



Te Marae Ora
Ministry of Health Cook Islands

**Critical Preparedness, Readiness and
Response Plan to Coronavirus Disease 2019
(COVID-19)**

April 2021

Version 2

Government of the Cook Islands

Contents

Introduction	3
Purpose	3
Legislative Framework	3
Leadership and Governance	3
Communication and Consultation	3
Public Health Response	3
The Cook Islands Emergency Response Plan to COVID-19	4
Stages, Levels and Phases of an Emergency Response	4
Critical preparedness readiness and response actions	6
Core minimum requirements to ease public health restrictions	7
Te Marae Ora – Essential Services in	12
References	21
Annex 1: Community Management Structures	22
Annex 2: National Response Framework	23

Introduction

Coronavirus Disease 2019 (COVID-19) is a new respiratory illness caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) which was first reported in December 2019, in China. The World Health Organisation declared COVID-19 a Public Health Emergency of International Concern on 30 January 2020, and a Pandemic on 12 March 2020.

There have been no cases reported in the Cook Islands and on 16 April 2020, the Cook Islands was declared a COVID-19 free zone. This was the result of the rapid emergency response measures undertaken by Te Marae Ora Ministry of Health Cook Islands (Te Marae Ora) and the National Health Emergency Taskforce since 22 January 2020. The National Emergency Response Plan to COVID-19 was published on 10 March 2020¹, and this has helped guide the response of the National Incident Management Team, the 10 Rarotonga Puna and the Pa Enuā. While the public health emergency response to COVID-19 has been successful, the public health threat of COVID-19 remains. Border restriction measures in place since 25 March 2020.

Purpose

The aim of this Plan is to outline Te Marae Ora's health systems strengthening measures, in order to be in a position of readiness to respond effectively and to mitigate the threat and impact of COVID-19 (prevent outbreaks, delay spread, slow and stop transmission) until such a time when a vaccine or proven treatment is available.

Legislative Framework

Several legislative documents guide the national response to COVID-19.

- COVID-19 Act 2020
- Public Health Act 2004
- Disaster Risk Management Act 2007
- Ministry of Health Act 2013.

Leadership and Governance

The organisation structure of Te Marae Ora has changed to reflect the reorientation of the health system and service delivery model which now includes a focus on primary care and preventive community based health services.

The National Health Emergency Taskforce (NHET) will continue to meet and provide advice to the Minister of Health and Cabinet as required. Te Marae Ora Executive and the Health Incident Management Team (IMT) will direct and coordinate the health response in collaboration with the Rarotonga health centres/Punas as well as the Pa Enuā (Annex 1).

Communication and Consultation

Te Marae Ora will lead communications targeting all levels of society to ensure a timely, effective and coordinated response. Nationwide consultation will enable the mobilisation of community action that seeks to protect vulnerable members, such as aged persons, those with non-communicable diseases (NCDs) or disabilities, and others. A Risk Communications and Community Engagement Plan (2021) has been developed and reviewed.

Public Health Response

SARS-CoV-2, is transmitted through the following modes: (1) Large droplet spread; (2) Transmission through aerosolised spread (for example coughing, sneezing); (3) Contact – direct

¹ Reviewed April 2021

or indirect – with respiratory secretions (for example contaminated surfaces). The incubation period (time between infection and onset of symptoms) is estimated to be 14 days, however, new data suggest this might extend to 28 days. While some cases are asymptomatic, virus transmission is thought to occur during the pre-symptomatic and asymptomatic period.

World Health Organization Criteria for countries to consider to enter a state of low level or no transmission

1. That transmission is controlled
2. Health systems capacity in place to test, isolate, & treat every case, and trace every contact
3. Outbreak risks minimised in settings such as health facilities and nursing homes
4. Preventative measures in place for work, schools, places where people travel or visit
5. That importation risks can be managed; (Border controls) and
6. Communities are fully educated and engaged and empowered to adjust to the ‘new norm’.

The Cook Islands Emergency Response Plan to COVID-19

The Plan has two stages and four levels and phases as outlined below in Table 2.

Table 1: Stages, Levels and Phases

Stage	Level	Phase
Initial action stage	1	Prepare COVID-19 is not present in Cook Islands and controlled in New Zealand with no cases of community transmission
Targeted action stage	2	Reduce COVID-19 is not present in the Cook Islands but there is a community case in New Zealand
	3	Restrict COVID-19 has been detected in the Cook Islands and community transmission may be occurring
	4	Lockdown There is more than one case of COVID-19 in the Cook Islands and community transmission may be occurring

Within each of the action stages are targeted interventions under the following functions: governance and legislation; surveillance and intelligence; border measures; resources and logistics; communication and consultation; health clinical care and public health management; and social welfare and support. Annex II Incident Management System refers to specific roles and responsibilities.

