



Rapid Response Team Initiation Training Report

Papua New Guinea

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Developing workforce readiness of multidisciplinary teams to support public health emergency response in Papua New Guinea



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Cover photo: The Rapid Response Team in the Autonomous Region of Bougainville

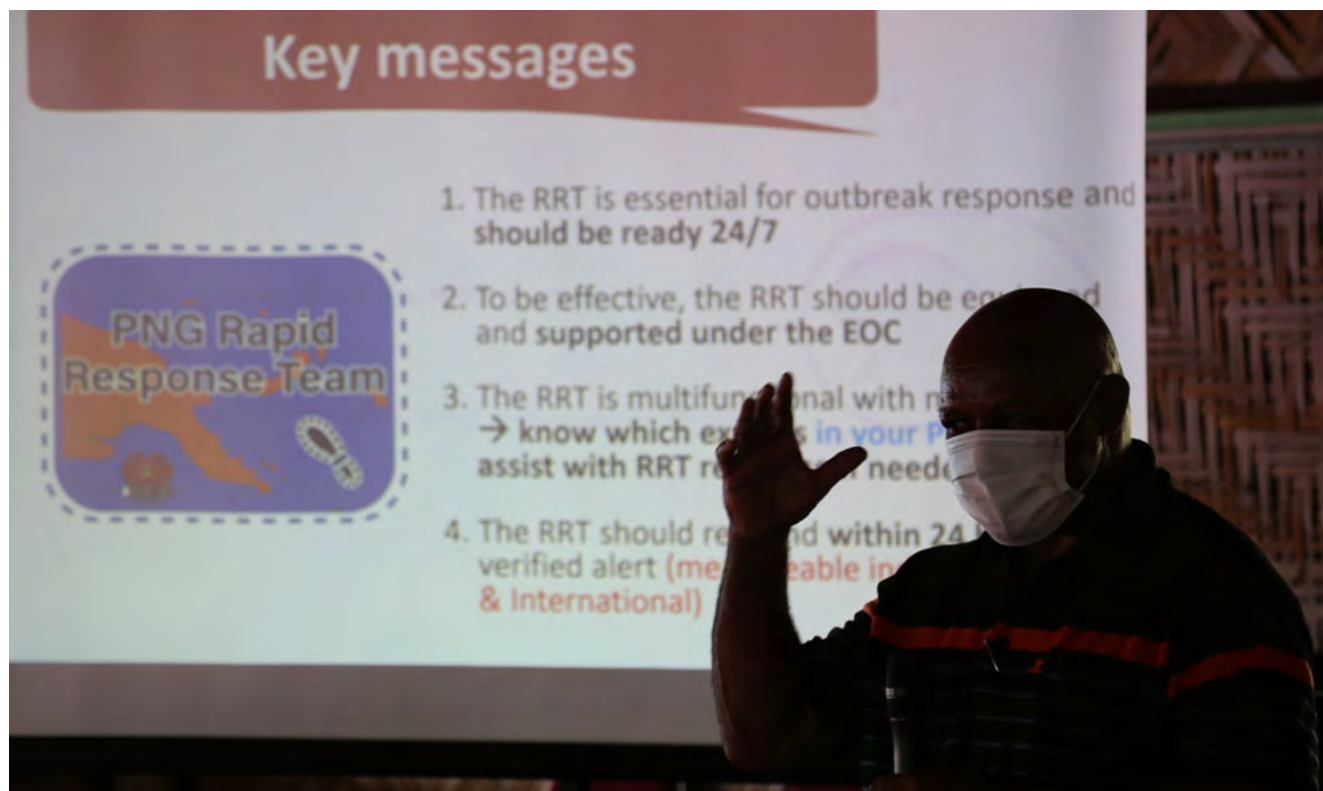


Photo: Barry Ropa teaching at the RRT Initiation training in the Autonomous Region of Bougainville

Summary

This report summarises the teaching and learnings from the launch of Rapid Response Team (RRT) initiation training in Papua New Guinea in six provinces. Rapid response teams were assembled by provincial health authorities in Oro, Gulf, Autonomous Region of Bougainville, Western Highlands, West New Britain and Manus Provinces.

The training was conducted virtually with the RRT in Oro Province using the zoom platform, and in person in the other five provinces. A total of 105 RRT members participated in the training, representing all of the key roles of the RRT: incident manager, laboratory specialist, surveillance and epidemiology specialist, infection prevention and control specialist, clinical services, community engagement and risk communications, logistics and finance.

The training sessions were delivered by members of the Field Epidemiology in Action (FEiA) team and national RRT faculty from WHO and the National Department of Health (NDOH). A train the trainer model was used to build capacity for ongoing roll out of the RRT training by national faculty based in PNG.

