimens collected from the swabbers. Furthermore, as from the end of October 2020, each incoming passenger received a 'Pax swabbed' card after being swabbed which they put in a basket upon leaving the swabbing area. This is an additional control which worked well and all three controls tallied so far, ensuring that all incoming passengers were swabbed for the Day 0 test.

### **Newly recruited staff at AHL underwent a thorough training in COVID-19 PCR testing**

All 4 technicians, 3 laboratory assistants and 3 attendants have been trained by the technical laboratory manager upon recruitment in August 2020. Theoretical training consisted of introduction to COVID-19, biosafety measures including donning and doffing of PPE and the type of PPE to be worn in each room, basic molecular biology, polymerase chain reaction method and interpretation of results. Consequently, the trained staff underwent a practical training of month at CHL followed by additional training at AHL by the technical laboratory manager with specimen sent by CHL once the equipment were installed. The staff were trained in real life situations with those samples as per their job description.



*Two laboratory technicians interpreting the results of the PCR tests at AHL*

### The performance of AHL is monitored and evaluated on a regular basis to guarantee the quality of PCR tests done

To ensure that the quality of the PCR test done at AHL are at the highest standards, regular competency assessments are done to monitor the progress of the staff especially regarding rapidity. The turnaround time is important and AHL is ensuring that the standards are being met. The technical laboratory manager ensured the daily monitoring of tests through the following key performance indicators: (1) time taken to label samples, (2) time taken to load samples in extraction plates and (3) time taken to load PCR mix and RNA.

AHL used positive control, negative control and/or no template control for quality control of the tests performed. All doubtful and positive specimen were doubly tested at AHL before being sent to CHL for a confirmatory test. AHL asked for the re-sampling of specimens on Day 1 if they were not satisfied with the specimen collected on Day 0 and this was done by the team of swabbers of CDCU at the quarantine centre and the tests are performed by CHL.

### Strong and constantly improving biosafety measures were applied at AHL

All staff working at AHL wore different types off PPE at all times depending on the rooms they are in. Moreover, despite its recent set-up, AHL rearranged the laboratory settings to further improve safety. The open space which was found next to the extraction room was replaced by the donning and doffing areas to encourage immediate and safer donning off while the open space was moved furthest from the extraction room next to the storage room.

A risk assessment was done by the Health and Safety Department of ATOL before opening and after opening and risks were identified and classified by severity. Only the extraction room represents moderate risks of contamination and biosafety cabinets were used to manipulate the specimens.

Biohazard wastes were disposed in a separate bin which is collected on a regularly basis by a transport officer from the closest regional hospital (Jawaharlal Nehru Hospital in Rose Belle) to be taken for incineration.



*The newly set-up donning and doffing areas at the entrance of the extraction room at AHL*

## **AHL performed Day 7 and Day 14 testing during the detection of the cluster of COVID-19 cases to help CHL manage the increasing number of tests done**

Extensive contact tracing exercise was carried out following the detection of the cluster of COVID-19 on 12 November 2020 resulting in a rise in the number of COVID-19 PCR test to be performed. Upon the suggestions of the High-Level Committee on COVID-19, AHL supported CHL during this period by also doing the Day-7 and Day 14 PCR tests to reduce their work load. Thus, 1242 addition tests were done by AHL from 14 November to 16 November 2020, in addition to the 536 Day 0 PCR tests done for this period.

## **Challenges**

### **COVID-19 LIMS was not being used to its full potential**

COVID-19 LIMS has the potential to be a crucial tool for data access and data analysis which could accelerate informed decision making, especially in the middle of an outbreak. One of the purposes of COVID-19 LIMS was to facilitate the dissemination of information related to COVID-19 testing by providing access the relevant stakeholders with a real time access to the data via an internet interface. However, the lack of access to computers and internet is hindering the use of COVID-19 LIMS to its full capacity. Moreover, relevant medical officers as well the administrative at MoHW do not have access to the system and a general lack of motivation to adopt this novel computerised system was noted. Moreover, excel sheets were still used to prepare management reports while the COVID-19 LIMS was meant to directly analyse data and produce visuals for easy reporting.

### **Slow implementation of the Passenger LIMS**

Planned to be fully implemented by the end of July 2020, the Passenger LIMS intended to be a centralised system of data collection and storage of key information of incoming passenger for COVID-19 surveillance. Incoming passengers would have entered all the required information prior to arrival in Mauritius on an online system and all the relevant stakeholders at the airport namely the Passport and Immigration Officers, Public Health Inspectors, swabbers and AHL; would have had direct access to it. This would have also avoiding the filling and exchanging of paper forms and reducing physical contact between passengers and staff for increased safety. At the time of the review the Passenger LIMS was still in its beta version.

A lack of communication between the systems developers and its future users and systems developers not taking into consideration the needs of its future users while developing the system were identified as the factors slowing down the implementation of the Passenger LIMS. Furthermore, as mentioned above in chapter 'Increased number of forms to be filled by the passengers is counterproductive to IPC measures taken', instead of simplifying the system of passenger information collection, the incoming passengers were at the time of this review required to fill in two additional paper forms, one of which was for data entry into the beta version of the Passenger LIMS, thus defeating the purpose of the system. Data sharing is also slow since information from the paper forms were entered manually into the system for each passenger.

