

MEASLES OUTBREAK IN THE PACIFIC - SITUATION REPORT No. 9

Joint WHO/UNICEF Measles Outbreak Response and Preparedness in the Pacific

Reporting date:	31 December 2019
Reporting period:	23-30 December 2019

Event highlights

- As of 30 December, four Pacific Islands Countries and Areas (PICs) have announced measles outbreaks: American Samoa, Fiji, Samoa and Tonga. The number of cases is decreasing in Samoa, and the situation has stabilised in American Samoa, Fiji, and Tonga.
- Kiribati has two laboratory confirmed cases of measles, no epidemiological link has been identified during investigation.
- A suspected measles case in Niue has been found to be laboratory negative; i.e. no case of measles.
- The situation in other PICs is being closely monitored with on-site and remote preparedness support from WHO, UNICEF and other partners.

Summary by PIC

- **American Samoa:** No new measles case reported since the last report.
- **Fiji:** one new case is under investigation to assess links to the current outbreak.
- **Kiribati:** two laboratory confirmed cases, but no epidemiological link identified. One suspected case under further investigation.
- **Niue:** one suspected measles case in Niue has been verified as negative.
- **Samoa:** situation is stabilizing, with a decrease in the numbers of reported cases. The Measles State of Emergency ended on 28 December 2019.
- **Tonga:** outbreak is slowing, with fewer numbers reported, mostly from the main island of Tongatapu.
- **Pacific Regional:**
 - WHO will begin rolling out a collaborative methodology to work alongside Pacific Ministries of Health to identify and prioritise key measles preparedness and response actions for the next 3-6 months.
 - Availability of vaccines is currently monitored by WHO and UNICEF (Table 3) and contingency plan is in place in case of additional demand.

Other emergency activities in the region

- Tropical Cyclone Sarai has affected Fiji and Tonga.
- In Fiji, over 2,000 people were evacuated in 48 evacuation centres.
- The Fiji Ministry of Health and Medical services has put measles surveillance in place and offered vaccination.
- Other coinciding events:
 - There are ongoing dengue outbreaks in the Kosrae and Yap States in FSM and Republic of the Marshall Islands (RMI).
 - Influenza outbreak reported in Republic of the Marshall Islands
 - Acute Diarrhoea and vomiting (ADV)/Rotavirus RDT-positive cases reported in Kiribati. One death due to ADV has been reported and is under investigation.

Situation update

The overview of declarations of outbreaks and states of emergency is summarised in Table 1. The epidemiological situation and vaccine delivery status in each PIC are shown in Tables 2 and 3, respectively.

Table 1. Overview of declarations of outbreaks and states of emergency, in Pacific Islands Countries and areas with measles cases, as of 30 December 2019.

Country	Outbreak declared	Outbreak days	State of Emergency declared	Emergency days
Samoa	October 16, 2019	75	Nov. 15 – Dec. 28, 2019	43
Tonga	October 22, 2019	69	No	N/A
Fiji	November 7, 2019	53	No	N/A
American Samoa	December 8, 2019	22	December 8, 2019	22

Legend: N/A = not applicable.

Table 2. Overview of number of measles cases, morbidity and mortality and trend, in Pacific Islands Countries and areas with measles outbreaks.

Country	Reporting date	Reported cases	Reported deaths	Cumulative in-patients	Case-fatality rate ^b	Trend
Samoa	Dec 29, 2019	5,675	81	1,844	1.4%	Decreasing
Tonga	Dec 27, 2019	598	0	15	0%	Stable
Fiji	Dec 26, 2019	25	0	14	0%	Stable
American Samoa	Dec 30, 2019	10	0	0	0%	Stable
Kiribati	Dec 27, 2019	2	0	0	0%	Under investigation

^a This table follows the official reported case as reported in the national sitreps

^b Case-fatality rate = proportion of reported deaths within the total number of reported cases.

Table 3. Overview of Measles Containing Vaccines delivered and for delivery by UNICEF.