The topics covered during the RRT initiation training included outbreak investigation, roles and responsibilities in the RRT, verification of an alert, community engagement, risk communication, infection prevention and control, case investigation and contact tracing, psychological first aid, interpreting your data and construction of a situation report. Training was delivered using a variety of methods designed for fellows to learn new concepts, apply their learnings and discuss their ideas.

An evaluation survey was administered after each day of training to gauge learner satisfaction and learning. The results of these evaluations highlighted the impact of the RRT training, with overwhelming positive feedback from RRT members regarding the training materials and content. A pre-post survey was conducted amongst RRT members. Results from the pre-post survey indicated that RRT members' knowledge and confidence increased across all subject matter covered in the RRT initiation training. An in-person post-training review was conducted with Oro province to assess application of the training and functionality of the RRT five weeks after the training. Results from the post-training review revealed that administrative and leadership support is a key requirement for successful preparation and deployment of RRTs.

Background

Rapid Response Teams are an essential component of a country's public health emergency response architecture, focused on strengthening health security. The International Health Regulations, set by the World Health Organization, require countries to be prepared to detect and respond to public health threats and emergencies. The concept of rapid response teams is to have a multidisciplinary team trained and able to deploy on short notice in response to public health alerts or emergencies with public health impact.

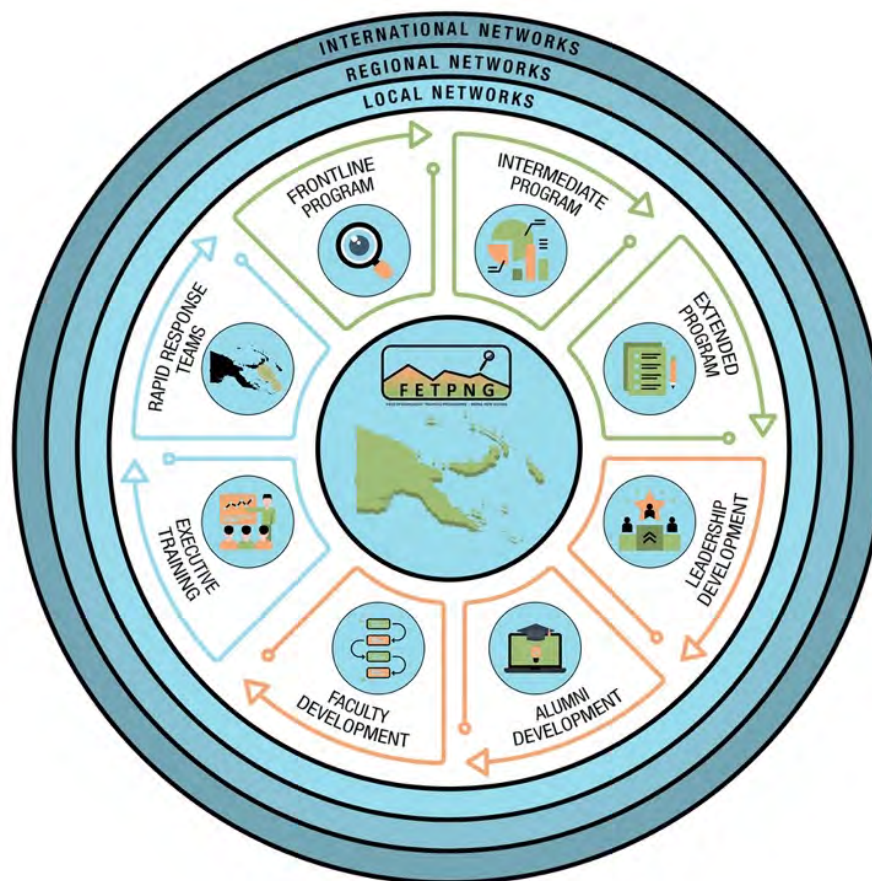
In Papua New Guinea, the Rapid Response Team (RRT) program is owned and run by the National Department of Health (NDOH) with support from the World Health Organisation (WHO), the Australian Department of Foreign Affairs and Trade (DFAT), Hunter New England (HNE) Local Health District in Australia, and others. The RRT program is part of FETPNG, a highly regarded field epidemiology network that was established in PNG in 2013. FETPNG encompasses eight programs that aim to build public health workforce capacity in PNG (Figure 1).

