NATIONAL CAPITAL DISTRICT
Provincial Health Authority

OUTBREAK RAPID RESPONSE MANUAL

2024

OUTBREAK RAPID RESPONSE MANUAL

for

National Capital District Provincial Health Authority

How to detect, prepare for and respond to outbreaks, emergencies, and other urgent public health events.

A manual for all NCDPHA clinical and public health practitioners and decision makers.

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2024

FORWARD

As the Chief Executive Officer for the National Capital District Provincial Health Authority, I am pleased to present the Rapid Response Manual for outbreaks of public health significance in our province. This manual represents a collaborative effort by our dedicated team of public health professionals to ensure the swift and effective response to outbreaks within our communities.

In recent years, NCD has faced various challenges posed by infectious diseases and other public health emergencies. The need for a comprehensive and well-coordinated response cannot be overstated. This manual serves as a crucial resource for guiding our actions during times of crisis to mitigate the spread of disease and protect the health and well-being of our residents. It is designed to be adaptable to a range of scenarios, ensuring that we remain agile and responsive in the face of evolving threats.

I would like to express my gratitude to all those who contributed to the development of this manual, including our staff, partners, and stakeholders. Their expertise, dedication, and collaboration have been instrumental in its creation.

I am confident that with the implementation of this Outbreak Rapid Response Manual, we will strengthen our capacity to safeguard the health of our communities and effectively manage public health emergencies. Together, we remain committed to the health and well-being of all residents of the National Capital District.

Sincerely,

NCD PROVINCIAL HEALTH AUTHORITY
DR. STEVEN YENNIE, EMBA, MED-Internal Medicine, MBBS
CHIEF EXECUTIVE OFFICER

Dr. Steven Yennie
Chief Executive Officer
National Capital District Provincial Health Authority

ACKNOWLEDGEMENT

The creation of the NCD PHA Outbreak Rapid Response Manual has been a collective effort, driven by the dedication and expertise of numerous individuals and organizations committed to protecting the health and well-being of our communities.

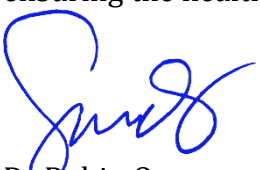
We acknowledge the invaluable contributions of Barry Ropa and Emmanuel Hapolo from the Field Epidemiology Training PNG Faculty at the National Department of Health whose support has been instrumental in developing this manual.

We would also like to express our appreciation to the members of the Public Health Team from NCD PHA including Dr Amos Lano, Dr Robin Oge, Dr Rose Morre, Catherine Gandi and Rosemary Bates whose diligent work, insightful feedback, and collaborative spirit have been vital throughout this process. Their expertise in epidemiology, clinical practice, emergency management, and public health policy has shaped this manual into an effective tool for outbreak response in NCD.

We are also grateful for the support and guidance provided by NCD PHA Disaster Management and Emergency Response Committee. Our deepest thank you to the committee members: Dr Mary Kaevakore, Dr Fiona Kupe, Rhonda Tisap, Ruben Kingal, Samantha Lomutopa, Mouren Kila, Janet Pongone, Robbie Aimon, Laura Kaki and Metha Agobe.

Special thanks to Samson Rexford Wass for designing the cover page and providing graphic assistance to this manual.

Together, we have created a robust framework to swiftly and effectively respond to outbreaks, ensuring the health and safety of all residents in our province.



Dr Robin Oge
Editor
Deputy Director, Public Health – Family Health Services, NCD PHA

CONTENT

ABBREVIATIONS

RRT	Rapid Response Team
NDOH	National Department of Health
EOC	Emergency Operating Centre
FETP	Field Epidemiology Training Program
NCDPHA	National Capital District Provincial Health Authority
NCD	National Capital District
PHEOC	Public Health Emergency Operations Centre
PHECC	Public Health Emergency Coordination Centre
IMT	Incident Management Team
ILI	Influenza Like Illness
SARI	Severe Acute Respiratory Illness
PPE	Personal Protective Equipment
IPC	Infection Prevention Control
PHA	Provincial Health Authority
DEFAT	Department of Foreign Affairs and Trade
SDA	Seventh Day Adventist
NCDC	National Capital District Commission
PNGDF	Papua New Guinea Defence Force
NAQIA	National Agriculture Quarantine Inspection Authority
DDA	District Development Authority
PEOC	Provincial Emergency Operation Centre
PDCO	Provincial Disease Control Officer
MS	Moresby South
MNE	Moresby North East
MNW	Moresby North West
LLG	Local Level Government
HAI	Health Associated infections
LGA	Local Government Area
MoH	Ministry of Health
PUI	Person Under Investigation
HEO	Health Extension Officer
RDT	Rapid Diagnostic Test
IEC	Information Education and Communication
MUAC	Mid Upper Arm Circumference
ID	Identification

1. INTRODUCTION

A rapid response team is critical for early investigation and timely response to epidemic prone disease or unusual events, which will minimize the extent and impact of potential outbreaks and widespread transmission of the disease. “Rapid Response Team” is a technical, multi-disciplinary team of experts readily available for a quick mobilization and deployment in case of emergencies to undertake the lead in conducting the initial investigation, confirm the nature and extent of the reported disease/public health event and take initial control measures. The following guidelines are to facilitate the Rapid Response Teams to properly investigate and confirm the outbreak. Ideally, the rapid response team should comprise of a clinician, epidemiologist, or public health officer; laboratory technician; communication officer; hygienist; and driver. However, the minimum number of the Rapid Response Team can be reduced to 3-4 (Provincial Disease Control Officer and clinician or laboratory technician, health promoter or social mobilizer and a driver) in Papua New Guinea context because of limited number of health workers are available in the country.

The Rapid Response Team (RRT) can be mobilized for the immediate investigation and response of any outbreak or emergencies such as the influenza pandemic, COVID-19 pandemic, measles outbreak at the national, provincial, district and health facility level. It is the responsibility of the National Department of Health (NDOH) surveillance team to deploy the Rapid Response Teams from the national level and to work closely with provincial health authorities for activation of provincial RRTs to initiate investigations and implement initial measures.

The overall mandate of the NDOH is to investigate and respond to outbreaks of national or international concern. In such situation, the Department of Health will constitute a national investigation team to work with the affected Province in the investigation and response if required.

2. PURPOSE OF THIS MANUAL

The purpose of this manual is to give guidance on the functionality and response of the RRT to any disease outbreaks and public health response. The manual provides guidance on the following:

- The composition of the team members
- Roles and responsibilities of team members in the RRT
- Outbreak Preparedness
- Surveillance and Alert
- Risk assessment
- Outbreak investigation
- Activation and deployment of RRT
- Infection, prevention and control
- Community engagement strategies
- Risk communication strategies
- Reporting and follow up
- Templates and checklists are provided to assist with all stages of the outbreak

3. OBJECTIVES OF THE RRT

- Receive an alert and prepare to go to the field
- Verify the alert
- Conduct outbreak investigation
- Complete a case investigation form
- Create a line list for cases and contacts (if relevant)
- Collect and transport the laboratory samples to confirm disease
- Undertake active case finding
- Initiate prevention and control measures
- Create a situation report and communicate findings
- Conduct an after-action review and record the lessons learnt

4. OUTBREAK INVESTIGATION STEPS

Step 1: Confirm the outbreak

Step 2: Establish a diagnosis

Step 3: Make a case definition

Step 4: Additional cases and information

Step 5: Make a line list

Step 6: Describe and interpret data

Step 7: Control measures

Step 8: Communicate findings

5. COMPOSITION OF THE RRT

Due to the volume of alerts and possible scale of the disease outbreak, the RRT will be a modified team for rapid investigation, confirmation, investigation and contact tracing.

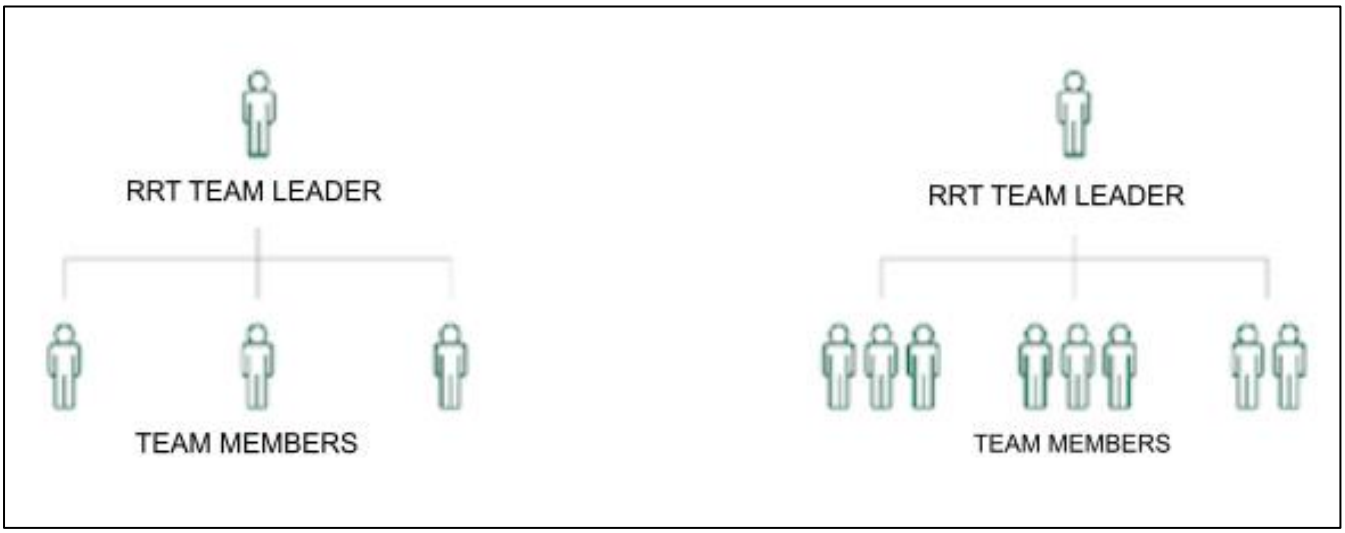
The NDOH and PHA should designate experienced trained technical personnel who can respond immediately when there is a suspected case and promptly undertake the tasks of initiating outbreak investigation and response.