## **Recommended actions**

### **Raise awareness of all stakeholders about COVID-19 LIMS and support them with continuous training and materials**

The successful implement COVID-19 LIMS will require raising awareness of all the stakeholders on the uses and advantages of using this new tool and step by step training on using the system. All the users should have regular in person support and follow-up from the local system implementer (Central Information Bureau, from the Ministry of Information Technology, Communication and Innovation) to achieve full adoption of this new tool in their respective day to day work. Access to the COVID-19 LIMS

should be reinforced by providing system access, adequate internet connection and devices to relevant stakeholders.

### **Increase communication between the developers of Passenger LIMS and future users to accelerate its implementation**

The communication between developers of Passengers LIMS; University of Washington; Central Information Bureau from the Ministry of Information Technology, Communication and Innovation and the airport stakeholders who would be using the system should be increased by regular working sessions or by establishing an efficient feedback mechanisms. Needs and inputs of all the future users should be taken into consideration to develop a system which is advantageous and user friendly for all partners and passengers.

### **Explore the possibilities for AHL to perform Day 7 and Day 14 tests for optimum use**

The relevant stakeholders are encouraged to discuss the possibility of Day 7 and Day 14 COVID-19 PCR tests being done by AHL. This was done during the surge testing for contact tracing when COVID-19 cases were detected in the community in November 2020 and has proven to be an optimum for AHL since Day 7 and Day 14 fall on the same days as Day 0 and AHL already have their full staffing. Moreover, AHL already have passenger's information since they performed Day 0 testing. This option will optimise the resources at AHL while reducing the pressure on CHL whose molecular biology department is already involved in the surveillance of arboviruses and influenza epidemiological surveillance.

### **Increase AHL's capacity to perform COVID-19 PCR test for outgoing passengers**

There is an increasing number of countries requiring a compulsory COVID-19 PCR test done by passengers prior to flying to them. Thus, relevant stakeholders could consider facilitation/increasing AHL's capacity perform COVID-19 PCR tests at the airport terminals for outgoing passengers as well.

### **Passenger LIMS should be programmed to include information on COVID-19 vaccination**

With vaccination campaigns against COVID-19 been deployed both locally and worldwide, LIMS passenger should be prepared to capture passenger's information on assenger's information on vaccination such as types of vaccination received, doses received and the date of vaccinations.

## **5.6. Infection prevention and control**

### **Best practices**

#### **A training of trainers was conducted to strengthen the capacity of health professionals in IPC and case management post COVID-19 in Mauritius and Rodrigues island**

WHO Country Office together with MoHW conducted a 5-day training of Trainers on Infection Prevention and Control (IPC) and Case Management post COVID-19 from 12 to 16 October 2020 with the support of the Canada Fund for Local Initiatives. 34 health professionals including specialists working in public health, public health nursing officers, surveillance officers, pharmacists, public health food and safety inspectors from both Mauritius and Rodrigues islands virtually benefitted from the expertise from WHO Regional Office for Africa and WHO Regional Office for Africa/Intercountry Support Team for East and Southern Africa. Face to face sessions were facilitated by local resource persons and consisted of hands on training on hands-on experience on donning and doffing, hand hygiene and other relevant standards IPC measures. Gaps in the IPC guidelines were also identified. The trainees had the responsibility of cascading this training to some 1370 health professionals.

The first series of cascade training was conducted in Rodrigues island from 8 to 16 December 2020 by WHO Country Office Mauritius in close collaboration with the Rodriguan Commission for Health. More

than 100 health care workers from the primary health care settings comprising medical officers, nurses, midwives, public health nursing officers, surveillance officer and other relevant health worker attended the training. These trainings were designed to address the high rate of COVID-19 infection among health professional during the COVID-19 outbreak. A training manual was developed for this purpose and the manual included preventive measures against COVID-19 as well as communicable diseases in general.



Left: Participants of the 5-day training of Trainers on Infection Prevention and Control (IPC) and Case Management post COVID-19

Right: Dr Mariam Timol, Director Health Services of the Ministry of Health and Wellness addressing the audience during the opening of the training

### IPC practices in schools were strengthened through School Health Clubs

From 3 to 9 November 2020, 11 sensitisation workshops were conducted building the capacity of 98 patrons and 157 students in knowledge and skills on basic microbiology, COVID-19, IPC, standard precautions for hand hygiene and respiratory hygiene, physical distancing and the wearing personal protection equipment. Participants were equipped with a newly developed module handbook for Infection Prevention and Control Practices to help them cascade the training to their peers. In addition, 50 schools were identified for the setting up of foot/elbow operated taps following an assessment. These workshops were organised by WHO Country Office in partnership with the Ministry of Education, Tertiary Education, Science and Technology and MoHW.



Left: Members and patrons of Public and Private School Health Clubs during the sensitisation workshop

Right: Trained healthcare demonstrating hand hygiene practices during the sensitisation workshop

### Safer waste management measure was implemented in quarantine centres

All incoming passengers going through the mandatory 14-day quarantine upon entry in Mauritius were encouraged to sort their wastes in two categories upon disposals. A yellow waste bag was provided for



potentially infectious materials such as masks, tissues, wipes while a black waste bag was used for regular waste. Hotel and health staff present at the quarantine regularly sensitised and reminded the travellers. This additional precautionary measure was adopted to reduce the risk of contamination among the staff working along the chain of the public waste management services. The yellow bags with potentially infectious materials were treated similarly to medical waste and safely collected and incinerated by professionals in the health sector.