Stages, Levels and Phases of an Emergency Response

There are four phases identified in the emergency response to COVID-19, across two stages:

Table 2: Threshold and Triggers

Stage	Level	Phase	Threshold and Triggers
Readiness action stage	1	Prepare COVID-19 is not present in Cook Islands and controlled in New Zealand with no cases of community transmission	Disease is severe and spreads easily from person to person but is occurring outside the Cook Islands. The disease is controlled in New Zealand. Public health measures in place - hand washing, cough etiquette, use of face masks, and physical distancing. Minimal disruption to society such as travel advisories and restrictions.
Targeted action stage	2	Reduce COVID-19 is not present in the Cook Islands but there is a community case in New Zealand	Disease is severe and spreads easily from person to person, but occurring outside of the Cook Islands. The disease is not yet detected in the Cook Islands, but there is a community case in New Zealand. Moderate disruption to society, Maintain public health measures; encourage use of face masks on public transport.
	3	Restrict COVID-19 has been detected in the Cook Islands and community transmission may be occurring	An unidentified community case has been detected in the Cook Islands. Border restrictions implemented. Intensify COVID-19 testing of population. Early case detection and isolation and aggressive contact tracing and quarantine to limit the number of generations of transmission. Restrictions on mass gatherings. Non-essential services closed for a period of 24 - 48 hours. People encouraged to work from home. Face coverings mandatory.
	4	Lockdown There is more than one case of COVID-19 in the Cook Islands and community transmission may be occurring	More than one case of the disease is present in the Cook Islands. Border restrictions implemented. Self-isolation and quarantine required for recent arrivals for a minimum period of 14 days. Intensify COVID-19 testing of population. Early case detection and isolation and aggressive contact tracing and quarantine to limit the number of generations of transmission. No mass gatherings. Non-essential services closed. People encouraged to work from home. Face coverings mandatory.

Critical preparedness readiness and response actions for each transmission scenario for COVID-19

Te Marae Ora identifies the following actions based on the infection transmission scenarios: (adapted from WHO)

Table 3: Transmission scenarios

	Level 1: Prepare	Level 2: Reduce	Level 3: Restrict	Level 4: Lockdown
Transmission Scenario	COVID-19 is not present in Cook Islands and controlled in New Zealand with no cases of community transmission.	COVID-19 is not present in the Cook Islands but there is a community case in New Zealand.	COVID-19 has been detected in the Cook Islands and community transmission may be occurring.	There is more than one case of COVID-19 in the Cook Islands and community transmission may be occurring.
Aim	Stop transmission and prevent spread	Stop transmission and prevent spread	Stop transmission and prevent spread	Slow transmission, reduce cases numbers, end community outbreaks
Priority Areas Of Work				
Emergency response mechanisms	Activate emergency response mechanisms	Enhance emergency response mechanisms	Scale up emergency response mechanisms	Scale up emergency response mechanisms
Risk communication and public engagement	Educate and actively communicate with the public through risk communication and community engagement	Educate and actively communicate with the public through risk communications and community engagement	Educate and actively communicate with the public through risk communication and community engagement	Educate and actively communicate with the public through risk communication and community engagement
Case finding, contact tracing and management	Conduct active case finding contact tracing and monitoring, quarantine of contacts and isolation of cases	Enhance active case finding contact tracing and monitoring	Intensify case finding contact tracing and monitoring, quarantine of contacts and isolation of cases	Continue contact tracing where possible, especially in newly infected areas, quarantine of contacts and isolation of cases, apply self-initiated isolation for symptomatic individuals
Surveillance	Consider testing for COVID-19 using existing respiratory disease surveillance systems and hospital based surveillance	Implement COVID-19 surveillance using existing respiratory disease surveillance systems and hospital based surveillance	Expand testing for COVID-19 using existing respiratory disease surveillance systems and hospital based surveillance	Adapt existing surveillance systems monitor disease activity (example through sentinel sites)
Public Health Measures	Hand, face hygiene, respiratory etiquette, practise physical distancing, disinfect surfaces	Hand, face hygiene, respiratory etiquette, practise physical distancing, disinfect surfaces	Hand, face hygiene, respiratory etiquette, practise physical distancing, disinfect surfaces	Hand, face hygiene, respiratory etiquette, practise physical distancing, disinfect surfaces
Laboratory testing	Test suspect cases as per TMO definition, contacts of confirmed cases, test	Test patients identified through respiratory disease surveillance	Test suspect cases as per TMO definition, contacts of confirmed cases, test	Test suspect cases as per TMO definition, and symptomatic contacts of

	Level 1: Prepare	Level 2: Reduce	Level 3: Restrict	Level 4: Lockdown
	patients identified through respiratory disease surveillance		patients identified through respiratory disease surveillance	probable/confirmed cases, test patients identified through respiratory disease surveillance. If testing capacity is overwhelmed prioritise testing in health care settings and vulnerable groups. In closed settings limit test to first symptomatic suspect case.
Case Management	Prepare to treat patients. Ready hospital for potential surge	Treat patients and develop triage procedures	Prepare to treat patients. Ready hospitals for potential surge	Prioritise care and activate triage procedures. Scale up surge plans for health facilities
	Promote self-initiated isolation of people with mild respiratory symptoms to reduce the burden on health system	Promote self-initiated isolation of people with mild respiratory symptoms to reduce the burden on health system	Activate surge plans for health facilities	Implement self-initiated isolation of people with mild respiratory symptoms to reduce the burden on health system
Infection Prevention and Control	Train staff in IPC and clinical management specifically for COVID-19	Train staff in IPC and clinical management specifically for COVID-19	Retrain staff in IPC and clinical management specifically for COVID-19	Retrain staff in IPC and clinical management specifically for COVID-19
	Prepare for surge in health care facility needs, including respiratory support and PPE - report stocks supplies weekly	Prepare for surge in health care facility needs, including respiratory support and PPE - report stocks supplies daily	Implement health facilities surge plans - report stocks supplies twice daily	Implement health facilities surge plans - report stocks supplies twice daily
Societal Response	Develop all-of-society and business continuity plans	Implement all-of-society, repurpose government and ready business continuity plans	Implement all-of-society resilience, repurpose government, business continuity, and community services plans	Implement all-of-society resilience, repurpose government, business continuity, and community services plans