PNG RRTs are multidisciplinary teams embedded within Provincial Health Authorities that are activated in response to disease outbreaks, natural disasters and other urgent health threats. RRT members include (for example) clinicians, epidemiologists, surveillance officers, laboratory specialists, environmental health officers and social mobilisation officers. These multidisciplinary teams may be asked to investigate a wide range of health emergencies, providing rapid community engagement response, public health messaging, and importantly the collection of data to inform public health response and impact. RRTs are already being deployed in PNG provinces to respond to COVID-19 and they play a key role in testing, case investigation, contact tracing and community mitigation.

The aim is for RRTs in every province to be trained in the wide range of skills and knowledge required to respond to health emergencies in PNG. A pilot RRT training was conducted in November 2019 in National Capitol District. Based on a comprehensive After Action Review of this [training](#), materials were adapted and new topics introduced for the 2021 launch of RRT training across multiple provinces in PNG. Due to the time commitments of RRT members, who are critical to the COVID-19 pandemic response in their provinces, as well as the need for rapid introduction and application of core RRT concepts for outbreak response, the training was condensed into a two-day initiation format.

The RRT initiation training is highly interactive and focused on practical application of concepts to health emergency scenarios, adapting solutions to specific provincial context and team building within the provincial RRTs. RRT members are nominated by their Provincial Health Authority leadership and allocated core roles within the team. Following the initiation training, RRT members will be expected to meet frequently in order to enhance detection and prepare for public health emergencies as well as to deploy as a team for public health emergency response.

Figure 1: Structure of the Field Epidemiology Training Program Papua New Guinea activities, 2021



RAPID RESPONSE TEAMS

- ✓ Clarify the function, roles and responsibilities of RRT members
- ✓ Field preparation, communication, engagement
- ✓ Conduct a case investigation and contact tracing
- ✓ Articulate when to respond to an alert and conduct a rapid risk assessment
- ✓ Use of personal protective and laboratory equipment needed for a response
- ✓ Produce a report on the response, with recommendations and an action plan

Selection criteria for RRT participants

RRT training participants were chosen by PHA leadership with guidance from Dr Berry Ropa. Participants in this training must already be identified in a key role of the rapid response team in their province. Importantly, the applicant indicates motivation and commitment to participating in outbreak response as a member of the RRT.

RRT Training coordinators and facilitators

RRT training was coordinated by the NDoH and WHO Country Office. Points of contact within the provincial RRTs were key to organisation of the venue, catering, attendee list and implementing COVID-safe protocols. RRT initiation training facilitators were:

- Mr Berry Ropa, NDoH Program Manager, Surveillance and Emergency Response, Director FETPNG
- Dr. Tambri Housen, FEiA, GOARN, FETPNG Faculty
- Mr. James Flint, FEiA, GOARN, FETPNG Faculty
- Dr. Joanne Taylor, Epidemiologist, Field Epidemiology in Action
- Dr Anthony Eshofonie, Incident Commander, WHO Country Office
- Dr Gilbert Hiawalyer, National Control Centre
- Mr Emmanuel Hapolo, National Control Centre, RRT Coordinator
- Ms Bernnedine Smaghi, COVID-19 Contact Tracing Lead, National Control Centre and advanced FETPNG fellow
- Ms. Leone Ruape, Laboratory Surveillance Lead WHO/NDoH
- Ms. Pauline Mukura, Malaria Surveillance Officer, NDOH
- Mr. Philip Vagi, Director of Village Health Volunteer program, NDOH
- Ms. Abby Peacock-Smith, WHO Country Office
- Dr. Laura Macfarlane-Berry, Epidemiologist, Field Epidemiology in Action

RRT post training review facilitators (Oro province):

- Mr James Flint, COVID-19 Epidemiology Support, GOARN, FETPNG Faculty
- Mr Emmanuel Hapolo, National Control Centre, RRT Coordinator
- Dr Anthony Eshofonie, Incident Commander, WHO Country Office

RRT Accreditation

Participants will be enrolled into the accreditation process after meeting selection criteria. The criteria serve to increase the probability of successful completion of the accreditation process. Enrolled participants will complete the RRT will complete three phases of training with ongoing professional development.

Phase 1: RRT initiation

This is a 2-day intensive training which can be conducted virtually or face-to-face. This program is designed to introduce RRT to the team structure, roles and responsibilities. The sessions are highly interactive to draw from the prior experience of RRT team members and how these experiences and learning can be used to strengthen RRT response in future. The training also introduces key principles that are needed for an effective RRT response.

Phase 2: RRT Competency

This is a 5-day scenario based face-to-face training with specific attention on providing skill development for each role in the RRT. The training builds on the 2-day training expanding on principles and drawing from the experience of the RRT members.