### **Regular checks were done to ensure IPC measures are respected in workplaces**

Despite the general relaxation in the implementation of IPC measures by the population at large; the Occupational Safety and Health Department of the Ministry of Labour, Human Resource Development and Training continued its regular checks in workplaces to ensure that sanitary measures were applied according to the Occupational Safety and Health Act and the Public Health Act. From January to November 2020, a total of 5214 inspections were conducted by 66 Occupational Safety and Health Inspectors and notices were issued in case of infringement.

## **Challenges**

### **Hand hygiene in hospital settings remains weak**

Access to soaps and drying materials, key factors to maintaining hand hygiene, remains a challenge in hospital settings. Soaps or handwashing liquids and clean towels, paper towel or drying machines are often not available.

### **Lack of standardised IPC guidelines is causing a poor coordination of IPC activities at national level**

The lack of a standardised IPC guideline at national level resulted in each regional hospital to develop its own IPC guideline, which is causing a poor coordination of IPC activities national level.

## **Recommended actions**

### **Accelerate efforts to improve in IPC in hospital settings**

In addition to improving access to water in hospital settings, access to soap and drying materials should also be improved and accelerated.

### **To acquire another incinerator for waste management**

The public health sector currently has only one incinerator for the disposal of medical waste and relying on only one incinerator is highly risky. Thus, it is important to increase this capacity and have back up incinerators in case the current one is not functional.

### **Establish an IPC Directorate at national level**

MoHW should establish an IPC Directorate at the national level to implement the IPC National Action Plan. Having this dedicated entity would facilitate the elaboration and implementation of strategic plans and operational plans for IPC at national level as well as their monitoring and evaluation. It would also ensure that there are dedicated resources to ensure that IPC measures are respected in health facilities, including the access to guidelines and other tools and continuous training for healthcare workers. It would also be an opportunity to accredit the IPC component in healthcare work with standardised training tools in line with national guidelines and international standards.

### **Develop a national guideline for IPC in healthcare settings**

MoHW should standardise all IPC guidelines in healthcare settings at a national level, meeting international standards such as WHO and CDC guidelines and with the purpose of mitigating the risk of transmission of nosocomial infections to health workers, patients and visitors. This guideline will help to

facilitate the training and education of trainers in IPC modules and support the coordination of the surveillance and impact of IPC intervention. A harmonised monitoring and evaluation and feedback mechanism framework should also be included for IPC at national, regional and district level.

#### **Plan for sustainable medium to long term IPC training programme**

To ensure the continuity of the IPC training done by WHO Country Office together with MoHW, a sustainable medium to long term training programme should be planned for on-going IPC training of all clinical and non-clinical staff at facility levels.

## **5.7. Case management and knowledge sharing about innovations and the latest research**

### **Best practices**

#### **The discharge protocol was promptly amended following a recovered and discharged COVID-19 patient falling ill again**

On 12 November 2020, a recovered and discharged COVID-19 patient showed symptoms of illness, was once again tested positive and referred to a treatment centre. Two members of his family thereafter tested positive for COVID-19. The patient who travelled from Australia and UAE was previously tested positive while in quarantine, admitted in a treatment centre and discharged following a negative COVID-19 PCR test as per the protocols at the time. Following this usual case, the discharged protocol was promptly reviewed and strengthened by MoHW. COVID-19 patients can only leave after at least ten days of hospitalisation and after having produced two negative COVID-19 PCR tests on the 7<sup>th</sup> and 10<sup>th</sup> day of hospitalisation<sup>16</sup>. The discharged patient must remain in self-isolation at his place of residence for 7 days following discharge with regular checks done by the public health inspectors.

#### **Treatment protocols were regularly upgraded to meet international standards**

Based on the evolving scientific literature and evidence, the treatment protocols for COVID-19 were often upgraded to meet international standards. Treatments and medications were administered according to European and American norms.<sup>17</sup> Since September 2020, Mauritius had a 100% recovery rate and no patient needed an intubation. The use of oxygen therapy coupled with regular blood gas test for monitoring was highlighted as the key contributor to recovery.

#### **The ‘maximised and optimised’ strategy was maintained with the isolation of symptomatic and asymptomatic patients in separate treatment centres**

Mauritius adopted a maximised and optimised response for maximum efficacy for case management. In line with it, MoHW maintained the isolation of all persons with a positive COVID-19 test result. Symptomatic patients were treated at the New ENT Hospital while asymptomatic patients were under observation at SSR Recreation Centre in Belle Mare, a makeshift treatment centre. This was done to avoid the exposure of the asymptomatic patients to high viral load of COVID-19 in the New ENT Hospital treatment wards. Asymptomatic COVID-19 patients with co-morbidities are also admitted to the New ENT Hospital for closer medical follow-up with the latest technologies at hand. The rest of the asymptomatic COVID-19 patients were isolated in individual rooms with attached bathroom at the SSR Recreation Centre. The latter were monitored twice daily for body temperature and blood pressure checks

---

<sup>16</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=No-new-local-positive-COVID-19-case-registered-since-12-November-2020,-states-Dr-Joomaye.aspx>

<sup>17</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Hotel-fees-to-be-reimbursed-in-case-Covid-19-test-is-positive-upon-arrival,-says-Dr-Joomaye.aspx>

by a medical practitioner and a nursing officer, who stayed on-site. Any asymptomatic patients showing persistent rise in body temperature was rapidly transferred by Rapid Response Team to New ENT Hospital for treatment.