Core minimum requirements to ease public health restrictions

WHO provides a framework to determine minimum core requirements to ease public health restrictions in the Cook Islands. Te Marae Ora must remain in a state of preparedness and readiness and poised to respond rapidly to any threat of COVID-19 entering the Cook Islands. Te Marae Ora’s state of readiness can be illustrated using traffic lights: green = high, amber = medium, red = low. The aim is for Te Marae Ora to achieve high readiness (green) across all measures.

The actions Te Marae Ora is required to take under the various disease transmission scenarios is presented in more detail in Annex IV - Critical preparedness readiness and response actions for each transmission scenario for COVID-19.

Table 4: Core minimum requirements to ease public health restrictions.

<p>Country-level coordination, planning and monitoring</p>	<p>Country incident management system (IMS) structure and resourcing reflect epidemiological situation. Contingency planning for rapid escalation or reactivation in place with adequate resources (incl. HR) to respond</p>	<p>January 2020: National Health Emergency Taskforce established</p> <p>March 2020:</p> <ul style="list-style-type: none"> • Cook Islands National Emergency Response Plan endorsed • Consultation with Pa Enea re COVID-19 • National Prayer Service COVID-19 • National IMS structure implemented • COVID-19 Budget (\$5M) • COVID-19 Act 2020 enacted <p>April- June: COVID-19 4 x policies and 33 SOPs final drafts completed</p> <p>March – December 2020</p> <ul style="list-style-type: none"> • Public Health Protocol COVID-19 • Public Health Protocol III Traveller • Critical Preparedness and Readiness Response Plan • Easing Border Restrictions Plan • Surveillance and Testing Plan • Risk Communication and Community Engagement Plan • Containment and Mitigation Plan • Dedicated COVID-19 website <p>March- April 2021- Plans, Policies and SOPs reviewed</p> <ul style="list-style-type: none"> • Quarantine Free Travel Plan drafted
<p>Surveillance, rapid response teams and case investigation</p>	<p>Active surveillance in place for detection of cases and confirmation of an outbreak. This includes surveillance for COVID-19, ILI, SARS; and event-based surveillance</p>	<p>January 2020:</p> <ul style="list-style-type: none"> • Surveillance systems established • Daily situation reports issued <p>March -June 2020:</p> <ul style="list-style-type: none"> • Contact tracing training

		<ul style="list-style-type: none"> • GeneXpert test in country • GoData an outbreak investigation tool for field data collection, contact tracing and visualizations • Cooksafe App introduced
		July 2020: Daily Hospital Health Service Report
		December 2020: Situation reports 3 times a week
		March –April 2021 <ul style="list-style-type: none"> • Refresher contact tracing training • Live exercise
Risk communication and community engagement	Whole of country sensitised to alert levels, its potential fluctuations, given the epidemiological context, and public health measures associated with these levels, and are mentally and physically prepared for future change and reinstating of restrictive public health measures. Continue prevention and precautionary messaging on physical distancing and suspect case reporting	March 2020: <ul style="list-style-type: none"> • Communications Plan COVID-19 implemented • COVID-19 website established • Periodic IMS meetings • Periodic Rarotonga Puna meetings April 2020: Periodic Pa Enea Puna meetings <ul style="list-style-type: none"> • November 2020 • NHET meetings held on a as needed basis
Domestic travel considerations	Enable domestic travel, balanced with the risk of preventing inter-island spread of COVID-19	April 2020: Domestic travel restrictions lifted <ul style="list-style-type: none"> • Exit screening measures established at airport and seaport November 2020: <ul style="list-style-type: none"> • Health declaration forms implemented
Essential health services	That essential health services have been identified with modes of delivery adapted to protect those most vulnerable to severe impacts of COVID-19. This specifically includes those who are elderly, have NCDs or with other chronic illnesses example TB, HIV, and others who are immunocompromised. Services should be adapted to reduce physical contact, improve spacing, and reduce overcrowding in all facilities. Mechanisms are in place to essential health services are delivered.	March 2020 <ul style="list-style-type: none"> • Primary care and emergency services relocated to Tupapa community clinic • Primary care - phone consults and appointments - COVID testing, influenza vaccinations • Public health relocated to Rarotonga Puna - includes health checks, blood and COVID testing, influenza vaccinations, Tutaka, Operation Namu and planting • Oral health - dental emergencies only March- December 2020: <ul style="list-style-type: none"> • Oxygen Plant and line completed • Electrical wiring at Rarotonga Hospital, Tupapa public health building and TMO Administration building completed • Two negative pressure units completed