Rapid Response teams shall be established at National and Provincial level. The National RRT should be equipped to cascade training when necessary and build capacity of Provincial RRTs.

Each Team will be composed of 2-4 members, with core members including:

1. Provincial Disease Control Officer/Field Epidemiologist
2. Clinician
3. Laboratory technician
4. Social mobilization Officer
5. Driver

In an emergency where there are many cases (or potential for many cases) the composition of the RRT team may need adjustment to meet demand and resource limitations. In this case reduce the number of team members and have a central reporting structure.



6. RRT ROLES AND RESPONSIBILITIES

RRT Role	Responsibilities of Core Team Members
TEAM LEADER **Name:** Dr. R Morre **Contact No:** 7576 9408 **Email:** rosemorre41@gmail	✓ Reports back to relevant national authorities (at EOC or equivalent). ✓ Ensures a coordinated response among team members. ✓ Collects information from all team members' daily re: data, activities, challenges… ✓ Keeps updated on global and regional health intelligence.
Name: HEO Catherine Gandi **Contact No:** 7928 1719 **Email:** cgandi65@gmail.com	**Additional roles specific to our RRT:** ✓ Activating rapid response team to respond to any alert from surveillance program officer, hospital, clinics and unusual events reported. ✓ Formulate RRT team (4-6 manpower team: surveillance officer/FETP trained, RRT lead, Lab technician, one health frontline FETP representative, driver) ✓ Identify focal emergency staff in the NCDPHA clinics and run trainings for staff to respond to emergency situations especially in infectious diseases and disaster related outbreak diseases. ✓ Ensures emergency kits are stocked for response. ✓ Coordinate capacity building on emergency and response focal leads and proposed sites.

PROVINCIAL DISEASE CONTROL OFFICER/ FIELD EPIDEMIOLOGIST **Name:** Sr. Rosemary Bates **Contact No:** 7524 1426 or 7366 7688 **Email:**rosemarybates@gmail.com	✓ Verifies if alert meets case definition. ✓ Educates on the case definitions and identification of cases. ✓ Identifies and coordinates control measures. ✓ Supervises data collection and data analysis to give information on the evolution of the outbreak. ✓ Collects all available information from the national level focal points prior to the field mission and prepare the logistic of the mission in collaboration with the Team Leader. ✓ Coordinates follow-up measures. ✓ List the contacts, based on contact definitions. ✓ Identifies potential modes of exposure and community transmission. ✓ Provides case definitions to local health workers. ✓ Updates the case line list will all the patients that meet ✓ the case definition. ✓ Coordinates with provincial medical Director, hospitals and health centres.
ASSISTANT FIELD EPIDEMIOLOGIST **Name:** Dr. Veronica Niltainde **Contact No:** 70991641 **Email:** vniltainde@gmail.com	✓ **Same Role as above.**
CLINICIANS **Name:** Dr. Mary Kaevakore **Contact No:**7158 7168 **Email:** mkaevakore@gmail.com	✓ Institutes case management measures ✓ Advises and gives leadership in case management ✓ Educates, implements, and supervises infection control measures ✓ Advises on area hospital bed capacity and medical capability ✓ Advises on collection of clinical specimens from cases/patients ✓ Ensures that case notes for each patient are recorded ✓ Oversees the infection prevention protocol in place at all levels ✓ Liaises with the EHO, assists in layout of Treatment Centre, management of hand washing facilities.

Name: Dr. Fiona Kupe **Contact No:** 70143176 **Email:** fkupe@gmail.com	**Same as above case management measures however, focus will be on paediatric cases.**
INFECTION PREVENTION & CONTROL **Name:** Ruben Kingal **Contact No:** 7287 3744 **Email:** rubenkingalrk@gmail.com	✓ Triage, early recognition, and source control. Clinical triage includes early recognition and source control (isolation of patients with suspected infection) of suspected cases. ✓ Standard precautions for all patients. Standard precautions hand and respiratory hygiene; appropriate use of personal include protective equipment (PPE); safe waste management; environmental cleaning and sterilization of patient-care equipment and linen. ✓ Additional precautions for infection. In addition to standard precautions, all individuals (healthcare workers, visitors, family members etc) should apply precautionary measures on route of transmission of pathogen. ✓ Administrative controls. Ensure sustainable IPC infrastructure and activities (e.g., IPC committee, review existing PPE stockpiles, estimate future needs, facilitate procurement). ✓ Ensure capacity building for HCW per WHO guidelines in responding to emergencies.
SAMPLE COLLECTOR / LABORATORY SPECIALIST **Name**: Samantha Lomutopa **Contact No:** 7430 4573 **Email:** lomutopa@samantha@gmail.com	✓ Notify the laboratory centre to be prepared to receive samples and notify the NDOH surveillance team. ✓ Safely collect the sample according to protocol and clinician advice. ✓ Package the sample according to safety standards. ✓ Fill in and verify the appropriate paperwork for shipping of sample. ✓ Ensure sample is transported in a good condition with temperature between 2-8^{o}C. ✓ Ensures correct paperwork, including the person in investigation form sent with the sample. ✓ Receives results from laboratory centre once delivered.

ASSISTANT LABORATORY OFFICER **Name**: Marina Imong **Contact No**: 7364 5148 **Email:** mitarianah@gmail.com	✓ **Roles same as above**
PHARMACIST **Name:** Mr. Benson Kewa **Contact No:** 72664992 **Email:** lgupason@gmail.com	✓ Ensures all non-pharmaceutical and pharmaceutical needs in in stock. ✓ Orders urgent stock supply in an emergency situation ✓ Reports promptly on any out-of-stock items. ✓ Keep up to date inventory of stock.
SOCIAL MOBILIZATION **Name:** Rhonda Tisap **Contact No:** 7947 0188 **Email:** mercymcberth02@gmail.com	✓ Mobilizes stakeholders to support health education. ✓ Identifies, orients and trains community health workers about the diseases and messaging to patients and community. ✓ Provides strategies for community education about the outbreak. ✓ Conducts health education sessions in both affected and unaffected areas to contain the outbreak. ✓ Distributes Information Education and Communication (IEC) materials.
ENVIRONMENTAL HEALTH SPECIALIST **Name:** Benjamin Titowali **Contact No:** 7347 6276 **Email:** benjititowali@gmail.com	✓ Liaises with community and other important stakeholders. ✓ Rumour control. ✓ Participating in emergency response activities, such as spills and other environmental incidents. ✓ Conducting environmental assessments and audits, including air and water quality monitoring, waste management, and soil contamination assessments. ✓ Attending environmental health incidents and following up with further investigations to make sure that those responsible are held to account ✓ Educating and training employees, contractors, and other ✓ stakeholders on environmental health issues and best ✓ practice ✓ Communicating regularly with management and other ✓ stakeholders, providing environmental performance and ✓ compliance updates ✓ Keeping records and compiling reports

ANIMAL HEALTH SPECIALIST **Name**: NAQIA Rep **Contact No:** **Toll Free No:** 1801332 **Email:**	**Roles specific to our RRT:** ✓ Zoonotic support staff from NAQIA ✓ Conduct field investigations to gather data on animal health, disease prevalence, and transmission dynamics. ✓ Surveillance and detection of zoonotic disease outbreaks and risk to human health ✓ Risk assessment to animal related health hazards to humans. ✓ Contribute to response planning, coordination and collaborations. ✓ Involved in capacity building and training. ✓ Writes situational analysis concerning zoonotic outbreak ✓ Participate in post-event evaluations meetings.
LOGISTICS MANAGER **Name:** Mr. Robbie Aimon **Contact No:** 7338 9642 **Email:** aimonrp@live.com	✓ Logistics Cluster will be responsible for management of medical supplies/commodities and logistics required for the outbreak event control and prevention in NCD. Logistics will involve coordination of transport systems to effectively respond to disease out-break in the city. ✓ Transport coordination and managing logistics of necessary drugs, sundries, PPEs, IPC materials and commodities needed for the response.
FINANCE AND ADMINISTRATION **Name:** Mr. Lumson Okilum **Contact No**: 72085134 **Email:** okilumlumson@gmail.com	✓ Liaise with NCDPHA SEM for outbreak response funding ✓ Coordinates finance and administration support to any event & emergency response in NCD ✓ Submit Acquittal for outbreak response ✓ SEM representative in the response committee

7. OUR IMT / PHEOC COMMAND STRUCTURE

8. VERIFICATION OF A POSSIBLE OUTBREAK

When is a rapid response team needed?

- A new illness reported in a community
- Increase in illness in a community
- Large numbers of unexplained cases of a disease
- Rapidly increasing case count of a disease
- A vulnerable population is being affected (e.g. children or the elderly)
- Severe illness or death observed
- An unusual or particularly severe pathogen is involved
- The outbreak is on-going and no source has been identified

How do we find out about possible outbreaks?

- A health care worker, community member, point of entry worker or surveillance officer of Province receives a notification through the provincial or national hotline.
- An unusual increase in the number of cases and/or deaths is identified during analysis of routine or enhanced surveillance data

Deciding when to respond

Verifying an outbreak includes an assessment of whether the increase is real, and if it is real is it above expected. A 'response threshold' (or 'epidemic threshold') indicates the level above which a disease requires an urgent response.