Country	Total MCV received in country since 01 Oct (doses)	Scheduled Deliveries (as of 30 Dec)
Samoa	265,500	0
Fiji	735,000	0
Tonga	58,000	10,000
Vanuatu	80,000	0
Kiribati	14,000	15,000
Nauru	3,000	0
FSM	20,000	0
RMI	2,500	5,000
Solomon Islands	60,860	0
Cook Islands	4,000	0
Niue	2,000	0
Tokelau	2,000	0
Tuvalu	9,500	0
Total	1,256,360	30,000

Samoa

Surveillance/Epidemiology

- 5,675 measles cases reported as of 29 December 2019, including nine in the preceding 24 hours.
- 81 measles-related deaths (no deaths reported since 26 Dec).
- The number of new cases per day is reducing and the situation is stabilizing.
- Post-measles infections among affected children are monitored.

Case Management & IPC

- 1,847 measles admissions in total; 93% have recovered, been discharged, and returned home.
- There are 40 hospitalized cases currently of which eight are critically ill (seven children, one adult) in intensive care and high-dependency care units (ICU/HDU).
- Children aged 6-11 months are most highly affected (267 per 1,000), followed by infants 0-5 months (161 per 1,000) and children aged 1-4 years (76 per 1,000).
- The clinical teams are managing post-measles infections among affected children presenting to the hospital.
- Several Emergency Medical Teams (EMTs) are departing this week.

Leadership & Coordination

- On 28 December 2019, the Samoan Cabinet unanimously approved the cancellation of the State of Emergency Orders due to the Measles Epidemic (Table 1).
- For the Recovery Phase, the MoH together with the Ministry of Foreign Affairs, will prepare the Recovery Plan within two weeks.
- All work conducted by the National Emergency Operation Center (NEOC) is to be referred to the Health Emergency Operation Center for continuation.

Health Operations

- Approximately 95% of all eligible people in Samoa have been vaccinated against measles.
- A large-scale vaccination campaign is ongoing, targeting unvaccinated people including young children.
- There are ongoing efforts to provide psychosocial support to bereaved families, discharged patients, health workers/front liners in the Tupua Tamasese Meaole (TTM) national referral hospital, in other health facilities, and throughout the community.

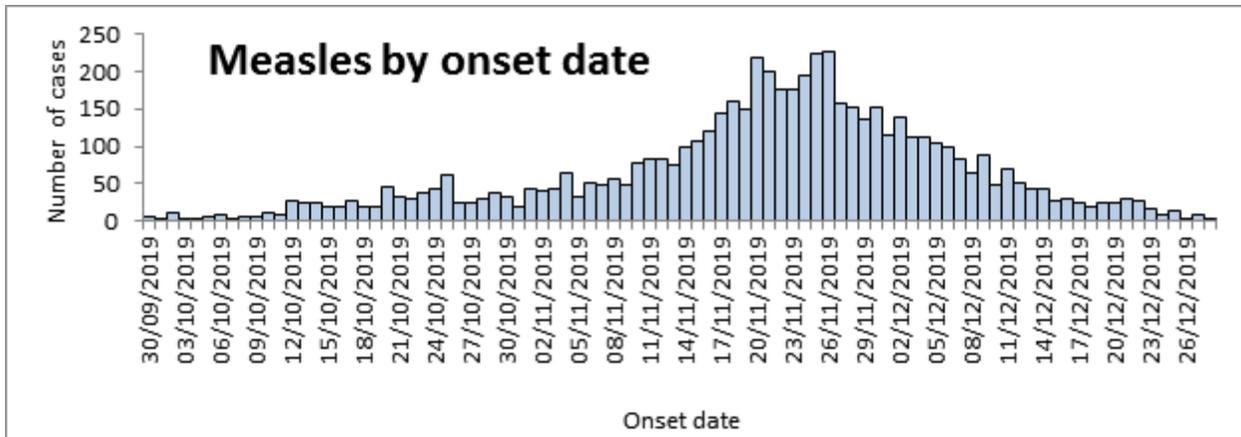


Figure 1. Epicurve Measles in Samoa by date of onset, date of report: 29 December 2019 (N=5,675). Source: Health Emergency Operations Centre (HEOC) Situation Report, Ministry of Health Samoa; Incident Name: Measles outbreak - October 2019; Sitrep No. 44.