Phase 3: After Action Review (AAR)

This is a 2-day reflection on how the RRT has been performing as a response team. The session is highly interactive with time dedicated to discussing responses and how the team can strengthen the response in future. Different strategies are used throughout this workshop to identify what is working well, what isn't working well and why. RRT teams develop an action plan specific to the outcomes of the discussions to strengthen their future responses.

Phase 4: Scenario based training

This is part of an ongoing professional development plan for RRTs. Where RRTs will be taken through refresher training by working through a scenario as a team. During this process RRTs will be sensitised to responding to different kinds of alerts and acute public health events including natural disasters, infectious disease outbreaks, outbreaks of unknown origin, one-health outbreaks, vector borne outbreaks, environmental hazards and pandemics.

RRT Initiation Workshop

During the RRT initiation training RRT members were introduced to the foundations of core RRT duties. The two-day intensive workshop introduced the RRT to public health surveillance, outbreak investigation, and coordination of an RRT response. RRT members will complete an outbreak response manual that is specific for their RRT and PHA that can be continuously updated and used in the field. The content covered during the intensive two-day workshop is summarized in Table 1.

Table 1: Content covered during the two-day intensive rapid response team initiation training workshop

Section	Topics Covered
Composition of the RRT	RRT overview
	Steps of the outbreak investigation
	Roles and Responsibilities of the RRT
Preparing for deployment	Verification of an alert
	Communication plan
	Community engagement
	Risk communication
In the field	Infection prevention and control
	Interviewing
	Psychological first aid
	Case investigation
Returning from the field	Contact tracing
	Interpreting your data
	Construction of the situation report
Scenario	After Action Review
	Capstone session – applying learnings to a scenario



RRT Initiation Training Materials

RRT initiation training guide for trainees

RRT members were each provided with a printed [guide](#) to the RRT training and accreditation requirements, agenda and expectations for the RRT initiation training workshop, COVID-safe rules for the work shop, and code of conduct requirements.

RRT outbreak manual for provincial RRT teams

RRT members were each provided with a printed outbreak [manual](#) to complete together as a provincial team. As well as including summaries of key information from the training sessions, the manual was specifically designed to be tailored to reflect the priorities and context of the province. RRT members were requested to complete the manual before their scheduled post-training review with facilitators.

Outbreak pocket guide

RRT members were each provided with a printed pocket guide outlining the steps and key tips for outbreak investigation. The guide can be folded up to be easily carried in a wallet or pocket during outbreak response.

RRT initiation training facilitator manuals

Printouts of facilitator manual that included the powerpoint slides, accompanying script and facilitator notes for each workshop session were provided for facilitators. As more facilitators are on boarded for RRT training in PNG, these manuals can continue to be used and adapted.

Community engagement video

A 30-minute video featuring interviews with public health responders in PNG and Solomon Islands was used to convey key community engagement principles.

Action plans

RRT training participants in each province committed to establish their RRT and institute weekly meetings. They also committed to completing the RRT manual for their province. This task includes clear articulation of RRT members with contact details, PEOC structure and where the RRT sits within the PEOC, a mapping of community structure, completion of a communication plan and review or construction of a provincial situation report.

RRT Initiation Training Participants

Provincial health authorities were asked to select RRT members that are currently involved in RRT activities (for example, COVID-19 responses) and are committed to fulfilling the allocated RRT role. When considering training participants, it was also requested that the likely back up RRT members attend the training, with the aim for at least two team members for each RRT role.

A total of 105 RRT members actively participated in the two-day workshop from six provinces (Table 2). All core RRT roles were represented in the training for each province. Aside from the incident manager and environmental health role, two representative RRT members were usually trained for each role. Note that RRT members were allocated roles in the team, but it is likely that they would fulfil more than one role (for example, clinical management and infection control).

In every province except for Gulf, the RRT included an FETP graduate as the surveillance and epidemiology specialist. In Oro province, the FETP graduate was promoted to incident manager. Of 105 RRT members trained, 37% were female (N=39). The RRT roles primarily performed by women included clinical services, infection control, immunisation, environmental health and risk communications.