Each disease has a specific threshold that depends on its infectiousness, other determinants of transmission, and the degree to which it is locally endemic.

For certain diseases, such as cholera or haemorrhagic fever, one case is sufficient to initiate a response. For other diseases, such as malaria, establishing a threshold ideally requires the collection of incidence data over a period of months or years to understand what the 'expected' level is for that time of the year. If long term surveillance data is not available or not reliable, the average number of cases for the previous 3 or 4 weeks can be used. A threshold may be set as 1.5 times or 2 times the expected level. Statistical methods may also be used to determine increase above expected.

Response thresholds of the RRT:

Disease / Condition	Alert Threshold	Action Suggested
Acute watery diarrhoea in a patient aged 5 years of more (suspected cholera)	One case	Reinforce appropriate case management, initiate investigation
Acute flaccid paralysis in a child under 15 years of age (suspected polio)	One case	Case investigation and specimen collection for laboratory diagnosis
Acute fever and rash with cough or runny nose or red eyes (Suspected measles)	One case	Immediate investigation and active case finding in coordination with the national immunization programme
Haemorrhagic fever	One case	Initiate investigation
Outbreak or cluster of unexplained disease or deaths	An aggregation of cases with related symptoms and signs of unknown cause that are closely grouped in time and /or place	Initiate verification and investigation as required.
Prolonged fever of 3 or more days (no rash of cough)	One death or two times the mean number of cases of the previous three weeks for a given location	Initiate investigation
Acute onset of fever with cough and/or sore throat	Twice the average number of cases seen in the previous three weeks for a given location	Reinforce appropriate case management; initiate investigation
Bloody diarrhoea	Three or more cases in one location	Reinforce appropriate case management, including antibiotic usage; collect stool for culture and antimicrobial sensitivity; initiate investigation
Malaria, dengue, shigellosis, Hep A	Twice the average number of cases seen in the previous three weeks for a given location	Reinforce appropriate case management, including appropriate treatment; initiate investigation
Leptospirosis	Two or more linked cases	Reinforce appropriate case management, including antibiotic usage; collect clinical specimens; initiate investigation

9. RAPID RISK ASSESMENT

9.1 Assemble the risk assessment team

- Less than 10 people who have the technical expertise required for the particular situation.

9.2 Conduct a situation analysis

- Case interview summary
  Provide a brief overview including the date of notification of the index case, date of symptom onset, movement history and date of notification of secondary and tertiary cases (if relevant).

- Total number and characteristics of the people affected
  Include age, gender, and specific population.

- Severity of illness
  Include number of hospitalisations and deaths.

- Include epidemic curve if available to show number of cases over time

9.3 Write a risk question (you can have more than one!)

Number/ extent	Event/ thing	Location	Outcome	Hazard	Source	Time frame
• at least one • an increasing number • (NA, any)	• Person • people • healthcare worker	• in province Y • in hospital Z • in district X	• exposed • deaths • presents with clinical disease • spread • Infected	• COVID-19 • haemorrhagic fever • dengue • haemorrhagic fever • chemical spill	• patient • (N/A, any source)	• in the next week • in the next month • In the next year • In the next insect season • X festival

Example: What is the likelihood and impact of an increasing number of people in Port Moresby infected with dengue during the next month?

9.4 Characterise the risk

Exposure Assessment (evaluation of the exposure of individuals to the likely hazards): Description of identified probable exposure sites, including date/time

- Most likely mode of transmission

  Specify why and include a visual of the transmission chain, including a patient ID number, age, gender and date of onset of symptoms, and classify according to confirmed, probable, and suspected.

Context assessment (evaluation of the environment in which the event is taking place): What is the likelihood that further cases could be identified?

- Are vulnerable populations affected?
- Are there factors that could affect further transmission and adherence to public health interventions?

  Consider socio-economic, environment, behaviours, social or cultural practices, language, forum for risk communication

- Are there any political sensitivities?
- Are there enough resources to respond?

Estimate the overall likelihood and impact of the situation described in the risk assessment

Likelihood	High				
	Moderate				
	Low				
	Negligible				
		Negligible	Minor	Moderate	Severe
		Impact			

Overall assessment

[*Mark the appropriate box below. The level of overall risk should be determined via collective decision making by the RRT and other expert input*]

Mark	Level of overall risk	Actions
	Low	Managed according to standard response protocol for the RRT.
	Moderate	Consider outbreak meetings and preparation of situation reports. Ensure public health emergency operations centre (PHEOC) is informed.
	High	Convene outbreak meetings, prepare situation reports and inform public health emergency coordination centre (PHECC) Operations. Activate RRT response.
	Very high	Daily outbreak meetings, daily situation reports with distribution to senior decision makers, Operations, incident management team (IMT).

9.5 Identify risk management options/actions and communications messages

Completed Actions:

Indicate which actions had occurred prior to the risk assessment.

Planned Actions:

- Exposure sites:

  Indicate which exposure sites will be notified, what advice they will receive, whether an RRT will be deployed.

- Exposed population:

  Indicate how risk communication will be conducted, indicate specific interventions needed for sub-populations e.g. Engagement with community leaders, use of specific risk communication strategies, assistance with isolation/quarantine.

Summarise risk analysis for field deployment - See Appendix 1, field investigation report template

10. ACTIVATION OF THE RRT

The RRT should be activated within 24 hours of notification of an alert.

Provincial RRT activation

The NDOH surveillance coordinator will communicate notifications that arise from the national hotline to Provincial health authorities. The provincial health authorities will use usual lines for activation of the RRT to take action.

National RRT activation

The NDOH surveillance coordinator or incident manager can activate an RRT, assign a team and decide on composition of RRT based on preliminary notification of information from hotline, health facilities, and communities, through routine surveillance system or by request for provincial support.

The provincial RRTs may be supported by the National rapid response team to conduct investigation when:

- Requested by the province due to scale or complexity of the alert or due to capacity constraints.
- If the province is constrained and is unable to deploy the provincial RRT.
- An unusual increase is seen in the number of cases or deaths during routine analysis of data or epidemic thresholds.
- Communities report rumours of deaths or many cases that are not being seen in the health facility

During COVID-19 the RRT should be activated if:

- An increasing number of people fit the case definition for COVID-19.
- A notification from the national or provincial hotline is verified by the surveillance team.
- Increasing number of suspected cases are reported from a health facility or Point of Entry or border area.
- A report from health care workers or community of a cluster of suspected cases or deaths from similar respiratory illness symptoms.
- An unusual increase is seen in the number of cases or deaths in routine analysis of ILI or SARI data.

11. FIELD PREPARATION

Preparing well to go to the field will improve the efficiency of the RRT to investigate and take actions in the field smoother. Teams will be deployed to the field with a **rapid response kit**, including the appropriate case investigation, contact listing form, equipment for sample collection, PPE and decontamination equipment.

When preparing for the field, consider discussing, organising and preparing the following:

1. Discuss the current information about alert and next steps
2. Put team together and assign roles and responsibilities, including team lead
3. Verify information and coordinate investigation with health workers and community contacts
4. Risk assessment: hazard, exposure, context and overall risk level
5. Logistics: transport, fuel, accommodation, food, storage and transport of sample
6. Key stakeholders and community engagement
7. Action plan
8. Prepacked RRT bag: Investigation template, case investigation form, line-list templates, IPC, PPE, sample collection kits, waste management, pens and notepads (see checklists)
9. Prepare medical supplies and equipment needed to investigate and respond
10.Communicating findings and reporting: Situation report template and communication plan

Obtain the right administrative authorizations

Observe the appropriate authorizations, clearances, ethical norms, security considerations and permissions that are required to do the investigation (see **command structure, map of key stakeholders, communication plan**).

Community entry

- In the preparation phase key community members and their contact details should be obtained and recorded on the investigation template.
- On entry to the community the team lead should meet with the appropriate people and observe cultural practices (see community engagement and communication plan).
- Team members should be introduced and their roles should be clearly explained to the community.
- At all times include appropriate local health worker or leader to guide investigation.
- The risk assessment should inform the need for a security escort.

12. IDENTIFY KEY STAKEHOLDERS

Key partners and stakeholders that will need to be involved in the response. This is important for obtaining appropriate permissions, preparing for community engagement, and for communications.

STAKEHOLDER	CONTACT PERSON	EMAIL
LOCAL LEVEL		
Community Leader	contacts per situation @ hand	contacts per situation @ hand
Women Leader		
Youth Leader		
Church Leader		
Community Peace mediators		
Ward Council		
NATIONAL & PROVINCIAL LEVEL PARTNERS & STAKEHOLDER		
Provincial Disaster Centre	Mr James Pepa	324 0651
National Capital District Commission	Mr Iowa Isowa	IsowaM@ncdc.gov.pg
MNE District Development Authority	Ms Joanne Kaupa (Health Officer)	joannul45@gmail.com
MNW District Development Authority	Samuel Darimomo (Health Sector Coordinator)	7227 5065/7526 5518 samuel.darimo@moresby darimomosam@gmail.com
MS District Development Authority	Dr Eddie Edimani(Health Officer)	eedimani@gmail.com
United Nations Children's Fund	Philomena Tatireta Health Officer (Immunisation)	72073011 ptatireta@unicef.org
World Vision	Freeman Manyavi (Disaster Preparedness & Response Coordinator)	Freeman_manyavi@wvi.org
National Agricultural Quarantine and Inspection Authority		3112100
Water PNG	Mr Blacklock Sine (Health Safety Security and Environment Officer)	73560450
National Airports Coorporation		3244700
Central Public Health Laboratory	Mr Milton Rassoriri	703232236 mrassoriri@gmail.com
St Johns Ambulance	Diane Mape a/NCD Regional Commander	dmape@atjohn.org.pg
National Department of Health	Mr Barry Ropa	71291609 bropa2013@gmail.com
World Health Organization	Dr Halimo Joaqium	
National Disaster Centre	Gion Amean (Secretariat)	75524890 Gion.amean@gmail.com

13. TEAM COMMUNICATION PLAN

Formalizing a simple communication plan is essential for a highly functioning RRT. The team should have two communication plans: one for peacetime (outside of a response) and one for response period.