Infection control and prevention (clinical and community settings)	<p>Basic IPC guidelines are provided to IPC staff</p> <ul style="list-style-type: none"> ensure IPC staff disseminate information to essential facilities within and outside health sectors example schools, workplaces, churches, prisons healthcare workers involved in COVID-19 care, especially in high-risk environments example ICU, emergency rooms, HDU are trained and rigorously exercise appropriate PPE use methods and processes <p>Basic IPC training will include:</p> <ul style="list-style-type: none"> Standard precaution (hand hygiene, PPE, respiratory hygiene, waste management, environmental cleaning, safe handling, cleaning and disinfection of patient care equipment) Transmission-based precautions (droplet/contact/airborne precautions) WASH focal points ensure essential needs are identified and basic WASH supplies and infrastructure are available in healthcare facilities, essential workplaces, schools, and in the community 	<ul style="list-style-type: none"> Tupapa accident and emergency waiting room completed <p>March 2020</p> <ul style="list-style-type: none"> IPC training for TMO and border agency staff, and Pa Enea (Aitutaki) <p>May 2020</p> <ul style="list-style-type: none"> IPC nurse recruited IPC training for SQ facility <p>May 2020</p> <ul style="list-style-type: none"> IPC Governance team set up at TMO <p>September 2020</p> <ul style="list-style-type: none"> Decontamination machine purchased Refresher training courses ongoing
Mental health and psychosocial support	<p>Priority intervention area in preparedness, communications and actions to minimise the risk of mental health and wellbeing of the population</p>	<p>March 2020</p> <ul style="list-style-type: none"> 20 volunteers (psychological aides) engaged Corrective services response plan COVID-19 implemented <p>April 2020</p> <ul style="list-style-type: none"> Community workshops, counselling and training provided <p>May 2020</p> <ul style="list-style-type: none"> Counselling and workshops for private sector and Pa Enea <p>September 2020</p> <ul style="list-style-type: none"> Counseling workshops
Laboratory	<p>Molecular testing is available and accessible for diagnosis and confirmation of COVID-19 cases either in country or referred to a reference laboratory with results available within 1-7 days. Capacity to isolate cases until results are confirmed and contact tracing is completed.</p>	<p>March 2020</p> <ul style="list-style-type: none"> IPC training for laboratory staff <p>May 2020</p> <ul style="list-style-type: none"> 70 Test cartridges for 2 GeneXpert machine received 1351 swabs taken to date (all negative) <p>May 2020</p>

		<ul style="list-style-type: none"> • In country testing October 2020 • 3,000 Antibody serology test kits arrived
Case management and clinical preparedness	There is in-country capacity for case management of COVID-19 cases and adequate level of health system capacity to provide essential health services to non COVID-19 cases	January 2021: <ul style="list-style-type: none"> • IPC online training on going • In country training by PPTC will begin on the 26 April 2021. • 1270 GeneXpert cartridges on hand and can use pooling up to 4 specimen for 1 cartridge.
		May 2021 PCR Lab operational
		January and February 2020 <ul style="list-style-type: none"> • Travel advisories issued March 2020 <ul style="list-style-type: none"> • Isolation ward (32 beds) established • Cook Islands international and domestic border closed • Vulnerable groups identified in community - with support Provided • Significant PPE/consumables ordered April 2020 <ul style="list-style-type: none"> • Supervised quarantine and medical clearance process implemented May 2020 <ul style="list-style-type: none"> • Negative pressure room established
		March 2021 <ul style="list-style-type: none"> • CT scan in progress

Te Marae Ora – Essential Services

Te Marae Ora will continue to provide essential health services. The range of services will depend on the levels