Table 2: RRT roles represented by RRT initiation training participants

RRT role	Oro	Gulf	AROB	WNB	WH	Manus	TOTAL
Incident manager/PHA leadership	3	1	1	1	1	0	7
Epidemiologist/ Surveillance Officer	2	3	5	2	2	4	18
Clinical services/case management/immunisation	2	0	4	8	5	4	23
Infection prevention and control	1	1	2	2	1	2	9
Laboratory	2	1	2	2	1	2	10
Logistics / Finance	2	2	2	2	2	1	11
Environmental Health	0	0	1	2	0	1	4
Risk communications/partner coordination/engagement	2	4	1	2	2	0	11
Other	2	6	0	0	0	4	12
TOTAL	16	18	18	21	14	18	105

AROB = Autonomous Region of Bougainville; WNB = West New Britain; WH = Western Highlands

Feedback from Participants

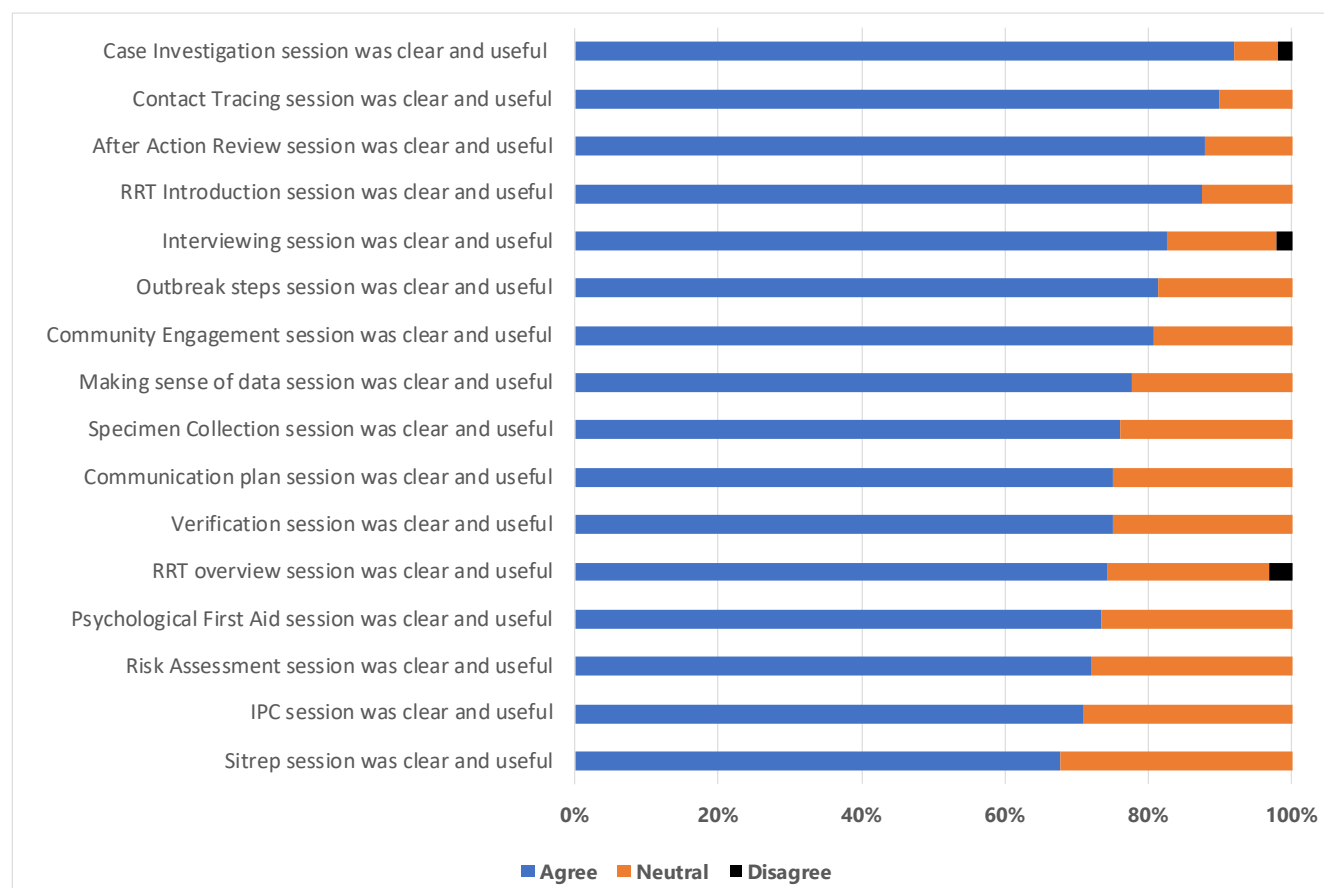
To ensure the RRT training meets expectations of the NDoH, WHO Country office, Provincial Health Authority Leadership and RRT members, evaluation of the training workshop during the initial rollout is critical.

Daily evaluation

A daily evaluation survey was administered after each day of training to gauge learner satisfaction and learning. The results of these evaluations highlighted the impact of the RRT training, with overwhelming positive feedback from RRT members regarding the training materials and content. The total daily evaluation responses by RRT members varied for each workshop topic or tool evaluated. Results are summarised in Figure 2 and Figure 3.