Considerations for communication plan outside of a response:
RRT members should arrange a dedicated time to regularly meet to:

- Evaluate surveillance data.
- Discuss known or predicted public health issues within the province.
- Keep informed of public health emergency issues within the region.

RRT members should keep each other informed of and participate in continued professional development opportunities.

RRT members should keep each other informed of their availability so that back up team members can be arranged in the event of an alert or response.

Considerations for communication plan between RRT members during a response:
Communication during a response occurs on three levels:

1. Communication **UP** (communication to senior management within the PHA).
2. Communication **ACROSS** (communication within the RRT).
3. Communication **OUT** (communication with the public, community, media etc.)

Communication UP
It is vital to keep senior management informed of the teams' progress during a response. The frequency and format of communication should be decided prior to field deployment.

A situation report (sit rep) is typically the keyway to communicate up. A situation report is a simple update outlining the current situation, it typically contains the following sections (see Annex for template).

- background
- current situation
- needs to support the response

The RRT Team Lead is responsible for communicating up.

In addition to the situation report - which are short and frequent updates - the team should prepare a final outbreak report after the investigation has concluded (see Annex for template)

Communication ACROSS

While all members of the RRT report to the team lead, it is important to support open and frequent communication between team members (communicating across the team):

- The team needs to look out for each other's needs to ensure everyone's wellbeing during responses that are stressful
- Team members need to speak up when they need support of any kind - technical, mental, emotional
- It is good practice to create a buddy system (pair two team members) to check in on each other.
- It is good practice to meet as a team first thing in the morning to plan the activities of the day, and again in the afternoon or evening to review the day's activities.
- It may be necessary to call 'stop-work' meetings if urgent issues need to be discussed as a team; in this case, all teams' members stop work and come together for a meeting.

Communication OUT

Communicating with the public is an important part of the response. Communications includes community engagement (see Community Engagement section), media interviews, social media posts, village meetings, church meetings, etc.

General principles for communication out to the public include the following:

i. Build trust

The most critical objective of public communication is to build, maintain, or restore public trust in those responsible for managing the outbreak and issuing information about it.

ii. Announce early

Early announcement contributes to early containment in a situation where every day counts. Equally important, early announcement wins public confidence that authorities are openly reporting what they know when they know it, setting expectations that information will not be concealed.

iii. Be transparent

Transparency can be defined as communication that is candid, easily understood, complete, and accurate. In general, greater transparency results in higher trust. Establishing the limits of transparency may vary from outbreak to outbreak, but if transparency limits become an excuse for secretiveness, the likely result will be a loss of public trust.

iv. Respect public concerns

Public concerns should be treated as legitimate, explored, and respected as a force that will influence an outbreak's impact. An outbreak gains the attention of many different groups of people – those at risk, patients and their families and neighbours, the media, researchers, community leaders, trade partners, and tourists – and affects them in many different ways. Outbreak communication works best when the views of all these publics are considered.

v. Plan in advance

Outbreak communication planning must be a part of outbreak management planning from the start.

COMMUNICATION DURING PEACETIME (OUTSIDE A RESPONSE)	
How often will the RRT meet?	**Monthly**
What day will it meet?	**Mid-week (Wednesday)**
What time will it meet?	**1:30pm**
When will it meet?	**NCPHA PEOC**
COMMUNICATION DURING A RESPONSE – COMMUNICATING UP	
Who does the RRT report to?	**Dr. Robin Oge**
Who on the RRT prepares the situation reports?	**RRT Deputy Team Lead/PDCO**
Who communicates the situation reports?	**RRT Team Lead/PDCO**
How are the situation reports communicated? *Email, phone*	**Email/WhatsApp/Written Report**
How often does the RRT plan to release situation reports?	**Depends on the situation**
COMMUNICATION DURING A RESPONSE – COMMUNICATING ACROSS	
How often does the team meeting during a response?	**Daily briefing**
What time(s) does the team meet?	**Afternoon-3pm**
Who chairs the team meetings?	**Team Lead**
Who records the key decisions?	**Admin officer/Secretary**
COMMUNICATION DURING A RESPONSE – COMMUNICATING OUT	
Who on the RRT is responsible for leading/coordinating public communications?	**RCCE Cluster Leader**
Who on the RRT is authorised to speak to the media?	**Team Leader/Public Health Director**
Who on the RRT is authorised to communicate via social media?	**Team Leader/Public Health Director**

14. COMMUNITY ENGAGEMENT: OUR PROVINCE

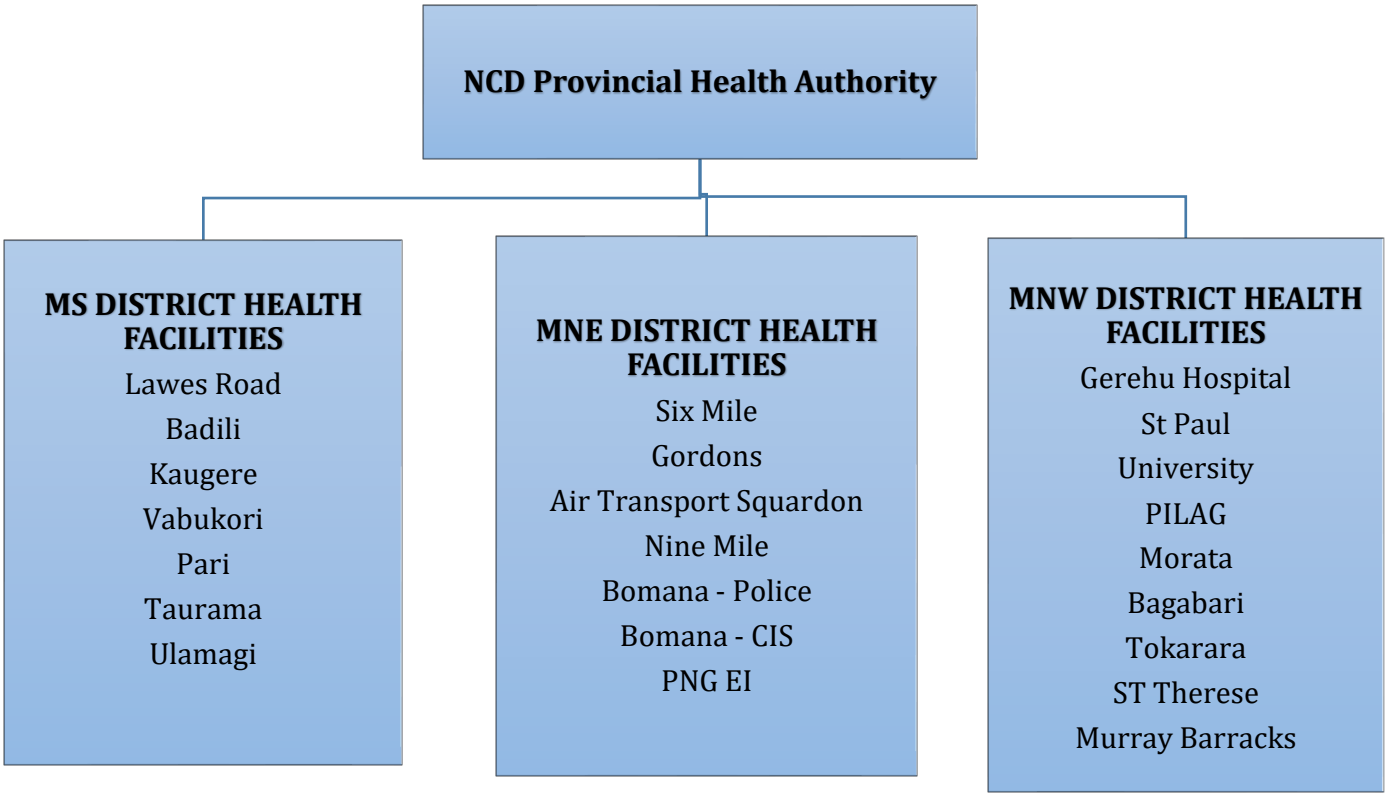
Provincial health liaisons for community engagement:

NCD Provincial Health Authority District Coordinators'

Full Name	District Coordinators	Contact no./Email
Sr. Esther Pinga	Moresby North East	7855 7025 / 7282 0903
Mr. Kaupa Unage	Moresby South	7953 0251
Sr. Pauline Jude	Moresby North West	7647 5248 / 7451 4461

NATIONAL CAPITAL DISTRICT MAP

HEALTH FACILITIES IN THE THREE DISTRICTS OF NCD



15. COMMUNITY ENGAGEMENT: STRATEGIES

Important considerations for community engagement:

- Involve trusted members of the community (religious leaders, elders) since the start.
- Know & understand local customs that might spread the disease.
- Understand community dynamics, structures as well as tensions and conflict.
- Adapt appropriate strategies to help win the trust of the community.
- Engage the community to explain the risks, and how they can be prevented.
- Distrust of certain actors or authorities can impact community acceptance.
- Adapt response to allow people to carry out their traditional practices, while decreasing disease transmission.
- Address rumours as they are recognised.