Table 5: Essential Services

Essential service areas	Considerations	Resourcing	1	2	3	4
			All services Restrictions apply	All services - Restriction s apply	Limited services - restrictions recommended	Limited services - restrictions mandatory
Prevention and management of communicable diseases						
Vaccination	Routine immunisation schedule adjusted and intensified early to close immunity gaps	Ensure facility used adheres to hygiene and physical distancing measures Ensure availability of vaccines and supplies for routine immunisation (at least 6 months) Appropriate storage levels (cold chain management) Only trained nurses for immunisation are used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TB	Maintain services and IPC to reduce transmission of TB. Diagnostic and home-based care preferred.	Adequate stock of TB medicines (1-2 months) provided to patients to take home.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surveillance for other disease outbreaks	Routine surveillance should be ongoing including syndromic; event based; vaccine preventable; notifiable disease surveillance. Any alerts, unusual disease patterns should be investigated. Routine reports produced to inform rapid response.	Maintenance of routine surveillance systems and human resourcing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Essential service areas	Considerations	Resourcing	1	2	3	4
HIV/STIs	Continue people-centred HIV services including availability of condoms, pre-exposure prophylaxis, treatment, and HIV/STIs testing. Consider options to reduce patient encounters at facilities (remote consultations and provision of multi-month dispensing of medication) Confidentiality for those with HIV must be maintained	Sufficient supplies for multi-month dispensing (3-6 months) Ensure clients know where treatment/support is available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reproductive health care services						
Family planning	Maintain services while utilising options to reduce need for visits to health facilities. Utilise media to ensure public are informed of services and risk reduction. Services can include remote consultation, one-stop clinic appointment including post-partum family planning and immunisation, multi-month provision of medication, reducing frequency of check-ups	Conduct in dedicated clinic/separate room - adhere to public health measures. Treatment to consider infection risks. Remote consultation and decentralised consultations may also be considered. Adequate stock of medicines and condoms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antenatal care services	Home visits consider provision of integrated service e.g. well child checks. Reduce to minimum of four face-to-face contacts in total with virtual follow up appointments in between Minimise frequency of visits through ensuring scans etc. are provided within a single visit, involving few staff as possible Support for development of birth preparedness and complication readiness plans Women with mild COVID-19 symptoms encouraged to remain at home in early (latent phase) labour	Adequate stocks of prophylactic medicines (iron and folate, calcium) Home visits should consider COVID-19 risks Reorganisation of services/patient flow to minimise wait times and contact with other patients Minimum equipment and supplies Standard PPE for healthcare workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Childbirth	Births must be delivered by skilled attendant Conduct labour and delivery preferably in a dedicated room within health facility	Sufficient supplies of relevant equipment/medicine. Standard PPE for healthcare workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Essential service areas	Considerations	Resourcing	1	2	3	4
Postnatal care services	Continue with three contacts (day 1, day 3 and day 7) Prioritise face-to-face visits for women with known psychosocial vulnerabilities; operative birth; premature/low birthweight baby; other medical and neonatal complexities Home visits are preferable - must comply with physical distancing measures however health staff safety must be maintained	Adequate stocks of prophylactic medicines (iron and folate, calcium etc.) Home visits should consider COVID-19 risks Point of care tests for haemoglobin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Postnatal care - healthy newborn	Minimum three contacts (day 1, 3 and 7) Provide guidance to mothers with suspected or confirmed COVID-19 on how to safely care for newborn Consider visits at health clinic and align with visits for mothers Home visits are preferable - must comply with physical distancing measures Remote consultations for breastfeeding support, specialised postnatal advice, early parenting advice and guidance	Comply with IPC protocols if mother/caregiver is displaying respiratory symptoms Healthcare workers trained to identify sick newborns by directing assessing for danger signs during home visits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Postnatal care - sick newborn	Minimise movement of commonly used equipment for neonatal resuscitation and stabilisation Enhance droplet/contact precautions if newborn remains in hospital Avoid nasal or oral suction for babies born spontaneously breathing Follow up visit after discharge to be referred to community clinics Minimum three contacts (day 1, 3 and 7)	Infant resuscitation/assessment to occur where infant is born - avoid transfer Neonates transferred in closed incubator if on respiratory support. Where possible, all procedures and investigations should be carried out in the single room with minimal staff present Comply with IPC protocols if mother/caregiver is displaying respiratory symptoms Train staff at hospital to address complications to minimise contacts All equipment should be cleaned as per IPC measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Essential service areas	Considerations	Resourcing	1	2	3	4
Nutrition - Infant and young child feeding	<p>Mothers with suspected or confirmed COVID-19 (isolation) advised to follow respiratory hygiene during feeding</p> <p>Intensify promotion of safe hygiene behaviours for new mothers/families</p> <p>Integrate counselling into home visits for postnatal care and ensure healthcare workers are trained accordingly</p> <p>Donations of breastmilk substitutes should not be accepted</p> <p>Information on healthy feeding options for infants and young children in context of COVID-19 may be needed</p> <p>If severe illness prevents mother from breastfeeding, provide support to express milk and safely feed infant</p>	Train healthcare workers on counselling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrition - micronutrient supplementation, detection and management of acute malnutrition	<p>Reduce frequency of visits - approximately once per month for children with severe malnutrition</p> <p>Maintain frequency of micronutrient supplementation</p> <p>Emphasise strong hygiene measures for those caring for infants (<6 months) and of any feeding equipment</p> <p>Reduce family member visits to primary family/caregiver only</p> <p>Deliver treatment in the community via home or remote means - maintain physical distancing measures</p> <p>Minimal staff and strict IPC protocols</p>	<p>Ensure sufficient supply of medicine (e.g. vitamin A, albendazole, zinc)</p> <p>Train mothers/caregivers</p> <p>Train healthcare workers</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Management of sick child (with focus on pneumonia and diarrhoea)	<p>In settings with COVID-19 transmission, any child with cough might have COVID-19 and/or acute respiratory infection of another origin. Refer cases for further investigation.</p> <p>Raise awareness to identify danger signs for pneumonia and when to seek medical attention</p> <p>Treat all suspected pneumonia cases (separate well-ventilated room with physical distancing)</p>	<p>Remote means should be considered for consultation/training</p> <p>Physical examination for pneumonia requires PPE (gloves and surgical mask)</p> <p>Healthcare workers trained with key messages on COVID-19 to mitigate misinformation and stigmatisation in their communities that may negatively</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Essential service areas	Considerations	Resourcing	1	2	3	4
	<p>Consider home visits - identify well-ventilated location outdoors for consultation instead of entering house (maintain physical distancing and wear PPE if available)</p> <p>In the absence of PPE, consider no touch policy that focuses on history of symptoms and clinical observation</p> <p>Follow normal procedures for diarrhoea and educate in identifying signs of dehydration and when to seek medical attention</p>	<p>impact care seeking for pneumonia and diarrhoea</p>				
RHD	<p>Ensure continuity of secondary prevention - treatment with benzathine penicillin</p> <p>Relocate service delivery from delivery of COVID-19 care with strong triage in place</p>	<p>Ensure benzathine penicillin and associated supplies are adequate</p>	□	□	□	□
Management of chronic diseases						
<p>NCDs and risk factors - diabetes, cancer, cardiovascular disease, chronic respiratory disease, hypertension, mental health conditions</p>	<p>Support for those diagnosed with NCDs (including mental health conditions) with particular focus on provision of medicines and supplies for ongoing management</p> <p>Less frequent clinic appointments while ensuring the service is not compromised</p> <p>Decentralise routine NCD services to areas away from COVID-19 screening</p> <p>Limit number of patients per day by increasing clinic days, spacing of appointments, prescription for refills for several months</p> <p>Reduce face-to-face encounters through: remote consultations, home delivery of medicines, mobilise community healthcare workers for</p>	<p>Adequate stocks of medicine needed to ensure multiple months' supply</p> <p>Decentralise stock (optional)</p> <p>Decentralise services (remote delivery) - monitoring system needed with appropriate equipment in stock</p> <p>Oversight and training of community healthcare workers (remotely)</p>	□	□	□	□