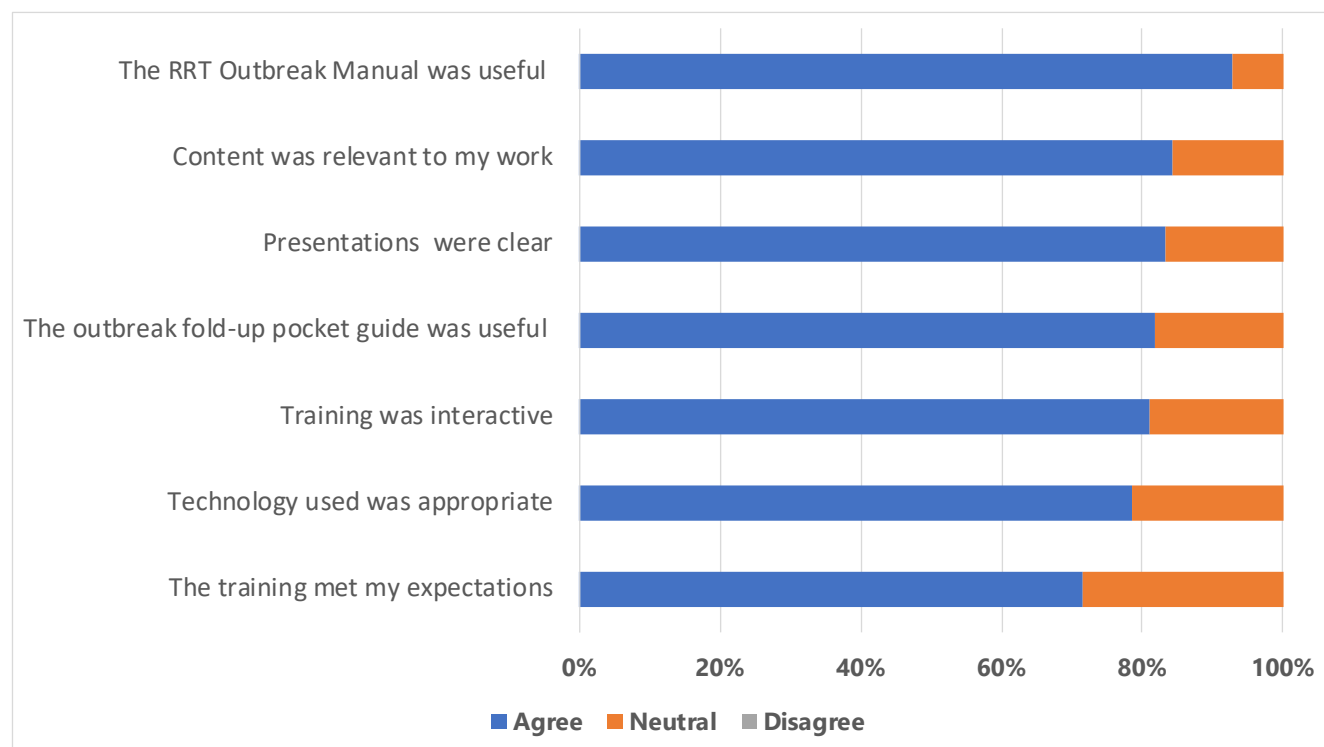
Regarding individual workshop sessions, the case investigation and contact tracing sessions were considered clear and useful by the most participants (92%, N=45 and 90%, N=44, respectively). The situation report and infection control sessions were considered clear and useful by 68% (N=23) and 71% (N=22) of participants, respectively (see Figure 2).

Figure 2: Feedback from participants on specific sessions used in the training, on a scale of 1 (disagree) to 3 (agree).



Regarding RRT training tools, content, and delivery of training, most participants (93%, N=52) agreed that the RRT outbreak manual was useful, that the content was relevant to their work (84%, N=70) and that the training was interactive (81%, N=68).