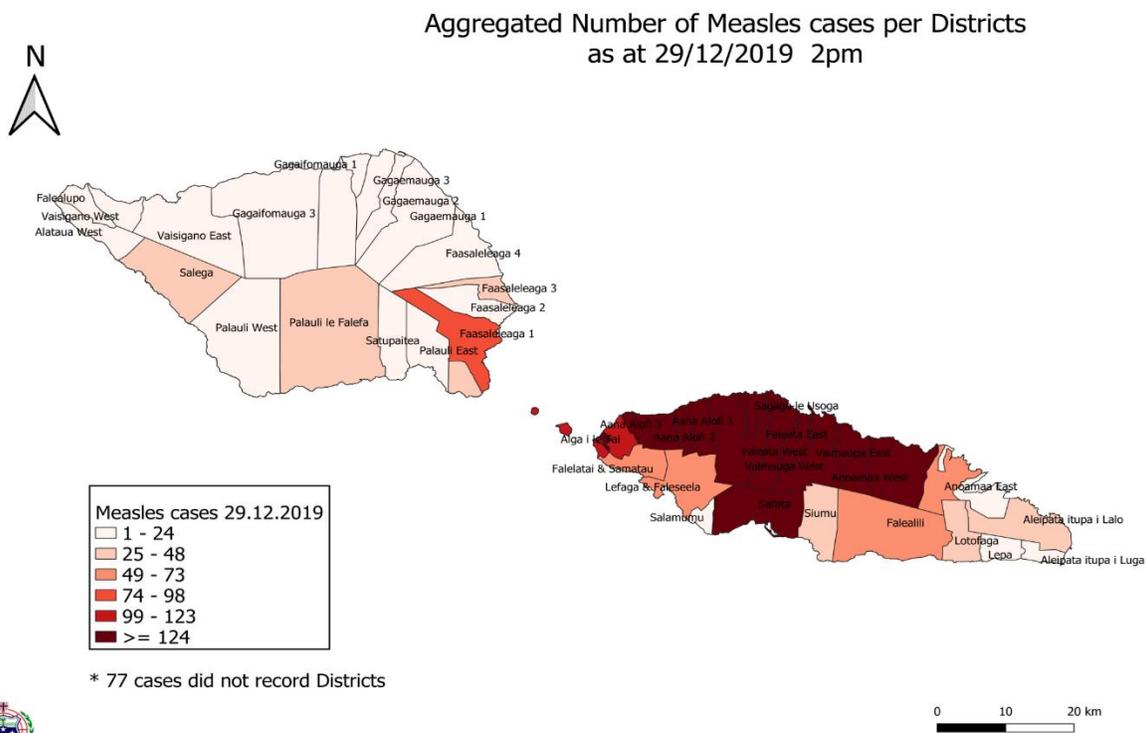


Figure 2. Aggregated number of measles cases in Samoa, by district, date of report: 29 December 2019 (N=5,675). Source: Health Emergency Operations Centre (HEOC) Situation Report, Ministry of Health Samoa; Incident Name: Measles outbreak - October 2019; Sitrep No. 44.

Tonga

Surveillance/Epidemiology

- There is a downward trend in reported case numbers in Tonga, with fewer new cases being reported in recent weeks (Figure 3). Reported figures may change following the holidays.
- Active surveillance is ongoing on all islands, including zero reporting (i.e. reporting of zero cases of measles).

Case Management/IPC

- A total 596 generally-mild cases, including 15 admissions and zero deaths reported since the beginning of the outbreak.
- The age group primarily affected remains those aged 10-24 years (79% of cases). Most cases were reported in Tongatapu (88% of cases) and Vava'u (11%).

Health Operations

- The mass vaccination campaign targeting individuals in the 10-24-year age group that were not picked up during the school campaign ended on 20 December 2019.
- As of 20 December 2019, 24,210 vaccinations were administered
- Total of 4,438 vaccinations were completed in the Islands of Tongatapu, Vavau'u and Ha'apai.
- Eua and Niuatoputapu will be covered in January 2020.

Leadership & Coordination

- Government was officially closed for the year on Friday 20 December 2019, however, public health and clinical services are covered during the period with provision for surge capacity as needed.