Essential service areas	Considerations	Resourcing	1	2	3	4
	routine services example blood pressure, blood glucose, foot inspections, wound care					
Cancer treatment, including palliative	Palliative care will be maintained while considering compromised immune system in most cancer patients Consider alternative sites for treatment away from management of COVID-19 patients/screening	Ensure sufficient supply of cancer medication Ensure staff pay attention to own health and minimise risk to patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Renal dialysis	Complicated cases identified early and referred for further care overseas	Ensure careful screening of all patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hospital/primary care/oral health services						
Emergency surgery	Postpone all non-essential elective surgery, including invasive and diagnostic procedures Maintain emergency surgery capability and capacity	Rigorous IPC measures needed Ensure sufficient supplies of consumables and PPE for surgery and review future demands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency department	Maintain separation of patients coming for COVID-19 screening from others (rigorous screening) Hospital admissions limited to patients requiring essential or lifesaving treatment General principle - all patients should be considered infectious and some may be asymptomatic	Screen all patients prior to entry - use appropriate physical distancing Separate patients with respiratory symptoms from those without respiratory symptoms Ensure staff wear appropriate PPE Plan for mobilisation of staff to cover peak periods/provide care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinical support services - radiology, laboratory, pharmacy, biomedical, patient referrals. Health specialist visits	Postpone health specialists visits Clinical support services should be scaled down to focus on supporting delivery of essential and lifesaving services.	Where possible, establish separate location/designated staff members for laboratory testing and imaging of COVID-19 cases.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Essential service areas	Considerations	Resourcing	1	2	3	4
Dental emergencies	All non-urgent dental treatment should be postponed Dental emergencies include: swelling of face, neck or mouth; dental trauma causing change in position of teeth, soft tissue damage and/or significant pain; significant bleeding; difficulty opening jaw and/or swallowing; referral from specialist; dental pain causing loss of sleep; ulcers persisting for 3+ weeks.	Ensure sufficient PPE for healthcare workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other essential health and social services						
Gender based violence	Maintain key services and integrate with other services: screening/health checks of all women in contact with health services Sexual assault examination.	Remote services should be prioritised.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Child protection	Maintain key services and support victims of child abuse Children of parents who are quarantined or hospitalised with need to be supported.	Services should be available in line with usual processes, with special consideration for quarantined or isolated carers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support for people living with a disability	Maintain support however consideration should be given to reducing non-critical appointments.	Maintain home visits, strict IPC measures needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overarching health services						
Infection prevention and control	IPC measures must be rigorously applied across all essential health services/facilities Clear separation of COVID-19 and non COVID-19 treatment is critical Protect staff, clean facilities and ensure appropriate availability of all associated consumables at all locations where treatment services are provided.	Ensure sufficient PPE.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Procurement and logistics - medicines, laboratory	Plan ahead for procurement and consider alternative sources.	Ensure provision of several months of routine medicines, consumables.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Essential service areas	Considerations	Resourcing	1	2	3	4
supplies and consumables						
Facilities	Maintain efforts to separate COVID-19 care and non COVID-19 care (consider use of community clinics for non COVID-19 care)	Ensure IPC measures and public health measures maintained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staffing	Health staff encouraged and supported to report in sick if they have any symptoms (no matter how mild) consistent with COVID-19 Staff taking care of or screening for COVID-19 Counselling and support should be provided in consideration of burden and demand they are facing and stress.	Protect staff through appropriate use of PPE Efforts to increase HR or collaborate with the community to fill specific demands which do not require clinical skills Support and training required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Remote consultations/telemedicine	Reduce travel needs for patients and reduce use of clinics and hospital Continue service provision through telephone or other communication mediums.	Consider cybersecurity, maintenance of patient confidentiality.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resources/Funding	Maintain services for essential health services.	Ensure sufficient resources are allocated to enable the continuation of key essential health services'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health Information and patient information	Ensure patient records are still accessible and routine recording is not compromised.	Support and training required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Annex I: Community Management Structures