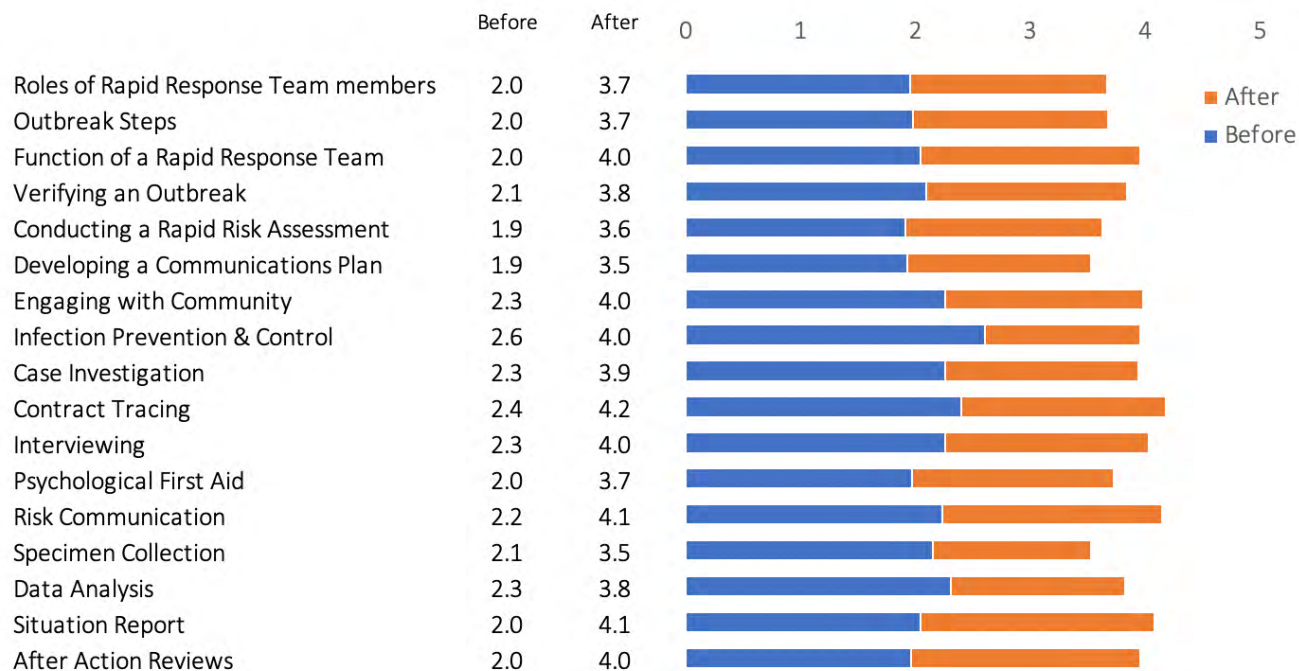
Figure 3: Feedback from participants on RRT training tools and delivery, on a scale of 1 (disagree) to 3 (agree).



Pre-post survey

A pre-post survey was conducted amongst RRT members where they were asked to rank topics on a scale of 1 (no confidence) to 5 (very confident). Results from the pre-post survey indicated that RRT members' knowledge and confidence increased across all subject matter covered in the RRT initiation training. The largest difference in pre-post confidence was seen in the situation report, after action review, risk communication and function of a rapid response team subject matter areas.

Figure 3. Average score of participants confidence before and after training, by topic on a scale of 1 (no confidence) to 5 (very confident)



Open ended feedback

Open feedback and comments were requested from RRT members. Many expressed that the training was highly beneficial and necessary. Many also expressed a desire to receive additional training and felt that two days was too short to do justice to the material delivered. The most liked training sessions included Risk Assessment, Community Engagement and Risk Communications.

The content and method of delivering the presentation was progressively modified based on participant feedback, with less content delivered and additional time provided for interactive discussion and scenario sessions.

Other feedback included the need for handouts and time to read through materials before the training, that the presenters were hard to hear through their masks, and that the district public health officials should be included in the training.

“We wish we had this training earlier, we should have known this last year and our response would be more effective. Now we know these things we will do this” - *RRT member, Oro Province*

“Medical professionals and other workers can now all work in integration; I can now be confident to carry out a rapid response” - *RRT Member, AROB*

“Thank you for coming here and doing this training with us, we were feeling demoralized but now I have the energy and feel motivated again to do my programs and to the activity plan we have set” - *RRT member, Oro Province*

“The topics are relevant to our roles and responsibilities; it helped us a lot with information to correct the gaps and strengthen our responsibilities. I found it very interesting” - *RRT Member, Gulf Province*



RRT Post Training Review

An in-person post-training review was conducted with Oro province to assess application of the training and functionality of the RRT five weeks after the training. Results from the post-training review revealed that administrative and leadership support is a key requirement for successful preparation and deployment of RRTs. A full report from the review is included as an Annex to this report.

Key Reflections and Recommendations

While in each Province for the RRT training, the team met with the provincial Incident Management Team, visited the provincial hospital, laboratories, isolation facilities, triage centres, vaccination hubs and testing sites. The team also visited frontline health centres, schools and a prison which reported COVID-19 outbreaks. The following key reflections and recommendations consider the teams experience with the RRT training and these additional activities.