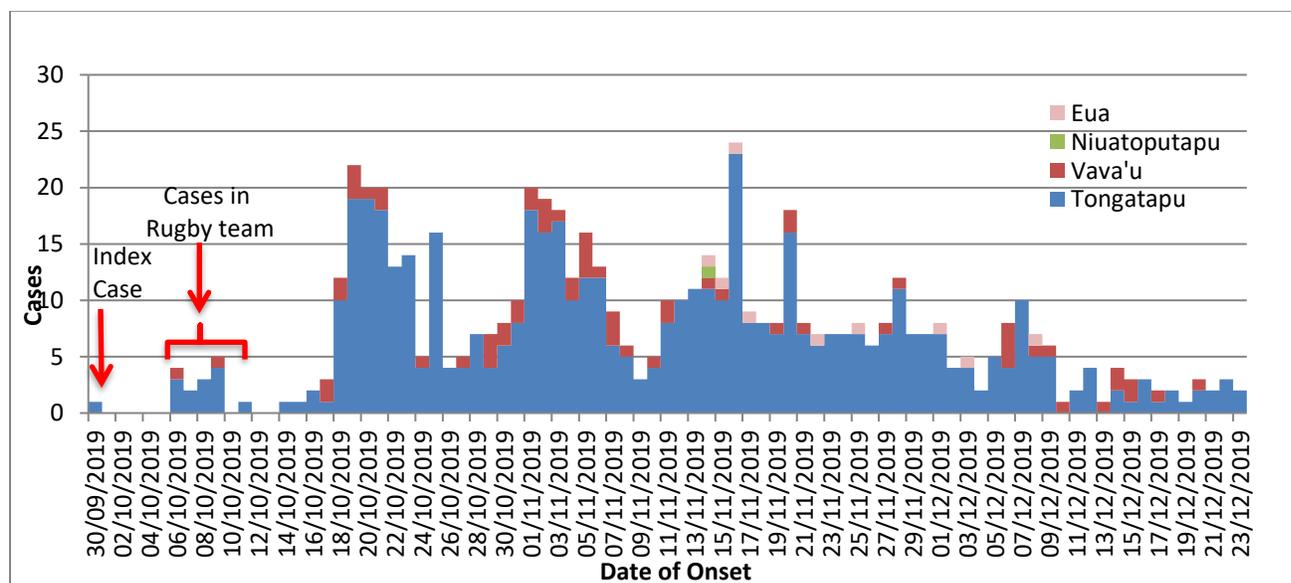


Figure 3. Epicurve Measles in Tonga by date of onset, by island, date of report: 23 December 2019 (N=596).

Source: SITUATION REPORT Tonga Measles Outbreak 2019, SITREP Number: 11, Date of Issue 26/12/2019.

Fiji

- Total 25 confirmed cases; all cases have been epidemiologically linked and all reside in the Central Division.
- 14 hospitalizations and no deaths reported. All other cases confirmed earlier have recovered or are recovering well under home isolation.
- Advisory against mass gatherings continues to be in place.
- All divisions focusing on a house-to-house approach to ensure high immunization coverage. Since the outbreak was declared, around 328,000 people in Fiji have been immunized against measles, with current 98% coverage in the Central Division. Western, Eastern and Northern Divisions planned to continue with vaccination on 27 December 2019, after a two-day Christmas break (aiming for 95% coverage), however, the campaign was suspended due to Tropical Cyclone Sarai.
- Following Tropical Cyclone Sarai, over 2,000 people were taking refuge in 48 evacuation centres across Fiji, including 714 people in 15 evacuation centres in the Central Division.
- The MoH is working with the National Disaster Management Office to closely monitor the evacuation centres, focusing on areas where measles cases have been recorded. Measles vaccination is offered to all in evacuation centres.

American Samoa

- 10 confirmed cases have been reported in six geographically dispersed villages since the outbreak and a State of Emergency was declared on 8 December 2019. No severe cases or deaths. Measles transmission is confined to the island of Tutuila.
- Four suspected cases are under investigation with laboratory confirmation pending.
- An estimate 98% of children (12 months to 18 years old) have received 1st dose of MMR, and 90% of children (4 to 18 years old) have completed 2 recommended doses of MMR.
- American Samoa continues to restrict entry at its borders from travellers via Samoa and Tonga. Travel permits will require a 15-day review process. Proof of immunity against measles is required for entry from these locations.
- The ban of all public gatherings has been lifted, effective December 16, 2019.