	Rarotonga Puna		Pa Enuā DRM Committees
1.	Ngatangia	1.	Mangaia
2.	Matavera	2.	Aitutaki
3.	Tupapa Maraerenga	3.	Atiu
4.	Takuvaine Tutakimoa	4.	Mauke
5.	Titikaveka	5.	Mitiaro
6.	Murienua	6.	Penrhyn
7.	Akaoa	7.	Manihiki
8.	Ruaau	8.	Rakahanga
9.	Nikao Panama	9.	Palmerston
10.	Avatiu, Ruatonga, Atupa	10.	Pukapuka
		11.	Nassau

Figure 1. Map showing community districts (Puna) for Rarotonga



Annex II: National Response Framework

Table 4: COVID-19 response framework and targeted interventions

Functions	Readiness action stage	Targeted action stage		
	Level 1: Prepare COVID-19 is not present in the Cook Islands	Level 2: Reduce COVID-19 is not present in the Cook Islands but there is a community case in New Zealand	Level 3: Restrict COVID-19 has been detected in the Cook Islands and community transmission may be occurring	Level 4: Lockdown COVID-19 has been detected in the Cook Islands and community transmission may be occurring
Governance and Legislation	<ul style="list-style-type: none"> Assess and advise on declaration of State of Emergency Convene NDRMC, NRE, NHET. 	<ul style="list-style-type: none"> Emergency governance arrangements – NDRMC, NHET, NRE. 	<ul style="list-style-type: none"> COVID-19 declared transmissible notifiable condition and dangerous condition Assess and advise on declaration of State of Emergency Convene NDRMC, NRE and NHET 24/7 coverage of National Emergency Operations Centre Possibility of Parliament convening urgently to pass relevant legislation Activation of Health Emergency Operations Centre and Incident Management System (IMS). 	<ul style="list-style-type: none"> Declaration of State of Emergency Emergency response fully activated Circumstances to allow Parliament to extend a public health emergency Police to maintain law and order.
Surveillance and Intelligence	<ul style="list-style-type: none"> Intensify surveillance at ports of entry Sentinel populations ILI/SARI surveillance Test selected ILI/SARI samples to identify undetected virus circulation Laboratory surveillance EBS 	<ul style="list-style-type: none"> Intensify surveillance at ports of entry Air/sea/land traffic surveillance Weather reports Monitor official and non-official reports Test all contacts. 	<ul style="list-style-type: none"> Monitor and analyse information Monitor flu-like symptoms presenting at clinics Community surveillance Testing lab samples overseas Monitor official and non-official reports. 	<ul style="list-style-type: none"> Intensify surveillance Monitor all surveillance systems Community surveillance Testing lab samples overseas Monitor official and non-official reports.

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	Level 1: Prepare COVID-19 is not present in the Cook Islands	Level 2: Reduce COVID-19 is not present in the Cook Islands but there is a community case in New Zealand	Level 3: Restrict COVID-19 has been detected in the Cook Islands and community transmission may be occurring	Level 4: Lockdown COVID-19 has been detected in the Cook Islands and community transmission may be occurring
	<ul style="list-style-type: none"> • Test hospital admissions with respiratory presentations • Test all contacts • Conduct targeted testing for high-risk individuals and settings. 			
Border Measures	<ul style="list-style-type: none"> • Monitor incoming passengers for signs/symptoms • Assess travel restrictions and advise e.g. test before travel +/- quarantine on arrival • Health declaration and travel history • Assess entry to the Pa Enea • Maintain cargo staging areas to minimise interactions • Strict infection control procedures observed and regular decontamination • Provide logistical assistance to repatriate foreign nationals. 	<ul style="list-style-type: none"> • Monitor incoming passengers for signs/symptoms • In-flight, airport and maritime announcements • Liaise with airlines/shipping operators • Assess entry to the Pa Enea • Health declaration and travel history. 	<ul style="list-style-type: none"> • Assess travel restrictions and revise • Health declaration and travel history • Assess entry to the Pa Enea • Cargo staging areas to minimise interactions between cargo handlers at ports and workers in country • Strict infection control procedures observed and regular decontamination • Provide logistical assistance to repatriate foreign nationals. 	<ul style="list-style-type: none"> • Assess travel restrictions and revise • Assess entry to the Pa Enea • Maintain cargo staging areas to minimise interactions • Strict infection control procedures observed and regular decontamination • Provide logistical assistance to repatriate foreign nationals.