### **IPC measures in treatment centres were reinforced by learning from the outbreak experience**

As from September 2020, the Superintendent of New ENT Hospital met with the supervisors of attendants, nursing officers and medical practitioners who were on duty during the COVID-19 outbreak of March-April 2020 to discuss about challenges and lessons learnt. These informed the reinforcement of IPC measures in the treatment centre to reduce risks of contamination among the staff. The staff were fully trained in and fully using the existing hospital pneumatic tube systems for the transferring of X-rays, patient documents, general documents, drugs, test results, specimen collected for testing across the in the hospital. This greatly reduced exposure to potentially infected materials and human contact.

All medical staff who worked in the treatment centres wore full protective personal gears with masks, overheads, face shields, overall suits, gloves and overshoes. They received a comprehensive briefing on donning and doffing of PPE and those working the New ENT hospital were distantly supervised by Superintendent of the hospital via the camera system through video surveillance. Medical staff were provided with operating theatre foot wear and fresh gowns at each morning and evening ward rounds. The used gowns were isolated for 48 hours before going for laundry. The hospital premises were disinfected daily with chlorinated water every morning by two public health inspectors from the sanitary inspectorate. No staff from treatment centres were infected by COVID-19 for the period under review.

### **Staff in treatment centres were isolated during duty and went into post-duty quarantine**

Since the conversion of New ENT Hospital into a COVID-19 treatment centre, its ENT staff and services were relocated in the nearby regional hospital. Staff were supplied from across all regional hospitals to create the weekly teams for COVID-19 treatment. The team comprised of 4 attendants (two male and two female), 4 nursing officers (two male and two female), a nursing supervisor, a medical practitioner (generalist) and specialised medical practitioner. Similarly, weekly teams of one medical practitioner, one nursing officer and two attendants (male and female) were constituted for SSR Recreation centre. Staff were isolated within the premises of the two institutions throughout their 7-day shift and signed an undertaking to commit to the protocol in place. Upon taking duty at the respective treatment centres every Monday, all staff were briefed about their respective duties and about the different IPC measures with the aid of an informative video. There was no contact between the incoming and outgoing staff teams.

At the end of their 7-day working shift, members of the teams took a COVID-19 PCR test before proceeding to a one-week quarantine. They underwent a COVID-19 PCR test at the end of the quarantine and go into 7-day home-isolation during which they have to report for any suspected signs or symptoms of COVID-19. This strict staffing strategy of isolation during duty and post-duty quarantine was effective in preventing cases of COVID-19 in the community via infected of health personnel.

### **MoHW increased the preparedness in case management for a resurgence of COVID-19 and for different medical case scenarios**

In September 2020, MoHW together with its key multisectoral stakeholders worked on a “National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius”. As part of this plan, a detailed surge capacity strategy was devised for case management which prepares for a bed capacity of 61 in resuscitation, 40 for unstable patients and 240 for asymptomatic patients or patients with mild symptoms and without any risk factors across several public hospitals. One of the wards in the New ENT Hospital is equipped with high efficiency particulate air filters and could be converted to an intensive care unit if needed.

Moreover, in preparation to receive COVID-19 patients with various existing health conditions, the Superintendent of New ENT Hospital held several consultative meetings with consultants in charge to discuss about their requirements and how resources needed for specific treatment and interventions

would be provided. Preparations to welcome paediatric patients, pregnant patients, patients needing dialysis and patients with heart conditions were made, following the site visit of the consultants in charge to the New ENT Hospital.

#### **A special pathway was designed for the safe transfer of COVID-19 patients for scans**

To reduce the risk of contamination among the hospital staff, a special pathway was created to safely transfer the COVID-19 patients from the treatment ward to the scanners in the New ENT Hospital. The existing structure has the advantage of having a lift connected directly to the treatment wards which was dedicated solely for the movement patients. Two nursing staff with full PPE accompanied and helped the COVID-19 patients in and out of the scanner while the radiologist technician remained in the control room and had no contact with the patients. All scans were sent digitally.

#### **The Hospital Management Information System was fully implemented for more efficient case management**

As part of the government's initiative to implement e-health in the public health system, the New ENT Hospital was equipped with a Hospital Management Information system following its renovation. Ensuing a thorough training of the relevant staff, the system was eventually fully implemented in September 2020 and was efficiently used to order drugs and scans, to manage test and scan results and to manage admission and discharge of patients. This system required less work, writing and person to person contact and has been greatly advantageous in this time of minimal staffing at the New ENT Hospital. Moreover, the new generation of health professional positively welcomed the system and were motivated to integrate it in their work routine.

#### **A multidisciplinary approach was adopted for the case management of COVID-19**

Internal medicine specialists attended patients with co-morbidities to manage their chronic illnesses and physiotherapists provided chest physiotherapy when needed. Additionally, psychiatrists attended patients who developed psychiatric conditions due to their long stay at the hospital. Radiologists analysed medical images to help in the monitoring of the COVID-19 patients' condition and Consultant in Charge (internal medicine) from the regional hospital also helped in the interpretation of results when needed.

#### **A clinical immunology committee oversaw the case management of COVID-19 patients**

A technical group consisting of the Directors of Health Services at MoHW, an adviser at MoHW the Superintendent of the New ENT Hospital, two pathologists who are the Director and Assistant Director of the Laboratory services and Consultants in Charge (Internal Medicine) and Chest Physicians at the Regional Hospitals was established to oversee the case management of COVID-19 patients. Members were in regular contact via mobile and met to discuss and take decisions difficult cases as well as discharge and admission criteria. This committee allowed for consultative and prompt decision making.