Methods of Community Engagement:

- **Storytelling:** Community members talk about a disaster they experienced to examine communication and responses.
- **Individual Interviews:** Ask specific questions to individuals in the community to gain a deeper understanding of local emergency preparedness.
- **Discussion Groups:** A facilitated discussion among a group of people to better understand the knowledge, attitudes, and perceptions.
- **Community Walk and Observations:** Walk through the community and observe daily practices and community resources.

Methods of Community Engagement in NCD province

NCDPHA has an existing platform of disseminating information to the community/general public through the;

- Influential community leaders (LLG representative/Churches/Women's Group/Youth Group/Men Group)
- NCDPHA Health Partners (World Vision/FHI 360/ Hope World Wide/Maries Stopes/Anglicare)
- Business Partners/Stake Holders
- Use of conventional media and social media Platforms

16. PRE-DEPLOYMENT CHECKLIST – WHOLE TEAM

1. **Situational assessment and risk analysis completed**
2. **Communication plan completed**
3. **Team identified and roles specified**

NAME	RRT TITLES	PHONE NUMBER
HEO Catherine Gandi	Team Leader	79281719
Sr. Rosemary Bates	Field EPI Officer/Surveillance	7524 1426
Dr Mary Kaevakore	Clinician	7833 4110
Mr Ruben Kingal	Infection Prevention Control	7287 3744
Samantha Lomutopa	Laboratory officer	7430 4573
Sr. Rhonda Tisap	Risk Communication & Community Engagement	7947 0188
Mr Robbie Aimon	Admin/Logistics Manager	7524 0827
Mr Benson Kewa	Pharmacist	72664992
Mr Lumson Okilum	Budget Office-Finance	72085134
Mr Benjamin Titowali	Environmental Health Officer	7885 2679
Dr H Joaquim	WHO Expert	7226 4175
NAQIA REP	Animal & Plant Health	180 1332

Data collection preparation:

- Differential diagnosis list and draft case definitions
- Draft line list (Epidemiologist and clinician)
- Draft case questionnaire (Epidemiologist and clinician)
- Draft sample collection form (Epidemiologist, clinician and laboratory specialist)

Community engagement:

- Key community leaders have been identified and engaged and relevant members in the community have been engaged
- Strategize for community entry and communication
- Public health messaging materials have been developed and are suitable

Supplies (see individual check lists for each RRT role):

- Pharmaceutical and medical supplies (Pharmacist and logistics officer)
- Infection, prevention and control supplies (Clinician)
- Clinical sample collection supplies (Clinician and laboratory specialist)
- Environmental and food sample collection supplies (Environmental/laboratory specialist)
- Animal sample collection supplies (Animal health specialist)
- Print outs of data collection tools and public health messaging materials
- Phones and chargers for each RRT member if needed (logistics and administration)
- Laptops if required (logistics and administration)

Transport:

- Protocol and mechanism for rapid request of transport (e.g. helicopter, vehicle)
- Method of transport confirmed, vehicle booked (logistics and admin)
- Funding for transport and fuel confirmed (logistics and admin)

Accommodation and per diem:

- Funding and secure accommodation available for all RRT members (logistics and admin)

Finance:

- Dedicated fund for RRT deployment
- Preparation of invoices and financial reports for necessary items and transport
- Protocol and mechanism for rapid release of funds for RRT deployment upon approval.

17. PRE-DEPLOYMENT CHECKLIST FOR CLINICIAN

Clinical and outbreak resources

- Outbreak Rapid Response Manual 2024
- Outbreak Manual for Papua New Guinea 2012
- Case investigation form tailored to likely clinical course of patients

Clinical tools

- Stethoscope
- Thermometers
- Urine dipsticks
- BP Machines
- Glucometer/Strips

Infection prevention and control

- N95 masks
- Surgical masks
- Paper bags and marker for mask storage
- Disposable gowns
- Gloves (Small, Medium, Large)
- Eye protection (face shield or goggles)
- Booties
- Alcohol wipes
- Disinfectant (70%)
- Hand sanitizer
- Hand soap
- Bins
- Plastic bags/biohazard bags
- Donning and doffing posters
- Signs for donning and doffing stations
- Hand hygiene audit sheets
- IPC checklists

18. PRE-DEPLOYMENT CHECKLIST FOR EPIDEMIOLOGIST

- Field investigation reporting form
- Confirm case definition(s)
- Line list forms
- Case investigation forms
- Contact tracing forms
- Calculator
- Laptop and charger
- Stationaries (Clipboard/Pens/Biros)
- Rapid response bag
- Public Health manual
- Rapid Response manual

19. PRE-DEPLOYMENT CHECKLIST FOR SAMPLE COLLECTOR

- Established liaison at laboratory for sample submission- contact information
- Sample collection, packaging and transport SOPs for disease(s) in question
- Universal transport media
- Serum blood tubes
- Whole blood tubes
- Nasal swabs
- Tubes for nasal swabs
- Ice packs
- Esky
- Bio bags
- Markers
- Laboratory sample submission forms
- Consent forms
- Ensure training in relevant PPE and IPC procedures is completed

20. FIELD INVESTIGATION

Case definition considerations

- Clinical description
- Laboratory criteria for diagnosis
- Case classification (confirmed, suspected, probable, not a case)

Determine if the alert meets case definition

- Review the clinical history and epidemiology or assess patient.
- Based on investigation confirm whether the patient signs, symptoms and history meet the case definition of the diseases.
- If necessary, ask the health worker or a family member who can speak for the patient's condition and history.
- Exposure history.

Complete field and case investigation forms

- For each suspected case that meets case definition fill the case investigation from (Annex 1 National Department of Health case investigation form).
- Fill all fields, don't leave blank sections. Where information is not available state that it is not available.
- The investigation forms are to be completed for transport with any samples.
- Always copy the case investigation form and provide to the PHA surveillance team and NDOH surveillance team.

Identify additional cases

- Review health facility registers for suspected cases
- Outreach to surrounding area to investigate for suspected cases
- Meeting with community leaders to find out if there has been illness or death within the community, or community members report clusters of similar illness or deaths or unusual health related events.

Collect samples

- Designated sample collectors should reference the relevant SOP.
- Always practice appropriate IPC measures and carry all PPE for sample collection (see IPC).
- Sample collection focal points in each RRT team must be trained on IPC, sample collection, packaging for transport.

Sample packaging and transport

- The laboratory technician (with IATA certification) packages the sample for transportation to CPHL or PNG IMR depending on province.
- The case investigation form should be packed with the sample.
- Notify PHA and NDOH when samples have been sent.

Contact line listing (if relevant)

- The RRT must collect the initial contact line list for all suspected or probable cases using the contact tracing line list
- The RRT will interview the suspected or probable cause to obtain contact information.
- If the suspected or probable case is unable to communicate try to engage family, friends, health care workers that cared for the suspected or probable case.

21. INTERVIEWING

During a response the rapid response team will conduct interviews with a variety of people. Interviews are likely to be conducted with community leaders, health care workers, and people meeting the case definition ('the case'), family members of 'the case', and other members of the community. How the interview is conducted will have an impact on the quality of information gathered. Your role when conducting an interview is to build trust and make the person being interviewed feel comfortable, collect information that will aid in the investigation, provide advice and instructions.

Preparing for the interview

Familiarise yourself with the questionnaire
Go through the questions a few times so that you are familiar with the order and know where you need to record each piece of information. Practice interviewing a colleague.

Building trust
How you introduce yourself can make or break the interview. The key to a successful interview is taking the time to build trust and make the person feel comfortable. During a rapid response you need to build trust quickly, so that the person feels comfortable to talk with you and share their honest opinions. It is important to let the person know that they can talk freely, that you are there to listen and hear their experiences.

- Take time to introduce yourself and who you work for
- Confirm the identity of the individual
- Explain the purpose of the interview, why you want to talk to them
- Ask if now is a good time to talk
- Let them know how long the interview might take and identify a quiet, private and comfortable place to conduct the interview
- Explain how the information will be used
- Thank them for their time

Gathering information and listening
The quality of the information you gather during the interview will have an impact on the investigation and decisions around public health actions. Take your time during the interview, avoid rushing through the questions, provide time for the person to answer and practice active listening skills.

Figure 1.0 7 Key Active Listening Skills

(https://communicationinoccupationaltherapy703.wordpress.com/active-listening/)

Provide advice and instructions

Always ask the person if they have any questions and provide answers if you know – never make up answers. If unsure, you can offer to take the persons phone number and call them with the correct information.

- Provide 'facts' only
- There is no shame in asking for clarification or assistance from your team leader/supervisor
- NEVER ignore any concern or make up an answer
- Do not give false promises or false reassurances

Closing the interview

How you finish the interview is as important as how you start the interview. It is important the person feels their time is appreciated and that they have made a contribution in providing information to assist the investigation. Thank the person for their time and contribution and let them know how they will be informed of the outcome – you may need to refer to your communication plan.

22. MENTAL HEALTH AND WELL BEING

It is important to recognise that when responding to an alert you may be faced with individuals or communities experiencing high levels of distress. This section will help you know how to support people who are very distressed. It will provide some tips on recognising signs of stress in yourself and your team and some strategies you can implement to reduce the impact of this stress.

During your preparation phase you should learn about the event, learn about the available services and support, and learn about safety and security concerns.