Key Reflections

- RRT training was well received in all provinces; additional training is necessary to build RRT competencies and ensure gains made with initiation training are not lost.
- All provinces have in place an Incident Management Structure for COVID-19; the functionality of these teams varied with some provinces being particularly impacted by leaderships changes and challenges.
- Logistical challenges in some provinces limited or prevent access to remote areas due to lack of transportation or funds for transportation.
- Communication with frontline workers limited for many health centres, with some having no phone or internet connectivity.
- In most provinces, COVID-19 testing was only available at the provincial hospital leaving large segments of the population without access to testing
- Most provinces had adequate supply of RDTs and GeneXpert cartridges; however, the testing protocols were not always understood or applied. Turnaround times for specimens send to CPHL was over 2 weeks limiting their usefulness for control purposes.
- COVID-19 vaccination coverage very low in all provinces visited; hesitancy remains extremely high, including amongst health care workers.
- Compliance with case home-isolation reported to be a major challenge on all provinces with reports of confirmed cases seen in markets and taking public transport. Some provinces had isolation facilities nearing completion, however, the acceptability of cases isolating in an isolation facility is not well understood.
- Very low compliance with Niuepla Pasin was observed in all provinces visited; very few people wore masks in markets or on public transport; many private businesses were enforcing mask wearing inside their stores. Manus introduce on-the-spot fines which resulted in a slight improvement in compliance.
- PPE was widely available in provinces visited

Key Recommendations

1. Strengthen outbreak response in PNG by continued RRT training

- Continue RRT initiation training for the remaining provinces over the next 6-12 months.
- Support trained provinces to complete their RRT manual and commence the production of weekly situation reports for COVID-19.
- Conduct additional RRT post-training reviews 6-12 weeks following initiation training to identify barriers/enablers to implementation of learnings.
- Continue with planning of the 5-day RRT competency training; implement in provinces who had shown commitment and leadership following the initiation training.
- Develop and implement ongoing refresher training/scenarios to ensure teams remain effective.
- Encourage regular after-action reviews to identify strengths, areas for improvement and develop action plans for continual improvement.
- Continue to build and engage in the RRT WhatsApp network; encourage the sharing of learning and experiences between provinces.

2. Address COVID-19 vaccine hesitancy

- Advocacy preparedness workshops should train healthcare workers and key community influencers from every district and frontline health centre in the country. Such programs can be run at the provincial or regional level, be used to disseminate IEC materials and strengthen networks for communication about the vaccine. It is essential that these campaigns are discussion based and include question and answer sessions. Workshops should include opportunities to practice using IEC materials (e.g. flip charts) in order to build confidence for community engagement activities.
- Disseminate co-designed IEC materials that use minimal text, such as the [IEC materials](#) developed by the Burnett Institute and East New Britain. IEC materials should address common concerns and information needs reported by frontline workers and the community such as: side effects of the vaccine, where the vaccine comes from, the safety of the vaccine, how the vaccine could be developed so quickly, and what the vaccine is made from.
- Communication strategies need to include videos with individuals who have received the vaccine discussing their experience and addressing common questions. Material should be disseminated using a combination of methods including social media posts, websites, newspapers, radio chat shows, and YouTube.
- The NCC/NDoH and PHAs should prioritise investment in community engagement and risk communication in all provinces. A large campaign with increased visibility, discussion and question and answer sessions are needed to debunk circulating myths and raise awareness in the provinces about the importance of the vaccine.

3. Strengthening COVID-19 case testing and isolation

- Decentralize COVID-19 testing to frontline health care centres to reach as much of the population as possible.
- Disseminate simple testing protocols for use of RDTs, GeneXpert and PCR.
- Interventions to improve case isolation should be urgently prioritized, with studies undertaken to understand key barriers and enablers of home and facility isolation.
- The promotion of non-pharmaceutical interventions should continue with particular emphasis on high impact settings (e.g. markets, public transport, funerals, church services).
- Community engagement and risk communication efforts should be accelerated to support testing, contact tracing, case & contact isolation, non-pharmaceutical interventions and the vaccine rollout.

Annexes

1. Report from the Oro RRT Post Training Review – click [HERE](#) to access
2. Rapid Response Team Manual Template – click [HERE](#) to access
3. Rapid Response Team Workshop Guide – click [HERE](#) to access

Team Pictures



RRT - Oro Province (Virtual Training)



RRT - Gulf Province



RRT – Autonomous Region of Bougainville Province



RRT – West New Britain Province



RRT – Western Highlands Province



RRT – Manus Province