#### **A simplified system was devised to facilitate the payment of medical costs of foreigners**

Mauritius is a welfare country and the public health system is free for Mauritians. With the partial reopening of the air travel, Mauritian authorities developed a billing system for non-Mauritians who will be hospitalised if COVID-19 positive. As part of their booking package, all foreigners purchased a one-off medical insurance of 7.81 euros on the Mauritius Tourism Promotion Authority online platform to validate their travel booking and the medical insurance is issued by a local insurance company for a maximum cover of 150 000 euros. The MoHW established a price list for the costs of beds and treatments for both the New ENT Hospital and the SSR Recreation Centre. The billing is prepared by the Superintendent of New ENT Hospital with the help of the nursing administrator and sent directly to insurance company for the payment. This system simplified the payment of health services for foreign COVID-19 patients by avoiding the tedious processing of payments from various foreign insurance companies around the world.

## Challenges

### **Recovered patients and previously infected persons are having positive COVID-19 test results**

Many incoming passengers with a past COVID-19 history had positive PCR COVID-19 test results which according to the local protocol should be admitted in treatment centres. Similarly, there were cases of recovered COVID-19 patients still having positive PCR COVID-19 after several weeks without symptoms nor illness who remained in treatment centres. After consultation with WHO experts, MoHW kept the existing protocols since Mauritius was COVID-safe and discharging the recovered patients with positive COVID-19 results was risky. However, it remained a challenging experience for both the patients and the health professionals in contact with them.

### **Temporary closure of internal lab at New ENT Hospital**

New ENT Hospital is equipped with its own laboratory which was performing all basic biochemical and haematological tests except PCR tests until its closure in June 2020. This decision was taken since the laboratory was not equipped with safety cabinets which presented a risk for laboratory staff. Consequently, the laboratory technicians were relocated. At the time of this review, specimens were sent to CHL for testing. However, requests were made by the Superintendent of New ENT Hospital for its prompt reopening and the needful was done for the buying of the safety cabinets.

### **Rotating staff at treatment centres often leave by the time they are full versed in the protocols**

With the current 7-day shift system, the staff coming to work at the treatment centres have to quickly learn, adapt to and apply the very specific precautionary measures as per the various protocols to protect them from contracting COVID-19. This can be a challenging task especially for elder staff who adapt less quickly and attendants who have a higher exposure to COVID-19 compared to what they are used to in their usual place of work in regional hospitals. They were often fully versed in the precautionary measures by the end of their duty.

## Recommended actions

### **Review the staffing strategy at the treatment centres to capitalise knowledge acquired**

To address the challenge of staff leaving once they are fully conversant with the specific protocols to be respected in the treatment centres, a new strategy for staffing can be devised. This could include more regular appointment of those who have previously worked in the treatment centres or training before taking up duty in the treatment centres.

### **Accelerate the upgrading and reopening of internal laboratory at the New ENT hospital**

Efforts for upgrading and reopening of internal laboratory at the New ENT hospital should be accelerated as this is advantageous for rapid results of tests and clinical decisions.

## 5.8. Operational support and logistics in the management of supply chains and the workforce

### Best practices

#### Close monitoring and weekly reporting of medical and non-medical materials for COVID-19 response

To ensure that Mauritius has the right amount of medical and non-medical materials for its COVID-19 response, stock supplies at the Central Supply Division were regularly reported and shared with the management of MoHW on a weekly basis for a close monitoring. Forecasting of the stock supplies of these essential items comprising of PPE, PCR reagents lab, chloroquine, hydro chloroquine and hydroxymycin, oxygen cylinders was done to plan future orders.

#### MoHW adhered to the COVID-19 Supply Chain System

MoHW adhered to WHO's supply portal known as COVID-19 Supply Chain System which facilitates countries' access to and procurement of about 50 key materials for COVID-19 response including swabs, PPE and laboratory reagents. This will ensure that Mauritius has the quantity and quality of supplies needed even during times of acute shortage of materials and disruptions in global supply chains.

#### Recruitment of additional nursing staff to meet rising demands of the response

With an increasing number of nursing staff being posted in quarantines and treatment centres and who have to undergo quarantine and/or self-isolation following their shifts, regional hospitals and health centres were understaffed. In November 2020, MoHW started the recruitment of retired nursing officers on a seasonal basis to address this gap and reduce the current pressure on the workforce.

### Challenges and Recommended actions

Challenges and Recommended actions identified were specific to the vaccines rollout and included in the section 4.10 on Pillar 10: Vaccines.

## 5.9. Maintaining essential health services during the COVID-19 outbreak

### Best practices

#### A phased reduction of non-COVID-19 health services was planned in case of a sanitary curfew

The *National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius* devised in September 2020 provides guidance for a phased reduction of non-essential health services across 3 levels of severity of in case of a second wave. It takes into consideration the gaps identified in first Inter Action Review covering the period of January to August 2020. The plan caters for the maintaining of vaccination schedules for children and delivery of all treatments and services including the distribution of methadone as well as for the setting of tele-consultation services in case of a prolonged outbreak. Phase 3 in case of severe epidemic takes into consideration isolated people, elderly people and people suffering from psychological pathologies.