Kiribati

- Two laboratory confirmed cases have been reported: one 11-month-old boy and one 10-month old boy, with onset of fever on 29 November and 16 December 2019, respectively. The two cases are from different villages in Tarawa island and are not epidemiologically linked.
- The MoH is intensifying activities to support Kiribati's outer islands with UNICEF and WHO support (children vaccination, public risk communication).
- The measles task force committee of Ministry of Health and Medical Services has developed a phased outbreak response plan.
- As of 28 December, vaccination has started for all domestic travellers to/from Tarawa, if there is no evidence of vaccination.
- Kiribati is also reporting cases acute diarrhoea and vomiting (ADV)/rotavirus cases. One associated death has been reported.

Solomon Islands

- A further travel advisory has been issued by the Ministry of Health and Medical Services of the Solomon Islands on 26 December 2019.

- Accordingly, two new countries (Kiribati and Papua New Guinea) are now added to the list of affected countries as of 28 December 2019, requiring proof of vaccination before entry.
- The list of countries affected by travel restrictions now includes American Samoa, Samoa, Fiji, Tonga, Kiribati and Papua New Guinea.

WHO and UNICEF Actions to date

Measles Preparedness & Response in the Pacific

This sitrep is reporting on new activities in the reporting period; see Sitrep 1-8 for updates on previous activities.

Risk Communications

- WHO and UNICEF continue to support several PICs in risk communications, including using the WHO/UNICEF Pacific Measles Communication Toolkit and implementing paid social media campaigns to boost measles messaging via this online platform.

WHO/UNICEF Pacific Measles Communication Toolkit:

- WHO is supporting the content adaptation and translation of the Measles Communication Toolkit for Tonga.
- WHO is facilitating translation of the Measles Communications toolkit into French.

Social Media Campaign: WHO continues the implementation of a Pacific regional measles social media awareness campaign, targeting populations in all PICs, and in Australia and New Zealand. Audiences are targeted based upon their locality (geotagged) and viewing history/personal interests.

- The campaign reached 1,515,230 people and drove 23,436 link clicks to WHO's "Measles outbreak in the Pacific" landing page
- The #VaccinateByChristmas Facebook campaign for Fiji MoH has been completed. It reached a total of 303,322 people.
- The paid Facebook ad campaign for Samoa reached 225,990 people in total.

Health Operations & Technical Expertise

- Technical expertise continues to be deployed to PICs through a partnership of WHO, UNICEF, CDC, SPC and Global Outbreak Alert and Response Network (GOARN).

Kiribati

- Three WHO staff members have been deployed to Kiribati to investigate the measles cases, and to provide technical and logistical support.
- Active surveillance, detection of suspected measles cases, contact tracing, vaccination and active case finding are ongoing.
- Six bio bottles of two litters and 15 swabs (COPAN UTM 306 C) have been sent from WHO to Kiribati, to support the collection and transport of samples.

Nauru

- A mandatory MR vaccination was conducted for all health workers
- Continuation of vaccination of all outbound travellers.
- The age for MR vaccination has been reduced to nine months.

Niue

- Personal protective equipment (PPE) for Niue has been delivered from WHO.
- Technical support of clinical management of suspected measles in Niue has been, and will continue to be provided, remotely from WHO's Division of Pacific Support.

Samoa

- WHO supports health system recovery, including appropriate management of post-measles infections.
- With technical support from WHO and UNICEF, the MoH Mental Health and Psychosocial Support (MHPSS) team work continues to be focused on patients and their families with measles in Samoa (report on 2-22 December 2019):
 - 422 visits took place (345 initial + 77 follow-up); of which 78% in TTM hospital.
 - Patients and their families (non-health workers) continue to be the majority of those visited (88% of visits in last 3 weeks), health workers make up 7% of visits; for 5% this information is unknown.
 - 65% of those visited have measles, 21% have other conditions; the remaining 15% were health workers or did not answer this question.
- Emergency Medical Teams (EMTs) providing case management, psychosocial support, and vaccination and are currently scaling down. A total of 45 EMT rotations and 528 visiting personnel have been deployed to date to support TTM Hospital, Leulumoega and Faleolo District Hospitals.
- UNICEF has delivered six ice line refrigerators to MoH, three of which were installed in three health facilities of Savaii.
- UNICEF delivered 150 vaccine carriers on 29 December 2019.
- UNICEF provided technical assistance in the development of a plan for catch-up vaccination campaign for school entry children.