Recognising signs of distress in others

- Crying, sadness, depressed mood, grief
- Irritability, anger
- Appear withdrawn
- Guilt, shame
- Worry that something really bad is going to happen
- Being 'jumpy'
- Feeling tired, loss of appetite, aches and pains,
- Confused, emotionally numb
- Not being able to care for themselves or their family

Recognising signs of distress in yourself and your team

- Eating or sleeping too much or too little
- Pulling away from people and things
- Having low or no energy
- Having unexplained aches and pains, such as constant stomach aches or headaches
- Feeling helpless or hopeless
- Excessive smoking, drinking, or using drugs, including prescription medications
- Worrying a lot of the time; feeling guilty but not sure why
- Thinking of hurting or killing yourself or someone else
- Having difficulty readjusting to home or work life

Psychological first aid

Even if you are not a mental health professional you can provide support to people who are experiencing distress. The **Look, Listen, Link** approach is recommended.

Look When you enter the setting take time to look around. This moment will give you a chance to **be calm, be safe and think before you act**.

- Check for safety – consider your safety and the safety of others
- Check for people with urgent basic needs – know your role and refer people in need to appropriate services
- Check for people with serious distress reactions – consider how best you can help and if it is safe and appropriate to do so.

Listen Listening properly is essential to building trust. Learn to listen with your eyes, ears and heart by giving the person your undivided attention, truly hearing their concerns and showing care and respect.

- Approach people who may need support – introduce yourself and ask if you can help, find a safe and quiet place to talk
- Ask about people's needs and concerns – help them identify what is most important to them now and what their priorities are
- Actively listen to the individual story and concerns and acknowledging their concerns – e.g. "I understand this is difficult for you"
- Reassure people that what they are feeling is 'normal'
- Help them to feel calm – encourage the person to focus on their breathing, and to breathe slowly

Link People may feel vulnerable, isolated or powerless after experiencing a distressing event. Their daily life may be disrupted and they may not be able to access the usual support networks

- Help people address basic needs and access services
- Help people cope with problems – ask how they have coped with difficult situations in the past, and affirm their ability to cope with the current situation. Share information on positive coping strategies
- Give information – rumours can be damaging, find out where and how people can access correct information, only say what you know, do not make up information or give false reassurances
- Connect people with loved ones and social support

Coping Strategies

You can take steps and help others to take steps to reduce stress.

For yourself: Recognise what causes you to stress and put in place strategies to reduce stress.

For others: Encourage the person to think of strategies they generally use to calm themselves when they have felt distressed in the past.

Figure 2.0 Coping Strategies

Coping Strategies:	Type of Responses:
Problem Solving or Active Strategies	• Work on solving the problem in the situation • Make a plan for action and follow up
Emotional Expression and Emotional Regulation Strategies	• Let emotion out; get in touch with feelings and let them out • Let someone know about my feelings • Keep emotions under control by performing appeasing activities • Cognitive restructuring; reorganizing the way I look at the situation
Seeking Understanding Strategies	• Try to understand or find meaning of the situation; looking for learning
Help-seeking Strategies and Support-seeking Strategies	• Seeking instrumental aid or advice from others • Seeking comfort or understanding from others
Problem Avoidance Strategies and Distraction Strategies	• Acting like nothing had happened • Avoid thinking or doing anything about the problem • Leaving the scenario and staying away from the stressful situation • Efforts to avoid thinking about the problem situation by using distractions or entertainment activities

(https://press.rebus.community/introductiontocommunitypsychology/chapter/stress-and-coping/)

Self-Care

You can use the look, listen and link to help you recognise risk factors related to your own wellbeing.

Look Looking at your own reactions to the circumstances you are in and how you are responding.

- Are there physical, emotional, mental, spiritual or behavioural signs that may be a reason for concern?
- Have you noticed changes or new signs within yourself that are of concern?
- Are certain symptoms not going away? Headache, stomach-ache, heart palpitations.

Listen Listen to how these reactions are having an impact on how you feel about your work. Are you have thoughts similar to those below?

- "I am too busy to take a break"
- "This was too difficult for me. I don't really know what I am meant to be doing"
- "I don't think I am the right person to be here"
- "I'm not coping as well as everyone else"

Link It is important for you to link in with others during stressful times.

- You may wish to talk to a colleague or your manager
- Talk to a family member or friend
- Take a walk or implement other coping strategies that have worked in the past

23. INFECTION, PREVENTION AND CONTROL

Infection prevention and control (IPC) are practices and activities that prevent patients and health workers from being harmed by avoidable infections.

How do healthcare associated infections (HAI) occur?

- HAI are acquired, generated or precipitated whilst within the healthcare system
- In healthcare systems, large numbers of patients are treated in close proximity
- The infectious status of patients may remain unknown
- Patients undergo invasive procedures, and receive broad spectrum antibiotics
- All create ideal opportunities for the acquisition and spread of infectious organisms

How can we prevent HAI?

Apply Standard precautions at all times:

1. Hand hygiene (WASH with soap, or CLEAN with alcohol-based hand rub)
2. The use of personal protective equipment
3. The safe use and disposal of sharps
4. Routine environmental cleaning
5. Reprocessing of reusable medical equipment and instruments
6. Respiratory hygiene and cough etiquette
7. Aseptic technique
8. Waste management
9. Appropriate handling of linen

When required, apply Transmission-based precautions tailored to the particular mode of transmission:

Precaution	Mode of transmission	IPC management (on top of standard precautions!)
Contact	1. Via touch or contact with blood/other body fluids 2. Direct or indirect (environmental surface) contact Eg. Multi-drug resistant organisms, enteric infections, skin infections	• Single room to reduce contact with other patients/residents. • If single room not available – cohort 'like with like' • Signage outside the entry door. • Hand Hygiene available at the entry at the point of care. • Gloves. • Clean non- sterile gown or apron. • Dedicated non – critical patient equipment.
Droplet	1. Occurs when a person coughs, sneezes or talks 2. Involves droplets of large particles (>5 microns) 3. Direct (within 1 meter) or indirect (hands touching eyes) E.g. Influenza, meningococcal disease	**IPC management basics:** • Use of appropriate PPE- including a surgical face mask and eye protection • Special handling and cleaning of equipment • Ensure patients are physically separated one metre apart and privacy curtains are drawn between patients • Minimising patient transfer or transport either within a facility or outside of the facility unless required. • • The importance of respiratory hygiene and cough etiquette should always be explained to patients/residents under droplet precautions.
Airborne	1. Via breathing, talking, coughing, or sneezing. 2. Aerosol generating procedures. 3. Sharing the same room or shared air circulation 4. Involves small airborne droplets (< 5 microns) Eg. Measles, SARS-CoV-2	**IPC management basics:** • Special air handling and ventilation systems are required • Private room with ensuite and monitored negative air flow ventilation • A minimum of 6 to 12 air exchanges per hour • Direct exhaust to the outside or high- efficiency particulate air (HEPA) filtration if the exhaust is recirculated • Door should be kept closed and the patient should leave the room for essential purposes only

		• Use of the ante chamber for entering and leaving the patient room, donning, and doffing PPE and performing hand hygiene • If the patient must be transported either within a facility or outside of a facility, they should wear a surgical mask.

24. RISK COMMUNICATION

Every single public health intervention will succeed or fail based on the way we communicate.

How do we select the best risk communication strategy?

1. Utilise risk assessment – is the risk low, medium or high?
2. Gauge the risk perception of those at risk – are emotions high, or are people not concerned?
3. Select a risk communication strategy –

Outrage management (Low risk, but high-risk perceptions)

- Listen & acknowledge truth
- Give facts about why there is no danger
- "CALM DOWN" (respectfully)

Health promotion (Low risk, and low risk perceptions)

- Communications surveillance
- Identify and address any outrage early on
- Relationship building
- Get feedback!

Precaution advocacy (High risk, but low risk perceptions)

- Outrage them to your levels of concern so that they take action
- Arouse emotions
- Required to prevent secondary crisis
- "WATCH OUT!"

Crisis communication (High risk, and high-risk perceptions)

- Explain what is happening
- Deal with emotions
- "WE ARE ALL IN THIS TOGETHER"

Reaching your audience: Single Overarching Communication Outcome (SOCO)

What do you want your audience to change as a result of your communication?

25. AFTER ACTION REVIEW

- Should be conducted within one month of any response.
- Should include the whole response team.
- Review each phase of the response:

1. What went well, what didn't go so well?
2. What could be improved for the next response?
3. What needs to be in place in order for this to happen?
4. Who at the PHA can facilitate any required changes?
5. Which team member will follow up on any action items and by which date?
6. When will the team meet again to follow-up on action items?

26. ACTION PLAN FOR THE RRT

- Complete the manual
  Fill in any gaps and make the necessary connections within the PHA to ensure back up of RRT members, gaps in command structure, logistical gaps, etc
- Adapt the manual as needed to suit your RRT and province.
- Solidify the RRT communication plan for outside of response phase
  Identify a response that the team can use for the RRT training assessment
  - *Outbreak report*
- Personal reflection on the response and your role as part of the RRT
- What further training do the RRT members require?

27. APPENDIX 1: FIELD INVESTIGATION FORM TEMPLATE

Date: _____

Area visited (LGA/Ward/village) _____

Introduction: State your **REASON** to visit to this LGA, ward or village

Cases **CURRENTLY AT** the Health Facility (for each clinic visited, case numbers and additional info)

PHC/Dispensary/Mobile Clinic/Other	Village	# Cases	# Death

Cases **TREATED** by surveillance team since _____ (date)

LINE-LIST DATA: Total cases reported **PRIOR** to visit (use the below table to make a quick tally by area, clinic or day/week (as appropriate) from the line-list. Take a copy of the line-list if possible.

Name/Type of Health Facility	**Village**	**Time Period**	**# Cases**	**# Deaths**
		Total		

POPULATION sizes:

Village/Area Name	Total Population	Under 5 Population

Previous **HISTORY** of _____outbreak in the area visited (were there outbreaks in the previous years?)