## Challenges

No challenges were identified for Pillar 9, since Mauritius did not experience an outbreak of COVID-19 for the period under review, i.e from September to December 2020 and there was no disruption in health services.

## Recommended actions

### To prepare for teleconsultation in case of a second wave and a sanitary curfew

As per the National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius, the setting up for telemedicine will be done in phase 2 if there is prolonged epidemic of mild gravity. However, setting up this new service during a prolonged outbreak/sanitary curfew could be restricting due to reduced staffing and limited access to technology. MoHW should begin the preparations for the set-up of teleconsultation. Resources needed and available and modes of operation for teleconsultation could be identified. Both administrative and medical staff could be trained on setting up and implementing teleconsultation. This will increase the preparedness of the public health services and ensure an immediate continuity of services when some health services will be shifted teleconsultation.

## 5.10. Vaccines

### Best practices

#### Mauritius was proactive in securing COVID-19 vaccines by exploring all the sources available

The government rapidly contacted several laboratories such as BioNTech/Pfizer, Astra Zeneca-Oxford, Moderna, Serum Institute of India, Sinopharm of China and Gamaleya of Russia to acquire COVID-19 vaccines. Pfizer of BioNTech laboratory has acknowledged receipt of MoHW request regarding the mode of possible shipment of its vaccines to Mauritius.<sup>18</sup>

In September 2020, the Government paid for 240 000 doses of COVID-19 vaccines representing vaccines for 20% of the population via the WHO's COVAX facility.<sup>19</sup> Mauritius drew on the presence of its Permanent Mission to the United Nations in Geneva to support MoHW in the process of procuring vaccines from the COVAX facility. The Mission facilitated the process in terms of documentation, reviewing of agreements, agreements to be signed and following up on Mauritius' vaccine orders. It is also advocated for Mauritius not to be relegated on the priority list for vaccines delivery because its COVID-safe status.

Mauritius also capitalised on its friendly diplomatic ties to request support in securing vaccines and the Republic of India responded favourably by including Mauritius in its as part of its "Vaccine Maitri" Initiative to distribute free COVID-19 vaccines (covidshield) across the globe.

#### A national deployment and vaccination plan for COVID-19 vaccines was devised under the guidance of 9 thematical working groups

MoHW and WHO Country Office jointly conducted a 2-day workshop on 22 and 23 December 2020 to elaborate a national deployment and vaccination plan for COVID-19 vaccines. The aim was to design a

---

<sup>18</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Covid-19--The-vaccination-programme-in-progress.aspx>

<sup>19</sup> <https://govmu.org/EN/Pages/NewsDetails.aspx?n=Ten-new-positive-imported-COVID-19-cases-detected-since-last-week.aspx>

phased deployment of the vaccination programme aligned with the national plans regarding COVID-19 and integrated in the national governance mechanism. Participants of the workshop who were mainly from MoHW were grouped in 9 thematical working groups covering the following themes: regulatory preparedness, planning & coordination, costing & funding, supply chain & logistic, training & capacity building, effective communication strategies, service delivery, safety surveillance and monitoring & evaluation; to discuss and elaborate the activities across the themes. The plan was in the process of finalisation during the review.

### **Authorities took a scientific and observatory approach to inform the local COVID-19 vaccination deployment**

Recently established in 2019, the National Immunization Technical Advisory Group (NITAG), also locally referred to as MAUNITAG, played a key role in advising the local health authorities regarding the COVID-19 vaccination plan based on scientific evidences. MAUNITAG was involved in developing the COVID-19 Vaccine Consent Form as well as defining the priority groups for the vaccination.

Members of the High-Level Committee on COVID-19 and key staff from MoHW and the Ministry of Foreign Affairs, Regional Integration and International Trade reviewed and shared key scientific literature regarding the different aspect of the COVID-19 vaccines as well as observing the progress of the vaccination campaigns launched in other countries. Decision regarding the national vaccinations campaigned were guided by this scientific and observatory approach.

## **Challenges**

### **Limited resources for optimal storage of COVID-19 vaccines and monitoring the cold supply chains**

MoHW's warehouses have limited capacities for vaccines storage in regular refrigerators and lack freezer systems. Moreover, there is a lack of facilities for end-to-end temperature logging and real-time monitoring and reporting of temperature, shock and moisture. This limits the choice and volume of vaccines that Mauritius can acquire as well as jeopardises the efficacy of vaccines purchased.

### **Securing funding and donations to acquire COVID-19 vaccines is a challenge**

At the time of the review, Mauritius did not have a full plan for acquiring all of the COVID-19 vaccines needed to achieve herd immunity in the population. Securing funding and donations were a challenge.

## **Recommended actions**

### **Ramp up the cold storage and monitoring capacities across the COVID-19 vaccine supply chain**

MoHW should ramp up its cold supply chain capacities to avoid tampering of the COVID-19 vaccines for maximum efficacy when administered to the population. If securing the new materials and systems within short time frame, limited funding and current context of delayed shipping of materials are a challenge, outsourcing the vaccine cold supply chain and logistics system to the private sector could be considered. Every steps of the cold supply chain should be considered.

### **Maintain efforts to secure funding and donations obtain vaccines by exploring new funding avenues**

### **Coordination structure/s for vaccination programme should include all concerned Ministries**

The coordination structure/s for the vaccination programme should include key stakeholders beyond health such as the Ministry of Foreign Affairs, Regional Integration and International Trade and the Ministry of Tourism which play and important role in facilitating coordination and logistics.