Tonga

- Three technical experts have deployed from WHO to support the Tonga MOH
- A shipment of PPE has been delivered from WHO

Next steps

Pacific

- Continue technical support both in-country and remotely for all pillars of response.
- Active follow up on social media campaigns
- WHO is rolling-out a collaborative methodology to identify gaps in measles preparedness and response capacities in priority PICs, and to support them in the development of 3-6-month action plans to guide activities to further mitigate the risk of measles importation and transmission.
- Priority preventive immunization – including outer island immunization coverage. Conduct mop-up vaccination to ensure all susceptible (particularly children 6–59 months) are vaccinated.
- Active follow up on social media campaigns across the Pacific.

Fiji

- MoH plans to conduct rapid coverage assessment during the second week of January 2020.

Federated States of Micronesia (FSM)

- Planning for supplementary immunization activity to start in Jan 2020 in all four states. The target groups are children aged six months to 17 years, travellers to and from FSM, first responders (health workers, police, immigration officers), and anyone living in the same household as an infant under the age of 11 months

Kiribati

- Risk communication support for public awareness of measles symptoms and complications, vaccine target groups (including travellers)
- Phase three of the action plan will include follow up campaign in all the islands (six months to 14 years) and the frontline, establish MR clinic at the airport for the domestic travel and validate the MS1 report (Jan to Nov) for the routine immunization program.
- UNICEF has released 2,000 Vitamin A (100,000 IU) scheduled to be delivered this week.
- An additional 15,000 doses of MCV has been released by UNICEF scheduled to be delivered this week.
- Phase three of the action plan will include follow up campaign in all the islands (six months to 14 years) and the frontline, establish MR clinic at the airport for the domestic travel and validate the MS1 report (Jan to Nov) for the routine immunization program.
- Priority preventive immunization – including outer island immunization coverage. Conduct mop-up vaccination to ensure all susceptible (particularly children six to 59 months) are vaccinated.
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- An additional 15,000 doses of MCV has been released by UNICEF scheduled to be delivered this week.
- Additional WHO support for logistics and leadership/coordination being deployed, to strengthen ongoing preparedness and response activities.

Tonga

- UNICEF has released an additional 10,000 doses of MCV for MOH scheduled to be delivered this week.
- UNICEF will send two ice-lined refrigerators to Tonga.
- MoH has planned vaccinator training to be conducted in February 2020.
- WHO planning to support the transition from outbreak to post-outbreak surveillance, including the appropriate use of laboratory testing and implementation of electronic early warning alert system for routine surveillance of epidemic prone diseases

Samoa

- Planning for the transition from outbreak to post-outbreak surveillance, including the appropriate use of laboratory testing and implementation of electronic early warning alert system for routine surveillance of epidemic prone diseases

Solomon Islands

- Stockpile of essential medicines used in clinical management of measles cases is being reviewed by the Ministry of Health and Medical Services and if required, procurements will be initiated.

RMI

- UNICEF has released 5,000 doses of MCV scheduled to be delivered this week.

Vanuatu

- Supplementary immunization activities were temporarily suspended during the holiday period and will restart early in January to ensure 95% coverage is achieved.
- Planned to start the SIA in Santo province covering Zones 1, 2 and 4 from 6 – 17 January 2020. Microplanning will also start in Tanna province for Zones 1, 2, 3 and 4 on 1st week of January 2020.

WHO/UNICEF weekly coordination meeting

The secretariat would be pleased to include the support provided by other partners in the next and subsequent sitreps.

Weekly coordination meetings are held every Wednesday at 09:30am, at the WHO office in Suva. Please let us know if you will join in person or by Zoom, by emailing Measles2019@who.int. **There will be no meeting on Wednesday 1 January 2019; the next meeting will take place on Wednesday 8 January 2020.** Any change in venue will be advised.

For those wishing to call in:

Join from PC, Mac, Linux, iOS or Android: <https://wpro-who.zoom.us/j/5993964937>

Or Telephone: +1 669 900 6833 (US Toll), +1 646 876 9923 (US Toll).

Meeting ID: 599 396 4937.

International numbers available: <https://wpro-who.zoom.us/j/acZxLvmltF>

Acknowledgements

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