Vaccination:

1. What is the _____ Vaccination coverage in the Ward visited and the LGA?

2. Was any reactive Vaccination done during present outbreak? Yes / No
   - If yes, how many were vaccinated?

Were there any **MEDICAL SUPPLIES** from **LGA** or **MoH**? Yes / No. If yes, what drugs were supplied?

ACTIVITIES (of the Surveillance Team) carried out in each clinic/community (e.g. training/donation/treatment):

OTHER information (e.g., challenges/access of patients to clinics/HR available/infection control in clinics etc.)

PLAN/Recommendation:

RAPID RISK ASSESSMENT

28. APPENDIX 2: CASE INVESTIGATION FORM TEMPLATE

Part A

Reporting Health Facility/Site _____District: _____Province:
Report Date: _____ Time of Report: _____
Name of Reporting officer: _____ Source of Information: _____

Part B: Case Identification

Full Name: _____Occupation: _____
Telephone number:_____ Date of Birth: _____
Age: _____Gender: _____(M/F)
Residential Address (Street address): _____
Home Province_____ Village_____ District_____
If working in a health facility, specify name and locality:

Part C: Clinical information/Examination

Date of Onset of symptoms: _____Currently admitted in health facility? : □ No □ Yes,
If yes, name of health facility: _____
Outcome of illness: still sick / cured / sequelae / defaulter / death
Date of recovery, default or death: _____
What are the main Symptoms (Tick either Yes or No for very symptom)

Symptoms	Yes	No	Symptoms	Yes	No
Fever			Diarrhea, no blood		
Rash			Diarrhea with blood		
Headache			Nausea		
Muscle/joint pain			Vomiting		
General Weakness			Photophobia		
Malaise			Sore throat		
Irritability			Cough		
Bleeding			Productive cough, no blood		
Enlarge lymph node			Productive cough with blood		
Fits			Shortness of breath (SOB)		
Loss of consciousness					
Confusion			**Other symptoms**		
Drowsiness					
Paralysis (weakness)					

What are the main Signs at presentation (Tick either Yes or No for every sign)

Signs	Yes	No	Signs	Yes	No
Pharyngeal exudate			Coma		
Conjunctival injection			Neck stiffness		
Oedema of the face/neck			Bleeding from mouth, vagina, rectum, sputum, urine, or others (specify)		
Sunken eyes/skin pinch					
Tender abdomen			**Other signs**		
Palpable liver					
Palpable spleen					
Skin rash					
Jaundice					
Enlarged lymph nodes, site(s)					
Oedema of the lower extremities					

Heart rate (beats per min):_____ Blood Pressure (mmHg): _____systolic _____diastolic
Respiratory rate (per min):_____ SO_2 saturation at room air: _____%
Temperature: ____ □°C Capillary refill time> 3 sec: □ No □ Yes MUAC: ____mm
Underlying conditions and comorbidity (check all that apply):
□ Pregnancy □ Post-partum (< 6 weeks), delivery date: _____
□ Malnutrition □ Immunodeficiency □ Associated acute or chronic disease, specify:
_____

PART D: Exposure and Travel information
_____ DAYS/WEEKS PRIOR TO FIRST SYMPTOM ONSET:
Do you know anyone presenting similar illness or symptoms*?: □ No □ Yes, specify:_____
Date of last contact, if any: _____ Relationship: _____
Place of interaction: _____
Did you participate in any mass gatherings events?: □ No □ Yes, specify:
Event type and location: _____ Date: _____
Did you receive care from □ a traditional healer and/or any other treatment?:□ No □ Yes,
Specify:_____
Did you have any direct contact with sick or dead animals?: □ No □ Yes,
Specify: _____
Do you have any additional information regarding animals or insects around you?: □ No □ Yes,
Specify _____

Do you suspect food or beverage to be the cause of the disease or symptoms?: □ No □ Yes,
Specify: _____

Any other observations to share (e.g. contact with toxics, fake drugs, environmental exposure…)?: □ No □ Yes, Specify _____

Part E: Laboratory Investigation

Date of specimen collection: _____
Date specimen sent to the Laboratory_____
Did the patient receive antibiotics prior to specimen collection?_____

Type of specimen sample collected (Tick all that apply**)**

Blood Urine Stool Nasal swab (NPS)
Comments:_____
_____
_____

Laboratory Result – (review medical records with laboratory investigation results)
Positive test result for infectious disease? □ No □ Yes, specify: _____
Disease agent: _____Type of test: _____

PART F: If case died;

Date of death: _____Time of death: _____ Place of death: _____
Nature of death: (see copy of the death Certificate)

PART G: Workplace Environment Assessment (provide physical assessment report)

PART H: Referral Pathway (Suspect cases to be referred by Dr. Mary Kaevakore at Gerehu General Hospital)

A case line list template is also available as an Excel document, and should be modified as needed depending on the disease agent.

29. APPENDIX 3: CONTACT LINE LIST TEMPLATE

A contact line list template is also available as an Excel document, and should be modified as needed depending on the disease agent.

Complete one contact line list for every confirmed case and every person under investigation.

Details of confirmed case or PUI:

ID number _____Province _____

District _____Village _____

Date of Symptom Onset (Specimen Collection date if unknown or asymptomatic) _____

Infectious period _____

Surname _____

First Name _____

Example line list for Contacts:

Unique ID	Sur name	First name	Gender	Age	Relation to case	Date of last contact with case	Place of last contact with case	Residential address for the next month	Phone Number	Alternate person's phone number	Health facility

Note: For contact tracing for COVID-19, see the NDOH COVID-19 contact tracing SOP

30. APPENDIX 4: IPC CHECKLIST

- ☐ IPC risk assessment of the healthcare setting

  - Education level of healthcare facility staff
  - Policies and procedures in place
  - Hand hygiene auditing
  - Environmental cleaning audits

- ☐ Determine PPE and IPC requirements depending on:

  - Type of patient interaction (probability of exposure to bodily fluids)
  - Known infectious status (if in doubt, assume infectious)
  - The likely mode of transmission (contact, droplet or airborne)

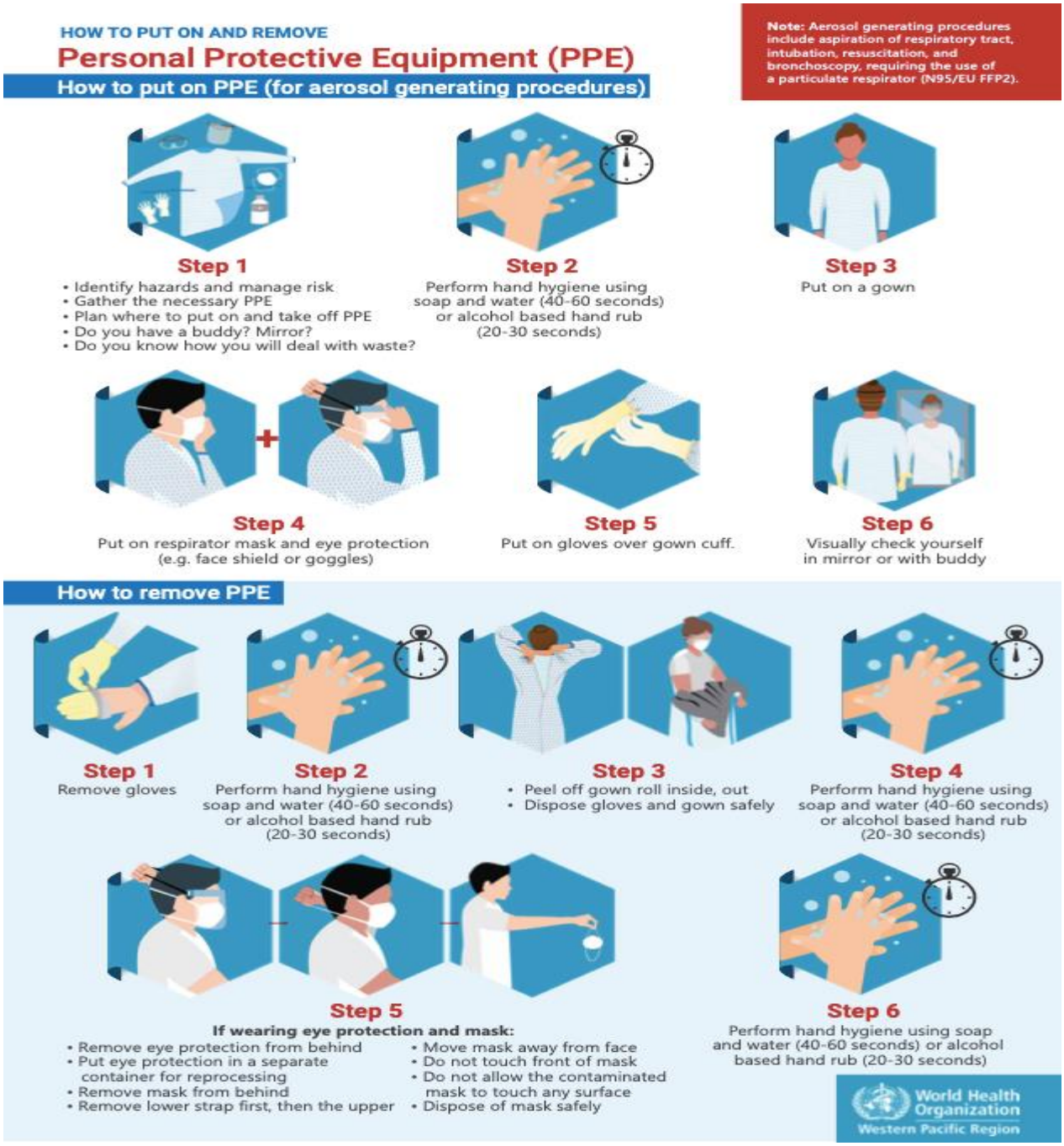
- ☐ Buddy system for field work to ensure you have help with:

  If you are the person collecting samples, labelling tubes and bags, preparing equipment, completing forms, observing sample collection for possible contamination or IPC breaches, observing donning and doffing

- ☐ System to rotate or replace staff every 1-1.5 hours, especially in hot climate

- ☐ System for set up, decontamination and cleaning of patient evaluation and sample collection sites

31. APPENDIX 5: DONNING AND DOFFING PPE



32. APPENDIX 6: SITUATION REPORT TEMPLATE

Date of report: **Author:** **Contact:**

Situation Summary

- Provide an overview of the outbreak (date incident was reported, onset of first case, number of cases, number of deaths, location of concern).
- Provide an assessment of the situation (low, medium, high risk.)