## 5.11. Follow up of the recommended actions from first IAR

Recommended actions from first IAR	Observations
<b>Pillar 1: Country-level coordination, planning and monitoring</b>	
<b>For immediate implementation:</b> <ul style="list-style-type: none"> <li>- Consolidate preparedness and response of Rodrigues and Agalega across WHO's nine strategic pillars.</li> </ul>	<ul style="list-style-type: none"> <li>- Response in Rodrigues was increased with the IPC training and introduction of the PCR COVID-19 testing. Pending for Agalega.</li> </ul>
<b>For mid to long term to improve response to next waves of COVID-19 outbreak:</b> <ul style="list-style-type: none"> <li>- Elaborate a whole-of-government health emergency response plan for harmonized coordination across sectors in response to a second wave of COVID-19 or in the advent of the outbreak of another emerging infectious disease.</li> </ul>	<ul style="list-style-type: none"> <li>- Pending</li> </ul>
<ul style="list-style-type: none"> <li>- Explore new funding avenues due to high-income country status.</li> </ul>	<ul style="list-style-type: none"> <li>- Funding was secured but need new funding avenues need to be explored.</li> </ul>
<ul style="list-style-type: none"> <li>- Continuously update the national COVID-19 Preparedness and Response Plan COVID-19 include Pillar 9 – Maintaining Essential Health Service and as and when required.</li> </ul>	<ul style="list-style-type: none"> <li>- The National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius was elaborated but an operational plan is needed.</li> </ul>
<b>Pillar 2: Risk communication and community engagement</b>	
<b>a. For immediate implementation:</b> <ul style="list-style-type: none"> <li>- Scale-up the training of trainers for stakeholders working directly with the general public for increased sensitisation of the population on COVID-19 and community engagement.</li> </ul>	<ul style="list-style-type: none"> <li>- Pending</li> </ul>
<b>b. For mid to long term to improve response to next waves of COVID-19 outbreak:</b> <ul style="list-style-type: none"> <li>- Maintain the current strategies put in place for detection and mitigation of misinformation and rumours.</li> </ul>	<ul style="list-style-type: none"> <li>- Done</li> </ul>
<ul style="list-style-type: none"> <li>- Widely disseminate information on other non-health sectors linked to the COVID-19 such as continuity of social services and gender violence.</li> </ul>	<ul style="list-style-type: none"> <li>- Pending</li> </ul>
<ul style="list-style-type: none"> <li>- Maintain continuous and sensitisation campaigns to sustain the knowledge and precautionary measures among the population.</li> </ul>	<ul style="list-style-type: none"> <li>- Done</li> </ul>
<b>Pillar 3: Surveillance, rapid-response teams, and case investigation</b>	
<ul style="list-style-type: none"> <li>- Capitalise on its strengths of the robust surveillance system and contact tracing system in Mauritius in case of a next COVID-19 outbreak.</li> </ul>	<ul style="list-style-type: none"> <li>- Done</li> </ul>

- Elaborate a scaling-up plan for contact tracing to activate the rapid deployment of additional contract tracing teams during periods of high rates of local transmission.	- Pending
- Developing SOPs for contact tracing to include the monitoring of compliance on self-isolation through regular messaging, calls and house visits.	- Pending
<b>Pillar 4: Points of entry</b>	
<b>a. For immediate implementation:</b> - Build-up on the good practices to inform the next stages in the reopening of borders.	- The good practices informed the partial reopening of borders
<b>b. For mid to long term to improve response to next waves of COVID-19 outbreak:</b> - Develop a health emergency contingency plan for port and airport to increase preparedness and response at points of entry in Mauritius.	- Pending
<b>Pillar 5: National laboratories</b>	
- Ensure optimum pre-stocking of consumables and reagents in the advent of a second wave of COVID-19 outbreak.	- Stocks are monitored and orders
- Capacity building of private laboratories to scale-up the testing capacities beyond the public sector.	- Two newly opened private laboratories were authorised to perform COVID-19 PCR tests.
<b>Pillar 6: Infection prevention and control</b>	
<b>a. For immediate and mid to long term implementation:</b> - Assess implementation of IPC measures among health personnel to reduce the number of infection rate and improve IPC trainings to include table-top exercise and drills at healthcare facilities.	- Partly done with IPC training done jointly by the WHO Country Office and MoHW but IPC training needs to be scaled up and sustained
<b>Pillar 7: Case management</b>	
<b>a. For immediate and mid to long term implementation:</b> - Boost morale and support offered to health personnel at treatment centre so that they can respect all IPC measures as they are one of the few links which could result in new local transmissions.	- Various new IPC measures were adopted for case management
<b>b. For mid to long term to improve response to next waves of COVID-19 outbreak:</b> - Accelerate efforts in reducing noncommunicable disease to reduce the burden of future outbreaks of infectious diseases.	- Preparedness were increased to manage patients with NCD and other underlying medical conditions.
<b>Pillar 8: Operational support and logistics</b>	