Functions	Readiness action stage	Targeted action stage		
	Level 1: Prepare COVID-19 is not present in the Cook Islands	Level 2: Reduce COVID-19 is not present in the Cook Islands but there is a community case in New Zealand	Level 3: Restrict COVID-19 has been detected in the Cook Islands and community transmission may be occurring	Level 4: Lockdown COVID-19 has been detected in the Cook Islands and community transmission may be occurring
Resources and Logistics	<ul style="list-style-type: none"> • Transition to standby accommodation in communities if hospital capacity is reached • Additional resources mobilised • Emergency funds mobilised • Assess stockpiles of PPE in case of shortages • Maintain essential services. 	<ul style="list-style-type: none"> • Stockpile of personal protective equipment (PPE) example. face masks, hand gel, full gear • Health system capacity example isolation areas, flu clinics, HDU/ICU capability • Standby accommodation and infection control providers • Capacity to maintain essential services • Review financial mechanisms to support business continuity and response. 	<ul style="list-style-type: none"> • Assess stockpiles of PPE in case of shortages • Additional resources and finances mobilised as needed • Monitor health system capacity and establish triggers if full capacity is reached • Health professionals on standby as needed • Maintain essential services (food, water, energy, waste disposal, mortuary services, financial services, law enforcement, ICT, transport, infrastructure) • Prepare to transition from business as usual to emergency response. 	<ul style="list-style-type: none"> • Transition to standby accommodation for isolation if full capacity is reached in health facilities • Additional resources mobilised • Emergency funds mobilised • Reassess HDU/ICU capability • Maintain essential services.
Communication and Consultation	<ul style="list-style-type: none"> • Encourage compliance with recommended public health measures • Conduct monitoring activities and address issues as they emerge e.g. use of unverified treatments or reports of people avoiding health facilities • Request compliance isolation/quarantine 	<ul style="list-style-type: none"> • Central communications hub and strategy • Resilient ICT example. email, remote access, internet • Liaise with international counterparts • Liaise with private sector and community stakeholders. 	<ul style="list-style-type: none"> • Maintain cough etiquette, hand-washing, stock up on non-perishable items as needed • Stay up-to-date with health advice • Health line details • Advise those with the virus to take all measures to prevent infecting others. 	<ul style="list-style-type: none"> • Urge communities to maintain social distancing • Request voluntary compliance to isolation/quarantine as needed • Continue to advise on cough etiquette, hand-washing • Urge those with virus to take all measures to prevent infecting others

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	<ul style="list-style-type: none"> • Urge those with virus to take all measures to prevent infecting others • Urge those at risk to take precautions to avoid infection • Urge those who suspect they have the virus to call healthline for medical attention • Advice and information to prevent stigma, discrimination and harassment. 	<ul style="list-style-type: none"> • Internal communications example situation reports, memos • Health line details • Advice on cough etiquette, hand-washing, prepare home supplies • Advice and information to prevent stigma, discrimination and harassment. 	<ul style="list-style-type: none"> • Advise those at risk to take precautions to avoid infection • Advise those who suspect they have the virus to call a medical practitioner/hospital/clinic first, or the Healthline (28180) for advice • Advice and information to prevent stigma, discrimination and harassment. 	<ul style="list-style-type: none"> • Urge those at risk to take precautions to avoid infection • Urge those who suspect they have the virus to call a medical practitioner/hospital/clinic first, or the healthline (28180) for advice • Advice and information to prevent stigma, discrimination and harassment.
Clinical Care and Public Health Management	<ul style="list-style-type: none"> • Conduct rigorous case investigation to identify and quarantine close contacts • Conduct contact tracing • Triage cases and test people with symptoms • Reinstate restrictions as needed example gatherings, quarantine/isolation. 	<ul style="list-style-type: none"> • Frontline training on infection control • Contact tracing as needed • Develop and refine case and contact definition as needed • Redirect people with flu-like symptoms to flu clinics. 	<ul style="list-style-type: none"> • Laboratory testing capability • Isolate and manage cases • Quarantine and contact trace • Prepare cases for transfer overseas if HDU/ICU capacity is overwhelmed • Flu clinics treat cases • Separate infected patients from at-risk patients example elderly, disabled, chronic illness. 	<ul style="list-style-type: none"> • Intensify monitoring and reporting of cases • Transfer cases where HDU/ICU capacity is overwhelmed • Isolate and manage cases • Quarantine and contact trace • Distribute vaccine if available • Separate infected patients from at-risk patients e.g. elderly, disabled, chronic illness • Appropriate management of deceased persons

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Social Welfare and Support	<ul style="list-style-type: none"> • Strict visitor restrictions and access to closed communities, hospitals, isolation areas, prisons • Restricted activities at higher-risk settings example bars, pubs, nightclubs • Support for grieving families and communities • Mandatory self-quarantine/isolation • Coordinate provision of services to at-risk populations example elderly, disabled, chronic illness • Coordinate provision of resources, food, financial assistance, special leave • Individuals make necessary arrangements example stockpile essential items, childcare. 	<ul style="list-style-type: none"> • Welfare of residents and visitors • Coordinate services to at-risk population example elderly, disabled, chronic illness • Individuals make necessary arrangements example stockpile essential items, childcare • Coordinate assistance for elderly, disabled and chronic illness groups who do not live with any family members • Activities to build social resilience example counselling • Strict health checks in the community. 	<ul style="list-style-type: none"> • Voluntary self-quarantine/isolation • Possible school closures • Prohibit mass gatherings example nightclubs, cultural or sports events, churches • Limit access and visitation to closed communities, hospital wards, isolation areas, prisons • Coordinate provision of supplies example medicines, food to isolated or quarantined people • Individuals make necessary arrangements example stockpile essential items, childcare • Health checks in the community. 	<ul style="list-style-type: none"> • Strict visitor restrictions and access to closed communities, hospitals, isolation areas, prisons • Support for grieving families and communities • Mandatory self-quarantine/isolation • Coordinate provision of services to at-risk populations example elderly, disabled, chronic illness • Coordinate provision of resources example medicines, food, financial assistance, special leave • Individuals make necessary arrangements example stockpile essential items, childcare • Strict health checks in the community.