Case Definition(s)

- Case definitions should be specific to this outbreak/situation and include clinical/laboratory, person, place and time criteria.
- You may have a Confirmed Case Definition (laboratory diagnosis) and a Suspected Case Definition (clinical diagnosis with pending/no laboratory confirmation).

Case Summary

- Total number of confirmed cases and suspected cases
- Number of new cases today
- Median age and age range of cases (minimum – maximum age)
- Number of male cases, number of female cases, number of health worker cases
- Number of cases by location
- Number of cases in hospital
- Number of cases who have died

Epidemic Curve

- Bar graph of cases by illness onset date (or specimen collection date if illness onset not available).
- Epidemic curve may be broken down by confirmed and suspected cases, or male and female.

Contact Tracing Summary (if applicable)

- Total number of contacts investigated.
- Total contacts in quarantine, completed quarantine, lost to follow up.

Key activities completed

- Describe what key activities you have done – active case finding, case management, contact tracing, risk communications, vaccinations given, etc.

Key activities planned

- Describe the key activities you are planning and when you plan to do them.

Immediate needs

- Describe what activities the RRT need to continue and new activities to start.
- Be specific and highlight the most urgent needs and possible consequences if support is not provided.

Key contacts

- List key contacts for the response

33. APPENDIX 7: EXAMPLE SITREP

Date of report: 29 March 2021
Author: [Province Name] RRT
Contact: Joe Blo, 7431 3292, joe.blo@gmail.com

Situation Summary

- RRT notified of ILI cluster in Ioma on 2 Mar 2021; incident verified on 3 Mar 2021
- RRT mobilized on 4 Mar 2021
- 27 confirmed COVID-19 cases and 102 suspected cases reported to date
- Situation assessed as HIGH RISK; community transmission ongoing

Case Definition(s)

Confirmed COVID case:	Laboratory confirmed COVID-19 (RDT, GeneXpert or PCR) in a resident or visitor of Loma District, with illness onset or test result from Apr 1, 2021, to present.
Suspected COVID case:	Clinical symptoms compatible with COVID-19* in a resident or visitor of Loma District, with illness onset from Mar 1, 2021, to present
Clinical symptoms:	[Acute onset of fever AND cough] OR [Acute onset of ANY three or MORE of the following signs and symptoms: fever, cough, general weakness, fatigue, headache, myalgia, sore throat, coryza, dyspnoea, anorexia, nausea, vomiting, diarrhoea, altered mental status].

Case Summary

- Total confirmed cases: 27
- Total suspected cases: 129
- Total new confirmed cases today: 5
- Illness onset of first confirmed case: 2 March 2021
- Illness onset most recent confirmed case: 27 Mar 2021

Table 1: Summary of confirmed cases

Case details	Male	Female	All
Confirmed cases	12 (48%)	15 (52%)	27
Median age	54 yrs	43 yrs	48 yrs
Age range	9 yrs – 72 yrs	12 yrs – 78 yrs	9 yrs – 78 yrs
Hospitalised	7 (47%)	8 (53%)	15
Died	1 (25%)	3 (75%)	4

Table 2: Isolation status of confirmed and suspected cases

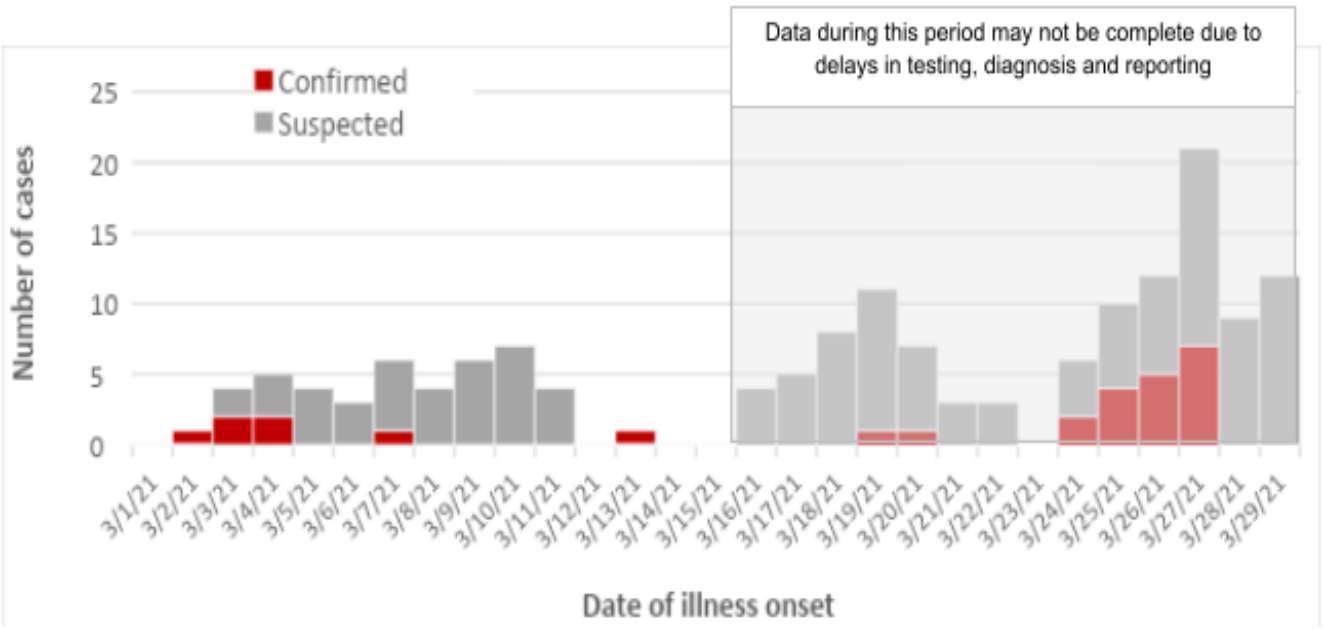
	Currently in isolation	Completed isolation	Lost to follow-up
Confirmed cases	13	9	5
Suspected cases	58	21	50

Table 3: Location of confirmed and suspected cases

Location	Confirmed Cases	Suspected Cases
Sohe District	27 (100%)	129 (100%)
Kira LLG	3 (11%)	18 (14%)
Tamata LLG	6 (22%)	28 (22%)
Kokoda LLG	12 (44%)	69 (53%)
Popondetta LLG	5 (19%)	14 (11%)

EPIDEMIC CURVE

Figure 1: Epidemic Curve of COVID-19 outbreak in Oro Province, confirmed and suspected cases, Mar 1st – 29th March



Contact Tracing Summary

- 95 close contacts have been investigated to date

Table 4: Quarantine status of contacts

	Currently in quarantine	Completed quarantine	Lost to follow-up
Contacts	25	65	15

Key activities completed

- Health workers in Kira heath centre, Kokoda health centre, Ioma Sub Clinic and Popondetta hospital have all received refresher training in IPC.
- Triage teams have been established at all health facilities
- A referral process is in place for people presenting with COVID-19 symptoms.
- Kokoda health staff have received additional training on case management of COVID positive patients.
- A community surveillance team of 15 volunteers has been mobilized to conduct contact follow up and symptom checks every two days. A HEO accompanies the volunteers who conduct symptom checks and monitoring of cases on a daily basis.
- A team of 8 swabbers have been trained and testing stations set up in Ajeka, Kebara, Putembo and Wora Wards.
- An additional 4 swabbers have been trained as the mobile swabbing team.
- The health promotion team has worked with church leaders, women's groups and key community leaders to deliver risk communication, inform the community of the importance of isolation and contact tracing and messaging on Niupela Pasin.

Key activities planned

- Vaccination of health care workers in X villages planned for next Wednesday
- Ongoing community engagement activities planned
- Visits to schools to promote Niupela Pasin

Immediate needs

- More PPE urgently needed for Health Centres
- More swabs urgently needed
- More RDT urgently needed
- Data credit for contact tracers
- Transport for community mobilization teams needed
- IEC materials requested to support community mobilization activities
- A surge workforce to assist health care workers in Sohe district so they can get a break. Some are showing signs of burnout.

KEY CONTACTS

Name	Title	Contact
Mr. Jakob Honi	Adventist pastor	7156 8976
Mr. Simon Foldine	Catholic priest	7346 9876
Mrs. Ailana Joseph	Women's group leader	7235 9813
Mr. John Latala	Kebara ward leader	7423 3727
Mrs. Martha Saman	Contact at The Voice NGO	7145 8965
Mrs. Lotana Honnis	Putembo ward leader	7423 3727
Dr. Lucas Morona	Popondetta Hospital OIC	7243 7667
Mrs. Samantha Fristanti	Kira health centre OIC	7135 9544
Sister Rita Alionz	Ioma sub clinic OIC	7235 2322