<p><b>a. For immediate and mid to long term implementation:</b></p> <ul style="list-style-type: none"> <li>- Conduct a mapping of regional suppliers of essential medical materials.</li> </ul>	<ul style="list-style-type: none"> <li>- Mauritius adhered to WHO's COVID-19 Supply Chain System</li> </ul>
<p><b>b. For mid to long term to improve response to next waves of COVID-19 outbreak:</b></p> <ul style="list-style-type: none"> <li>- Advocate for an accelerated implementation of the pooled procurement initiative for essential medicines among the small island developing states in the African region.</li> </ul>	<ul style="list-style-type: none"> <li>- Ongoing</li> </ul>
<ul style="list-style-type: none"> <li>- Maintain the pre-stocking and regular monitoring of essential medical materials.</li> </ul>	<ul style="list-style-type: none"> <li>- Mauritius adhered to WHO's COVID-19 Supply Chain System</li> </ul>
<ul style="list-style-type: none"> <li>- Invest in local production of medical materials.</li> </ul>	<ul style="list-style-type: none"> <li>- In progress</li> </ul>
<ul style="list-style-type: none"> <li>- Explore the possibilities of pre-positioning of medical materials.</li> </ul>	<ul style="list-style-type: none"> <li>- Pending</li> </ul>
<b>Pillar 9: Maintaining essential health services during an outbreak</b>	
<p><b>a. For immediate implementation:</b></p> <ul style="list-style-type: none"> <li>- Develop an operation plan for the continuity of health services including a mapping and prioritising of all public health service as well as a plan for the restoration of services.</li> </ul>	<ul style="list-style-type: none"> <li>- Operations of health services is included in the National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius</li> </ul>
<ul style="list-style-type: none"> <li>- Conduct a rapid assessment of the impact of reduced public health services during curfew on health seeking behaviours across all diseases and life course states to guide post curfew responses such as catch-up campaigns, introduction of new services or adaptation of existing services.</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Pending</li> </ul>
<p><b>b. For mid to long term to improve response to next waves of COVID-19 outbreak:</b></p> <ul style="list-style-type: none"> <li>- Implement a phased reduction of services based on the prioritisation of health services for a more balanced decision making after considering the prevalence and transmission rate of COVID-19, the burden of diseases among the population and changing contexts and needs.</li> </ul>	<ul style="list-style-type: none"> <li>- A phased reduction of non-essential health services is included in the National Response and Contingency Plan in the eventuality of a resurgence of COVID-19 circulation in Mauritius</li> </ul>
<ul style="list-style-type: none"> <li>- Conduct a rapid assessment of the availability, capacity and distribution of the health workforce to inform scaling-up strategies and/or re-distribution strategies such as reassignment, task sharing coupled and rapid training mechanisms.</li> </ul>	<ul style="list-style-type: none"> <li>- Pending</li> </ul>

- Set-up an alternative service delivery in the public health sector such as the use of digital platforms for teleconsultation services or outreach mechanism to ensure delivery of health services.	- Pending
--	-----------

## 6. THE WAY FORWARD

---

The strategies for implementing the activities identified during the IAR 2 are:

- Online and paper publication of the IAR 2 report.
- Dissemination of the IAR 2 report to the High Level Committee, senior staff of the key Ministries and relevant authorities, participants of the IAR 2, United Nations Country team and the Development Partners.
- Establish an IAR follow-up team within the High Level Committee to ensure that the recommended actions are being followed up.
- Review and update the National Strategic Preparedness and Response Plan for COVID-19 and create relevant protocols as per recommended actions.

## 7. ANNEX

### List of participants

---

The Hon Soodesh Satkam Callichurn	Minister of Labour, Human Resource Development and Training
Mr Ken Arian	Senior Adviser, Prime Minister's Office
Dr Zuberr Joomaye	Senior Adviser, Prime Minister's Office
Dr Swaraj Ramasawmy	Deputy Permanent Secretary, MoHW
Dr Lovena Veerapa-Mangroo	Community physician and Field Epidemiologist, MoHW
Dr Shyam Manraj	Director Health Laboratory Services, MoHW
Dr Soobaraj Sok Appadu	Medical Superintendent, New ENT Hospital
Ambassador Vishwakarmah Mungur	Chief of Protocol; Ministry of Foreign Affairs, Regional Integration & International Trade
Mr Vishal Lutchoomun	First Secretary; Protocol Directorate; Ministry of Foreign Affairs, Regional Integration & International Trade
Mr Nirvaan Seedoyal	Assistant Permanent Secretary, Ministry of Tourism
Mr Donal Payen	Adviser/Consultant, Ministry of Tourism
Ms Amrita Craig	Marketer, Mauritius Tourism Promotion Authority
Ms Christine Umutoni	United Nations Resident Coordinator for Mauritius and Seychelles
Dr Laurent Musango	WHO Representative
Mr Vikash Keetharuth	Head of Ground Operations, Air Mauritius Limited
Mr Pritbeeraj Bheemsingh	Senior Health and Safety Officer, Air Mauritius Limited
Mr Jocelyn Kwok	Chief Executive Officer, Association of Hoteliers and Restaurants – Ile Maurice
Mr Joël Genty	Chief Executive Office, Airport Terminal Operations Ltd
Dr Mitradev Pattoo	Technical Laboratory Manager, Airport Health Laboratory, Airport Terminal Operations Ltd
Mr Shekhar Suntain	Director General, Mauritius Ports Authority
Mr Maheswarnath Mohabeer	Manager, Safety & Health, Mauritius Ports Authority
Dr Paramanund Brizmohun	Medical Officer, Mauritius Ports Authority
Ms Ooma Rajagopall	Chief Officer, Administrative Services, Mauritius Ports Authority